Intelligence Support for Tactical Policing: Intelligence Preparation of the Battlespace

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STATEMENT OF AUTHORSHIP

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Daniel George Boyd
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ABSTRACT

This study examined the extent to which police intelligence units evolve through adopting and adapting processes from other disciplines, testing the assertion that intelligence preparation of the battlespace (IPB) doctrine offered a model for enhancing intelligence support provided to police tactical groups. The study makes an original contribution to knowledge by highlighting IPB as a militaristic process which could be adapted to realise an enhancement to current praxis within applied police settings, and contributes to the body of knowledge in an area of emerging interest within the field of police intelligence practice.

The study’s literature review identified that IPB continues to evolve as a framework for collection, collation, and analysis. Further review affirmed the continued suitability of the IPB framework as a process disposed toward adaptation to analogous fields, to enhance intelligence outputs in those domains.

The research method employed allowed for the collection of primary data from a multinational panel of experts. This then permitted analysis of the findings against both the core research question, and associated fields of secondary questioning centred on implications for practice in an applied setting.

The results of the study supported the notion that the IPB framework offers the potential to enhance the utility of police tactical group intelligence given certain conditions. The study’s results show that an adapted manifestation of IPB within police tactical group (PTG) contexts offers the opportunity to enhance intelligence support in a number of areas, principally in relation to factors of completeness and detail, most likely in areas of intelligence support which see interoperability with the military (such as counter-terrorism, joint operations, or peacekeeping/stability operations), and within longer-term, sustained operations.

Keywords: police tactical intelligence; intelligence preparation of the battlespace; police tactical group.
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<th>Definition</th>
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<tbody>
<tr>
<td>ANZCTC</td>
<td>Australia-New Zealand Counter-Terrorism Committee</td>
</tr>
<tr>
<td>AO</td>
<td>Area of Operations</td>
</tr>
<tr>
<td>COA</td>
<td>Course(s) Of Action</td>
</tr>
<tr>
<td>COIN</td>
<td>Counterinsurgency</td>
</tr>
<tr>
<td>CT</td>
<td>Counter Terrorism</td>
</tr>
<tr>
<td>FM</td>
<td>Field Manual</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>ILP</td>
<td>Intelligence-Led Policing</td>
</tr>
<tr>
<td>IO</td>
<td>Intelligence Officer</td>
</tr>
<tr>
<td>IPB</td>
<td>Intelligence Preparation of the Battlefield/Battlespace</td>
</tr>
<tr>
<td>IPMB</td>
<td>Intelligence Preparation and Monitoring of the Battlespace</td>
</tr>
<tr>
<td>IPO</td>
<td>Intelligence Preparation for Operations</td>
</tr>
<tr>
<td>IPTP</td>
<td>Intelligence Preparation for Tactical Policing</td>
</tr>
<tr>
<td>LE</td>
<td>Law Enforcement</td>
</tr>
<tr>
<td>LIC</td>
<td>Low Intensity Conflict</td>
</tr>
<tr>
<td>MI</td>
<td>Military Intelligence</td>
</tr>
<tr>
<td>NPM</td>
<td>New Public Management</td>
</tr>
<tr>
<td>OOTW</td>
<td>Operations Other Than War</td>
</tr>
<tr>
<td>PPU</td>
<td>Police Paramilitary Unit</td>
</tr>
<tr>
<td>PTG</td>
<td>Police Tactical Group</td>
</tr>
<tr>
<td>SWAT</td>
<td>Special Weapons and Tactics [team]</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities, and Threats</td>
</tr>
<tr>
<td>US/USA</td>
<td>United States of America</td>
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CHAPTER 1—INTRODUCTION

BACKGROUND
The assimilation of intelligence concepts into formal policing paradigms since the 1990s has seen influential shifts in practice and thinking within Western law enforcement (Maguire & John, 2006; Darroch & Mazerolle, 2013). During this same period, the role of police paramilitary units (PPU) grew considerably in Western nations traditionally possessing civil as opposed to gendarmerie-style police services (Hill, Beger, & Zanetti, 2007; Lutterbeck, 2004).

In many aspects, it could be argued that responsive tactical police units do not easily fit the traditional parameters of intelligence-led policing (ILP). Domestic high-risk response duties are inherently reactive, and deployments of these units are unlikely to be as a direct result of intelligence-led analysis. Intelligence support in the form of reactive “situation development” (Powell et al., 2008, pp. 2–3) functions is therefore the norm. The nature of modern tactical units has however seen them outgrow their uni-dimensional “SWAT” origins (Kraska, 2007, p. 507; den Heyer, 2014, pp. 353–354), and these elements’ range of tasks demands the application of ILP principles and the provision of dedicated intelligence support. A preliminary survey of key publications and relevant academic journals has revealed, however, a distinct lack of focus on PPU intelligence support systems (den Heyer, 2014, p. 359).

Intelligence Preparation of the Battlespace (IPB)\(^1\) is an established military intelligence (MI) planning system which provides an analytical framework for reducing uncertainty around environmental and threat factors, enabling enhanced support to decision-makers. IPB as a formalised construct has existed since the early 1980s, and has proven its flexibility and adaptability in supporting a broad spectrum of operations at tactical, operational, and strategic levels (Olson, 2013). In simple terms, IPB “…is an analytic process used to organise and analyse information on terrain, weather, and the threat within a unit’s area of operations and associated area of interest. Through its systematic four-step approach, members of command and intelligence staffs use IPB to

\(^1\) Variations on the IPB title include Intelligence Preparation of the Battlespace, Intelligence Preparation of the Battlefield, Preparation of the Intelligence Environment, and Intelligence Preparation and Monitoring of the Battlespace. All share the common core and source in IPB, and the acronym IPB is used interchangeably herein unless otherwise specified.
predict how an adversary will act within a certain area of operations … given the terrain, weather, and other contextual conditions.” (Medby & Glenn, 2002, xiv).

In line with IPB’s proven history of adaptability (Olson, 2013), it was therefore determined that scope existed for the IPB process and framework to be applied to other, analogous fields. This included specific areas of modern policing.

RATIONALE

Despite recognition that law enforcement (LE) intelligence is the progeny of traditional MI practice (Prunckun, 2010, p. 15), Walsh (2012, p. 35) highlighted the pervasive lack of focus in the literature on how established sub-fields of intelligence can learn from each other. Numerous analytical processes developed within MI practice have found their way into contemporary criminal intelligence and ILP practice. Considering this, this study explored the literature on IPB and described a conceptual framework for its use within tactical LE.

LE-specific IPB adaptations (or proposals for such) have appeared in areas of environmental protection compliance (Weekers, 2011) and animal conservation (Gustafson, Sandstrom, & Townsend, 2018), homeland security (Kim & Allard, 2008), and critical infrastructure protection (Paul & Landree, 2009). What had not been previously addressed in the literature was how IPB could be adapted to service PPU operating parallel to their military counterparts.

Police Tactical Groups (PTG) or PPU are posited as the clearest analogue to military Special Forces units within modern, Western police services (Kraska, 2007; McCulloch, 2004). The literature through the late 20th and early 21st centuries has focused on negative perceptions of these units, their rise in prominence, and their perceived militarisation (Kraska & Kappeler, 1997). What have not been focused on, it is argued, are the positive impacts adoption of military practices can have on policing practice within, and in support of, PTG or PPU.

THEORETICAL BASE

The study is an examination of a particular organisational recipe or “myth” posited as a solution to be adopted within institutionalised entities such as police tactical units. Organisational theories dealing with the adoption of myths through the concept of translation offer a framework for viewing the potential adaptation of IPB into tactical
policing domains. This is in line with much of the work around ILP as a manifestation of New Public Management (NPM) (Walsh, 2011, p. 19; James, 2013, p. 86), though at a more narrowly defined level.

This study therefore assumes a theory of process adoption in exploring the extent to which IPB, as a process recipe, may enhance intelligence support within Western police services’ tactical policing units. This theory is based upon the following propositions, including that:

1. Western police services as institutional bodies share a number of commonalities (despite their existential differences) with military services, particularly in their growing paramilitary components;
2. modern policing services are adaptive institutions, with multiple examples of their adopting myth perspectives from a number of complementary fields of expertise in order to address problems of process and/or emerging criminality. This is particularly true in pushes toward integrating intelligence processes into policing functions; and
3. MI’s greater formalised doctrinal base offers a number of ready-made cultural myths in the form of organisational process recipes, of particular use to PPU. These myths meet the requirements of successful recipes in that they have obtained authority and universalisation, and with reference to ILP, timing, given the emerging social focus on the use of PPU.

RESEARCH QUESTION

The purpose of the current study is to explore the extent to which IPB and its adaptations can enhance the utility of intelligence support provided to commanders and other decision-makers relevant to police tactical group applications. The study sought to frame IPB as a viable analytical and planning framework alongside traditional profiling and planning methods. As such, the principal research question was as follows:

*Can the application of military intelligence preparation of the battlespace doctrine enhance the effectiveness of intelligence support within tactical policing environments?*

This construction allowed for the question to be presented as an assertion (in the affirmative or negative) to allow testing and definitive responses.
In answering this question, the study will also, by extension, examine the extent to which components of IPB are already implemented or replicated in tactical policing intelligence support processes; and policy considerations, options, and challenges presented by an adaptation of IPB into the tactical policing environment.

OUTLINE OF THE STUDY

Chapter 2 presents the literature review examining the development of IPB scholarship from its beginnings in US Cold War doctrine, through to its contemporary state as a proven, adaptable framework used across both military and paramilitary applications. The chapter also examines the core concepts of tactical policing and the progression of the literature around tactical policing activities and, specifically, the dearth of focus in the scholarship around intelligence support frameworks servicing tactical police operators and commanders. The chapter also presents the conceptual framework for the current study by demonstrating the relationships between key, operationalised variables.

Chapter 3 outlines the methodological framework for the current study. The chapter details the research plan, addresses validity considerations, explains the sampling framework employed, and discusses the data collection, collation, and analysis processes followed. Finally, the chapter addresses the ethical considerations relevant to the study.

Chapter 4 presents the results of the Delphi collection process. These results are presented along the identified themes of the desirability of an application of IPB within tactical policing environments, and the feasibility of such an application. Thematic analyses of the results of each of the Delphi rounds are presented alongside a series of charts visualising key quantitative data points. Initial inferential analyses drawn from the data and linked to the research question are also presented, with a discussion of the results against the chosen framework of intelligence utility factors.

Chapter 5 contains a discussion of the results of the Delphi collection process and associated, complementary analyses of code co-occurrence heatmapping and an exploration of strengths, weaknesses, opportunities, and threats suggested in the findings. The results of these additive analyses affirm the key research findings, allowing for examination of implications for practice and theory.
Chapter 6 examines the contributions made by the study in the context of the literature, and also presents the conclusions determined from the study’s findings. These conclusions respond to the research question and its assertion, and consider implications for theory and tactical policing practice. This chapter also suggests a number of areas of further research into the application of IPB and its components to tactical policing environments.

Notes on the use of gender
Gender neutral terminology is used throughout the text of this thesis. Where references are made to masculine pronouns, these are due to the nature of the original sources only.
CHAPTER 2—LITERATURE REVIEW

The research question and the theoretical basis of the study demand an examination of how Intelligence Preparation of the Battlespace (IPB) has evolved and how it presents as a framework for the enhancement of intelligence support within tactical policing applications. The primary aim of the review presented in this chapter is to identify and critically analyse the key areas of research around IPB and related concepts of intelligence support in the tactical policing context.

A qualitative review of the literature was conducted to examine how the publicly available research has defined, reviewed, critiqued, and shaped the development of IPB as an analytical framework and as a process recipe for adaptation. The review adopted an inclusive approach, wherein literature with varying methodological and theoretical perspectives was incorporated.

This chapter presents this review, including key definitions, a systematic review of the literature on tactical policing intelligence support, the aforementioned examination of IPB’s development and coverage in the literature, and an examination of institutional theory as it relates to the tactical policing context.

DEFINITIONS AND KEY VARIABLES

One of the categorical variables of the study is the concept of the effectiveness of intelligence support, with the other categorical variable being the analytical framework provided by IPB. The contextual environment for these variables is the domain of tactical policing.

The concept of intelligence can be couched in a number of ways. Variously described as an artform, a science (Richards, 2013), a discipline (Kahn, 2008a, p. 4), or a mixture of these, and as both a product and a process as well as a profession, definitions of intelligence vary and theories underpinning it continue to be debated (Gentry, 2016). In a simple form, and as described further below, for the purposes of the current study intelligence is acknowledged (as either product or process) as representing information which has undergone processing and is presented for use as a decision-support tool by a commander (as decision-maker).

The production of intelligence is often framed within the notion of the intelligence cycle. Variously described and constituted, the intelligence cycle typically
consists of processes of problem definition, planning, collection, synthesis, analysis, product generation, and dissemination, before the cycle begins anew (George & Bruce, 2008, p. 2). While the cycle is not always used in its purest sense, and its value questioned (Rolington, 2013, pp. 36–37; Hulnick, 2014), it does provide a model for analysts, consumers, and producers of intelligence to follow, either in whole or in part. The remainder of this thesis limits exploration of the intelligence cycle to acknowledgement of its limitations within the constraints of police tactical group (PTG) environments, and to the nature of IPB’s integration within the functions of the cycle.”

The concept of intelligence support has been central to modern debates over the role of intelligence and the development of those theories both of and for intelligence—i.e. what intelligence is and what it should provide (and to whom) (Gill, in Treverton et al., 2006, p. 4). For the purposes of the current study, the concept of intelligence support is aligned with the US Army Doctrine Publication 2–0 definition, which bounds the concept as the contribution to developing the commander’s situational understanding, which benefits their decision-making, prioritisation of resources, and risk management, by the intelligence officer (or staff) who provides all source analysis and “produces timely, relevant, accurate, predictive, and tailored intelligence that satisfies the commander’s requirements” (Headquarters Department of the Army, 2012, p. 5–1). Measurement of this variable is discussed below.

IPB is defined under US Army Field Manual (FM) 2–01.3/MCRP 2–3A (FM 2–01.3), as follows:

a systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. By applying intelligence preparation of the battlespace, commanders gain the information necessary to selectively apply and maximize operational effectiveness at critical points in time and space (Headquarters Department of the Army, 2009, p. 1–1).

While an exploration of IPB and its continuing evolution as an analytical framework is found below, for the purposes of this study, the official US military definition is adopted. In adopting this definition, it is noted that terminological
differences between US Army and Marine Corps, relating to the use of “battlefield/battlespace” and “threat/adversary” have been synthesised.

Tactical policing is a term referencing the subset of specialised police functions, at the tactical level, usually reserved for reactive responses to critical incidents outside the general policing. While the debate over a universal definition of paramilitary or tactical policing is ongoing, for the purposes of this study, Rantatalo’s umbrella classification of a symbolic categorisation of a “militaristic style of policing characterized by militaristic appearance, technology, and modus operandi” (Rantatalo, 2012, p. 2) is adopted. This accords with Kraska’s argument that the use of the label “tactical” is preferred over the synonyms militaristic and martial (1996, p. 409).

In the Australian context, it is important to note the core element of both State and federal tactical policing units, being the PTG. In the open literature, a PTG is defined simply as “a highly-trained police unit that tactically manages and resolves high-risk incidents, including terrorist incidents” (Australia–New Zealand Counter Terrorism Committee, 2013, p. 3). An examination of publicly available literature from the State and federal police forces is helpful here in that it reveals several commonalities in the public declarations around each jurisdiction’s PTG elements.

PTG are most often described as providing specialist response to high-risk critical incidents such as sieges and terrorist action, beyond that provided by the scope of standard operational police and police tactics. These units are typically equipped with specialist weaponry, trained in quasi-military tactics, techniques, and procedures, and structured around paramilitary models. They are regularly supported by further specialist units, including communications elements, intelligence staffs, negotiators, and technical personnel, which combined form the tactical policing component of each service (AFP, 2019; New South Wales Police, 2019; Northern Territory Police, Fire & Emergency Services, 2019, pp. 57, 59). For the sake of clarity, these units are recognised in the Australian policing context, and specifically distinguished from European gendarmerie-style paramilitary entities.

**TACTICAL POLICING**

Tactical police units have substantially grown in prominence (both in practice and in terms of public visibility and perception) since the 1970s (Hill et al., 2007, p. 302), and remain characterised by their paramilitary structures and quasi-military roles, training,
and functions. In Australia, each of the State and territory police forces maintains a standing PTG in a full- or part-time capacity. In addition, the Australian Federal Police maintains a full-time PTG in support of community policing\(^2\) in the Australian Capital Territory, its national operations, and in support of stability and capacity-building operations internationally.

In the United States, the prevalence of PTGs is starker, with such units existing in over 90 per cent of the country’s law enforcement agencies (Brimo, 2012). While statistics vary, with a reported 15,328 law enforcement agencies operating in the USA as at mid-2016 (US Bureau of Justice Statistics, 2018), this potentially equates to just under 14,000 tactical groups in operation. While a comparative study of PTGs in Australia and other western nations is outside the scope of this research, an introduction to their rise in prominence is warranted here.

The growth in the prevalence of PTGs since the 1970s is due to a number of factors. These include, but are not limited to, the expansion of military support to police forces following the initiation of the so-called “war on drugs” in the 1980s (Hill et al., 2007); responses to evolutions in terrorist tactics (“The AFP special operations team”, 1998) and active shooters (Balko, 2006; Klinger & Rojek, 2008); and further expansion of weapons and matériel markets since 2001 and the wars in Iraq and Afghanistan, as well as a continuing cross-pollination of military and police personnel under contemporary homeland security approaches to law enforcement and policing (Kraska, 2007). While initially developed as an element in police forces’ reactive responses to terrorism and siege situations, the reality of contemporary PTGs is that they form standing units, often utilised across a wide swathe of operations previously the domain of uniform patrols (Eismann-Harpen, 2014, pp. 129–130). This scope includes operations allowing greater time in planning—and therefore intelligence preparation—such as the protection of high office holders, high-risk reconnaissance, deliberate operations against high-risk targets, public order, and foreign peacekeeping and stability operations.

A fuller examination of the development of PTGs is outside the scope of this review. For the purposes of this study, it is axiomatic that PTGs now form an

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\(^2\) Community policing in this context is used to denote the gamut of uniform patrol and response duties carried out by general duties police officers.
influential, visible, and permanent element of modern police forces, and one which has captured public attention and scrutiny.

Much of the contemporary research literature on the use of police paramilitary units (PPU) and PTG centres on the perceived expanded use of such units for areas of policing previously the domain of the prototypical community police officer, and the perceived militarisation of such units in equipment, tactics, and ethos (Rantatalo, 2012; Hall & Coyne, 2013; den Heyer, 2014). The growth in focus on counter-terrorism (CT) following the 9/11 attacks has led some to identify this trend toward the use of PPU as an aspect of CT itself (Rantatalo, 2012, pp. 13–14). Noting the roots of PTG in the Australian context as a response to terrorist activity, this theme is aligned with the perspective of the current study.

The debate over police militarisation persists. Existential arguments continue in the literature, as evidenced by the debate over the perceived rise in dominance between den Heyer (2014) and Kappeler and Kraska (2015), and by ongoing theoretical reflection on the role of academia in conceptualising the academic examination itself (Weiss, 2011, p. 402). Notably in the context of the current study and its theory of process adoption, even a militarisation sceptic such as den Heyer concedes there has been “cross fertilisation” between police and military services in “the form of adopting some of the other’s policies and procedures” (2014, p. 355).

This research deliberately avoids entering the militarisation debate, but aligns itself with calls from both sides of the discussion for critical research that aids in improving the way police forces use tactical units (den Heyer, 2014, p. 347; Kappeler & Kraska, 2015, p. 270; Mijares & McCarthy, 2008, pp. 256–257). Questions relating to the appropriateness of translating militaristic approaches, programs, frameworks, and/or tactics in a civilian are crucial, but outside the scope of this study, which does not take a position on this but is limited to exploring the potential utility of one such possible adaptation. As such, fuller examination of the literature on militarisation is eschewed in this review, which is focused on PTG and PPU intelligence support practices.

Notwithstanding the setting of these boundaries, one aspect of the literature worth noting here is the apparent gap in the militarisation scholarship on the role of intelligence. A preliminary scan of salient examples in the contemporary militarisation
literature—principally works assessing the state of the literature, meta-reviews, and in-depth examinations of the roots of militarisation phenomena—reveals a lack of focus on the role intelligence plays as either an enabler of militarisation efforts; is a consequence of these efforts; or as a positive element.

Rantatalo’s (2012) prominent review of the research literature around PPU’s in the first decade of the 21st century is silent on matters of intelligence support. Subsequent examinations of the impacts of militarisation in America are similarly mute on the consideration of intelligence support matters (Hall & Coyne, 2013; Hixson, 2013; Lawson Jr, 2019; Turner & Fox, 2019), as are examples from South African (Lamb, 2018) and Canada (Roziere & Walby, 20183).

A number of publications acknowledge Kraska’s (2007) identification4 of intelligence activities as an operational indicator of militarisation, without further exploration (Carriere & Encinosa, 2017; Simckes, Hajat, Revere, Rowhani-Rahbar, & Willits, 2019), though Mello (2016) does so while concluding that a coincidence of intelligence-led policing (ILP) and PTG protocols would improve the results of SWAT activities, with fewer errors. In doing so, Mello, largely reinforces den Heyer’s (2014) assertion around the risk of conducting PTG operations without sufficient intelligence support. Finally, an even smaller number of examples in the literature make fleeting reference to the potential role of intelligence (as an aspect of militarisation) in enhancing police practice, with either no further critical analysis due to the ancillary nature of the topic (Bieler, 2016), or limited to introducing the implied benefits of military-derived intelligence practices into a policing environment, from a purely military perspective (Wood, 2015).

**Intelligence support to PTGs**

As Sullivan and Elkus (2009) assert, a special kind of intelligence production is required to effectively support police tactical operations. This assertion makes the lack of examination in the literature of PTG intelligence support frameworks that much more problematic.

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3 In the context of the theoretical framework of the current study, it is of note that Roziere and Walby’s later (2019) publication on Canadian PTGs utilises the lens of isomorphism to explain the establishment and institutionalism of PTG use in Canada.

4 Referred to further in the next section in this chapter, below.
A number of the military literature examples reviewed note the increased need for enhanced, systematic methods of processing collected information into intelligence given the dynamic nature of modern threats and modern operations (Thaden, 1986; Agee, 1991). Tactical policing situations embody the dynamic operating environment at the most direct level, and demand a similarly systematic method for collecting, collating, and processing available information.

Perhaps mirroring the gap in the militarisation literature as explored in the preceding section, a preliminary assessment of the published literature reflects the lack of research and focus on PPU/PTG intelligence processes, with an initial survey of relevant journals revealing a tendency to confuse information about a tactical situation with intelligence, and a corresponding lack of focus on intelligence support structures and frameworks. While a number of works do make the distinction between information and intelligence, this identified tendency to interchangeably use “information” for “intelligence” was explicitly addressed in 1994, with a short explanatory piece in the trade journal *The Tactical Edge* (“Tactical terminology: Intelligence gathering (information vs intelligence)”, 1994).

Despite this apparent gap in the literature, a number of early works raised the need for enhancement in the intelligence support frameworks underpinning PTG/Special Weapons and Tactics team (SWAT) operations. As early as 1980, the complexity of a broadened set of responsibilities for PTGs was acknowledged, and the level of preparedness of most US SWAT teams for multi-faceted emergency response scenarios was under question. In examining this issue, problems in developing a fuller intelligence picture in emergency response scenarios were identified, with Olin noting that police (and PTGs) “sometimes stressed tactical considerations at the expense of sacrificing intelligence opportunities” (1980, p. 22). Olin’s response to this was to stress the need for organic intelligence cells within PTGs, perhaps highlighting that staffing, let alone intelligence frameworks, was at that time lacking.

Four years later, Ishimoto (1984) again drew the distinction between information and intelligence, and highlighted principles of intelligence most pertinent to PTG operations: factors of intelligence usefulness, timeliness, and, notably, that PTG and intelligence operations need to be interdependent. This in itself can be seen as reflecting an evolution in thought around PTG intelligence resourcing, and the work
goes further than most in addressing collection planning, development of indicators, and the perpetual intelligence cycle required to support the gamut of PTG operations.

Later works in the trade literature continued to touch upon the need for competent intelligence support to PTG operations (Kostka, 1984); the value of intelligence preparation on critical infrastructure and locations prior to any response (Burnes, 1987); enhancements to workflows of tactical operations centres (and their intelligence resourcing) during critical incident response (Hillmann, 1987); and the need to address multiple, and most importantly accurate, sources of information during intelligence planning (Garner, 1992). As a collective these articles can be seen as advancing the state of awareness and practice incrementally. As noted however, the immature state of intelligence support frameworks to PTG operations, and the acceptance of information as intelligence, persisted.

While espousing the need for it, even the most salient and influential works in the genre such as Mijares and McCarthy’s (2008) comprehensive treatise on PTG management make only glancing reference to intelligence analysis, and do not explore intelligence support process or PTG-specific intelligence management frameworks. Other authors such as Cascio and McSweeney (1996) largely skirt matters of intelligence support, mentioning the role of intelligence in the planning stage and in unit composition only. Where the role of the intelligence officer or an intelligence support element is acknowledged, or where IPB-like (and other frameworks’) intelligence sub-processes are detailed, a tendency toward a focus on the use of snipers and other vectors for reconnaissance as “intelligence” gatherers becomes apparent in the literature (Jones, 1996, pp. 70, 78).

Prominent contemporary works focusing on police and PTG militarisation (Fisher, 2010; Balko, 2014) are silent on the intelligence support frameworks and resourcing underpinning PTG operations, though it is of note that den Heyer concludes that the risk in regard to American PPUs and PTGs lies in their lack of preparatory activities, including their lack of reliance on sound, scrutinised intelligence (2014, p. 359). This prompts valid questions as to what extent could improvements to such intelligence support systems improve overall PTG effectiveness, and, subject to other efforts, lessen the need for militarisation. This is in line with the lack of focus on PTG operations in the research literature (Klinger & Rojek, 2008, p. 2).
Due to this apparent gap in the scholarship, to examine the nature of the literature around tactical policing and specifically its dealing with the variable of intelligence support, a systematic review was conducted. In conducting this review, 16 law enforcement journals and trade publications were systematically examined for their references to intelligence in relation to tactical policing. Journals were selected due to their coverage of topics around police intelligence, SWAT/PTG issues and related intelligence practice, and those solely focused on tactical policing and related intelligence concepts. Due to the lack of empirical research identified through initial collection, certain non-peer-reviewed trade publications (n=4) were also included. The list of publications included in the review is found below, in table 1.
Table 1. List of publications included in systematic review of PTG intelligence support literature.

<table>
<thead>
<tr>
<th>Publication</th>
<th>Category</th>
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<tbody>
<tr>
<td>Criminal Justice Studies: A Critical Journal of Crime, Law and Society</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Critical Studies on Terrorism</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Democracy and Security</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Journal of Policing, Intelligence, and Counter Terrorism</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>International Journal of Police Science &amp; Management</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Journal of Criminal Justice</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Police Journal</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Police Practice and Research: An International Journal</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>(incorporating Journal of Police Crisis Negotiations)</td>
<td></td>
</tr>
<tr>
<td>Police Quarterly</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Justice Quarterly</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Policing and Society</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>Special Operations Journal</td>
<td>Peer reviewed</td>
</tr>
<tr>
<td>The Tactical Edge (also incorporating Crisis Negotiator)</td>
<td>Peer-reviewed/ trade publications$^5$</td>
</tr>
<tr>
<td>Law &amp; Order</td>
<td>Non-peer-reviewed/ trade publication</td>
</tr>
<tr>
<td>Tactical Response</td>
<td>Non-peer-reviewed/ trade publication</td>
</tr>
<tr>
<td>Small Wars &amp; Insurgencies (incorporating Low Intensity Conflict &amp; Law Enforcement)</td>
<td>Non-peer-reviewed/ trade publications</td>
</tr>
</tbody>
</table>

$^5$ The Tactical Edge is a trade publication, incorporating peer review.
Considered setting of inclusion parameters is crucial for a systematic review (Roberts & Herrington, 2013, p. 117), and was undertaken for this examination. This review considered articles in English only, and despite the current study’s focus on PTGs in the Western tradition as opposed to European gendarmerie-style forces⁶, the review was deliberately not limited to examinations of Western frameworks, in order to assess the state of the literature on intelligence support to tactical groups in general. Given the aim of assessing the contemporary literature, only articles published since the year 2000 were included.

A set of nine Boolean search terms was developed and used to search against identified publications. These terms were linked by the Boolean “AND” operator as searches were conducted. The terms were developed and tested to probe for and retrieve articles focusing on police intelligence practice, specifically by or in support of PTG operations. It was recognised that the search terms would likely result in a large number of initial matches, but this was acceptable due to the identified need to assess the state of literature in the context of the perceived gap in the research.

As such, tier one confined searches to matters relating to intelligence; tier two terms further confined results to subjects relating to police or specific police units; and tier three to specific domains within police intelligence practice. The search terms used are summarised in table 2, below.

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⁶ For a critical analysis of the division between these traditions, see Waddington (1999).
Table 2. List of Boolean search terms used in systematic review of PTG intelligence support literature.

<table>
<thead>
<tr>
<th>Tier one terms</th>
<th>Tier two terms</th>
<th>Tier three terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>intelligence</td>
<td>police</td>
<td>tactical</td>
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<tr>
<td></td>
<td></td>
<td>paramilitary</td>
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<tr>
<td></td>
<td></td>
<td>“emergency response”</td>
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<tr>
<td></td>
<td></td>
<td>“special operations”</td>
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<tr>
<td></td>
<td></td>
<td>PPU</td>
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<tr>
<td></td>
<td></td>
<td>PTG</td>
</tr>
<tr>
<td>SWAT</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>HRT</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>SCO19</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>intelligence</td>
<td>Nil (for tactical policing-specific publications only)</td>
<td></td>
</tr>
</tbody>
</table>

A total of 137 searches were conducted, resulting in identification of an initial 2,747 articles matching the keyword selectors. These resulting articles were recorded for later screening and review. Through this process, book reviews, editorials, and review articles were removed; non-peer-reviewed articles demarcated from peer-reviewed publications; and duplicates removed. This resulted in a refined list of 1,631 articles for initial assessment of inclusion and exclusion.

This refined list was then screened to determine relevance to the aim of the review. This workflow is outlined in figure 1, below. Articles were scanned to confirm matches to the search terms (noting limitations in some databases’ search facilities); identify relevance; and any anomalies.
Figure 1. Screening and filtering workflow for systematic review of PTG intelligence literature.

Following this process, 43 articles remained for inclusion in the review. Another 57 articles not included in the review but highlighted for their focus on related topics of intelligence support to public order policing, reconnaissance, or crisis negotiation, or due to their having referenced Intelligence Preparation for Operations (IPO), were noted. Of the 43 articles included in the review, roughly two-thirds (n=29) were from peer-reviewed publications, with just under half (n=21) being published in the US and the remainder being split between the United Kingdom (n=16) and Australia (n=6).

The articles included in the review were then assessed thematically, in order to address the aim of assessing the state of the contemporary literature on PTG intelligence support. This analysis highlighted a number of trends.

Overwhelmingly, the most prominent theme from the included articles centred on the need for intelligence support for PTG activities. This took a number of forms, including:

- general acknowledgement of the role of intelligence (as either function or commodity) in directing PTG activities (Sheptycki, 2017);
• exhortations on critical activities required from intelligence personnel in relation to pre-incident response (Solis, 2002; Bradford, 2009);
• catalogues of intelligence requirements in support of PTG operations (Slatkin, 2002; Klein, 2003);
• the dangers inherent in PTG activities not based on sound intelligence (Sanow, 2006; Sanow, 2011; den Heyer, 2014); and
• acknowledgement of the immaturity of PTG and PPU intelligence processes (Bronson, 2003; Burrows, 2007; Waddington, 2007; Rogers, 2011; Adang, 2012).

Salient among this theme was Salt and Smith’s conclusion that intelligence, as both a process and a commodity, “assumes an auxiliary importance in providing evidence, vindication, and justification” for the tactical use of force by PTGs (2008, p. 239).

Related to the often general focus on the need for intelligence support was the need for resourcing of PTG intelligence elements. This can be seen as an evolution from the more simplistic calls for intelligence support itself, to a more refined examination of the form such intelligence support should take. Examples included those stressing the need for PTGs to include intrinsic intelligence capabilities (den Heyer, 2011), and examinations around the resourcing of tactical operations centres incorporating dedicated intelligence elements (Alexander, 2011) and intelligence systems for public order management (Baker, 2008; Havelund, Joern, & Rasmussen, 2015).

Issues of public order featured throughout the literature both included in the review, and in a large number of articles (n=27) excluded from the review but noted for second order relevance. This perhaps suggests intelligence support to mass gatherings, protest, and riot control has developed at a greater rate than that for other PTG/PPU activities.

Also prominent was the fact that a large proportion (n=11, 25.6%) of the articles could be considered quite rudimentary in their handling of PTG intelligence matters. This is of note given the high threshold already imposed through the filtering process, which saw irrelevant articles, albeit having met the search criteria, removed. Articles in this class included those deliberately introductory in their approach (Heal, 2004; McMains & Mullins, 2011a, 2011b; Heal, 2013) or which, it could be seen, were
extending the analysis of PTG intelligence need into new practices (Dowe, 2009), particularly in relation to crisis negotiation (Bolz Jr, 2001; Slatkin, 2002; Nelson, 2010). On review, it can be seen that the tendency in the literature toward a basic approach to discussion of PTG intelligence may reflect an immature state of practice.

A noticeable gap observed in the literature reviewed related to intelligence support frameworks, with McMains and Mullins (2011a) expressing the need for information and intelligence management systems in regard to crisis negotiation operations. Where intelligence support frameworks are examined, their effectiveness and integration with specialist units including PTGs is questioned (Willis, Mastrofski, & Kochel, 2010). This gap in the literature makes further assessment difficult.

The trend in the literature toward an acceptance of unprocessed information as intelligence was stark, as is the lack of any substantive discourse on intelligence frameworks despite the heavy focus on standards and norms in other aspects of PTG practice. This bolsters the demand for examinations such as that of the current research.

Notwithstanding challenges to black-and-white demarcations between information and intelligence in the information age (Wing, 1999), the distinction remains important in the PTG context. Through the filtering process, 90 articles were removed due to a strict focus on equipment for information gathering and/or due to their including a conflation of information or reconnaissance as intelligence.

Of the 43 articles included in the review set, 18.6% (n=8) exhibited this conflation; many idly interchanging the two terms (Sanow, 2006; Cutshaw, 2007), while others drew closer to demarcating the two concepts, arguably demonstrating an evolution in the discourse. Of this second group, it can be seen that a thread had emerged in the literature questioning the value of PPU/PTG-collected “intelligence” (Hill et al., 2007) and the dubious labelling of intelligence to raw information in such contexts (Stott, Scothern, & Gorringe, 2013) and beginning to focus on separating raw information from properly processed intelligence.

These hints of an evolution in the discussion of PTG intelligence become more evident as the literature moves toward demarcation of information and intelligence in, and toward an asserted definition of, tactical intelligence in the PTG context. This move can be seen in subtle insistence on the role of analysis throughout tactical response
(Cooper, 2004, p. 103) even where the terms of information and intelligence are still used interchangeably.

Later works such as that by Alexander (2011, p. 26) go further, highlighting the lack of awareness by command of the difference between the two. Alexander proceeds to also focus on the processing and vetting of information into a more refined form of intelligence for use by command, a step not taken by the larger bulk of more elementary approaches in the literature. Rheingans (2013), again while demonstrating the trend of conflation in terminology, progresses toward offering a rudimentary definition of PTG intelligence:

… tactical intelligence is a skilled procedure used to acquire knowledge and information in order to manipulate the environment and achieve a purposeful goal. Tactical intelligence provides us with operational advantages. It allows for manipulation of the perimeter, shrinks the problem and increases operator engagement. Tactical intelligence can increase the reactionary gap and allows for better force predictability. It allows us to seize the initiative. From the command perspective, it improves tactical planning, increases decision-making capabilities, leverages manpower, improves communications and reduces liability (pp. 26–27).

This greater detail in examinations of PTG intelligence also gave rise to explorations of its measurement and utility. Klein (2003) focused on utility factors of accuracy, detail, and timeliness in reflecting on crisis negotiations leading to a PTG response. Heal (2008) goes further in highlighting seven utility factors of importance to the PTG environment: objectivity of facts, thoroughness, accuracy, timeliness, usability, relevance, and availability. While noting its place outside the strict scope of the systematic review, these examples reflect the earlier work done by Wargo (1993) in highlighting essential elements of intelligence at hostage incidents, being timeliness, relevance, accuracy, refinement, and communication. Finally, while not specifically addressing PTG intelligence support, Sean M. Evans (2005, p. 263) framed crime as counterinsurgency and concluded the key elements of “adequate” intelligence support for police special operations to be quality, practicality, and leadership.
Despite the lack of examination in the literature on PTG intelligence frameworks (or perhaps because of it), the apparent evolution toward demarcation and definition can be seen as leading to emerging focus on the adaptation of existing methods from other fields. In an earlier work in the reviewed set of literature, Heal (2000), suggests the use of military methods for terrain analysis by PTGs. Kraska (2007) later classed the use of intelligence (including military intelligence) as one of four groups of indicators of police militarisation. Debates around militarisation aside, this demonstrates the influence such adapted military methods have had (or could have) on PTG units.

More recent examples in the literature do not focus specifically on Western PTG intelligence support, but highlight the potential for adaptation of other models. Evans (2016), while not prescribing a particular framework, proposes a hybrid intelligence and special operations system for indigenous police services in post-conflict nations or low-intensity conflict (LIC) situations, merging ILP and military models. Mirroring the approach of the current study, Lasley and Guffey (2017) investigated the potential for adaptation of a criminal- or security-based anti-terror approach (Situational Crime Prevention) in military settings, further demonstrating the potential for cross-disciplinary adoption of processes. What is absent in the literature reviewed is any greater exploration of this potential within the PTG intelligence support context. Further examination of such issues of adaptation and process adoption is made later in this chapter.

INTELLIGENCE PREPARATION OF THE BATTLEFIELD

IPB is a systematic, iterative process by which the intelligence officer (IO) provides intelligence support to a commander by defining the operational environment and the impacts the environment has on both friendly and threat forces and their respective courses of action (COA). It has been often cited as the intelligence estimate provided to the commander in graphical form. Developed within an operational context of the Cold War in order to better identify the environment’s impact on anticipated conflict.

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7 In military and some policing circles, the term intelligence officer is used to denote those personnel involved in management and/or collection phases, and potentially intelligence analysis. The term intelligence analyst is considered uni-dimensional, with a focus solely on analytical components of the intelligence process. For the purpose of the current study, the term intelligence officer is preferred unless otherwise noted.
with Communist forces in Soviet Russia and North Korea, IPB was initially focused upon traditional military order of battle analysis in conventional armed conflict (Johnson, 1991a, p. 1).

As is to be expected, the bulk of the literature on IPB is sourced from military scientists and practitioners. Much of the literature examining IPB’s effectiveness and adaptability is found in the form of monographs produced by military professionals at US institutions such as the Command and General Staff College. Many of the monographs when viewed in isolation offer incremental contributions to the literature, however each represents a prioritisation of process and focus of each author as a subject matter expert. This has relevance to the methods chosen for the current study, which are outlined in the following section.

**IPB versus intelligence analysis**

As open source intelligence advocate Robert Steele notes, IPB “is a process, not a substitute for analysis” (1992, pp. 28–30). IPB is performed in the planning and estimates phase, and incorporates various forms of analysis such as examinations of relevant terrain, enemy composition, and predictive analyses to form assumptions on friendly and enemy courses of action. It is not as a whole however a form of intelligence analysis, but a process of imposing order to these various analytical outputs and effecting an outcome to assist command decision-making. IPB is in this vein more an informed planning support tool utilising a guiding framework.

Core IPB doctrine was originally enshrined in the US Army’s 1986 guiding FM 34–3 Intelligence Analysis, having formerly been disseminated in training circulars, and was later hived off into FM 34–130 (Headquarters, Department of the US Army, 1989), re-titled as FM 2–01.3 in 2009 and ATP 2–01.3 in 2014. These public versions are relied upon for the current study. FM 2–01.3 makes a number of updates to previous iterations, particularly in regard to core terminology in an attempt to move away from a focus on conventional force-on-force threats and operating environments, to a more encompassing lexicon addressing asymmetric threats and non-traditional areas of operations faced in modern counter-terror and counter-insurgency.

In examining the evolution of IPB and the literature around its use as an analytical framework, four key themes emerge from the review. These emerge along chronological lines, and can be distinguished as:
1. pre-1992: Institutionalisation, integration, acceptance, and refinement;
2. the Post-Cold War years: adapting to new realities and a new existence;
3. post-9/11: adapting to the asymmetric threat and external translation; and
4. the contemporary literature as at the middle of the second decade of the 21st century.

The following sections explore IPB’s development through these time periods, in order to examine, in detail, its evolution and adaptation since its inception to the current day. This will provide greater context to, and allow for further examination of the framework’s potential for adaptation into tactical policing settings.

Pre-1992 – Institutionalisation, integration, acceptance, and refinement during the Cold War

The earliest identified literature around IPB centres on the military intelligence profession’s focus on trials and assessment of the initial IPB doctrine, prior to its formalisation into the first of the field manual iterations. Adelman, Donnell, and Phelps (1984) focused on the failings in early training circulars relating to IPB processes, expounding, through professional reflection and analysis of existing psychological research into decision-making, a need for IPB to incorporate decision-analytic techniques and judgment aids in order to assist analysts and strengthen necessarily subjective decisions under IPB.

Adelman et al.’s work is the earliest found publicly available example of a critique of IPB. Their research drew heavily on existing psychological research and examined IPB considerations through both a statistician’s and a psychologist’s lens. This academic cross-sourcing analysis isn’t much seen in the later monographs, which tend to look at IPB through the prevailing military science lens. Adelman et al. asserted that analysts undertaking IPB are not equipped to appropriately factor in potentially fallacious data (or recognise it as such), and are therefore vulnerable to collection limitations such as deception (1984, p. 7).

Relevant to this study, Adelman et al. discuss the correlation between task achievement and task predictability, particularly of interest to intelligence personnel given the “generally low level of predictability in some intelligence tasks” (p. 9). This is of greater importance in asymmetric threat situations common in policing, where known doctrine may give little guidance as to target predictability.
The authors follow by discussing the effect on interpersonal agreement within analytical teams when in such situations, as individual judgments vary and are difficult to convey. These phenomena can affect the psychology of analytical teams in changing situations such as those to which intelligence support is provided in policing or military operations. This may hinder or lessen the value of such support to commanders who cannot therefore understand how those analytical judgments have been reached. Also, relevant to the concept of intelligence support, Adelman et al. note the need for “consideration of how the enemy generally makes judgments of intent” in determining likely COA (p. 39). In a policing environment, this would require a capable psychological profiling/enemy profiling/doctrinal knowledge element.

Earlier work by IBM (International Business Machines Corporation, 1978) provided valuable insight into the early stages of IPB’s definition and implementation, highlighting perhaps the first recognition of IPB’s decidedly workload-intensive nature and the beginnings of the literature around automation of the process. This focus on automation would continue into the future as required technology was developed. The IBM report validated the use of IPB as a standardising analytical framework for the integrated evaluation of threat and environmental factors, and can be seen as one of no doubt many internal tests of validity the Army commissioned during IPB’s formalisation into doctrine.

Following the publication of IPB in FM 34–1 and later formalisation in FM 34–3, the literature around IPB reflects the greater acceptance of the formalised process and its integration into MI routines. Larry Buel (1987) highlighted IPB as an outcome of the US Army’s early 1980s’ focus on developing “operational art”. Otherwise a conventional review, Buel’s work broke down the discrete stages of the IPB process as it then stood, and made the first public case for development of an operational-level IPB focus to mesh with existing strategic and tactical implementations. The importance of Buel’s work can thus be seen in its seminal recognition of IPB as an adaptive process, a concept that would be extensively developed in later research.

Buel’s work generated greater interest in exploring non-tactical applications of the IPB framework. The first of these movements built on Buel’s exhortations in arguing for an operational level of IPB, protesting IPB’s tactical level focus and claiming the operational level was underdeveloped (Purcell, 1989). Purcell’s work is important to the current study as he clearly outlines an analytical framework for
conducting operational level IPB by modifying existing tactical level implementations, noting “it is intended that the more precise and widely understood tactical level IPB process serves as a start point and then be adapted to fit the scale, scope, and objectives of the operational level commander in a theater of operation” (p. 29). Purcell’s work is also important in the context of the current study in that he clearly defines required elements of “intelligence support” which operational level IPB must supply the commander (pp. 13–15), and provides a replicable, comparative model for building on IPB for a modified purpose (pp. 19–27).

Like Purcell, Marks (1990) attempted to fill the gap in the application of IPB outside the tactical level, specifically at the operational level in support of campaign planning. Interestingly, despite their shared positions, Marks doesn’t reference Purcell’s earlier work, likely reflecting the rapid evaluation of IPB across the areas of the military at that time, in an effort to adapt the doctrine to other applications.

Building in part on Marks’s and Buel’s work, Johnson (1991b) refines the operational level focus further, arguing that “operational IPB” is a misnomer, attempting to force a square peg into a round hole. Furthering his position, Johnson advocates for proper development of theatre-specific level doctrine, which he proposes under the title of Intelligence Preparation of the Theater of Operations. The end state of Johnson's study is the establishment of a framework for considerations for intelligence estimates at the operational/theatre level. Johnson’s method also offered a number of models for the current study, given his research question and its similarities to that being studied here.

The integration of IPB into US Army MI processes saw IPB drawn into the ongoing debate over the role of intelligence support in providing predictive analysis to commanders. Following the acceptance of IPB in the literature, a number of authors addressed the prediction debate in the lead-up to the end of the Cold War. This was important in that it reflected IPB’s standing in the overall MI framework at that point.

Thaden (1986) examined IPB doctrine and the expectations of what it should provide to tactical planners, and identified major assumptions within the IPB process to examine how these affect the validity of results. Thaden’s core research question was to examine the extent to which IPB could provide predictive, rather than descriptive, intelligence to support command decision-making.
Utilising a multiple case study method, Thaden highlighted a theme wherein IPB may not be flexible enough a process to account for deception and surprise events, due largely to it being at that stage geared toward the heavily doctrinal Soviet threat. Thaden concluded that while understanding threat doctrine is undoubtedly important for the analyst, the case studies he examined do “not support using it as the primary tool to predict enemy courses of action” and that other factors, including personality characteristics, can have greater influence on enemy commanders’ decision-making (p. 29). Thaden’s assessment is an early driver and indicator of the changes that would later be made to IPB to deal with less rigid, dynamic threat sources.

Later works during this period built upon Thaden’s foundations, focusing on the perceived over-reliance on IPB as a predictive tool, particularly against non-doctrinal threats or those which employ sophisticated deception practices (Campbell, 1989). Also explored were existential questions over the utility of tactical intelligence if it is not to be predictive; the relative merits of prediction; and theories “of” military intelligence (and therefore IPB) as necessarily predictive (Linden, 1989).

These considerations are of interest, as while counter-deception can be built into IPB for LE, doctrinal threats are rare, and often limited to Al Qaeda-type opposition, some organised motorcycle gang elements and transnational serious organised crime formations, and former military and military-influenced cells. Campbell also suggests a commander wanting prediction from the process should consider several factors, including the strength of understanding of enemy doctrine, level of faith in the intelligence system and an assessment of its collection capabilities, quality of the IO, time available for decision-making, and contingency planning (1989, p. 50). Such considerations can be seen as pertinent to the current research’s conceptualisation and operationalisation of the construct of intelligence support.

Linden (1989) interestingly charts the historical debate around the role of the IO and whether they should be predicting enemy COA. Through a number of case studies Linden determined IPB in its form as at the end of the 1980s was inadequate to deal with the demand for prediction at the tactical level, and as extraordinarily prone to cognitive and perceptual biases as well as a number of influencing factors. Linden concluded by proposing an “expanded IPB”, including several streamlined processes aimed at minimising the time needed for the iterative rounds, and importantly,
analytical processes “designed to minimize the negative effects of behavioral factors on prediction” (1989, p. 39).

After more than a decade since its conception, and years after its indoctrination, the focus of the IPB literature also shifted to examination of efficacy and refinement. This was reflective of the fact IPB had achieved legitimacy as policy and method, and that its vernacular had been promulgated and accepted. The literature acknowledging this began to focus on the more salient problems with IPB as a process, particularly at the tactical levels, including the realisation IPB was placing the heaviest burden at the poorest-resourced, most time-sensitive levels, while recognising the benefits it brought in standardisation and synchronisation (Paternostro, 1989, p. 37).

This stage of refinement also saw a number of researchers focus on the role of the commander, as recipient of the intelligence support provided by IPB, as the key figure in the process. These examinations importantly placed IPB in the context not of an “intelligence panacea” (Johnson, 1991b, p. 9), but simply as a means-end method or framework for providing a digestible intelligence estimate to a commander.

This new focus on the role of the commander was brought about by early critiques of IPB’s effectiveness and acceptance, and a realisation that the process had been siloed within the realm of the intelligence staff and lacked command involvement. The most assertive of critics, Douglas Campbell, noted that even at that early stage, formal IPB doctrine was evolving, and stressed the need for the newly minted FM34–130 to be altered (1990, pp. 86–87), in this case, to better support command decision-making and reflect the reality of synchronisation between intelligence and operations staffs.

Placing the onus back on command rather than intelligence staff, Campbell proclaimed “the commander is responsible for IPB” (1990, p. 85). This call for greater command integration in the IPB process was echoed by other practitioners (Lacquement, 1990, p. 39; Rodriguez, 1991), with Rodriguez concluding that the “viability of the IPB process to decision making lies squarely on the commander’s shoulder” (1991, p. 36) and going as far as recommending IPB be renamed “Commander’s Preparation of the Battlefield” (1991, p. 38).

Noting a positive development in light of Campbell’s (1990) critique and the subsequent focus on command integration, Stahl highlighted that the calls of his
contemporaries were being heeded, and that the “intelligence estimate is becoming more and more a commander’s IPB. Commanders are getting much more involved in the process” (1991, p. 23). Drawing on real-world experience, Black (1991) discussed the evolution of IPB application through Operation Desert Storm, to arrive at the IEW synchronisation matrix, which appears to be an answer to Campbell’s criticism of the lack of synchronisation between the operations and intelligence planning systems to which IPB contributes.

Agee’s comprehensive 1991 monograph is most representative of the phase of review and assessment of IPB commenced in the late 1980s and into the last decade of the 20th century, where military strategists began to evaluate IPB and its impacts a decade or so after its introduction and promulgation. Agee explores the origins of IPB and its constituent processes, and focuses on the ambiguity of IPB application below the brigade level.

Agee identified several doctrinal approaches for increasing the utility of IPB at the battalion level, specific to the broad areas of uniformity in doctrine, the role of the commander, the revision of intelligence doctrine itself, and the application and definition of specific IPB techniques (pp. 39–40). Disagreeing with Campbell (1990), Agee recommended against the removal of decision-support products from IPB, asserting that their inclusion in IPB accords with the aim of greater operations-intelligence staff planning integration (1991, p. 30). Of particular relevance to the current study, Agee stressed the importance of headquarters and higher echelon support in the preparation of IPB components to lower-level intelligence staffs; this is likely to be of importance to policing organisations with greater available resources at the headquarters and administrative levels when compared to tactical personnel numbers in the field.

By the late 1980s, perhaps emboldened by the literature around the prediction debate and the early exploration of operational level applications of IPB, an undercurrent emerged in the literature critiquing the long-term relevance of IPB as it was shaped. Such critique surrounded doctrine relevant to both conventional military operations at various non-tactical levels as discussed above, and prescient exemplars challenging the long-term viability of IPB doctrine in unconventional operations and operations other than war (OOTW). These latter adaptations paved the way for later
works refining IPB to specific tactical applications, and are therefore considered as seminal in the context of the current study.

One early examination of a real-world situation where IPB was found lacking in dealing with a low intensity conflict outside the rigid, doctrinal, Soviet-style threat hypothetical can be found in Galvagno and Rock’s (1990) case study from the Panama conflict in 1989. Galvagno and Rock describe the evolution of IPB which was developed by IOs during the low-intensity conflict, to adapt established doctrine to be of use to commanders in a non-traditional environment. They outline the development of composite matrices (Enemy Response Matrix, terrain matrix, and Enemy Courses of Action matrix) and how these assisted tactical commanders in understanding the vast amount of information developed under doctrinal IPB to cover the scope of environments and threat sources encountered.

While Galvagno and Rock’s level of detail is minimal, likely due to classification and/or sensitivity issues so closely following the conflict, the work is a good and early example of IPB being adapted to suit the reality of a non-traditional, non-linear threat/environment. It also reinforces the centrality of IPB as a command support tool, concluding that the forced adaptations made the development of IPB easier in that environment, contributing to the timeliness of the disseminated intelligence to commanders (1990, p. 23). These adaptations and additional considerations were later reinforced by Stahl (1991, p. 32), noting the greater level of detail required for forces operating in LIC.

The focus on the adaptability of IPB to non-linear operations continued, with the confidence that the framework could be adapted to any situation or threat (Paternostro, 1989, p. 42). Foreseeing its utility to the dominant reality of future counterinsurgency operations, Horris noted IPB’s elemental emphasis on evaluating and integrating the threat as a key analogue to identifying insurgent infrastructure (1990, p. 6). Mirroring the current study, Horris identified a number of criminal intelligence and investigative methods of use to IPB within counterinsurgency (COIN) operations, validating the cross-domain application of analytical techniques being examined here.

Other authors sought to adapt the Army’s traditional unit focus of IPB to defensive operations against airborne assault (Clayborn, 1990; Haibeck, 1990), with
Haibeck contributing an important conclusion in the context of asymmetric threats common today, noting that decision-support products under IPB can still be produced when doctrinal analyses of the threat are not available or are rendered useless. Others, while cautiously chastising the practice of IPB in the real world, continued to claim it a cornerstone of more specific tactical tasks (Lacquement, 1990, p. 27).

Not all authors as warmly embraced the rapid adoption and adaptation of IPB outside the traditional sphere. While in the same year propounding the need for an adaptation and expansion of IPB to account for the specific considerations for operations in urban environments and agreeing that there seems no limit to IPB’s application (Johnson, 1991a, p. 1), Johnson cautioned that “IPB seems to be contagious. At the risk of making too much of a good thing, doctrine writers are expanding IPB’s scope to encompass [other areas]” (Johnson, 1991b, p. 9). Johnson’s concern in this regard was for the blind acceptance and adaptation of IPB as it stood as a tactically focused doctrine, not against IPB itself, which he saw as applicable and malleable enough to use as a foundation for applications at the theatre level and within urban environments.

Johnson’s identification of the rapid assimilation and impact of IPB on OOTW was prescient given the expansions to come in later years. OOTW, particularly in relation to COIN, LIC, CT, and peacekeeping deployments, most in urban environments, have demanded IPB be continually adapted to suit. His examination of IPB’s suitability within urban operations showed a path for such adaptations, and he noted the limitations of the doctrine, observing “doctrinal templates may not be feasible during urban insurgency, simply because some groups may not have developed specific doctrine. FM 34–130 admits that doctrinal templates are normally not prepared for terrorist and insurgency situations … Instead, we must rely on reactive pattern analysis and situation updates during the battle” (pp. 30–31). Such considerations would remain for the following decades.

The period preceding the Cold War saw IPB’s formalisation as a doctrine, removing it from the sphere of undocumented military practice and into a publicly available, widely adopted framework. This process had allowed it to be tested both in battle and in the realm of academic military science.

At its outset, IPB was defined in TC30–27 as:
... a comprehensive procedure which involves maximum integration and analysis of all aspects of enemy, weather, and terrain. Included within the IPB effort is the development and standardization of manual tactical intelligence analysis techniques. It is accomplished by using graphics such as annotated maps and photographs, overlays, and tactical intelligence templating. These are used as aids to analysis and as a means of disseminating intelligence information to the generals, colonels, and captains. IBP (sic) will also assist in determining the automatic data processing data base requirements necessary to meet the decision needs of the commander. (Draft TC30–27, quoted by IBM p. 1–1.)

By the end of the Cold War the formal doctrine had updated its definition as follows:

... IPB is a systematic, continuous process of analyzing the threat and environment in a specific geographic area. It is designed to support staff estimates and military decision making. Applying the IPB process helps the commander selectively apply and maximize his combat power at critical points in time and space on the battlefield by—

- Determining the threat’s likely COA.
- Describing the environment your unit is operating within and the effects of the environment on your unit.

IPB is a continuous process which consists of four steps which you perform each time you conduct IPB:

- Define the battlefield environment.
- Describe the battlefield’s effects.
- Evaluate the threat.
- Determine threat COAs. (Headquarters, Department of the US Army, 1994.)

At this stage, the IPB framework had gone through a controlled process of formalisation and was recognised for its ability to standardise analytical processes, but was being questioned for its resource demands, and its rigidity and inability to handle the challenges foreseen within non-traditional applications. The role of the commander
in both the performance and efficacy of IPB to intelligence support had been emphasised and heeded, and the military was looking ahead to future adaptations of the still-developing doctrine.

The Post-Cold War years—Adapting to new realities and a new existence

The years following the Cold War saw IPB establish its formal maturity, with the framework being forked to address emerging threats and new modes of operation. The doctrine itself continued to be built upon, and the literature exerted greater influence over its ongoing, official development.

The early years following the end of the Cold War saw the US military in search of new purpose, and its doctrine had to follow accordingly. Non-traditional contingency and intervention missions in Somalia, northern Iraq, and Panama had forced the realisation that future deployments would not be against a traditional doctrinal enemy. Military researchers and practitioners also realised IPB in its initial form was inadequate to fulfil its core task when faced with such missions and adversary threats, due to a lack of inputs, or lack of flexibility in dealing with more complex environments and non-doctrinal adversaries (Steele, 1992; Snider, 1995; Grimsley, 1993).

These realisations prompted a number of researchers to focus on actively adapting IPB to address emerging needs. Grimsley’s (1993) examination of IPB’s future applicability was ground-breaking in that it is the first identified assessment of IPB to asymmetric threats, while Steele (1992) explored potential applications of IPB in LIC against non-state actors; actors which are the most common targets of domestic LE agencies and which are prevalent in the current climate of multi-lateral, joint-agency CT operations. While earlier areas of focus around the application of IPB at the operational level (Munn, 1993) and in terms of automation (Pfeiffer, 1995) continued, the momentum of the research continued its push toward such adjustment and adaptation.

Given the nature of the military’s deployments, IPB’s utility in peacekeeping, sustainment, and humanitarian operations initially dominated the scholarship. Rejecting the view of IPB as an intelligence panacea, Dixon (1993) argued for a concomitant focus on human intelligence collection alongside IPB in contingency operations, while Morrison (1993) similarly saw IPB as a complementary activity to
core reconnaissance tasks within peacekeeping and sustainment operations rather than a one-stop solution. Examining the wider doctrinal base as applied to such operations, Hunter (1994) determined IPB as inadequate in handling intelligence preparation due to its lack of inclusion of cultural and political factors into battlespace evaluation, whereas Snider determined the problem to be one of indoctrinated mental processes rather than the stricture of the doctrine itself, which though lacking the granularity of detail to deal with commanders’ demands of IPB in peacekeeping operations, did allow for flexibility of scale (1995, pp. 42–43). By the end of the decade, Mikaloff (1998) concluded IPB as lacking in its scope for peacekeeping operations and sought to adapt holistic notions from established systems theory to account for the complexity of interactions encountered in such deployments.

As these contingency operations became more common and the shape of US force projection transformed, the breadth of OOTW considerations widened and forced further examination of IPB’s adaptability. While a number of authors disagreed over the level to which IPB, as it stood, could be used in OOTW, the flexibility of the doctrine at an applied level was demonstrated to overcome these challenges, often through application of other analytical methods to achieve the composite IPB stages against non-doctrinal threats and in environments defying simplistic definitions (Peterson, 1993, p. 32; Valentine, 1993, p. 40).

The focus on OOTW saw IPB’s first potential applicability to law enforcement raised. While these emerged through the US military’s omnipresent standing, particularly following moves toward employing the armed services to assist in counter-drug operations (Schnaubelt, 1995) and in support of civil authorities (Wenger & Young, 1992; Peterson, 1993), others posited the adaptability to the threat environment and the recognition of the power of, and threat posed by, transnational criminal syndicates (Grimsley, 1993, p. 8; Peterson, 1993). Other authors, while not specifically referencing the criminal threat, focused on tactical responses commonly encountered by responding police units, bolstering IPB’s range of application in “operations short of war” (Munn, 1993, p. 19).

The lack of detail in the IPB process required for LE and peace enforcement operations was again raised by Morris (1995, pp. 28, 30–31) who also highlighted the utility of common LE analytical methods in generating doctrinal, *modus operandi* templates against non-traditional, non-doctrinal threats. This is mirrored by the demand
for greater detail for IPB support to special operations forces (Scофield, 1999), posited as the natural analogue of police tactical groups. This lack of detail, identified throughout the period, combined with the still-nascent exploration in the literature of IPB’s applicability to urban environments and the US military’s posture as a forward-deployed peacekeeping and sustainment force—as opposed to what it would become post-9/11—limited the exploration by military researchers into further, LE-relevant areas.

By the turn of the millennium however, IPB’s dominance as the “most well known of the intelligence functions” (Hunter, 1994, p. 4) had seen it grow beyond the military sphere, along with the emergence of the IPO concept (Sullivan, 2000), which would later be substantially developed as a framework for LE use. This was an important development and a key instigator of the current research study.

IPB’s wide acceptance allows the researcher to discern methodological trends in the body of research by this point. Whereas the earlier focus on IPB’s shape and application initially leant itself toward secondary data analysis and historical case studies, researcher and military scientists during this period moved toward a dominant pattern of comparative analysis and more relevant, topical case studies in arguing for their particular adaptation of the doctrine. As the push for adaptation continued, this pattern became more pronounced.

In assessing IPB’s suitability for adaptation, a number of measurement models also began to emerge. Caniano (1992), while not offering a formal alternative model, clearly drills IPB measurement down to Clausewitz’s holistic notion of providing understanding of “locality” to a commander, and on a second criterion of synchronicity. The synchronisation criterion recurs throughout the literature of the period, with Rowe (1992, pp. 45–46) mirroring the claims by Paternostro and Rodriguez regarding IPB’s ability to synchronise intelligence outputs by asserting that it is to the betterment of the intelligence estimate as a whole. This represents a potentially important factor in assessing the effectiveness of the intelligence support function.

In line with Thompson et al.’s utility model, Grimsley (1993, p. 15) later utilised the US Army’s five operational tenets of agility, versatility, initiative, depth, and synchronisation as measurements of IPB’s effectiveness, while Peterson (1993, p. 3)
reduced the assessment process down further to three criteria of timeliness, completeness, and appropriateness to command support.

The expansion of the US military’s role into non-traditional deployments and the accompanying reflection of IPB’s use in such operations, as well as rapid technological developments saw a number of efforts toward the adaptation of IPB into much wider fields of focus, including information dominance (Felts, 1998), spaceborne systems (Corey, 2001), and even assessment of the effects of interstellar electromagnetic phenomena (Frooninckx, 1998). IPB’s wide acceptance among ground forces also saw it adapted to Air Force operations, with the framework used as a method to synchronise intelligence, surveillance, and reconnaissance efforts (US Department of the Air Force, 2001). Hearkening back to Johnson’s warning against seeing IPB as an intelligence panacea while simultaneously noting the rapid expansion of the US military’s role, Wood (1998) posited tightly defined IPB as a way of warding off mission-creep.

This period of rapid growth saw the doctrine begin to be shaped by the scholarship. Evidenced by the substantial annexures to the 1999 draft IPB FM (Headquarters, Department of the US Army, 1999), it is clear the breadth of work positioning IPB as a process recipe had begun to influence a receptive organisational knowledge management system. The 1999 draft included as annexures a number of significant examples from the growing body of literature surrounding IPB’s specific adaptations and application, notably including a reflection on the emerging focus on operations in urban environments (Ley, 1999; Brohawn & Dupont, 2000; Burleson, 2000), foreseen by Johnson (1991a) and Horris (1990). It is arguable that this receptiveness to change in the doctrine placed the flexible IPB recipe in readiness for the continued expansion and paradigm change that was to come following the 9/11 attacks.

Post-9/11—Adapting to the asymmetric threat, and external translation
The terrorist attacks on the US homeland on September 11, 2001 prompted paradigm change across a number of aspects of Western life, and preceded changes in legislation and civil liberties, the nature of policing approaches to CT and extremism, the media, and the scholarship around the military and intelligence. Like the earlier surges in intelligence research following the Church committee revelations in the 1970s (Warner, 2007, p. 22), the introspection and analysis following the 9/11 attacks and the later Iraqi
weapons of mass destruction fiasco have prompted a renewed surge of research into CT intelligence and intelligence failure (Walsh, 2011, p. 15). The literature around IPB since 2001 reflects this focus.

Following the exploration of IPB’s use in non-traditional contingency and peacekeeping environments, often in urban settings, the change of focus shifted to applications of IPB in foreseen urbanised landscapes common to occupying forces and within counterinsurgency campaigns. While IPB’s structural applicability continued to be examined for uses well outside topical areas of focus (Weekers, 2011; Fordham, 2000) and lingering consideration of automation and the prediction debate endured (Brown, 2004), the focus overwhelmingly centred on CT, COIN, and urban adaptation.

The focus on adaptations of IPB to support CT operations is natural, and can be seen as built upon the work conducted during the 1990s readying IPB for non-traditional uses. The work of Johnson (1991a; 1991b), Grimsley (1993), Morris (1995), Buel (1987), Purcell (1989), Ley (1999) and others laid the foundations for the shift toward acceptance of strategic and operational IPB in reducing uncertainty in CT (Repass, 2003, pp. 10–13); the need for integration of wider factors such as economic (Murray, 2008) and cultural considerations into the IPB process (Chase, 2009; Black, 2010); and for terrorism early warning system approaches which foreran the conceptualisation of Intelligence Preparation for Operations adaptations within American police and emergency services (Sullivan & Wirtz, 2008). The depth of focus given at the time to the role IPB could play in CT and other urban operations is evidenced by the publication, outside of the predominant sources in the Naval and Army command colleges and in the publicly available published media, of Thomas’s (2004) treatise on CT IPB and Medby and Glenn’s (2002) RAND Corporation study into urban adaptations.

The growth in the scope of application and political power of Special Forces during the period (Mazzetti, 2014, pp. 128–129; Scahill, 2013, p. 297) saw IPB examined for its effectiveness in supporting their deployment, with models generated focusing on the granular level of detail required in targeting and threat profiling (Johnson, 2002; Don, 2003; Clark, 2003). These models are of particular relevance to the current study and its examination of IPB’s adaptability to tactical policing units and environments, given the shared characteristics, training bases, and operating procedures of PPU (particularly PTG) and Special Forces units.
The shift toward protracted counterinsurgency operations led to the inclusion of IPB into COIN practice (Zeytoonian, 2006) and also to the elevation of guidance on the application of IPB in COIN operations to a dedicated appendix in the 2009 iteration of the IPB FM, having previously been included in a lesser manner in its 1994 predecessor publication. This progression is of relevance to the current study given the convergence of military and policing functions under COIN (den Heyer, 2011) and the framing of crime as insurgency (S. M. Evans, 2005).

Despite not having been formally updated in doctrine for 15 years, and having been extensively adapted and adopted to support new uses, the 2009 iteration of FM 2–01.3 made only natural changes to IPB’s definition:

… Intelligence preparation of the battlefield/battlespace is a systematic process of analyzing and visualizing the portions of the mission variables of threat/adversary, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. By applying intelligence preparation of the battlefield/battlespace, commanders gain the information necessary to selectively apply and maximize operational effectiveness at critical points in time and space (Headquarters, Department of the Army, 2009) …

with additions to emphasise the continuous nature of IPB, its reliance on graphical presentation, and its support to decision-making.

America’s concern for the protection of the homeland and the rise of integrated interagency taskforces undoubtedly assisted IPB’s conversion to domestic applications. Where Wenger and Young (1992) championed the use of IPB, despite its limitations, in assisting civil authorities in major public order responses, more recent explorations have come full circle. Learning from experience in urban environments and peace enforcement wars abroad, recent examinations have modelled IPB as applicable to law enforcement adoption in the emergency management (Sullivan, 2015) or transnational investigations domains (Shelley et al., 2005), or highlighted where existing police processes mirror IPB (Ellis, 2007). The IPB framework has also been posited as a standardising framework for newer, conglomerate or hybrid agencies with an intelligence function (Kim & Allard, 2008, p. 77). Kim and Allard’s positing of IPB as a ready-made solution is suggestive of the warned-against IPB intelligence panacea.
(Johnson, 1991b, p. 9), and may perhaps present as naïve in the context of inevitable bureaucratic impediments and challenges of implementation, but it does strengthen this study’s exploration of whether IPB may provide enhancement (possibly including in relation to standardisation) to PPU/PTG intelligence outputs.

The IPO concept arguably represents the most developed implementation of IPB’s adaptation/translation to law enforcement settings. Emerging through Sullivan’s work with the Interagency Board for Equipment Standardization and Interoperability (Sullivan, 2000) and the Los Angeles Terrorism Early Warning Group (Sullivan & Bauer, 2008), the concept gained traction in the first decade of the 21st century as a hybrid model drawing from military and civilian practices and due to its potential applicability across counter-terrorism, emergency response, public order, and other operations. Focused on responses in urban areas, IPO was developed to support decision-making within tactical and, predominantly, operational domains, and incorporates a number of analytical methods in its modification of the standard phases of IPB (Sullivan, Kempfer, & Medby, 2005, p. 15). In the context of the current study, the emergence of IPO is important as it provides a model which “bridges civil-military divides” (Sullivan et al., 2005, p. 11), and demonstrates the applicability of the IPB foundation within emergency law enforcement response.

The state of the contemporary doctrine reflects the extent of IPB’s applicability and adaptation. This is demonstrated through the extension of the doctrine to account for, and give guidance on, the use of IPB in non-linear, non-traditional military applications. For example, the 2009 iteration of FM2–01.3 included extensions to guide the intelligence officer through the application of IPB for COIN and insurgent support, CT, evacuation operations, counter-drug operations, peacetime and humanitarian assistance operations otherwise not defined, and stability and civil support operations. It can be seen that this reflects the scope of operations the US army and marines were primarily undertaking at that time, and therefore what IPB was intended to support.

By 2014, ATP2–01.3 had been substantially expanded, again showing the continued state of adaptation, evolution, and application of the IPB framework to reflect the contemporary operating environment. While the 2014 iteration of the doctrine made only minimal changes to the definition of IPB, it included extensions for the application of IPB in COIN operations; for population assessment; “unique activities” including force protection and capacity building with partners; applications for “unique
environments” including urban settings and cyberspace operations; and “unique missions” including counter-drug and counter-weapons proliferation operations, sensitive site exploitation, peace operations, and humanitarian and disaster relief activities (Headquarters, Department of the Army, 2014).

The contemporary literature and non-military adaptations
While military-specific evolutions of IPB continue to present (Attar & Rouleau, 2013), particularly to address greater operational complexity (Pike & Brown, 2016; DeGennaro, 2016; D.P. Carter, 2016; Morris, 2017) and the nature of contemporary operating environments (Russo, 2016), a fourth theme began to emerge with the identification of more contemporary literature around the second decade of the 21st century. This body of work can be seen to reflect the widespread acceptance of IPB as a staple of analytical method, with its use referred to outside of more traditional military and paramilitary applications. In addition to the homeland security adaptations already mentioned, and IPO, uses include those within the aforementioned environmental compliance enforcement (Weekers, 2011) and animal preservation fields (Gustafson et al., 2018) which arguably flow on from the law enforcement adaptation path, but also to applications well outside this sphere, including for campaign preparations within online gaming (Miller, 2014; Haulica, 2015). Such developments are likely attributable to factors including the availability of US military intelligence doctrine, and a wider appreciation of intelligence concepts through the open source and popular media.

One interesting adaptation in the US context, is the use of the IPB framework by the “prepper” and survivalist movements for developing “Community Intelligence” in preparation for a post-conflict environment on US soil (Culper Institute, 2014; Culper, 2018). Driven in part by ex-US military personnel active in the prepper movement, these adaptations focus on the framework’s use—and ease of use—by community members concerned with security in any post-conflict or post-apocalyptic event. While an examination of the phenomena lies well outside the scope of this study, the use of IPB by the prepper movement is an interesting example of it being identified as carrying utility for situational awareness in civil settings, and adds weight to the noted adaptability of the framework.

Relevant to law enforcement and the contemporary operating environment, IPB continues to be asserted as a key method for the analysis of large-scale urban locations in counter-drug campaigns (Sullivan, 2014) and as a framework for assessment and
prediction of threats to the banking sector (Lowe, 2017). The adaptation of IPB as IPO under strategic warning systems continues (Sullivan, 2015), and this focus on adaptation of IPB for emergency management has seen it examined for its utility in supporting decision-making and planning for ambulance and medical first aid services at mass-gathering events (Davies, 2014). While not in the same context, IPB has also been posited as a basis to drive complementary medicine consultations (McLintock, 2018), again highlighting the framework’s adaptability.

The expansion of IPB frameworks, principles, and methods into the online or “cyber” domains is also salient in the contemporary literature, with IPB being investigated for its effectiveness in dealing with online threats and supporting cyber operations. Building on early examples arguing for the suitability of, and a need to adapt and expand IPB into cyber domains (Fordham, 2000; Winterfeld, 2001; Wieland, 2012), the literature progressed to adaptations of the IPB recipe to support threat assessment online, with the resulting proposed Intelligence Preparation of the Virtual Battlefield (Moore, 2004). More recent exemplars have similarly proposed adaptations of the recipe to address shortcomings in risk analysis in computer network operations, leading to the inception of Intelligence Preparation of the Cyber Environment or IPCE (Lemay, Knight, & Fernandez, 2014).

Relevantly given the theoretical basis of the current study, Kime (2016) later articulated an Intelligence Preparation of the Cyber Operational Environment as a translation of the IPB recipe into the defence of corporate networks and operations, adapting each of IPB’s relevant processes to suit. Extending these propositions, Kieffer (2016) used a case study approach to testing IPB’s effectiveness as part of a multiple methods approach to target attribution in cyber domains, concluding that the framework offers utility, across industries, when used alongside other established techniques. These examples demonstrate the continuing use and adaptation of IPB to analogous, receptive fields.

**IPB summary**

The preliminary review of the literature reveals IPB to be a resource-intensive methodological framework requiring substantial preparation and time to conduct, but one which potentially brings order to otherwise disparate analytical activities and which can be integrated into the operational planning and targeting processes in order to enhance the utility of intelligence support to command. The process has been adapted
over time to changes in the environment and has spread to application within non-military spheres, including within law enforcement and emergency services.

INSTITUTIONAL THEORY AND THE PTG CONTEXT

Having addressed the literature around both military IPB and tactical policing in the preceding sections of this chapter, and noting the conceptual framework for this study, it is considered necessary to examine briefly the recent literature to highlight the environmental, operational, and political realities leading to such intersections, and to provide a basis to survey areas of process adoption. As outlined in the previous chapter, the current study seeks to examine the potential for IPB as a rationalised process to enhance the effectiveness of PTG intelligence support. In doing so, the study contends that PTGs present as institutionalised settings predisposed to adopting processes from analogous military environments, particularly those processes seen as being more greatly refined and/or to which a receiving institution (i.e. the PTG) could or should aspire.

This is in line with Christensen et al.’s (2007) exploration of the myth perspective on organisational development. In this case, IPB is presented as a recipe for organising work processes, and elastic (Christensen et al., 2007, pp. 60, 62) in that it has already been shown as adaptable and will require further modification if translated into a PTG context. Utilising the translation paradigm affords the benefit of framing the analysis presented in the study in an established framework of public sector organisational theory, outside a narrow perspective if limited to a purely policing or military studies lens.

Christensen et al.’s treatise on the transformation of public sector authorities via various means, including the myth perspective, offers a strong and digestible exploration of what is a wide and varied topic, building on the pioneering work of Meyer and Rowan (1977) and DiMaggio and Powell (1983) in developing institutional theory and the understanding of isomorphism respectively. Specific to the context of the current study, the transfer of processes and behaviours via the myth perspective and broader institutional theory has been explored through contemporary policing and organisational structure (Crank & Langworthy, 1992; Giblin, 2006), and briefly in relation to the spread of SWAT in the USA as part of a search for greater efficiency in handling critical incidents (Phillips, 2013) and legitimacy (Cooper, 2012; Kim, Phillips,
& Wheeler, 2016). Maguire (2014) included the militarisation of police and the rise of PTGs and PPU in his assessment of four developments reflective of isomorphism. Empirical studies examining the adoption of processes in law enforcement settings are however less prevalent (Burruss & Giblin, 2014).

Separate, but related to, these considerations are those considerations of the applicability and utility of transferring a program or process from one jurisdiction to another, particularly when addressing moral and ethical considerations. This is of importance when considering (as this study does) the translation of processes across cultural and jurisdictional boundaries, even in ‘Western’ police settings with a number of shared characteristics given legal, doctrinal, cultural, and practical differences will inevitable abound.

The internationalisation of crime control strategies has led to the identification of an ‘Americanisation’ of transnational criminal justice efforts building off the long-standing program of international counter-illicit drug efforts, both cooperative and unilateral (Andreas & Nadelmann, 2008). While evolutions such as this have brought considerable success, questions remain around the appropriateness of transferring (deliberately or unintentionally) inherent norms and values from one jurisdiction or culture into another (Jones & Newburn, 2019). This is indeed relevant given the current study examines the potential utility in adapting one such US-developed framework.

The literature around the adaptation and translation of processes and programs between jurisdictions is also relevant to issues of credibility and acceptance of resultant implementations. Explorations of procedural justice theory as it relates to public acceptance of policing initiatives are relevant here to both public acceptance of police legitimacy (Tyler, 2004; Hough, 2013; Jones & Newburn, 2019) particularly given the negative associations often present in the militarisation debate; and also issues of the internal credibility (acceptance by practitioners and consumers) of adapted processes. The latter is explored later in this thesis through the presentation and discussion of the results of the study, though a fuller exploration of procedural justice theory as it relates to wider efforts to transplant police interventions and strategy from one legal or cultural jurisdiction to another is outside the scope of this review.

Similar to the concepts inherent in translation theory and the spread of processes as myths are those of organisational mimicry, which has been used as a framework to
examine contemporary and historical police/military convergence in the USA (Campbell & Campbell, 2016). This thread has also seen the diffusion of processes and norms among police be examined through the lens of isomorphism driven by external pressures (Jiao, Lao, & Lui, 2005; J. G. Carter, 2016), with major developments in the police intelligence domain including ILP and Compstat (Willis, Mastrofski, & Weisburd, 2007; Burruss & Giblin, 2014); intelligence fusion (Hidek, 2011); and New Public Management in relation to management processes (Hoque, Arends, & Alexander, 2004) framed as having benefited from or been driven by isomorphic forces.

The evolution of PTGs, it could be argued, reflects both normative and mimetic elements of isomorphism at work: the normative brought about by key actors within an organisation directing the adoption of processes and behaviours having their origin, or having been developed, within military settings; and the mimetic brought about by organisations seeking to adopt military processes seen as successful or aspirational. This can be seen in the formation of the earliest and most influential US SWAT units (Baumgart, 2016, p. 8), and is in line with examinations in the literature on police forces’ adoption of other specialist units such as anti-gang squads (Katz, 2001) and cybercrime units (Willits & Nowacki, 2016).

The literature examining isomorphism as it relates to the development of PTGs—outside those analyses of militarisation as a phenomenon—is more limited and in some cases inconclusive, focused on the adoption of appearance, equipment, and weaponry (Phillips, 2016), and the spreading of structures as already identified. This has included examples highlighting the export of the SWAT and gendarmerie templates to foreign nations as part of re-building efforts (Friesendorf, 2013; Friesendorf, 2017). Recent examples in the literature have highlighted the important distinction between militarisation and innovation through selective adoption, and have included the adoption of intelligence processes originating in military (and other, covert) environments as reflective of the same model as that which has led to the spread of SWAT units (Dinsmore, 2018). Others have rightly, albeit tangentially, questioned the spread of PTGs when their need or effectiveness may not be proven (Johnson, 2015).

The nature of military special forces has been acknowledged as transcending “the ‘behavioral codex’ of military institutions into the realm of others such as police or intelligence agencies” (Johnsen & Christensen, 2016, p. 112). In itself this may represent a normative force influencing analogous units in police tactical groups. At a
more elementary level, Phillips (2018) identified the uniformity of PTG appearance and equipment as an indicator of isomorphism, and linked to the perceived legitimacy of these units in the eyes of command. Discussion in the literature around PTG intelligence process adoption is largely silent, mirroring the identified gap around PTG intelligence in general.
CHAPTER 3—METHODS

INTRODUCTION

Framing the research question as it was provided a testable basis for the research implementation. This allowed for the composition and development of an assertion that can be supported or rejected following the collection and analysis phases of qualitative or mixed-methods research.

A deliberate choice to frame the research question as written was made in order to better bind the research direction toward a clearly defined objective, and following the identification and development of the research problem resulting from the literature review. This also accorded with the aim of the researcher to seek incremental advancement and incremental contribution of knowledge within the field, by answering a research question related to the key, operationalised, variables.

This chapter outlines the methodical framework for the current study. The chapter details the research plan, operationalises the study’s variables, explores the use of the Delphi method, explains the sampling framework employed, addresses ethical considerations, and discusses the data collection, collation, and analysis processes followed.

CREDIBILITY AND INTEGRITY OF THE RESEARCH DESIGN

In the current study, the collection of both quantitative and qualitative data through the Delphi process was the primary form of methodological triangulation. Maintaining a reflexive research journal throughout the planning, collection, and analysis phases also assisted in achieving this aim. Data triangulation was conducted through the inclusion of secondary data sources within the literature review alongside primary data collected through the Delphi process.

Ensuring credibility and reliability through the collection process was also addressed through the recruitment of the heterogeneous, stratified expert panel. The considered construction of a thorough research plan also assisted ensuring prolonged and sustained engagement on the issues in focus before, during, and after the collection phase of the project.

Finally, recognising the influence of axiology and the need to address subjectivity in the analytical phase of a project (Ghesquière, Maes, & Vandenberghe,
the maintenance of the research journal assisted in negating any lingering bias brought to the research endeavour. In line with Guba’s assertions on the role of the inquiry audit in assisting with an assessment of a study’s dependability (1981, p. 87) simultaneous to establishing confirmability (Lincoln & Guba, 1985, p. 318), maintenance of the research diary was also conducted with the enhancement of dependability in mind.

The transferability of the current study was considered from the earliest phases of participant sampling and expert recruitment. These processes aimed at including participants from across a number of stratified backgrounds, in order to ensure inclusion of multiple perspectives leading to potential generalisability to other contexts. The deliberate “thick description” (Lincoln & Guba, 1985, p. 316; Jeanfreau & Jack, 2010, p. 6) of the data as detailed in the proceeding chapters further enhances research transferability, by allowing the reader to adequately draw conclusions around the suitability of transferring results to other situations and contexts.

OPERATIONALISING THE STUDY’S KEY VARIABLES

Several studies have attempted to operationalise and bound the concept of intelligence support by examining and proposing frameworks for measuring the effectiveness it provides decision-makers and policy officials. For the purpose of the current study, focus is given to models prioritising the role of the “commander” (as client of the intelligence function) in determining the value of intelligence support provided at the tactical level.

Marrin (2009) described the “standard model” whereby intelligence effectiveness was measured as an outcome of the contribution made to policy decision-making. The problem with this model relevant to the current study is that Marrin was focused on national-level and particularly political intelligence issues, away from stricter tactical decision-making considerations found in military and policing contexts. Marrin focused on the literature available, which was overwhelmingly centred on the standard model’s positioning of intelligence as being objective, of an apolitical nature, and not concerned with recommending courses of action. This is different to the reality of the operational or tactical intelligence professional in a policing or military environment, the role of which is to develop recommendations.
Marrin later revisited the standard model, describing developments in the literature around intelligence evaluation as having evolved from the rather idealistic notions of the standard model. While still with one eye on the impact of intelligence on policy rather than operational outcomes, Marrin synthesised developments recognising intelligence as a subordinate stage in the decision-making process, and noted the potential importance of an evaluation of intelligence from the decision-makers’ perspective (2012, p. 908).

In proposing a framework for evaluating the effectiveness of intelligence support from the decision-makers’ viewpoint, Marrin asserts the criteria of relevance, influence, utility, and impact (2012, p. 908). Relevant to the current research, utility is defined as being relevant and “either useful in the sense of improving judgment (i.e. influential) or useful in the sense of achieving policy outcomes, or both” (2012, p. 909). These clearer parameters bring us closer to an operational model.

Within ILP environments, the difficulty in assessing the utility of intelligence support—rather than simple output quantification—is notably difficult and has remained a dormant area of focus (Alach & Crous, 2012, p. 18). In his earlier work conceptualising a performance framework within ILP, Crous noted the measurement of intelligence outputs in the context of tasking and coordination is inherently tied to command decision-making, and can be gauged by “the role quality intelligence products play within this function” (Crous, 2010, p. 38). Given this, and the nature of the current study, an alternative, more refined model is therefore required.

In developing an earlier measurement framework for military intelligence performance, Thompson, Landee-Thompson, Fichtl, and Adelman determined through a mixed-methods study that military intelligence (MI) effectiveness “is directly related to how useful the MI output is to the user” (1989, p. vii) and that the user perspective is necessary to address measurement of this effectiveness (p. 7). While choosing to produce a quantitative measurement instrument to assess MI effectiveness, Thompson et al. initially focused on the identification of qualitative intelligence output utility factors of import to participating subject matter experts (pp. 37–39).
For the purposes of this study, Thompson et al.’s utility factor model (1989, p. 39) will be used to provide the basis for assessment of the utility of the categorical variable of intelligence support within tactical policing environments.

The other categorical variable, IPB, is presented as a policy option to potentially enhance the effectiveness and utility of intelligence support within tactical policing environments. In this sense IPB is being assessed as an application of an operational process recipe, or “myth” (Christensen, Lægreid, Roness, & Røvik, 2007, pp. 57–58). In terms of operationalisation for the purposes of this research, IPB as a myth is proposed as a viable institutionalised recipe to be adopted into tactical policing intelligence practice, through a process of translation (Christensen et al., p. 73).

**RESEARCH DESIGN**

Given the lack of publicly available data on IPB in law enforcement, the collection of primary data was necessitated, from both military and policing sources and related academic fields. The study incorporated a Delphi method collection process, which is appropriate given the identified incomplete knowledge about the use of IPB within policing settings, and fits with the guiding research approach.

Delphi studies have long been used in policing futures explorations (Cooper, 1974; Loo, 2002; Silberg litt et al., 2015), criminal justice policy evaluations (Loyens, Maesschalck, & Bouckaert, 2011), as a method for producing strategic criminal intelligence (S. Evans, 2005), and have an extensive history of use within military research (Linstone & Turoff, 2011). Use of the Delphi method was therefore seen as fitting for this study.

The Delphi method is of use when the problem at hand “can benefit from subjective judgments on a collective basis” (Linstone & Turoff, 1975, p. 4) and where a communication system is required for exploration of policy questions (1975, p. 71). The Delphi method’s inherent time demands (Linstone & Turoff, 1975, p. 8) were acknowledged during the research design stages, and the use of an internet-based collection instrument was intended to partially mitigate these.

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8 Further exploration of the rationale for the use of Thompson et al.’s framework is detailed in chapter three under the section on Data display, and later in chapter four under the assessment of the study’s results against the intelligence utility factor definitions.
Methods commonly implemented in exploratory, qualitative policy research, such as semi-structured interviews and focus groups, were considered. The use of semi-structured interviews for the collection of primary data was precluded due to the fact such a method would not allow for interaction between participants and the insertion of new ideas throughout the process. Due to the geographically dispersed nature of potential sources of information, alternatives such as participant observation and focus groups were not feasible. These considerations led to the choice of the policy e-Delphi as a logical, viable collection method.

The underlying epistemological stance within the current study is constructionism, which holds that meaning in human society is a result of human interaction and the production of a social reality. As noted by Engels and Kennedy, the Delphi method “builds on the Lockean notion of human experience as the basis for truth” (2007, p. 434), and is as such a form of naturalistic inquiry, wherein reality is manifold and constructed socially (Tullis Owen, 2008). These factors strengthened the choice of the Delphi method for the current study due to it meshing neatly with the underlying philosophical stance for the project.

A key benefit of the Delphi technique is its ability to harness collective expertise and provide legitimacy to findings; legitimacy being a key requirement for the spread of organisational recipes (Christensen et al., 2007, p. 75). The Delphi method was also deemed appropriate due to its lack of reliance on representative sampling, drawing its strength from the quality of the expert panel rather than statistical representativeness (Powell, 2003, p. 378). This goes to the heart of validity considerations and helped ensure both internal and external validity.

Gunaydin (2006, online) highlights the Delphi method’s utility in the “exploration of ideas or the production of suitable information for decision making”. Given the nature of this study and its focus on the potential enhancement of intelligence support to command decision-making, the choice of the Delphi method was apt.

**The Delphi method**

The Delphi is at its heart a method for structuring a group communication process to allow a collection of actors to address a complex problem. The method traces its origins to the Cold War period and American efforts to develop methods of forecasting Soviet activity through the harnessing of collective expert opinion and assessment.
While its origins lie in providing a structured method for forecasting, even in the method’s infancy its adaptability to other uses was being stressed and demonstrated. By the mid-1970s, Delphi pioneers Harold Linstone and Murray Turoff were asserting the method’s use within educational development, modelling, policy analysis, sociological analysis, historical assessment, urban planning, and budgetary allocation (Linstone & Turoff, 1975, p. 4).

Rieger (1986) categorised the Delphi method’s development since the 1940s in five stages. These stages comprised:

1. **Secrecy or obscurity**, during the method’s development by the US military through the 1940s and 1950s;
2. **Novelty**, from the mid-1960s on, as the method became known and adopted by private researchers and corporate entities;
3. **Popularity**, from the early 1970s, as the method gained credence and acceptance among researchers;
4. **Scrutiny**, as researchers and methodologists began to question the scientific rigour of the Delphi and the quality of its application; and
5. **Continuity**, where by the early 1980s, the method had withstood such scrutiny and was demonstrating its enduring acceptance and popularity.

Assessing the state of the method as at the mid-1990s, Gupta and Clarke reported on a literature survey which revealed the Delphi remained popular, used for research on areas as diverse as academia, agriculture, banking, criminal justice, health, management, and strategic planning (1996, p. 188). A cursory review of the contemporary literature as at 2016 showed the Delphi remains a popular research framework across a number of fields, including its sustained use within health research (Gunzburg, 2015; Turris et al., 2016), construction management (Sourani & Sohail, 2015; Musa, Yacob, Abdullah, & Ishak, 2015), tourism (Konu, 2015), and information management (Jones et al., 2015; Davis, Morgans, & Burgess, 2015), among other areas of practice. As noted, the method also continues to be utilised within futures research for law enforcement.

The Delphi method has proven a number of strengths, which have contributed to its enduring popularity within certain fields of research. Yousuf summarised many of the Delphi’s advantages as including its use in situations wherein collective,
subjective judgments are required and where participants cannot otherwise communicate *en masse*; time and cost savings; where anonymity amongst experts is demanded; and where heterogeneity of the panel must be preserved (Yousuf, 2007, p. 4). Others have noted that the Delphi encourages collaboration rather than fostering competition between experts whose opinions are being sought (Mead & Moseley, 2001, p. 7), which is of particular importance in dealing with forthright personalities and where dominance and groupthink issues must be avoided.

**Forms of the Delphi**

The popularity of the Delphi method has seen it adapted over time to suit different applications and to embrace technological developments. Noting again the research question and its assertions around the adaptation of military methods to tactical policing, the adaptability of the Delphi method was seen as fitting with the study’s philosophy and theoretical framework.

Adaptations of the Delphi method relevant to the current research include the:

- **Policy Delphi:** A modification of the Delphi first described in 1969 (Turoff, 1975, p. 80), which aims to explore expert opinion—including opposing views and dissension—on a particular issue of policy. The aim of a policy Delphi is not necessarily to reach consensus as in a classic Delphi study, but to identify and assess policy issues/options; and

- **E-Delphi:** An evolution of the classical Delphi technique to harness internet-based technologies in the conduct and administration of a Delphi study (Donohoe, Stellefson, & Tennant, 2012, p. 40). The use of these technological platforms delivers time and cost efficiencies while offering convenience to participants and the researcher, and largely eliminates geographical limitations often found in a traditional, offline Delphi study (De Villiers, De Villiers, & Kent, 2005, p. 642).

The current study includes in the collection phase an implementation of a policy Delphi, delivered online and therefore also warranting the e-Delphi categorisation.

**Implementation considerations**

The key characteristics of the Delphi method have been summarised as follows:

- The preservation of anonymity between panel members;
• At least one iteration of questioning of the expert panel beyond the initial survey;
• The provision of controlled feedback to the panel between rounds; and
• The use of the aggregate group response as the result set. (Dalkey, 1969).

There is no prescription on the number of rounds a Delphi study must include, however three or four iterations are common (Erffmeyer, Erffmeyer, & Lane, 1986), and the only methodological stipulation is that there be at least one iteration beyond the initial questionnaire. Policy Delphi studies often follow this trend, with a review of law enforcement- and security-related Policy Delphis showing a multitude of three-round Delphis (Coutorie, 1995; Jamieson, Suren, & Knapp, 2000; Loyens et al., 2011; Edwards, Hughes, & Lord, 2013), though two-round studies also feature (Herley, 1989; Silbergliett et al., 2015). Other study reviews acknowledge simply that the number of rounds in a Policy Delphi vary (Hasson & Keeney, 2011).

While the number of rounds for a Delphi study is not pre-determined, the literature recognises the phenomenon of diminishing returns after three or four rounds (Linstone & Turoff, 1975, p. 223; Donohoe et al., 2012, p. 40). This phenomenon acknowledges that responses tend to stabilise after a set number of rounds, and that this should force the researcher to examine the necessity to utilise resources to continue a study beyond this point.

The guidance in the literature leads the researcher to determine an end-point for the conduct of rounds in a Delphi study, so that surveys are ceased when stability in responses is reached. For the current study, Dajani, Sincoff, and Talley’s hierarchical model (1979, p. 85) was utilised to determine the point of cessation.

A large number of modifications to the classical Delphi method are apparent in the literature, and researchers deviating from standard Delphi procedure are supported (Buckley, 1994, p. 158; Clayton, 1997, p. 379; Brady, 2015, p. 3). Common deviations relate to the number of survey rounds, the formation of the initial survey instrument either by consensus or by pre-determination, and the method of delivery.

The Delphi can be used as the sole method of data collection, or utilised in conjunction with other methodologies as part of larger studies (Gupta & Clarke, 1996; Mead & Moseley, 2001). Recent assessments have highlighted the latter, espousing the
option of extending Delphi findings through their inclusion of case studies (Skulmoski, Hartman, & Krahn, 2007).

A policy Delphi, either delivered via analogue methods or online, notwithstanding the aforementioned tolerance for researcher deviation, typically comprises the following steps, which have been summarised from Turoff’s early work (1975, p. 84):

1. *Formulation of the issues.*
   This can be achieved through an initial survey to participants, or, as in the current study, careful and considered pre-formulation of the issues by the researcher;
2. *Exposing policy options;*
3. *Determining the panel’s initial positions on the issues.*
   This stage sees exploration of areas of existing agreement and dissension, and identification of unimportant topics that can be discarded;
4. *Exploring and obtaining the reasons for disagreements;*
5. *Evaluating underlying reasons for positions;* and

It is important to note that these steps may be conducted simultaneously, and are not required to be discrete. The step-wise narrative for the process conducted in the current study is detailed under the section on Data Collection, below.

*Limitations of the method*
As with any method of inquiry, the Delphi has a number of limitations which may affect research outcomes and which need to be addressed by the researcher. Franklin and Hart (2007, p. 241) categorised these limitations as broadly pertaining to panel selection (including qualifying of experts and time considerations related to panel retention); questionnaire development and administration; and data management, analysis, and bias. All of these limitation aspects were assessed and addressed in the construction of the research design.

Critics of the Delphi method typically question the technique’s reliance on small, non-statistically representative samples (Loo, 2002, pp. 767–768). In the current study, this criticism is negated by the focus on examination of policy issues requiring
analytical generalisability and not statistical power, and through the considered recruitment of the expert panel by strict, well-defined criteria.

The Delphi was in its early days heavily criticised due to its being enmeshed in the expert halo effect (Bagozzi, 1996, p. 236), with Sackman bemoaning the resulting lack of accountability for the researcher, panellist, and policy consumer alike (1974, p. 34). In contemplating the potential impact of the halo effect in the current study, consideration was given to the wording of initial questioning in the first round’s survey instrument, and was further refined during the piloting processes.

As acknowledged later in chapter six, the current study examined the perceptions and opinions of the collective panel of experts, rather than directly assessing an implementation of IPB in a tactical policing environment. As such and as with any Delphi study, this is valid, but the researcher must be cautious when attempting to generalise research findings within the wider community of practice. Generalisability was therefore considered throughout the research design phase, as referenced earlier in this chapter and in the following section.

While acknowledging the method’s limitations, the choice of the Delphi was most appropriate for the current study for a number of reasons. First among these considerations was the Delphi’s ability to provide structure to the collection process across a geographically diverse set of participating experts. This allowed the study to capture critical input from experts in different locations in Australia and overseas, while providing clarity and structure to all involved through a coordinated communications plan. The simplicity of the method is a further benefit (Landeta, 2006), and this, combined with the emergence of accessible and cost-minimal online survey platforms, has enabled ready deployment of Delphi instruments such as that used in the current research.

PARTICIPANTS

Considered selection of panel experts\(^9\) is key to the success of any Delphi study. For the current research, Delphi participants were identified through the literature and also

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\(^9\) For the purposes of the current study, members of the expert panel recruited for the Delphi process have been referred to as experts, respondents, panellists, and combinations of these terms. These should be read as interchangeable. Where specifically referring to ‘respondents’ or ‘respondent experts’, these descriptors refer to those members of the expert
from relevant professional subject matter experts and identified position holders in various Police Tactical Groups.

The following criteria were used in identifying eligible participants for the Delphi panel:

1. Academics and relevant practitioners identified through the literature as being published authors or contributors to the literature on IPB, tactical policing, and/or intelligence practice related to tactical policing;
2. Current or former tactical police operators, intelligence specialists, or commanders; and

While it has been noted that Delphi panels are often not split between genders and lack female representation (Scheele, 1975, p. 65), for the current study a gender balance was not sought as the overriding emphasis was on relevant professional expertise. This eliminated gender as a consideration.

The following sections detail the sampling strategy employed in the study, as well as key considerations around the size and qualification of the expert panel.

**Sampling frame**

Due to the research design, the study utilised a stratified purposive sampling frame. All participants were selected for their experience and expertise in tactical policing, tactical military operations, intelligence, policy, or related academic fields. Such a sampling strategy has previously been utilised in policing research, whether or not the study has specifically recognised the stratification employed (Giblin, 2006; Dodge, Valcore, & Gomez, 2011; Chotchaisathit, 2014).

The use of the chosen sampling strategy was fitting given the needs of the Delphi study and its achievement of research credibility through the collective width and depth of expertise of the expert panel. The use of a purposive sampling strategy within Delphi studies is common, as such a strategy helps ensure participants conform to a set determination of expertise (Clibbens, Walters, & Baird, 2012) and therefore
strengthens credibility of results. An explanation of the criteria and rationale used to qualify those on the expert panel for this study is included below.

In the current study, transferability was dependent upon the qualities of the expert panel, and it was assessed that this quality required input and involvement from practitioners and non-practitioners alike. These were further spread across general delineations between providers of intelligence support and product, and those more likely to receive or consume this support. Figure 2 below shows the stratification schema used.

**Figure 2. Stratification of sample groups.**

![Diagram of stratification schema]

The inclusion of panellists from various backgrounds also helped ensure input of productive criticism and constructive disagreement, enriching the dataset for analysis. This was in line with the search for deviant cases in analytic induction (Bloor, 1978).

Miles and Huberman’s checklist of criteria for evaluating a sampling strategy (1994, p. 34), was used to examine the sampling frame against the broad criteria of relevance, data generation, enhancement of generalisability of results, result believability (validity) in applied contexts, sample feasibility, and ethics. Following identification of potential expert panel members from the literature review and a review of key position holders, an initial pool of 50 panel members was formulated. From this pool, a process of panel size determination and panel recruitment was initiated.
Panel size
The size of a Delphi panel is influenced and measured by a number of factors, and the literature reflects a persistent debate on determinations of panel numbers and the impact of this on the validity of Delphi study results. This state is reflected in the contemporary literature, with practitioners reflecting on the lack of consensus around panel size by reference to early, eminent Delphi scholarship (Gill, Leslie, Grech, & Latour, 2013, pp. 1323–1324).

Early determinations described the use of low numbers of experts (n=<15) (Dalkey & Helmer, 1963; Jolson & Rossow, 1971), though this may reflect the nature of the topics under examination and the communication methods available at the time, rather than any particular methodological position. Delbecq, Van de Ven, and Gustafson (1975, p. 89) suggested the use of up to 15 panellists in homogeneous samples, with an uncapped number above this where various reference groups are being interrogated.

In an early review, Turoff (1975) suggested anywhere from 10 to 50 participants could be assigned to a policy Delphi study in support of business committee processes. More recent studies have galvanised around a general acceptance of policy Delphis comprising a panel of at least 10 experts, with most resolving to target a population in the high teens (Okoli & Pawlowski, 2004) to a ceiling of 30 (Loo, 2002, p. 765). This figure is widely cited in the literature, with many Delphi researchers agreeing that little is gained when panel size exceeds 30 panellists (De Villiers et al., 2005; Dinnebeil, McInerney, & Hale, 2006).

This has been reinforced by Delphi meta-studies, with Rowe and Wright (2001, pp. 128–129) concurring with Armstrong (1985, p. 96) that the use of between 10 and 20 experts in judgmental forecasts is preferable. Georg Aichholzer (2009, p. 262), prompting a technique used in the current study, stressed a minimum of 10 panellists and highlighted the structuring of panels to meet target response rates above this minimum by factoring in response rate estimates to the number of invitations. Despite this, debate continues, with other reviews asserting that a policy Delphi can involve greater than 60 participants due to their often-expanded scope over a conventional Delphi application (Maxey & Kezar, 2015, p. 10).
A number of examiners propose various measurements and considerations when determining the size and make-up of a Delphi panel. Loo (2002, p. 765) suggested the need for heterogeneity in policy Delphis, so as to ensure representation of various viewpoints and the generation of sufficiently rich data to facilitate analysis and the identification of options for decision-makers. The use of heterogeneous panels is supported by Rowe and Wright (2001, p. 128), who noted the importance of choosing experts whose aggregate expertise reflects the full spectrum of the issue under consideration.

Some researchers have avoided prescribing panel numbers for a Delphi study, emphasising rather that the composition of a panel should ensure sufficient expertise is probed and that a mix of stakeholders, experts, and facilitators is included (Scheele, 1975, p. 65). Others still have stressed the overriding importance of panel balance over size, even in heterogeneous panels comprising as little as four experts (Bloor, Sampson, Baker, & Dahlgren, 2013, p. 10). In assembling and inviting panel members to the current study, the sample included an assessment of balance factors through the stratification previously described.

For the current study, determination of the panel size was influenced by the following considerations:

1. A target response set of at least 15 responses per round;
2. A desire to achieve balance of the panel pool as described in the stratification table above, with a split between practitioner and non-practitioner experts;
3. The inclusion of identified panel invitees from a number of countries; and
4. An imposed ceiling of 30 panel invitees, given time and resource limitations.

Noting these considerations and the identification of panel invitees through the literature and referral processes, 27 experts were invited to participate in the study. Response rates from the expert panel through the Delphi process are detailed later in this section.

**Qualifying the expert panel**

The study took the view that the most critical consideration in a Delphi method study is the collective qualification of the expert panel. Despite this, a persistent uncertainty within Delphi studies centres on the criteria for defining an expert (Hasson & Keeney, 2011, p. 1696).
Qualifying an expert panel is in many ways a subjective process, dependent upon the judgment and discretion of the researcher (Oh, 1974, p. 29). Sackman, in critiquing the state of Delphi studies at the time, noted that “panels are often selected from accessible experts, and this accessibility is largely covert” (1974, p. 33), lacking transparency and thus affecting reliability and, potentially, validity. Compounding the issue is the fact that there is no set standard for expert selection in a Delphi study (Hsu & Sandford, 2007).

While accessibility of experts is a persistent logistical consideration, Delphi researchers are urged to consider individuals with more than simply knowledge of the issue under consideration (Oh, 1974, p. 29; Kennedy, 2004, p. 505). In this regard, it is exactly the inarticulated “background knowledge and [the] refined sensitivity to its relevance” (Helmer & Rescher, 1959, p. 38) which the expert—as opposed to the moderately engaged layman or practitioner—alone possesses and which the Delphi seeks to mimic.

For the current study, three guiding categorisations as summarised by Hsu and Sandford (2007, p. 4) were used to group those identified as experts:

1. Those identified following a review of authors of publications in the literature;
2. Positional leaders; and
3. Those with firsthand relationships with the particular issue.

These groupings were deemed as fitting the current study with its aim of capturing the expert input of academics, those in command and key support positions, and current practitioners. Further, noting Sackman’s commentary around the inclusion of salient names in the field adding prestige to the Delphi study (1974, p. 33), the first of Hsu and Sandford’s categorisations was taken into consideration, with a number of pre-eminent authors on IPB and tactical policing issues included in the panel. Hsu and Sandford’s groupings were considered in line with the stratification plan and the eligibility criteria as described earlier in this subsection.

A breakdown of participants in the expert panel and the rationale for their expertise and input is included in Table 3, below.
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<th>Status</th>
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<th>Qualifying consideration(^\text{10})</th>
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<td>Practitioner</td>
<td>Former tactical operations practitioner and PTG commander.</td>
<td>Firsthand relationships with a particular issue.</td>
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<tr>
<td>2</td>
<td>Team leader, Australian PTG intelligence cell</td>
<td>Practitioner</td>
<td>Current tactical operations practitioner.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Practitioner, Australian PTG intelligence cell</td>
<td>Practitioner</td>
<td>Current tactical operations practitioner.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Element commander, Australian PTG/PPU.</td>
<td>Practitioner</td>
<td>PTG intelligence practitioner; subject matter delegate on an intelligence professional’s representative body.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Police officer, Australian PTG intelligence cell</td>
<td>Practitioner</td>
<td>Australian PTG intelligence practitioner.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
<td></td>
</tr>
</tbody>
</table>

\(^{10}\) Qualifying considerations taken from Hsu and Sandford’s summary of the issue (2007, p. 3).
<table>
<thead>
<tr>
<th>6</th>
<th>Police officer, Australian State police intelligence and CT command.</th>
<th>Practitioner</th>
<th>Police officer, Australian State police intelligence and CT command.</th>
<th>Firsthand relationships with a particular issue.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Australian police Sergeant</td>
<td>Practitioner</td>
<td>Former military security intelligence operator, Australian police sergeant in intelligence.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>9</td>
<td>New Zealand police officer, post-doctoral researcher</td>
<td>Practitioner, Academic, Thought leader</td>
<td>Published author on police militarisation, post-doctoral researcher on issues of police emergency response.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>10</td>
<td>Convenor/lecturer, Australian university</td>
<td>Practitioner, Academic</td>
<td>Former US military officer, lecturer in intelligence studies including on IPB.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td>Former military and police official, senior lecturer in intelligence studies</td>
<td>Former practitioner, Policy analyst</td>
<td>Senior lecturer in intelligence studies, senior national policy analyst, PhD in intelligence practice.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>Former police tactical officer, Australian university senior lecturer</td>
<td>Former practitioner, Academic</td>
<td>Former PTG officer, senior lecturer in police management, researcher in areas of police emergency management, PhD candidate.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>13</td>
<td>Police officer/Team leader, Australian PTG</td>
<td>Practitioner</td>
<td></td>
<td>Firsthand relationships with a particular issue. Positional leaders.</td>
</tr>
<tr>
<td>14</td>
<td>Police officer/tactical operator, Australian PTG</td>
<td>Practitioner</td>
<td></td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>15</td>
<td>Police officer/tactical operator, Australian PTG</td>
<td>Practitioner</td>
<td></td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>16</td>
<td>New Zealand military officer, researcher</td>
<td>Practitioner, Academic</td>
<td>PhD candidate and teaching fellow, military officer.</td>
<td>Firsthand relationships with a particular issue. Positional leaders. Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>No.</td>
<td>Position</td>
<td>Academic/Practitioner</td>
<td>Specialization</td>
<td>Authorship</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>17</td>
<td>Professor, American researcher</td>
<td>Academic, Thought leader</td>
<td>Published author on issues of PTG management, recognised forensic expert on PTG tactics.</td>
<td>Firsthand relationships with a particular issue. Positional leaders. Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>18</td>
<td>A/Professor, American university</td>
<td>Academic</td>
<td>Former US military officer, intelligence specialist, lecturer on intelligence methods including IPB.</td>
<td>Firsthand relationships with a particular issue. Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>19</td>
<td>Professor, Australian university</td>
<td>Academic</td>
<td>Post-doctoral researcher, published author on issues of police militarisation and police paramilitary units.</td>
<td>Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>20</td>
<td>US police officer, post-doctoral researcher</td>
<td>Practitioner, academic, Thought leader</td>
<td>Practitioner, published author on issues around intelligence preparation for policing.</td>
<td>Firsthand relationships with a particular issue. Positional leaders. Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>21</td>
<td>A/Professor, European university</td>
<td>Academic</td>
<td>Academic, published author on police tactical unit practice and police training, and police militarisation.</td>
<td>Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td>Role</td>
<td>Description</td>
<td>Relationship</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>22</td>
<td>US police Sergeant</td>
<td>Practitioner</td>
<td>Practitioner and former subject matter expert on tactical intelligence for a tactical policing officers’ representative body.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td>23</td>
<td>Australian police Sergeant/Team leader</td>
<td>Practitioner</td>
<td>Policing representative at the Australian Civil-Military Centre.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
</tr>
<tr>
<td>24</td>
<td>Professor, American researcher</td>
<td>Former Practitioner</td>
<td>PhD, former US Army officer, former senior fellow at a US military think-tank. Current academic, and published author on issues including military and police training, and intelligence practice.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thought leader</td>
<td></td>
<td>Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>25</td>
<td>Australian military officer, intelligence studies lecturer, and author</td>
<td>Practitioner and academic</td>
<td>Researcher with PhD in intelligence analysis and threat assessment. Published author in the area of intelligence analysis, and serving military officer.</td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Following a review of authors of publications in the literature.</td>
</tr>
<tr>
<td>26</td>
<td>Former tactical operations specialist, trainer, team leader, and intelligence practitioner for an Australian PTG</td>
<td>Practitioner</td>
<td></td>
<td>Firsthand relationships with a particular issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Positional leaders.</td>
</tr>
<tr>
<td>27</td>
<td>Tactical intelligence practitioner for an Australian PTG</td>
<td>Practitioner</td>
<td>Firsthand relationships with a particular issue.</td>
<td></td>
</tr>
</tbody>
</table>
Recruiting the expert panel

Following the identification of the pool, a process of recruitment was initiated. This process was guided by the need to maintain participant anonymity from others in the expert panel, and to establish lines of communication to enable researcher-expert feedback throughout the process. Due to the need to maintain the integrity of the Delphi process’s strength in ensuring participant isolation (so as to avoid participant influence on one another or among participant groups), the use of snowball sampling—which would arguably have accelerated participant recruitment—was specifically avoided.

Pinpointing experts filling certain identified positions, and negotiating access to these individuals is a recognised challenge in administering a Delphi study, and the use of discrete points of contact as “gatekeepers” may be necessitated (Hasson, Keeney, & McKenna, 2000, pp. 1010–1011). In order to identify and facilitate introductions and recruitment of particular position holders within the three PTGs that contributed members to the study, such gatekeepers were approached via professional associates and in one instance, through the respective police force’s academic liaison.

These gatekeepers were instrumental in facilitating introductions in line with Clayton’s recommendations around experts’ nominations (1997, p. 378), and in navigating any institutional approvals required for participants’ involvement in the study. Gatekeepers were briefed on the need to maintain anonymity between individual participants. Experts not approached through gatekeepers predominantly comprised those identified through the literature, and were approached directly.

Paramount among the Delphi’s methodological considerations for participant contact is the need to maintain strict anonymity between participating experts, to avoid incurring exactly the sort of expert influence or domination the Delphi method is designed to eliminate. To ensure this anonymity was retained, all contact with each panel expert was conducted directly, avoiding group correspondence.

Participants were invited to join the study via emailed invitation sent in December 2015. These invitation letters included an introduction to the nature and aim of the study and included the Participant Information Sheet which also detailed the Ethics Committee approval for the project. A script for telephone contact with participants was developed to ensure consistency in dealings with potential panel members.
The remainder of this section presents relevant demographic information about the expert panel recruited for the study, and response rates.

**Demographics**

The final six questions of the round 1 survey instrument were devoted to demographics, and probed issues around the age brackets of participants, their specific areas of expertise and work experience, and position descriptors. While the use of the Delphi method largely eliminates demography as a factor in the results due to the focus on the collective expertise of the participant group, the decision was made to include a short number of demographic questions in order to allow for an examination of whether any trends emerged in the data, particularly between participant sub-groups.

Although the study used a non-probability sampling frame, the querying of demographic factors was also included to provide greater insight into participant selection in order to further establish the validity of the expert panel. A breakdown of these demographic data is provided below. Noting the potential sensitivity of intelligence practice matters in general and the requirement to maintain confidentiality and anonymity of panel members, certain of these questions—such as experts’ names and titles—were optional and not reported on here.

The majority of participants (n=13) provided their current position descriptor. Those replying included position titles such as:

- Tactical Intelligence Officer (within a particular PTG);
- Intelligence Officer (outside of a PTG);
- Team Leader (both within and outside a particular PTG);
- Various command positions within (or formerly within) a PTG; and
- Lecturer, Research Fellow, Associate Professor, or Professor in relevant fields of criminal justice and intelligence studies.

The age groupings of participants were split as follows as presented in table 4:
Table 4. Round 1 participants’ age ranges.

<table>
<thead>
<tr>
<th>Range (years)</th>
<th>Number</th>
<th>Percentage of Respondents¹¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>36–40</td>
<td>4</td>
<td>21.1%</td>
</tr>
<tr>
<td>41–45</td>
<td>4</td>
<td>21.1%</td>
</tr>
<tr>
<td>46–50</td>
<td>4</td>
<td>21.1%</td>
</tr>
<tr>
<td>56–60</td>
<td>3</td>
<td>15.8%</td>
</tr>
<tr>
<td>Over 60</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td>Declined to respond</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>100%</td>
</tr>
</tbody>
</table>

The mean period for respondents’ relevant experience was split between the ranges of 16–20 years (n=4) and more than 20 years (n=15), with a mode of more than 20 years. A breakdown of participants’ self-reported current fields of work is shown in table 5 below.

Table 5. Round 1 participants’ self-reported current fields of work.

<table>
<thead>
<tr>
<th>Field</th>
<th>Number</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policing (non-tactical or command position)</td>
<td>3</td>
<td>15.8%</td>
</tr>
<tr>
<td>Policing (tactical operations)</td>
<td>2</td>
<td>10.5%</td>
</tr>
<tr>
<td>Policing (intelligence)</td>
<td>7</td>
<td>36.8%</td>
</tr>
<tr>
<td>Academia</td>
<td>3</td>
<td>15.8%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

¹¹ Percentages have been rounded to one decimal place, here and elsewhere in the study, for clarity of the presentation. In some instances, this may affect the sum, but this is not an error.
Responses in the “Other” category included participants who identified their fields of work as crossing over two or more categories, and in three of these four responses related to experts whose work spanned both practitioner and academic roles.

Participants were in round 1 asked to provide responses indicating the areas of work in which they had experience and/or expertise. As a self-reported indicator, this provided a broad rundown of the spread of relevant sub-disciplinary specialties among the participant pool. A breakdown of participants’ self-reported areas of relevant work experience or expertise is shown in table 6 below.

Table 6. Round 1 participants’ self-reported work experience or expertise.

<table>
<thead>
<tr>
<th>Work Area</th>
<th>Number</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactical response</td>
<td>14</td>
<td>73.7%</td>
</tr>
<tr>
<td>Counter-terrorism response</td>
<td>13</td>
<td>68.4%</td>
</tr>
<tr>
<td>High-risk warrant execution</td>
<td>11</td>
<td>57.9%</td>
</tr>
<tr>
<td>Foreign peacekeeping / stability operations</td>
<td>11</td>
<td>57.9%</td>
</tr>
<tr>
<td>Joint police / military operations</td>
<td>10</td>
<td>52.6%</td>
</tr>
<tr>
<td>VIP Protection operations</td>
<td>9</td>
<td>47.4%</td>
</tr>
<tr>
<td>Foreign police training / capacity development deployments</td>
<td>8</td>
<td>42.1%</td>
</tr>
<tr>
<td>Search and rescue operations</td>
<td>8</td>
<td>42.1%</td>
</tr>
<tr>
<td>Police Technical / Surveillance / Reconnaissance Operations</td>
<td>7</td>
<td>36.8%</td>
</tr>
<tr>
<td>Planning or policy</td>
<td>7</td>
<td>36.8%</td>
</tr>
<tr>
<td>Public order management / riot control</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Force protection</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>21.1%</td>
</tr>
</tbody>
</table>
Responses provided in the “Other” category included respondents’ descriptors of “Military Intelligence” and generic “tactical intelligence”, as well as one respondent’s description of their publishing history relevant to IPB.

**Police Tactical Group members**

Members of three Australian PTGs participated in the study. The first of these PTGs was a full-time unit servicing a force of over 6,000 personnel. This PTG provided tactical policing operations support at the community level, across national-level operations in support of investigations into Commonwealth offences, and international support to regional capacity building and stability support operations. This PTG was, as at 2016, in operation for 14 years, and comprised of core tactical operator elements, and support elements including:

- Search and rescue disaster response;
- Canine operations;
- Negotiators;
- Bomb response;
- Maritime operations;
- Command, coordination, and planning cell;
- Extended capabilities (part-time) support units;
- Logistic support;
- Air support;
- Communications response (tactical field communication); and
- Tactical Intelligence Unit.

Members of this PTG participating on the expert panel for the study were from the PTG’s Tactical Intelligence Unit.

The second of the PTGs to participate in the study was a full-time State police unit, with responsibility for providing dedicated specialist services including search and rescue, public order management, site security, high-risk warrant execution, and CT response. This second PTG serviced a police force of over 14,000 personnel. Members from this PTG participating on the expert panel for this study were from the PTG’s command, training, and intelligence units.
The third PTG to participate in the study was a part-time State police unit, with similar functions as that of the second participating PTG. Members of this third PTG fulfilled their tactical policing roles in a part-time capacity, in addition to their daily duties. This third PTG serviced a police force of approximately 1,500 personnel. Members from this PTG participating on the expert panel for this study were from the PTG’s command and tactical operations cells.

**Gender**
While attaining a gender balance within the Delphi expert panel was not a specified goal, a note on the make-up of the panel is nonetheless warranted here. The gender spread within the overall group invited to participate in the expert panel was 26 males and 1 female (total 27). Of the current tactical police practitioners identified to participate in the Delphi panel, none were female.

**Nationality**
Of the total invited panel, 18 were Australian, six (6) were from the United States, two (2) were from New Zealand, and one (1) was from Sweden. These descriptors are indicative only, as dual nationalities and other nation-specific loyalties were not requested or explored.

**Response rate**
A target response total of between 15 and 20 responses from the overall expert panel was set. A floor of 12 responses was also set as the minimum acceptable level. It should be noted that while they are provided here, response rates were not considered the principal measure of survey success, and as such are not considered to be a primary indicator of validity.

Of the 27 identified experts approached to participate in the Delphi panel, 19 provided responses to round 1. This resulted in a response rate of 70.4%.

The round 1 response rate includes two panel members who were identified and recruited later in the response window and who, due to timing factors, were unable to participate in that round. One additional panel invitee was unavailable during round 2 and during the call for final commentary and was therefore unable to participate beyond the first round. Of the 26 identified experts approached to participate in the second Delphi round, 17 provided completed responses, for a response rate of 65.4%.
In response to the invitation to provide final feedback following the cessation of the Delphi survey rounds, two panellists offered further commentary via email. Another two panellists acknowledged the cessation of the collection phase without offering further commentary, with the remainder of the panel declining to make further contribution.

Notwithstanding that response rate was not considered a primary measure of survey success nor a primary indicator of validity, it is nonetheless one important factor when assessing a Delphi study. As noted by Critcher and Gladstone (1998, p. 435), participation rates of between 50% and 67% per round are to be expected, and a final participation rate of above 75% at the end of a three-round Delphi is considered unusually high.

With an inter-round decline of completed responses of 10.5% (n=2) and a sustained response rate of at least 65%, the response set for the current study was considered successful. It is assessed that this level of response was due in part to the high level of salience of the key issue to the respondent experts, in line with Critcher and Gladstone’s (1998, p. 435) summary of earlier Delphi studies.

LIMITATIONS OF THE STUDY

While consideration went into the composition of the expert panel, like any Delphi study this project was bounded by the limits of the panel as a whole. Recognising this, group participants were selected based on an assessment of the collective width and depth of their experience and expertise.

Due to the classification of Australian military doctrine around Intelligence Preparation and Monitoring of the Battlespace (the Australian manifestation of IPB), which, unlike its American source material, is restricted from public access, the participation of active Australian military personnel in this study was not possible. This limited the perspectives involved in the participant pool. The balancing of academic and police practitioner experts within the Delphi panel was intended to mitigate this limitation.

While a small number of studies on IPB exist from outside the US, these are minimal and do not represent a balancing perspective to the body of American work. This also limited the availability of perspectives explored in the literature review, though the expert pool was primarily comprised of Australian experts. Wineera (2011,
pp. 16–17) noted a similar limitation in his exploration of New Zealand military practitioner perspectives on IPB. Noting this limitation, the current study intended to contribute to the nascent body of non-US perspectives in the discourse.

It has been noted that much of the research in intelligence studies has been conducted by Western researchers or Western intelligence and policing services in ignorance of the foreign literature (Kahn, 2008b), with only peripheral contributions from other major European actors (Davies & Gustafson, 2013). This study fitted this category, and was conducted in English, utilising English-speaking sources only. This linguistic limitation bounded the project by restricting primary and secondary data to English sources, or at most sources which were translated into English from their original language.

As Kahn notes, Western intelligence literature has overly focused on technical matters (Kahn, 2008b, p. 259), a categorisation within which this study squarely falls. Discussion of the philosophical underpinnings of intelligence is deliberately limited in the current study, which is instead focused on issues of praxis.

The study was further limited to the inclusion of unclassified or declassified sources of information only. This limitation inherent in intelligence research, relating to access to classified sources and the discussion of sensitive methodologies has been noted over time (Ransom, 1980; Wineera, 2011; Coyne, 2014), and was acknowledged from the outset of the study.

Related to this, it is recognised that given the often secretive nature of intelligence practice, the study was limited to the involvement of published experts and those practitioners willing to participate. This limitation restricts the study by the exclusion of unpublished experts and those practitioners “still out in the cold”.

Finally, the ever-evolving nature of IPB doctrine and its adaptations and implementations has been noted by other IPB researchers (Wineera, 2011), and demands the determination of a set of definitions. Indeed, the US doctrine was updated early in this research project, prompting review of key terminology. Noting this, definitions were taken from the most recent iteration of the US doctrine available, being the 2014 Army Techniques Publication (Headquarters, Department of the US Army, 2014).
ETHICAL CONSIDERATIONS

Data collection for the research was conducted under Charles Sturt University (CSU) Arts Faculty Human Ethics Committee approval protocol number 100/2015/127, granted 28 August 2015. The project and the methods used were deemed to be low risk in that the foreseeable risk to participants was no more than one of discomfort (National Health and Medical Research Council, 2007, p. 15).

As part of the ethics review and consideration process, participant information sheets were produced. All participants were provided with these prior to their involvement in the data collection phase in order to ensure informed consent (see Appendix A).

In line with the anonymity protections inherent in the Delphi method, strict controls were established in order to protect the confidentiality of experts. Identifying details were maintained in a central register and kept separate from result sets. Where Delphi panellists elected to identify themselves, these identifying details were removed when analysed, with each participant being assigned a unique code.

DATA COLLECTION

Collection process and method

The type of data required to answer the research question needed to be authoritative, in that it held credibility. Given the identified lack of available data, collection from human participants holding relevant expert knowledge was thus required. The data collection phase of the study comprised the following steps:

1. Identification of Delphi panel participants;
2. Initial approach and obtaining of consent;
3. Construction and piloting of initial questionnaire;
4. Distribution of initial questionnaire. This took the form of a structured survey instrument using the online SurveyMonkey platform, along with a condensed background to the study (see Appendix B). Emailed to participants, the instrument was shaped to invite both quantitative and qualitative open-ended responses in order to identify initial areas of focus for future rounds;
5. Receipt and analysis of the results of round 1;
6. Construction of survey instrument for round 2 of the Delphi. This second instrument focused on the ranking, rating, and weighting of the priority areas of focus identified through the first iteration;
7. Distribution of the round 2 survey instrument to participants;
8. Receipt and analysis of the results of round 2;
9. Preparation of correspondence to the panel providing feedback on the results of the round 2 survey and inviting final commentary;
10. Distribution of the final correspondence to participants; and
11. Receipt and collation of final commentary provided by experts with the results of the previous survey rounds.

Retention strategy

In conjunction with the selection of a concerned and engaged panel of experts, achieving response rate targets in Delphi studies is partly attributable to rigorous follow-up contact with invited participants (Boberg & Morris-Khoo, 1992). Recognising this, a contact plan was implemented within the current study.

Follow-up emails were sent to all invited experts prior to the holiday break in December 2015, notifying participants of the continuation of round 1 through to January 2016. A second email was sent in late January 2016, notifying participants of the closing of round 1 at the end of that month. A similar process was followed during the administration of round 2, with follow-up emails sent to all invited experts in mid-March 2016 notifying them of the closing of the round at the end of that month. In both instances these emails resulted in a number of respondents completing the respective surveys in the days following the emails being sent, demonstrating the benefits of a reasonable amount of sustained communication with the expert panel.

Collection instruments

Construction of the initial survey collection instrument (see Appendix B) was undertaken following the definition of the research question and the initial literature review. Construction of the instrument centred on the inclusion of questioning that would provide information to answer the research question. Pre-piloting of this instrument was conducted with a law enforcement professional, and this process helped ensure questioning validity and adherence to time consideration parameters. To prevent
undue influence on the process, this professional was excluded from later piloting and the collection phase proper.

Validating the initial collection instrument
Throughout May 2015 to November 2015, a seven-stage process of survey development and validation was undertaken in order to authenticate, validate, and improve the initial survey instrument. These stages comprised:

1. Initial investigator construction and self-reflection, utilising the process outlined in Table 6 below;
2. Consultation and review with the principal research supervisor;
3. Pre-piloting with a professional colleague otherwise separate from the research process;
4. Review by a peer Research Colloquium;
5. Review by the CSU Arts Faculty Human Research Ethics Committee;
6. Review and refinement with the CSU Spatial Analysis Network; and
7. Piloting with a dedicated pilot group.

Certain of these stages, such as the Research Colloquium and the Ethics Committee approval process, were ancillary to the development of the collection instrument, while the remainder focused solely on the construction and validation of the instrument itself.

From mid-September to early November 2015, piloting of the initial survey was conducted to identify outstanding mechanical and procedural issues prior to the commencement of data collection. Members of the pilot group (n=6) included the principal research supervisor and known law enforcement associates, all of whom, in addition to extensive professional experience in policing and intelligence fields, had completed or were undertaking postgraduate studies. Members of the pilot group were also excluded from the collection phase proper.

Piloting resulted in a number of minor changes to the survey instrument, and mainly focused on mechanical issues around the working of the online survey. During piloting, updates to key terminology were also incorporated into the survey instrument, following the release of updated IPB doctrine by the US military.
**Delphi survey instrument – Round 1**

The resultant survey instrument for round 1 included 14 questions designed to answer the research question, with a small number of demographic questions. The survey instrument purposefully collected both qualitative and quantitative data. Free-text responses received from the panel in both rounds one and two generally ranged from single sentences to around two short paragraphs.

A breakdown of each question and the rationale for its inclusion, as well as justification on the validity of each question, is found below in table 7.
<table>
<thead>
<tr>
<th>Question</th>
<th>Rationale for inclusion and note on validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Established baseline level of agreement on current intelligence support methods.</td>
</tr>
<tr>
<td>2</td>
<td>Established baseline on areas of tactical policing most requiring intelligence support.</td>
</tr>
<tr>
<td>3</td>
<td>Established baseline agreement on current intelligence support utility and scope for its enhancement.</td>
</tr>
<tr>
<td>4</td>
<td>Established baseline of ratings for criteria in terms of importance. Established baseline on levels of importance of intelligence utility factor definitions.</td>
</tr>
<tr>
<td>5</td>
<td>Direct questioning against the research question.</td>
</tr>
<tr>
<td>6</td>
<td>Established baseline agreement on areas of tactical policing which could benefit from an application of IPB.</td>
</tr>
<tr>
<td>7</td>
<td>Related directly to the research question, by establishing baseline agreement/dissension on individual intelligence utility factors and how they may be impacted by an application of IPB within tactical policing.</td>
</tr>
<tr>
<td>8</td>
<td>Established baseline agreement/dissension on individual elements of IPB and the extent to which they may enhance intelligence support to tactical policing.</td>
</tr>
<tr>
<td>9</td>
<td>Related directly to validity by establishing where IPB elements are already in use. This determined the potential scope for enhancement from this point.</td>
</tr>
<tr>
<td>10</td>
<td>Related to the assumptions inherent to the research question, by establishing baseline agreement/dissension on factors of most relevance and most likely to impact on IPB’s ability to have an enhancement effect.</td>
</tr>
<tr>
<td>11–13</td>
<td>Establishing baseline agreement/dissension on key, identified issues around IPB’s resource demands and their impact on it enhancing intelligence support in tactical policing. Closed response questioning not adding unnecessarily to the burden on participants.</td>
</tr>
<tr>
<td>14</td>
<td>Opportunity for participants to raise issues relating to the core research question and for which the survey had otherwise omitted.</td>
</tr>
<tr>
<td>15</td>
<td>Collection of demographics potentially of use in comparison of results between groupings within the stratified sample.</td>
</tr>
</tbody>
</table>
Following piloting, the round 1 survey was emailed to the invited members of the Delphi panel in late November and early December 2015. Noting seasonal considerations raised by Loyens et al. (2011, p. 1487), round 1 was deliberately kept open for participant access for a longer period so as to allow participant response over the New Year and academic breaks.

Delphi survey instrument – Round 2

Following analysis of the round 1 survey results, the survey instrument for round 2 was developed between late December 2015 and early February 2016. The round 2 survey instrument comprised eight questions and an opportunity for experts to provide extended, free-form text. Questions were grouped in line with emergent themes around desirability and feasibility of an implementation of IPB in tactical policing (discussed further in chapter four).

Elements from round 1 questioning which were removed in the round 2 survey related to questioning on which it was deemed there was little benefit in revisiting. Other questions in round 2 were formulated on the basis of the aforementioned thematic groupings around desirability and feasibility factors.

A breakdown of each question and the rationale for its inclusion, as well as justification on the validity of each question, is found below in table 8.
Table 8. Round 2 survey question justification and notes on validity.

<table>
<thead>
<tr>
<th>Question</th>
<th>Rationale for inclusion and note on validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Established a baseline agreement on the likelihood of an IPB implementation within tactical policing, including quantitative rating and free-text, qualitative response.</td>
</tr>
<tr>
<td>2</td>
<td>Refined and established priority ranking of areas of tactical policing practice within which it is most important to apply IPB techniques, including both quantitative rating and free-text, qualitative response.</td>
</tr>
<tr>
<td>3</td>
<td>Refined the panel’s agreement on ranking of importance of intelligence support utility factors.</td>
</tr>
<tr>
<td>4</td>
<td>Direct questioning against the question, testing variance following the provision of controlled feedback from round 1.</td>
</tr>
<tr>
<td>5</td>
<td>Established a baseline agreement on the feasibility of an IPB implementation within tactical policing, including quantitative rating and free-text, qualitative response.</td>
</tr>
<tr>
<td>6</td>
<td>Refined the panel’s agreement on ranking of intelligence utility factors most likely to be positively impacted by an implementation of IPB in tactical policing.</td>
</tr>
<tr>
<td>7</td>
<td>Refined the panel’s agreement on ranking of IPB elements most likely to positively impact intelligence support to tactical policing.</td>
</tr>
<tr>
<td>8</td>
<td>Allowed for exploration of the form of any implementation of IPB in tactical policing, allowing consideration of impact on practice.</td>
</tr>
<tr>
<td>9</td>
<td>Open-ended (though length-restricted) opportunity for participants to raise issues relating to the research question and for which the surveys had otherwise not accounted.</td>
</tr>
</tbody>
</table>

As part of the testing and validation process, mapping of questions between the survey rounds was conducted. This was undertaken to track and explain the evolution of questioning between rounds, and to demonstrate the decision-making process leading to elements being removed from questioning once a point of diminishing return had been reached. This question mapping is included in figure 3, below.
Due to time constraints and the need to provide continuity and flow to the overall Delphi process, testing and validation of the round 2 instrument followed the following process:

1. Initial investigator construction and self-reflection;
2. Consultation and review with the principal research supervisor;
3. Piloting with a professional colleague otherwise separate from the research process; and
4. Review and refinement with the CSU Spatial Analysis Network.

The round 2 survey was emailed to members of the Delphi panel in mid-February 2016. Again due to seasonal considerations around academic and Easter breaks, round 2 remained open for participant access until the end of March 2016.

*Final input following the cessation of survey phase*

While the survey component of the collection phase was ceased after the second round, in mid-April 2016 an invitation to provide final commentary was extended to the panel alongside the provision of controlled feedback from the results of round 2. Experts
were invited to supply final commentary on this feedback, or on any other aspect of the study, via email. One month was allotted for panel members to supply final commentary through this mechanism.

In accordance with Delphi protocols, this communication was compartmented to maintain anonymity between experts and to encourage forthright input. Commentary provided through this mechanism was incorporated to the aggregate result set from rounds 1 and 2 of the survey process.

Feedback to panel members
A key element of the success of a Delphi method study is the provision of feedback to members of the expert panel throughout the data collection process (Hsu & Sandford, 2007). The feedback process is also the mechanism by which individual responses are improved and through which bias can be eliminated (Rowe & Wright, 1999, p. 370).

Considered feedback was also deemed essential to encouraging experts’ continued participation through the successive Delphi rounds. A strategic approach to maintaining communication through the collection phase of a Delphi study is key to maintaining panellist interest and involvement (Donohoe & Needham, 2009), and feedback to the group formed a major part of the communication strategy for this study.

Feedback was provided on emerging themes and aggregated data in the body of the survey instruments for round 2, and in the correspondence sent to participants following the cessation of the survey component. Positive commentary regarding the controlled feedback provided to the expert panel was received during round 2 of the survey phase, demonstrating the value of such feedback in maintaining participant engagement.

DATA COLLATION AND ANALYSIS
The use of the SurveyMonkey platform allowed for rapid collation of survey results following the cessation of each of the two survey rounds. Each of these rounds was developed and delivered on the platform as a separate survey instrument, necessitating data export at each stage into formats readable by other software analysis packages and for direct human consumption.

At the cessation of each of the two rounds, data was exported from SurveyMonkey in the following forms:
1. For all participant responses, including those which were incomplete:
   i. Within Comma-Separated Value files for reading by statistical analysis software packages;
   ii. In a spreadsheet format for reading by Microsoft Excel and other spreadsheet software; and
   iii. Within a Portable Document Format file which included exported charts for relevant questions, as well as qualitative commentary.

2. For only those responses which were complete:
   i. Within Comma-Separated Value files;
   ii. In a spreadsheet format; and
   iii. Within a Portable Document Format file which included exported charts for relevant questions, as well as qualitative commentary.

For each round, exported data was stored in a separate electronic file folder. Where individual participants had provided further commentary via email outside of the survey proper, such commentary was anonymised and dated, and saved in individual files in the respective round’s file folder. Data preparation also involved the discarding of incomplete responses from the full dataset as captured through the survey rounds.

Following the two Delphi survey rounds, data received from experts in response to the invitation to provide final commentary was anonymised and dated, and stored in individual files within a separate file folder. These data were subsequently collated and coded as per the qualitative responses from the previous two rounds of the SurveyMonkey process.

Data analysis attempted to deconstruct by established practices the key themes within the data amassed during the collection stages. Post-coding of collated data was conducted in order to identify key themes. Computer assisted qualitative data analysis software (CAQDAS) was utilised in the coding process to ensure consistency and internal reliability by helping limit human error.

The data analysis phase of the project comprised the following steps:

1. Coding of emerging themes throughout the Delphi process;
2. Post-coding of the end results of the Delphi;
3. Determination of potential effectiveness of IPB to intelligence support within tactical policing environments through analysis of results against Thompson et al.’s 23 utility factor definitions; and

4. Analysis of strengths, weaknesses, opportunities, and threats for selected elements of the research data, to assist in confirming research conclusions and identify potential areas of future study.

The first process was conducted during the data collection phase, as experts’ input was received. This was conducted in order to identify themes in the data as they emerged, and with the secondary aim of compressing the time required for analysis between the Delphi rounds.

Content analysis was conducted in line with Carney’s “ladder of abstraction” progression model (Carney, 1990, as cited in Miles & Huberman, 1994, pp. 91–92). The model describes the progression from information description to situational explanation, and comprises five steps within three broad phases:

1. Summarising and packaging data.
   This phase includes initial collation of qualitative data into a readable, codeable format, preliminary coding of data as received, drafting of analytical notes, and testing of emergent themes;

2. Repackaging and aggregating the data.
   This phase focuses on identifying overall themes in the data, continuation of analytical notation, searching for linkages in the data, and identifying gaps; and

3. Developing and testing propositions to construct an explanatory framework.
   This final phase focuses on hypothesis testing, data reduction for trend analysis, matrix analysis and cross-checking of initial findings, leading to the synthesis of data into one explanatory framework.

Coding of the results from the Delphi collection phase was conducted with the use of CAQDAS, namely the Dedoose software application. The use of CAQDAS as a tool to code and analyse qualitative data is heavily endorsed in the literature and offers advantages in information management, dealing with multiple media types, automating keyword searches, and in developing an audit trail (Baralt, 2012, pp. 224–228). The use of Dedoose assisted in identifying, classifying, and analysis of codes emerging from
the qualitative data both during the collection phase and following its conclusion. Dedoose was also used to facilitate data collation and qualitative coding including the construction of the code tree; generation of word clouds to highlight prominent and emerging themes; code co-occurrence tables to highlight areas of data crossover and coincidental themes; and the use of descriptor/code maps, to identify trends in the data between the sample’s various stratified groups.

Quantitative data collected during the Delphi process was exported from the SurveyMonkey platform in a spreadsheet format, which was analysed using the Microsoft Excel 2011 software package.

The third phase of data collation and analysis involved assessment of the data against Thompson et al.’s (1989) military intelligence utility factor definitions, described further in the subsequent sections of this chapter. The use of these definitions provided a framework within which the collected data could be examined and discussed, in order to respond to the research question.

Finally, an exploratory analysis of the strengths, weaknesses, opportunities, and threats (SWOT) was conducted for selected elements of the research data. SWOT’s recognised utility in both business strategy and process analysis (Glaister & Falshaw, 1999; Panagiotou, 2003; Helms & Nixon, 2010) and organisational change analysis (Coman & Ronen, 2009) particularly in relation to policing agencies (Tynan, 1995; Maloney & Moty, 2002; Jacobs, van Witteloostuijn, & Christe-Zeyse, 2013; Prezelj, 2015), and also its application in public policy analyses (Ghazinoory & Ghazinoori, 2006; Abdi, Azadegan-Mehr, & Ghazinoory, 2011; Nikolaou, Ierapetritis, & Tsagarakis, 2011) were noted, and led to its use in the current study.

The method’s utility in intelligence practice (Heldon, in Ratcliffe, 2004, pp. 107–108; Prunckun, 2010) was also acknowledged, and this cross-domain standing further strengthened the case for its use in examining the results of the study against the core research question. The inclusion of the SWOT analysis was undertaken to strengthen conclusions and reveal potential points of departure for further research.

Elements of the data subjected to SWOT analysis related primarily to those areas of IPB emerging from the Delphi process which the expert panel deemed most likely to positively benefit intelligence support to tactical policing; and to those elements of intelligence utility which the expert panel saw IPB as most likely
benefiting, in the context of tactical policing. SWOT analysis directs the researcher to address elements under a logical and sequential manner, and this was seen as complementing the collation and analysis against Thompson et al.’s intelligence utility factor definitions.

**Data display**

Data generated from the Delphi component of the current study are presented in graphical forms, with explanatory notes and discussion. Thematic codes identified through the coding process are similarly presented in visual form to assist the reader.

Thompson et al.’s intelligence utility factor definitions were used to both evaluate and display the data collected in the current study. Specifically, the definitions of 23 measurement factors as provided in the appendices to the authors’ 1989 work were utilised. The choice of these definitions was in large part made due to two factors. The first related to the simplicity of the definitions, which is comprised of the factors of:

1. Accuracy;
2. Clarity;
3. Completeness;
4. Concision;
5. [Provision of a] Conclusion;
6. Continuity;
7. Credibility;
8. Detail;
9. Filtering;
10. [Level of] Finished Intelligence;
11. Gaps;
12. [Use of] Graphics;
13. [Provision of a] Hypothesis;
14. Information;
15. Precision;
16. Perishability;
17. Processing;
18. Relevance;
19. Reliability;
20. Specificity;
21. [Provision of a] Summary;
22. Timeliness; and
23. Unusualness.

The second related to the authors’ discussion of IPB (as it stood as at the late 1980s) and their consideration of the output of the IPB framework during their development of their measurement model. This focus on IPB (alongside other doctrinal intelligence outputs) was deemed as fitting the needs and aims of the current study.

In choosing to utilise these definitions, consideration was given to the recognised challenges and lack of research in measuring intelligence utility (Grossman, 2005, p. 4; Alach & Crous, 2012, p. 18), which dictated the utilisation of a tested set of criteria for measurement. The definitions provided by Thompson et al. are detailed in clear, natural prose (see Appendix C), and were as such further deemed as fitting the research’s goal of clarity in discussion around IPB’s potential for enhancing intelligence support against clearly defined criteria.

SUMMARY

This chapter has addressed the relevant methodological considerations encountered during the research formulation, and outlined the research design utilised. The construction of collection instruments designed to facilitate collection of valid data to answer the research question has also been explored. The following chapter presents the results of the collection process and aspects of the subsequent analysis.
CHAPTER 4—RESULTS

The previous chapter outlined and discussed the theoretical approach to the study and the methodological framework employed through the data collection phase. This chapter details the results of the Delphi collection process as previously described, enabling answering of the research question examining whether IPB can enhance the level of intelligence support provided to tactical policing command.

The chapter is presented in two sections. The first presents key data points from both the quantitative and qualitative data collected through the Delphi process. Several visualisations are used to present these data points for ready consumption and analysis. The second section presents inferential analyses drawn from the collected data, linking these analyses to the answering of the research question. Within this section, results of assessment of the collected data against Thompson et al.’s intelligence utility factor definitions are presented, as is analysis of prominent data elements.

OVERVIEW OF THEMATIC RESULTS

Results from round 1 of the study showed an emergence of themes along two main lines: issues around the desirability of the implementation of IPB within tactical policing, and issues around the feasibility of such an implementation. Questioning through round 2, and results from that second round, were similarly reflective of emergent themes under these two issues.

Qualitative coding of both rounds’ results saw subordinate themes emerge from the data around the following six lines, explained below and as visualised as a hierarchy in figure 4:

- **Adaptation.**

  This theme stemmed naturally from the study’s focus on a potential process adoption of IPB into the tactical policing context, and reflected the panel of experts’ consideration of IPB’s suitability for adaptation into such an environment, as well as the environment’s suitability to receive such an adaptation. Subordinate themes emerged around areas where IPB elements were already in use within tactical policing intelligence practice, and technological considerations for such an adaptation.
• **Caution or resistance.**

   This theme reflected the expert panel’s cautiousness and/or identified potential areas of resistance to IPB being modified and adopted into tactical policing. Subordinate themes in this regard related to the importance of context for such an application of IPB given the breadth of contemporary tactical policing; caution or opposition to issues of militarisation and the perception thereof, relevant in this instance given IPB’s military provenance; and issues of process maturity, relating to both the maturity of the tactical policing intelligence sub-discipline to integrate an adapted IPB, and the flexibility of IPB as a process to handle the scope of considerations within tactical policing.

• **Enhancement.**

   This theme derived from the research question’s focus on IPB’s potential to enhance levels of intelligence support within tactical policing. Subordinate themes centred on the discipline’s *room to improve* in relation to tactical intelligence support; the ability of IPB to enable operators and command to see a broader range of issues—the *bigger picture*; the nature and ability of IPB to provide predictive intelligence; and both technical limitations and opportunities relevant to IPB in the tactical policing context.

• **Command Intelligence Support.**

   This theme centred on issues around the credibility of IPB and existing methods of tactical policing intelligence support; the nature and ability of IPB to provide predictive intelligence to command; and technological opportunities available to intelligence personnel in utilising the IPB framework to enhance their support to tactical commanders.

• **Practice change.**

   This theme encompassed issues around areas of contemporary tactical policing intelligence practice that would require modification in order to accept an adopted IPB framework. Subordinate themes emerged centred on:

   - Resourcing in tactical policing. This related to staffing and personnel, technological, and time limitations inherent in often reactive tactical police response;
   - Experience and training needs for tactical police operators, commanders, and intelligence personnel;
• Changes to practice around information flow;
• Identifying challenges inherent across jurisdictions which have developed their tactical policing intelligence support regimes at varying rates, and to different levels of competency and resourcing; and
• Issues around standardisation of policies, practices, and procedures.

This theme was often linked to the previously noted sub-theme around jurisdictional differences.

• Mindset change

This theme encompassed issues around areas of contemporary tactical policing intelligence attitudes—and around IPB itself—which would demand modification in relation to an adoption of IPB into a tactical policing environment. Subordinate themes emerged around the credibility of tactical policing intelligence support cells, linked to their resourcing and acceptance by command and operations elements; required modifications to terminology, particularly that seen as too militaristic; the requirement to change intelligence operators’ focus to one of prediction through IPB; the requirement to alter intelligence operators’ focus to centre on command support; and changes to intractable mindsets around information usage and information flow.
Figure 4. Qualitative code map.
ROUND 1 RESULTS

As noted above, results from round 1 of the study showed an emergence of themes along two main lines of desirability and feasibility. This section presents the results of round 1 organised by these two areas.

Desirability

Five of the first round’s 14 questions centred on issues of the desirability of an adaptation of IPB into tactical policing. These questions assisted in establishing baseline levels of agreement on issues around the need for changes to current tactical policing intelligence support, sub-disciplinary processes most requiring focus, and factors of intelligence utility which the panel saw as most important.

Round 1 question 1

The first question of round 1 sought to establish a baseline of the expert panel’s views on current tactical intelligence support methods, in order to address the need for (desirability of) alternative methodological frameworks such as IPB.

In round 1, experts contested the assertion that current methods of providing intelligence support to tactical police commanders are sufficient. Figure 5 below presents the panel’s level of agreement against this questioning.
Figure 5. Levels of agreement with the assertion that current methods of intelligence support to tactical police unit commanders are sufficient.

Analysis shows that 63.2% (n=12) of panellists disagreed with the statement that current methods of intelligence support are sufficient. In contrast 26.3% (n=5) of experts agreed with the assertion, with the remainder (10.5%, n=2) remaining neutral or declaring a lack of knowledge on the issue. Figure 6 below presents this division.

Figure 6. Simplified division of agreement with the assertion that current methods of intelligence support to tactical police unit commanders are sufficient.

While the majority of experts disputed the assertion, a number of current PTG practitioners within the expert panel agreed that current methods are in fact adequate.
Conversely, 71.4% (n=5) of those members of the expert panel who identified as occupying academic or policy positions (n=7) disagreed with the assertion. This insight was enabled through the collection of participant demographics relating to the various strata within the sample.

Fourteen of the responding experts provided reinforcing qualitative input on this question. Some of the commentary provided indicated that issues of intelligence support to PPU/PTG are symptomatic of wider problems in intelligence-led policing; that advances in technology are not matched by police processes or by the intelligence frameworks police use in tactical situations; and that training levels amongst police tactical units’ intelligence cells remain inconsistent despite recent attempts at standardisation. Figure 7 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.

**Figure 7. Visualisation of emergent qualitative coding from round 1, question 1.**

Thematically, issues around Practice change featured most heavily in experts’ responses to this question, with the differences in practice—and the need for harmonisation—between the various jurisdictions most prominent. Salient commentary in this regard highlighted the compartmentalised, “case-focused” nature of existing intelligence support processes; the relative pace of development (or lack thereof), of individual jurisdictions’ tactical intelligence support elements; differences in the jurisdictions’ levels of training and personnel resources in the tactical intelligence space; and the relative credibility granted tactical intelligence support cells between jurisdictions.
Responses to this question also showed the emergence of themes around *Enhancement*, which was considered natural and obvious in the context of the question’s focus and experts’ tendency to associate their qualitative responses toward the extant *Room to improve* within tactical policing intelligence support practice. Commentary highlighted areas of opportunity to better harness technology to enhance intelligence support outputs; and opportunities to counter the differences highlighted between the jurisdictions’ rates of development of their tactical intelligence support elements.

The theme of *Caution or resistance* also featured throughout experts’ responses, with a small number offering further commentary expressing concern around the maturity of existing tactical policing intelligence support infrastructure or doctrine. Salient commentary in this regard highlighted experts’ opinion that intelligence support methods were dependent on the context of their application given the shorter decision-to-action window within tactical policing (as opposed to other policing sub-disciplines), and—linked to earlier commentary under the theme of *Practice change*—the maturity of the jurisdictions’ tactical intelligence support structures.

Also featuring prominently was the area of *Mindset change*. Commentary along this theme mirrored issues of credibility also raised under *Practice change*, focusing on the relatively low level of credibility given to existing tactical intelligence support frameworks. No revelatory or explanatory commentary was provided by the minority dissenting opinion that current intelligence support frameworks are sufficient.

**Round 1 question 2**

The second question of round 1 followed on from the preceding question and sought to establish levels of agreement around those specific areas of tactical policing practice which most required intelligence support. Experts identified the following three areas of tactical policing as most requiring such support:

1. Counter-terrorism response (94.7% of respondents, n=18);
2. Tactical response (63.2%, n=12); and
3. High-risk warrant execution (57.9%, n=11).

Figure 8 below shows an expanded visualisation of the expert panel’s responses to this question.
Figure 8. Top-rated areas of tactical police operations most requiring intelligence support.

Qualitative responses to this question were limited to an opportunity to identify areas not included in the list presented to respondents. 15.8% (n=3) of respondents used this opportunity to assert that all elements of tactical policing required intelligence support, while other respondents offered limited commentary not leading to any emergent theme.

Round 1 question 3
Continuing this theme, experts identified the following three areas as most requiring enhancement to the level of intelligence support they receive:

1. Counter-terrorism response (73.7% of respondents, n=14);
2. Tactical response (42.1%, n=8); and
3. Joint police/military operations (36.8%, n=7).

Figure 9 below presents these ratings.
Commentary on this question included panellists’ views that enhancements were required in the level of intelligence support provided to tactical police units across the higher levels of operational and strategic intelligence, particularly for CT, foreign peacekeeping and stability operations, and joint police/military operations. Another of the expert panel suggested enhancement was required for complex investigations into transnational organised crime [and within which PTGs are to play a part].

Notably, none of the panel’s experts who had asserted that current methods of tactical intelligence support were sufficient in question 1 failed to identify any specific areas as not requiring enhancement.

**Round 1 question 4**

This question asked participants to rate, on the basis of their experience, the importance of each of Thompson et al.’s intelligence utility factors in measuring the effectiveness of intelligence support in the tactical policing environment. Figure 10 presents the set of results to this questioning.
Figure 10. Round 1 ratings of intelligence utility factor importance.

From the figure above it can be seen that experts identified the following 10 criteria as most important (presented in order of prevalence in the round 1 results):

That intelligence support:

1. is accurate;
2. is timely;
3. has relevance to the intended use;
4. is clear;
5. is of sufficient detail;
6. appears credible;
7. appears reliable;
8. addresses gaps;
9. is concise; and
10. is sufficiently specific.

Conversely, the majority of the expert panel (63.2%, n=12) held little regard for the level of unusualness or novelty present in tactical policing intelligence support. Interestingly, a number of the panel (15.8%, n=3) saw no value inherent in the specific use of graphics; graphic visualisations being a major component of IPB products.
No qualitative data were collected against this question.

Round 1 question 6

Following from this, experts identified areas of modern tactical policing’s operational responsibilities which could most benefit from IPB techniques being applied to their intelligence support processes as:

1. Counter-terrorism response (84.2% of respondents, n=16);
2. Tactical response (68.4%, n=13); and
3. High-risk warrant execution (52.6%, n=10).

Figure 11 below presents the full set of responses to this question.

Figure 11. Top-rated areas of tactical police operations which could most benefit from IPB techniques being applied to their intelligence support processes.

Three experts provided limited qualitative input to this question. Thematic coding of these responses showed the emergence of the theme of Adaptation as most prevalent, with experts reinforcing IPB’s suitability for adaptation into a tactical policing environment and emphasising sub-disciplinary areas where the IPB framework (or its individual elements) were already in use. Areas highlighted by these responding experts included training activities and disaster response actions.
Of note, one expert indicated that no area of contemporary tactical policing would benefit from the application of IPB, though no qualitative commentary was offered in this regard.

Feasibility

Results from round 1 also showed the emergence of issues around the feasibility of implementing IPB within tactical policing. Eight of the 14 questions in the round 1 survey related to issues of feasibility, with foci on areas including the adaptability of IPB processes to tactical policing environments; the required changes in practice and mindset to enable such adaptation; and resourcing, among other considerations.

Round 1 question 5

This question directly probed experts’ views on the core research question as to whether IPB doctrine offers a framework for enhancing intelligence support to tactical policing. As noted in the previous chapter, this was included in order to directly test the core research question, and was continued in the following iteration of the Delphi process so as to examine responses through the rounds.

Results from this question revealed the beginnings of an emerging consensus with the proposition that IPB doctrine offers a framework for enhancing intelligence support to tactical policing. The response to this question was marked, with but a small minority (10.5%, n=2) of panellists disagreeing with the assertion, with the remainder remaining neutral (15.8%, n=3) or agreeing to a varying degree (73.7%, n=14). Figure 12 below presents the full division of responses for this question.
Figure 12. Division of agreement with the assertion relating to the research question in round 1.

![Division of agreement](image)

Presented as a division between those in agreement with the assertion and those in dissension, analysis shows that 73.7% (n=14) of panellists were in agreement. Figure 13 below presents this simplified division.

Figure 13. Simplified division of agreement with the assertion relating to the research question in round 1.

![Simplified division](image)

Twelve of the panel’s experts provided qualitative input on this question. Given the central relevance of the questioning, a large amount of qualitative data was contributed by the expert panel, with analysis showing a strong focus on the core themes of Adaptation and Enhancement. This focus was considered natural given the
wording of the core research question (and therefore the wording of this question), and its focus on the variables being tested.

Secondary areas of focus included subordinate considerations of the *Mindset change* and *Practice change* required within tactical policing and to any adaptation of IPB within the tactical policing environment, in order to successfully implement such a process adoption. Chief commentary under these themes indicated the panel believed the framework would enhance intelligence support by forcing a change in mindset to focus on operational effects; that a mindset change away from militaristic jargon and the term “battlespace” in particular should be made to suit the tactical policing lexicon; and that time restrictions often inherent in tactical policing operations may offset the potential benefits of standardisation that IPB could bring to tactical policing practice.

Figure 14 presents a word cloud visualisation of thematic coding of the qualitative data for this question.

**Figure 14. Visualisation of emergent qualitative coding from round 1, question 5.**

As shown above, the emergent themes of *Enhancement*, *Adaptation*, and *Practice change* were most prominent in the expert panel’s response to this question.
Under the theme of Adaptation, salient commentary highlighted the panel’s level of agreement on IPB’s methodological suitability for adaptation/adoption into tactical policing environments.

Going further, the majority of those experts providing qualitative responses identified that the IPB framework was in some ways similar to existing intelligence structures supporting Australian PTGs. Others noted that existing implementations of IPB-based doctrine in law enforcement and emergency management applications support its adaptation into tactical policing support functions, though amendments to the framework would be required to suit the end application. A small subset of these responses was linked to other contributions highlighting the relative pace of jurisdictions’ development and therefore the differences in their applications to tactical intelligence support processes.

Under the issue of Practice change, notable commentary highlighted the potential benefits IPB could realise in standardising tactical police intelligence support processes, with the framework presenting a useful starting point for doctrinal standardisation. Further along this line, experts highlighted the flow-on effect such standardised processes would incur in the form of enhanced consistency of decision-making (based on a uniform intelligence picture), and on information flow between tactical police stakeholders.

Relevant to the theme of Enhancement, emergent sub-themes were spread across three main areas, categorised as:

- **Bigger picture**: defined as referring to commentary surrounding IPB’s potential to enable producers and/or consumers to develop a wider intelligence picture of the threat and/or environment;
- **Prediction**: defined as referring to commentary focusing on the predictive value of intelligence; and
- **Room to improve**: coding highlighting qualitative input on areas of tactical policing intelligence practice which experts asserted could be improved upon, or specific to IPB’s potential utility in improving such practices.

Salient commentary relevant to the theme of the Bigger picture included experts’ highlighting that IPB forces intelligence practitioners to consider factors and issues they may not normally address, including issues around the operating
environment; threat critical strengths and weaknesses, capabilities and vulnerabilities; and centres of gravity. Other contributions added to this by noting IPB’s ability to force analysts to consider operational effects of environmental factors, and to result in not only an explanation of operational reality, but a determination of the “so what” explanation of forward-looking options. Given the emphasis on IPB’s influence on analysts’ areas of focus, responses under this theme were most often linked to issues of Mindset change.

The theme of Mindset change was identified and applied to commentary centring on areas of tactical policing intelligence support experts asserted would require an alteration of existing lines of thought in order to accept an application of IPB, or where IPB would force a change in philosophical or mental approach on the part of tactical police operators. Commentary discussing concerns around militarisation and the use of militaristic language—as emerged under the theme of Caution or resistance explored below—was most evident in contributions discussing mindset change, with experts reiterating the need to depart from military jargon to assist in command acceptance of any application of IPB within tactical policing.

Of secondary prominence under the theme of Mindset change were issues of Prediction, with experts highlighting the potential benefits to the predictive value of generated intelligence product by applying IPB in the tactical policing space. Of note, commentary in this regard was tightly aligned with commentary on the Bigger picture, with contributing experts tying an application of IPB to both a widened operational perspective and a focus on future events.

The bulk of commentary discussing IPB’s potential benefits in enhancing the utility of intelligence support to tactical policing was not provided without balancing concern. Commentary under the theme of Caution or resistance centred mainly on the panel’s concerns around the potential negative consequence of adopting a militaristic lexicon alongside the process adoption of IPB itself. As noted above under issues of Mindset change, a number of experts, while agreeing with the assertion inherent in the research question, strongly asserted the need to move away from military terminology in any adoption of IPB into tactical policing.

Also featuring under the broader theme of Caution or resistance were issues of Context dependency. Under this theme, caution was expressed around the contextual
conditions which an adaptation of IPB into tactical policing would require in order to enhance intelligence support to tactical commanders. One expert noted that while IPB doctrine offered a framework to enhance intelligence support, the issue needed to be considered as part of a wider discussion around police adaptability.

The theme of Command Intelligence Support also featured under responses to this question. This was considered a natural extension of the discussion, given the inherent link between the variable of tactical policing intelligence support and its link to command.

Noting this, contributions under this theme focused on issues of superiors’ acceptance of both IPB and tactical intelligence support in general, and in particular the credibility granted these processes and functions by tactical commanders. Overlaps were also seen with the themes of Mindset change and the concerns over militarisation, with experts discussing the need to avoid militaristic language in order to ensure commanders’ acceptance of the process within a tactical policing context.

Other notable commentary provided in response to this question included one expert asserting, in agreement with the assertion in the question, that it would be arrogant and unproductive to assume that the underlying, critical relationship between intelligence support and its military heritage could be changed in the context of contemporary tactical policing. Another of the panel’s experts, again in agreement with the premise of the question, noted that PTG intelligence officers already undertake many of the processes dictated by IPB doctrine, though not under the guise of IPB itself.

No commentary was provided by the minority dissenting opinion which disagreed with the premise of the question and therefore the core of the research question.

*Round 1 question 7*

Experts most strongly asserted that the IPB framework could most impact on intelligence support to tactical policing against the criteria of addressing identified intelligence gaps, with 11 of the 19 experts considering there to be a strong enhancement effect against this criterion. Overall, experts rated the following criteria as most likely to be enhanced by an application of IPB:

1. Addressing identified intelligence gaps;
2. The level of detail of intelligence support and/or product;
3. Clarity of intelligence support and/or product; and
4. Completeness of intelligence support and/or product.

Of the 23 utility factors rated under this question, the majority (57.8%, n=11) of experts rated only that of the level of unusualness or novelty of the support/product provided as potentially incurring a neutral or negative enhancement effect from an application of IPB in tactical policing.

No qualitative data were collected against this question.

Round 1 question 8
This question asked the expert panel to rate the extent to which individual elements of IPB could impact on intelligence support within tactical policing. This question broke down IPB’s four phases into their individual stages, with experts rating each against the potential enhancement effect it could have in the tactical policing intelligence environment.

Regarding phase one of IPB—Define the operational environment—experts rated the process of Identifying significant characteristics within the AO and area of interest for further analysis as offering the strongest enhancement impact on the intelligence support provided within tactical policing. All 19 panellists agreed that this process could offer at least some enhancement effect, with 52.6% (n=10) asserting this element of IPB could offer a strong enhancement effect on PTG intelligence support.

In regard to phase two of IPB—Describe environmental effects on operations—the collective response from the expert panel was most uniform, with no expert asserting that any individual sub-process from this phase could result in a negative enhancement effect on tactical policing intelligence support. All experts agreed that the process of Describing how the threat / adversary can affect friendly operations could offer at least some positive enhancement effect. Further, 52.6% (n=10) of experts asserted that the processes of Describing how terrain can affect friendly and threat / adversary operations and Describing how civil considerations can affect friendly and threat / adversary operations offered the most possibility of a strong enhancement effect on intelligence support to tactical policing.

On IPB’s third phase—Evaluate the threat—responses from the panel were slightly more spread across the range of options. It is considered possible that responses to this question were formed in the context of this phase’s similarity to existing policing
threat profiling methods, which are in many ways well developed and therefore seen as less demanding of improvement, or as less likely to be enhanced by a process change.

While only one panellist saw the possibility of the sub-process of *Creating or refining threat / adversary models* as negatively impacting on the variable of intelligence support, individual ratings across other options were more evenly distributed. Notwithstanding this, 94.7% (n=18) of panellists asserted a potential positive enhancement effect in conducting the IPB sub-process of *Identifying threat characteristics / adversary order of battle*.

Finally, in regard to the fourth phase of IPB—Determine Threat Courses of Action—experts were more greatly inclined to assert a potential for a negative enhancement effect in applying the phase’s sub-processes within tactical policing. While no more than 10.5% (n=2) of panellists gave this response for any one sub-process, this response rate was markedly divergent from those of the previous three phases.

Respondents rated the sub-processes of *Identifying the threat’s likely objectives and desired end state* and *Identifying high-value targets for each COA* as most likely to incur a positive enhancement effect. It is noted that both these processes relate to assessments and delivery of predictive intelligence, and it was considered possible that experts saw the greatest potential benefit from these processes in enhancing the level of predictive intelligence provided.

No qualitative data were collected against this question.

**Round 1 question 9**

This question asked experts to identify elements of IPB already currently conducted, in whole or part, in the provision of intelligence support to tactical policing. The question sought to probe where existing practice replicated IPB processes, to assist in an evaluation of the assertion that IPB could enhance the level of intelligence support provided in tactical policing environments. Following from the preceding query, this question similarly broke down each of IPB’s four phases into its individual stages.

Combined, 84.2% (n=16) of experts in round 1 identified all elements of IPB as being already in some way implemented in tactical policing environments. In regard to phase one of IPB—Define the operational environment—experts rated the processes of *Identifying significant characteristics within the AO and area of interest for further*
analysis and Evaluating current operations and intelligence holdings to determine additional information needed to complete IPB as most commonly practised, with 63.2% (n=12) and 52.6% (n=10) of respondents respectively identifying these elements. Two (10.5%) respondent experts asserted that none of this phase’s elements were currently conducted. Figure 15 below depicts the responses against this phase.

**Figure 15. Responses against round 1, question 9 relating to phase one of IPB.**

In relation to phase two of IPB—Describe environmental effects on operations—experts rated the processes of Describing how the threat / adversary can affect friendly operations and Describing how civil considerations can affect friendly and threat / adversary operations as most commonly already conducted, with 63.2% (n=12) and 52.6% (n=10) of respondents respectively identifying these elements. Three (15.8%) respondent experts asserted that none of this phase’s elements were currently conducted. Figure 16 below depicts the responses against this phase.
Against IPB’s third phase—Evaluate the threat—the response was most stark, with 15 of the 19 experts (78.9%) asserting that IPB’s process of *Identifying threat characteristics / adversary order of battle* was already conducted in contemporary tactical policing practice. Two (10.5%) respondent experts asserted that none of this phase’s elements were currently conducted. Figure 17 below depicts the responses against this phase.
Figure 17. Responses against round 1, question 9 relating to phase three of IPB.

Finally, in regard to the fourth and final phase of IPB—Determine Threat Courses of Action—the result was similarly stark, with again 15 (78.9%) of the panel asserting that the process of *Identifying the threat’s likely objectives and desired end state* was already conducted. Other responses against this phase were more greatly equivocal, with experts largely split between identifying them as already conducted or not. Again, two (10.5%) respondent experts asserted that none of this phase’s elements were currently conducted. Figure 18 below depicts the responses against this phase.
Six experts offered qualitative commentary on this question. Prominent themes among these qualitative data were those of Practice change, Mindset change, and Caution or resistance. Figure 19 below presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.
Salient commentary under the theme of Practice change included respondents’ noting of the need to properly equip PTGs with requisite staffing and technological resources, and to ensure that such staff are appropriately and adequately trained to conduct IPB and therefore present it as fit for purpose. Experts also noted the need for change in practice to ensure standardisation within and/or across PTGs’ intelligence frameworks.

Relevant to the theme of Mindset change, commentary centred on the required shift in focus of intelligence product output by PTG intelligence units. This theme linked with responses under the theme of Caution or resistance, with one expert cautioning that the IPB process risks analysts becoming process driven, and detached from a required focus on the active target.

Round 1 question 10
Question 10 of the first round asked the expert panel to identify IPB’s known characteristics most likely to influence its ability to enhance intelligence support to tactical policing. No positive or negative connotation was ascribed to each characteristic, with responses relating simply to each characteristic’s potential influence in any adoption of IPB into a tactical policing environment. Experts rated the
following three characteristics of IPB as most likely to influence its ability to enhance tactical policing intelligence support outcomes:

1. IPB’s structured framework (68.4% of respondents, n=13);
2. IPB’s integration with command decision-making processes (57.9%, n=11); and
3. IPB’s integration with the intelligence cycle (47.4%, n=9).

Figure 20 below presents these ratings.

Figure 20. Panellists’ ratings in round 1, of characteristics most likely to influence IPB’s ability to enhance intelligence support to tactical policing.

No qualitative data were collected against this question.

Round 1 questions 11, 12, and 13
These questions were presented to the expert panel as a set, and sought to establish levels of agreement with three statements pertaining to IPB as it related to levels of resourcing within tactical policing.

The first question within the set sought the panel’s level of agreement/dissension on the assertion that IPB’s inherent time, technical, and human resource demands make it ineffective in tactical policing situations. Experts were largely split in their responses, with 36.8% (n=7) in some level of disagreement with the assertion, and 26.3% (n=5) agreeing. Of note, the remaining 36.8% (n=7) opted to
remain neutral or not provide a response. Figure 21 below shows a simplified visualisation of these responses, by level of agreement and dissension.

**Figure 21. Simplified division of agreement with the assertion that IPB’s resource demands render it ineffective in tactical policing.**

![Pie Chart]

- 37% Agree
- 37% Neutral/Don't Know
- 26% Disagree

Question 12 sought responses against the assertion that intelligence staff supporting tactical police operations lack the resourcing to effectively conduct IPB. Experts were split on the proposition, with just over half (52.6%, n=10) of the experts directly concurring with the assertion. Figure 22 below shows a simplified visualisation of these responses.
Figure 22. Simplified division of agreement with the assertion that intelligence staff supporting tactical police operations lack the resourcing to effectively conduct IPB.

Notably, this was not definitively attributed to a lack of organisational capability, with many responses to question 13 dissenting the view that law enforcement agencies lack the *technological* resources to conduct and utilise IPB. Figure 23 below shows a simplified visualisation of these responses.

Figure 23. Simplified division of agreement with the assertion that law enforcement agencies lack the technological resourcing to conduct IPB.

No qualitative data were collected against these three questions, however a number of comments provided in question 14 related to these lines of inquiry.
Round 1 question 14
The final question of the round 1 survey sought character limited free-text responses from participants, giving them an opportunity to raise issues relating to the research question and for which the survey had not specifically queried. As noted earlier in chapter three, providing participants this opportunity was aligned with assertions in the Delphi literature around the importance of allowing such input in the first round of a Delphi study (Franklin & Hart, 2007).

Twelve of the 19 respondent experts (63.2%) in round 1 offered final commentary through this question. Thematic analysis of these qualitative responses revealed the emergence of a broad range of themes, with those of Practice change, Command Intelligence Support, Enhancement, Adaptation, and Mindset change most prominent. Figure 24 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.

Figure 24. Visualisation of emergent qualitative coding from round 1, question 14.

Salient commentary indicated technological considerations should not override analysts’ training in conducting IPB no matter the technology available to them; that technical support to PTGs, while not at military levels, is sufficient; and that time is a more pressing concern than technological resourcing. A dissenting view was raised that IPB was unsuitable for tactical policing and that the exploration of the topic was based on incorrect assumptions of tactical policing, however this view was not further explained.
Other responses to this question showed emerging themes relating to a lack of formalised doctrine and the need for practice change through standardisation, with 92% of respondents identifying this issue currently working in tactical policing, policing intelligence, or non-tactical and command positions. IPB’s scalability and adaptability in time-poor situations were also raised, as were concerns over the acceptance and consistency of intelligence support to tactical police units, with experts providing salient input including the following:

- “IPB cannot be regarded as a universal panacea ... [it] assumes that police commanders are free to use the most effective means for immediate problem resolution [though] does not take into account [other] factors in determining the methods to be used and the final outcome.”
- “... technological resources shouldn’t actually matter. Analysts need to be able to follow an IPB process with maps and pen and paper - in case the power goes out and they have no available technology.”
- “While we are unable to implement the complete IPB template, we can take parts of it that we are able to use in a timely manner.”
- “The major barriers to effective use of IPB ... are lack of doctrine, lack of training among intelligence staff, [and] lack of familiarity of the benefits of IPB-type processes among command staff.”

Finally, under the theme of Command Intelligence Support, experts raised the need to heighten awareness of IPB’s benefits among command staff; concern around the intelligence function’s general and sustained lack of influence on tactical commanders; and the variance of the acceptance of tactical intelligence’s value across the Australian jurisdictions.

**Round 1 summary**

In regard to the issue of Desirability of an implementation of IPB within tactical policing, experts contested the assertion that current methods of providing intelligence support to PTG commanders are sufficient. Experts identified CT and tactical response, and high-risk warrant execution as the three areas of tactical policing most requiring specific intelligence support. CT and tactical response, and joint police/military operations, were identified as the three areas most requiring enhancement to the level of intelligence support they receive. Following from this, experts identified CT and
tactical response, and high-risk warrant execution as the areas of PTGs’ operational responsibilities which could most benefit from the application of IPB.

The factors of accuracy, timeliness, and relevance were rated as most important in measuring intelligence effectiveness in the PTG environment, and experts asserted the IPB framework could impact intelligence support in regard to addressing intelligence gaps, and the levels of detail, clarity, and completeness of intelligence product. Finally, experts identified those IPB elements offering the most potential to impact PTG intelligence support, focusing on processes identifying characteristics of the area of operations and the threat which can affect operations.

In regard to the issue of Feasibility, a consensus began to emerge with the proposition that IPB offers a framework for enhancing intelligence support to tactical policing. IPB’s structured framework, and its integration with both command decision-making processes and the intelligence cycle were identified as the characteristics most likely to influence its ability to enhance PTG intelligence support.

Just over half of experts concurred with the statement that intelligence staff supporting tactical police operations lack the resourcing to effectively conduct IPB, though interestingly this was not attributed to a lack of organisational capability. Elements of IPB which were already being conducted in the provision of tactical policing intelligence support were also identified.

ROUND 2 RESULTS

Questioning in the round 2 survey was divided between the emergent themes of desirability and feasibility. As such, results from round 2 are presented here organised by these themes.

Seventeen experts completed round 2. While participant descriptors were recorded where experts self-identified, responses to questioning in round 2 were not tracked nor mapped to a participant. Similarly, experts who contributed for the first time in round 2 did not have their descriptors captured. As such, comparison between subgroups of the stratified sample was not conducted for results from this round.

One methodological difference was implemented in the second round, with the option to provide a neutral response removed in line with Turoff’s (1975, p. 86) conclusions around the absence of a neutral position promoting debate in a policy
Delphi. While the neutral position was allowed in the first round of questioning, it was deemed appropriate to remove the option in later rounds given the context and discussion provided the entire expert panel between the rounds, and due to the overriding goal of fostering debate among the panellists.

Desirability
Consolidating a number of the first round’s questions, the second round included three questions focused on the issue of the desirability of an adoption of IPB into tactical policing.

Round 2 question 1
The second round’s first question sought experts’ assessment on the likelihood of an implementation of IPB within tactical policing eventuating. As such, the question followed on from the first question of round 1, while also incorporating elements of round 1 question 5. This question asked experts to express their opinion of the likelihood of IPB being implemented in tactical policing, taking into account the previous round’s level of consensus around whether current methods of providing intelligence support to tactical policing are sufficient, and around whether IPB offered a framework for enhancing such intelligence support.

Experts were largely split on the assertion that an IPB implementation within tactical policing environments was likely. The majority (58.8%, n=10) contended an implementation was likely in the given context, though of note none of the panel asserted such an implementation was “highly likely” or “already confirmed” as being applied. Conversely, the remainder of the panel (41.2%, n=7) contended an implementation of IPB in tactical policing was unlikely, though again none of these experts opted to dissent more strongly, with none of the panel asserting such an implementation was “highly unlikely” in the given context. Figure 25 below visualises the response set for this question.
Figure 25. Panellists’ ratings in round 2 of the likelihood of IPB being implemented within tactical policing.

Nine of the responding experts provided qualitative commentary to further explore and clarify the responses to this question. Input in this regard centred on the appetite for organisational change; training needs analyses; the level of acceptance by tactical commanders of the need for intelligence support frameworks; a perceived reluctance by some to accept further military influence within tactical policing; and the importance of the manner of the rollout of an IPB adaptation in gaining operator and command acceptance. Figure 26 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.

Figure 26. Visualisation of emergent qualitative coding from round 2, question 1.

Salient contributions under the most prominent themes of Caution or resistance and Command Intelligence Support reflected the panel’s concerns that despite IPB’s
technical and structural advantages over existing methods of intelligence support, senior officer “buy-in” was crucial to the acceptance of any implementation. Related to this, other of the panel’s experts stressed the need for training needs analyses, implementation testing, and reporting across the jurisdictions to help overcome such issues of acceptance, implementation, and actual use.

More tightly aligned with the issue of Command Intelligence Support as it related to acceptance, a number of experts raised the need for education among command staff of the utility of IPB methodologies, and, interestingly, tactical intelligence in general. This later issue, categorised under the sub-theme of process maturity, while outside the core issue being explored, recurred throughout questioning.

Finally, related to both these themes were responses reiterating concerns around militarisation, and the acceptance of military-derived processes into the tactical policing environment. Experts highlighted the inherent cultural aspects within a civilian, tactical policing intelligence sphere, and a pervasive reluctance to accept [further] military influence. This was tempered by commentary highlighting that the tactical policing intelligence function is still in an evolutionary state and therefore may benefit from the application of a mature IPB-like process if better understood by operators and command staff.

Round 2 question 2
This question sought to establish the expert panel’s level of consensus on the areas of contemporary tactical policing in which it was most important to apply IPB techniques. As such, the question consolidated the issues raised through questions 2, 3, and 6 from the first round, and sought to explore the level of variance between rounds 1 and 2 on this issue. This iteration departed from that of round 1 in that in this round, the panel was presented with the top five responses from round 1 only, and asked to provide their rankings again, though in the context of the controlled feedback provided between the rounds.

There was only slight variance in the ranking order of the top five areas of most importance, with joint military/police operations and foreign peacekeeping/stability operations overtaking high-risk warrant operations. Counter-terror operations remained the area of highest ranking, with over a third of respondents (35.3%, n=6)
rating it as most important. Tactical response operations remained as the panel’s second highest selection. Figure 27 below presents the panel’s rankings.

**Figure 27. Panellists’ ranking of areas of tactical policing in which it was most important to apply IPB techniques within intelligence support processes.**

![Graph showing panel rankings](image_url)

Experts’ qualitative commentary on this question added value to the quantitative rankings, by steering the discussion to areas of tactical policing intelligence support practice most likely to see success in an application of IPB. Figure 28 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.
Delphi panellists strongly suggested that areas of tactical policing practice that see interoperability or cooperation with the military are likely to see greater acceptance of an implementation of IPB. Panellists noted that this was due to the minimal disparity between military process and an adaptation of IPB into tactical policing, lessening the need for change in practice.

Experts discussed issues of Adaptation in the context of these proximal military application(s) of IPB, highlighting the inherent operational alignment of tactical police and military counterparts in the joint environment. Along this line, one expert noted the common lexicon in addition to common methods as a key enabler of a successful implementation of IPB processes by tactical police intelligence practitioners.

Other prominent commentary centred on issues of Enhancement and the sub-theme of Room to improve, with one expert noting that IPB’s benefits are likely to be most impactful in complex, sustained, tactical policing operations. This issue was linked to commentary around the aforementioned focus on joint military/tactical policing operations, with experts noting the limitations of effectively applying IPB—and ensuring sufficiently accurate command support through its application—in purely reactive, time-poor tactical response operations.

Commentary under the theme of Practice change centred on the required level of detail and alignment of practical methods within a joint “blue/green” tactical police/military environment. Experts highlighted the positive aspects of adopting a baseline method (IPB) for intelligence planning in such situations, though one expert
did express the reservation that such planning would be unlikely in time-poor circumstances such as reactive counter-terror response operations.

Round 2 question 3

This question was a reiteration of round 1 question 4, which sought to establish a baseline of the expert panel’s ranking of importance of each of Thompson et al.’s intelligence utility factors in measuring the effectiveness of intelligence support in the tactical policing environment. Where this iteration of the questioning departed from that of round 1 was that in this round, the panel was presented with the top 10 responses from the first round only. Experts were then asked to rank these factors, in the context of the summarised results of the first round and inter-round feedback, allowing for identification of any variance between the rounds.

The results of this questioning showed only slight variance in the panel’s ranking of the top factors of intelligence utility, in their order of general importance to PTG intelligence support. Factors of accuracy, timeliness, and relevance to the intended use maintained their positions as the top three most important to the panel. Figure 29 below presents the panel’s rankings of the top 10 intelligence utility factors.

Figure 29. Panellists’ ranking of the top 10 intelligence utility factors, by importance.
Experts’ overall rating saw positions five and six transposed, with the factor of intelligence credibility moving above that of intelligence support’s level of detail. Also, positions nine and ten were reversed, with panellists determining that the issue of an intelligence product’s concision was of slightly greater import than its specificity.

No qualitative data were collected against this question.

**Feasibility**

*Round 2 question 4*

This question revisited the assertion in the core research question that IPB doctrine can offer a framework for enhancing intelligence support to tactical policing, and was a reiteration of the question posed in question 5 of the previous round. While the question remained the same, the option to provide a neutral response was removed in this round.

The results of this question showed 94.1% (n=16) of the responding experts in agreement with the assertion. This was higher than in round 1, which saw 73.7% of experts in direct agreement. Figure 30 below shows a visualisation of these responses, by level of agreement and dissension.

**Figure 30. Levels of agreement and dissension, in round 2, with the assertion that IPB doctrine offers a framework for enhancing intelligence support to tactical policing.**

![Figure 30](imageurl)

Figure 31 below shows a simplified visualisation of these responses, by level of agreement and dissension.
In light of these results, it was determined that questioning around whether IPB can enhance the level of intelligence support to tactical policing had reached a consensus.

No qualitative data were collected against this question.

Round 2 question 5
This question probed the expert panel’s level of agreement with the assertion that an adaptation of IPB into tactical policing intelligence support was feasible. This question followed on from questions 11, 12, and 13 in round 1, all of which dealt with feasibility issues surrounding any such adoption process. Specifically, these questions centred on the impact on feasibility of IPB’s identified time, human resource, technical, and training resource demands, and question 5 in round 2 consolidated this by querying experts’ assessment of the feasibility of such an adaptation of IPB overall.

There was strong agreement from the panel in round 2 that implementing IPB in a tactical policing environment is feasible, with 94.1% (n=16) concurring with the assertion, and only one respondent expert dissenting. Notwithstanding the removal of a neutral response option in this second round, this was considered a substantially more declarative response over those given in the previous round, which saw just 36.8% agree such an implementation was feasible from a time, technical, and human resource
perspective, and notably, just 10.5% of experts assert it feasible given current police tactical intelligence resourcing levels.

Figure 32 below depicts the breakdown of responses against this question.

**Figure 32.** Responses against round 2, question 5, showing experts’ level of agreement in round 2 with the assertion that an adaptation of IPB into tactical policing intelligence support is feasible.

Six of the panel’s experts offered explanatory, qualitative input against this question. Commentary in many ways mirrored that provided in response to question 1 of this round, and centred on the significant level of training required for both analysts and commanders; and interestingly, a perceived reluctance by some to integrating military concepts despite the need to utilise proven methods. Figure 33 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.
Salient contributions included one expert reiterating the reluctance to further introduce military vernacular and militaristic thinking into tactical policing, while underlining the importance of adopting proven methods and therefore shaping IPB into a digestible product for police commanders to accept. Another of the panel’s experts concurred with the cultural concern around introduction of militaristic frameworks, stressing the need to avoid the term “battlespace”. This second expert highlighted the variance in feasibility of applying IPB for emergency actions—which are inherently response-driven—and tactical policing deliberate actions which afford intelligence personnel, planning personnel, and commanders the time to properly prepare and therefore complete an IPB-like process. A final contribution noted that the feasibility of an adoption of IPB into a tactical policing context would be dependent on commanders’ exposure to the framework’s effectiveness.

Round 2 question 6
This question sought to refine the panel’s level of agreement on a ranking of intelligence utility factors seen as most likely to be positively impacted by an implementation of IPB in tactical policing. This question related directly to question 7 from round 1, and presented the top 11 results from that round. Due to a data quality issue in the wording of this question in round 2, which was discovered during analysis of responses at the cessation of that round, results from this question have been removed from the results set and discarded for further analysis. Given the direct link between the two questions, subsequent analysis along this line of inquiry relied upon the data collected from round 1, question 7 only.
Round 2 question 7

Question 7 of the second Delphi round re-examined the panel’s ranking of IPB processes and their likelihood of positively impacting on intelligence support provided to tactical police units. This question was a reiteration and extension of questions 8 and 9 from round 1, in that the question revisited the panel’s opinion of elements of IPB seen as most impactful, and offered peripheral insight into those elements identified as already being conducted under existing tactical policing intelligence processes.

Between the first and second Delphi rounds there was only slight variance in the expert panel’s ranking of the IPB processes in the likelihood of their positively impacting on intelligence support provided to tactical police units. The process of *Identifying threat characteristics / adversary order of battle* was rated as the most likely to positively benefit intelligence support. This was followed by the processes of *Identifying significant characteristics within the AO and area of interest for further analysis* and *Describing how the threat / adversary can affect friendly operations* respectively.

The results for this question varied only in that experts collectively rated the process of *Identifying threat characteristics / adversary order of battle* above that of *Identifying significant characteristics within the AO and area of interest for further analysis* in the second round. Finally, in round two experts continued to promote processes focused on threat evaluation by rating *Identifying the threat’s likely objectives and desired end state* as the fourth most likely impactful of IPB processes in a tactical policing intelligence support context, elevating its collective rating of importance above that of processes focused on terrain and civil considerations.

Figure 34 below depicts the responses against this question.

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12 Due to a layout error in the survey, this element was included under the listing for phase two of the IPB process, though as all elements were listed without weighting or bias, this did not impact on results.
Figure 34. Responses against round 2, question 7.

No qualitative data were collected against this question.

Round 2 question 8
This question probed experts’ views on which products would be most required for any adaptation of IPB for use by police tactical units. The panel suggested that such an adaptation would require or rely upon a number of products including different mapping solutions and human terrain overlays. Also highlighted was the need to provide familiarisation products in order to educate commanders/consumers on the use of the intelligence support they are provided, including the specific use of IPB.

Figure 35 presents a visualisation of thematic coding of the qualitative data for this question, as a word cloud.
Specifically, responses to this question showed the emergence of themes around *Adaptation*, which was considered natural and obvious in the context of the question’s focus. The theme of *Command Intelligence Support* also featured heavily, reflecting the natural tendency of the expert panel in considering what products would make an adaptation of IPB work to enhance the level of intelligence support to tactical police commanders. Subordinate codes were evenly split across issues of *credibility*, *prediction*, and *technological opportunity* to enhance such command support.

Notable commentary under this theme centred on the way in which an adaptation of IPB would need to be introduced to tactical police personnel, in order to build command and operator acceptance and therefore procedural credibility. A number of experts highlighted the need to train both commanders and their intelligence support staff in the application of an adapted IPB framework to their areas of responsibility, in order to achieve these aims. Commentary in this regard also raised the need to build command elements’ acceptance and esteem of how intelligence cells supported them in general, and how intelligence provides the basis for operations, potentially exposing an extant gap in this area.

Returning specifically to a “roll-out” of an adopted IPB framework into tactical policing, experts provided input on how to best introduce the required changes to practice, by formulating a multi-faceted engagement and education plan to market the potential benefits of an IPB framework to both producers and consumers while overcoming caution, skepticism, and resistance. Experts also noted the requirement for
development of written doctrine, aides-memoire, and sample IPB products in order to guide intelligence personnel in applying adopted processes in the field. One expert raised the need to enhance relationships with technical support services and third-party information holders, in order to ensure that any enhanced identification of information gaps enabled by an adapted IPB-type framework would not be stymied by a lack of access to information to fill such gaps.

Responses addressing the theme of Practice change were prominent in the results from this question, with 81.8% (n=9) of those contributing experts giving qualitative commentary focusing on the shift toward the use of enhanced mapping products as representing a change from the status quo. The focus on mapping, overlays, and other graphical products to accelerate and enhance the value of intelligence briefings deriving from the IPB process was further noteworthy, given the relatively low importance the expert panel collectively rated the use of such types of product when ranking the intelligence utility factors during the Delphi rounds.

A number of experts identified the use of specific map overlays and reliance on specific and up-to-date mapping sources as crucial, while a similar number highlighted the utility of human terrain overlays as also of high importance. One expert, succinctly expressing frustration with current practice and mindsets, espoused the position that current levels of tolerance of substandard mapping and Geographic Information Systems (GIS) support was unacceptable, and would need to be overcome in any successful adoption of IPB into the tactical policing environment.

Other IPB products identified by the panel as most required for an implementation in tactical policing included:

- Situation and threat templates;
- Decision support, event, and synchronisation matrices;
- Centres of gravity and high value target matrices;
- Building layouts; and
- Combinations of the above, including modified combined obstacle overlays or adaptations thereof.

Finally, experts’ input on this question emerged through the themes of Technological opportunity and limitation, with over one-third of respondents (36.4%, n=4) offering commentary focusing on this area in their qualitative responses. Input in
this regard discussed issues of technological opportunity—or lack thereof—related to
an adaptation of an IPB framework into a tactical policing context, from both the
perspective of Command Intelligence Support and issues around Practice change.
Noting the aforementioned focus on the increased and enhanced utilisation of mapping
solutions and products under an adoption of IPB, relevant expert commentary was also
linked to the practice change of embracing evolved mapping solutions and current
technology while implementing IPB in tactical policing intelligence support.

No quantitative data were collected against this question.

Round 2 question 9

The final question of round 2 sought free-text responses from participants, giving them
an opportunity to raise issues relating to the research question and for which either
round of the survey process had otherwise not accounted. Four respondent experts
offered responses to this question, with all responses providing only encouraging
commentary to the Chief Investigator or re-emphasising previous input around the
utility of an adopted IPB framework within tactical policing and law enforcement in
general.

No quantitative data were collected against this question.

Round 2 summary

The results of the second of the Delphi rounds highlighted a number of considerations.
Questioning around whether IPB can enhance the level of intelligence support to
tactical policing has reached a consensus, with 93.75% of experts in the second round
agreeing with the assertion that it can. There was strong agreement from the panel in
this round that implementing IPB in a tactical policing environment is feasible, though
experts were largely split however, on the assertion that an IPB implementation within
tactical policing environments is likely.

There was only slight variance in the ranking order of the top five areas of most
importance in applying IPB techniques to intelligence support. Commentary on this
question strongly suggested that areas of PTG practice that see interoperability or
coopration with the military are likely to see greater acceptance of an implementation
of IPB. There was also only slight variance in the ranking of the top eleven of the
factors of intelligence utility, in their order of general importance to intelligence
support. Factors of accuracy, timeliness, and relevance to the intended use maintained their positions as the top three most important to the panel.

Similarly, there was only slight variance in the ranking of IPB processes in the likelihood of their positively impacting on intelligence support provided to tactical police units. The process of ‘Identifying threat characteristics / adversary order of battle’ was rated as the most likely to positively benefit intelligence support.

The panel suggested that an adaption of IPB for tactical police units would require a number of products including different mapping solutions and overlays. Also highlighted was the need to provide familiarisation products in order to educate commanders/consumers on the use of IPB.

CESSATION OF THE SURVEY COMPONENT

For the current study, Dajani et al.’s (1979) Delphi stability and agreement criteria were used to determine the termination point for the Delphi survey rounds. The authors’ hierarchical model dictates that a stopping point for a Delphi process may be determined once a level of stability between rounds is observed and consensus is achieved through unanimity of responses, or if the majority of respondents (being 50% or higher) exhibit consistency, coupled with a concurrent level of agreement between those in the minority.

Within this study, questions from both rounds 1 and 2 of the Delphi process focusing on direct interrogation against the core research question (through questions 5 and 4 in each respective round), were utilised in assessing a cessation point. In both rounds, the majority of participants agreed with the assertion tested in these questions (73.7% in round 1, and 94.1% in round 2), exceeding Dajani et al.’s (1979, p. 86) 50% threshold. Within these questions, levels of disagreement were consistently low, with 10.5% in disagreement with the assertion in round 1, and 5.9% in round 2.

While the variance between rounds 1 and 2 was higher than other recommendations of an arbitrary 15% threshold for equilibrium (Scheibe, Skutsch, & Schofer, 1975, p. 273), it was determined that this was due in part to the option for a neutral response being removed in round 2. Further, as the round 2 results showed all but one expert in agreement with the assertion presented, there was no clear value in continuing this questioning in a further round. These considerations of value also accounted for the necessity to retain the expert panel, in light of the demands on experts’
time and effort, in line with the retention strategy outlined in chapter three. Noting that other questioning was considered ancillary to that against the core research question, it was determined that data saturation had been reached through the Delphi process, and the survey component was ceased.

COMMENTARY FOLLOWING FINALISATION OF THE DELPHI ROUNDS

At the end of the second Delphi round, panellists were invited to provide final commentary on the study. Two panellists offered such closing commentary. This input centred on the theme of Adaptation and where elements of IPB are already in use, with experts re-emphasising the existence of adaptations under IPO, which has focused on applying IPB to police response to terror activity, public order, disaster response, and police activities relevant to peacekeeping and COIN. Input along these lines also stressed the methodological suitability for adaptation and adoption of IPB, as a military-born process, into policing intelligence practice, and its potential to enhance intelligence outputs.

Commentary also focused on the requirement for Mindset change in order to progress an adoption of IPB processes into tactical policing. Commentary under this theme centred on the required change of mindset within police intelligence practice in order to embrace and accept an adaptation of IPB or a derivative thereof, noting the potential for resistance to change and emphasising the potential benefits of persisting with implementation despite such anticipated resistance. Experts also reiterated the need to refine and modify IPB to suit the nuances of police operational requirements and areas of responsibility.

ASSESSMENT OF STUDY RESULTS AGAINST INTELLIGENCE UTILITY FACTOR DEFINITIONS

As described in the preceding chapter, Thompson et al.’s intelligence utility factor definitions were used to evaluate the results of the study. The choice of these was due to the simplicity of the definitions, those authors’ consideration of IPB in developing their model, and the recognised challenges in measuring intelligence utility thus demanding the use of a tested set of criteria. This section presents the results of the collection phase against each of the respective utility factors, consolidating both quantitative and qualitative results from the Delphi process and identifying areas of note for further exploration in the following chapters.
Accuracy

The utility factor of intelligence support accuracy was rated as the measure of highest importance in evaluating tactical policing intelligence effectiveness in round 1, equal with that of timeliness. 94.7% (n=18) of respondent experts rated this factor as of “critical” importance in that context, with the remaining panellist opting for the next highest rating of “substantial” importance.

Included for further exploration in round 2 of the Delphi survey process, experts affirmed issues of intelligence support accuracy as of the highest importance, with accuracy rated by 82.4% of round 2 respondents as the most important factor in the tactical policing context. The second-round results saw a marked distinction between the ranking of the factors of accuracy and timeliness, which had in the first round been equally rated by the expert panel.

In regard to the IPB framework’s potential utility in enhancing tactical policing intelligence support in relation to issues of accuracy, experts’ responses were again generally positive, placing this issue as the ninth most potentially impacted utility factor by an application of IPB in the tactical policing context. The modal response for this issue rated IPB as offering a potentially “moderate” enhancement effect (42.1%, n=8), with a further 31.6% (n=6) asserting the framework offered a higher, “strong” enhancement effect. None of the panel asserted that IPB would incur a negative or detrimental enhancement effect against this factor, though two panellists (10.5%) did state the framework would incur no impact either way.

Where observed, differences between the rankings against these two lines of questions were taken to indicate the panel’s variance in view between the importance of a particular intelligence utility factor in the tactical policing context, and their view on IPB’s potential to enhance current levels of a particular factor in that context. There was therefore, no inherent relationship between the lines of questioning, and it was possible that the panel viewed a particular factor as of high importance, but saw IPB as offering less potential enhancement (perhaps due to IPB’s characteristics, or due to current techniques being sufficient in ensuring satisfactory results against that factor); or conversely, that factors seen as less important than others could potentially be more greatly enhanced by an application of IPB; or some other combination.
Qualitative input on the utility factor and issues of intelligence support accuracy emerged through the themes of the Bigger picture and of Technological opportunity, and the higher-level theme of Adaptation. Contributions included the panel noting that advances in technology and communication offered an enhanced ability to draw on multiple intelligence feeds, and that alternative intelligence frameworks were viable options for enhancing intelligence support. Experts similarly raised the need to move away from case-focused intelligence support models to provide greater accuracy of mission.

Related to this, the nature of the often reactive, time-constrained tactical policing operating environment was also raised, with one expert noting the impact this has on intelligence and planning process accuracy. Other experts commented along a similar line, highlighting IPB’s potential for adaptation into the tactical policing context particularly for planned operations or deliberate actions where time constraints are less acute, asserting that IPB could be modified and used to provide an accurate tactical picture in such circumstances.

Clarity

The issue of intelligence support and/or product clarity was highly rated by the panel in round 1 of the Delphi process, with almost all respondents rating it as of “critical” importance (89.5%, n=17) in measuring intelligence effectiveness in the PTG support context. This was behind only the factors of accuracy and timeliness. While no expert asserted the criteria of clarity was of no importance, the remaining two (10.5%) panellists opted for the lowest positive rating of “some” importance.

This response saw the utility factor and issues of intelligence support clarity being included for specific examination in round 2 of the Delphi process. Through the second survey, experts collectively affirmed this factor as the fourth most important issue in the tactical policing intelligence support context, behind only those factors of accuracy, timeliness, and relevance.

As regards IPB’s potential to impact upon tactical intelligence support in relation to its clarity, experts’ responses were largely aligned with their response to the question of importance, with the panel asserting IPB offered a “strong” enhancement effect against this factor. The modal response to this question saw eight (42.1%) experts assert this highest option, with none of the panel claiming the framework
offered a negative enhancement effect on issues of product clarity. This collective response was second only to the panel’s assertions around IPB’s potential positive enhancement on factors of intelligence gaps and the level of detail.

Qualitative commentary provided throughout the Delphi phases offered only little against this factor, with but a small number of panellists raising the issue in regard to current methods of intelligence support lacking clarity through poor information practices, and highlighting IPB’s potential to deliver a clearer situational picture through more uniform processes.

**Completeness**

The expert panel were spread in their ratings of the importance of this utility factor, with responses spread between rankings of “some” to “critical” importance, and the modal response (31.6%, n=6) asserting a ranking of “substantial” importance, the second highest option on the Likert scale. This spread possibly reflected a higher level of comfort within the panel with incomplete information in dynamic tactical policing operational environments. In terms of IPB’s potential enhancement effect on this factor, 78.9% (n=15) of experts did however assert a collective opinion in round 1 that the framework offered a potential for a moderate-to-strong enhancement effect on issues of completeness on intelligence support in a PTG setting.

Qualitative input on this measure was seen through commentary along the themes of *Enhancement* and *Bigger picture*, with experts’ contributions on this area being second in frequency to discussions around timeliness factors in the tactical policing space. Salient responses highlighted IPB’s ability to shift operator and analyst thinking away from orthodox thinking in completing tasks more fully, particularly in relation to operational impacts/effects—the “so what” factor; the framework’s ability to force consideration of the intelligence picture beyond the purely tactical and out to the operational and strategic levels; and its ability to utilise multiple information feeds to allow analysts to consider issues such as environmental factors, adversary impacts, critical strengths, weaknesses, capabilities and vulnerabilities, and centres of gravity considerations not normally considered. Given this focus, contributions against this utility factor were intrinsically linked to those against the factor of detail, explored below.
**Concision**

Seventeen of the 19 (89.5%) respondent experts in round 1 of the Delphi phase rated this utility factor as of either substantial or critical importance in measuring intelligence effectiveness in a PTG context. Like issues of timeliness, the strong response against this utility factor was considered natural given the panel’s focus on the need for concision in often time-constrained operational settings.

This response saw this factor included in further exploration through round 2 of the survey component. In the second Delphi round, experts asserted the utility factor as the ninth most important factor behind those of accuracy, timeliness, relevancy, clarity, credibility, detail, reliability, and the addressing of gaps.

In regard to IPB’s potential to enhance tactical policing intelligence support against this measure, the modal response from the panel was that the framework offered a potentially “moderate” enhancement effect, with 47.4% (n=9) selecting this option and a further 21.1% (n=4) suggesting the IPB framework offered a “strong” enhancement effect. None of the panel asserted that IPB would incur a negative or detrimental enhancement effect against this factor.

Qualitative commentary on issues of concision was limited and offered no substantive further examination of this utility factor in the context of the research question.

**[Provision of a] Conclusion**

Relative to those in the top 10 selected responses, experts in round 1 were mixed on their rating of the importance of a conclusion in tactical policing intelligence product, again likely reflecting a higher level of comfort with uncertainty and cognisant of time and resource constraints in a tactical policing context. The mode for this factor was that it was of “substantial” importance (31.6%, n=6), with a relatively high number of experts (15.8%, n=3) asserting this factor was of only “some” importance in measuring intelligence effectiveness in tactical policing environments.

With respect to IPB’s potential to enhance tactical policing intelligence support against this factor, experts were generally positive, with none of the panel asserting the framework would offer a negative enhancement effect, and the majority (63.2%, n=12) asserting IPB could offer at least a moderate enhancement impact. Despite these positive rankings, further exploration was not explicitly sought on this
factor in subsequent rounds. Only one expert offered qualitative input on the issue of the conclusion utility factor, simply noting IPB’s potential to force analysts to consider providing a conclusion in their outputs.

**Continuity**

Experts saw this utility factor as being of moderate to substantial importance in measuring intelligence effectiveness in a tactical policing context, with 63.2% (n=12) of respondent panellists in round 1 applying these rankings. Regarding IPB’s potential to enhance tactical intelligence support in relation to continuity, the response was somewhat positive, with more experts (42.1%, n=8) asserting IPB offered a strong enhancement effect over any other response. Due to these rankings, further exploration was not explicitly sought on this factor in subsequent rounds.

A number of experts’ qualitative contributions touched tangentially on the factor of intelligence support continuity, though this factor was not one on which the panel as a whole focused. These offerings highlighted the need for tactical policing intelligence product to have continuity with other sources, primarily with the military in joint planning and operations. From this, a number of experts highlighted IPB’s potential utility in such joint-space settings (as described earlier in the chapter).

Other contributions relevant to the factor of continuity highlighted the need for police tactical intelligence to have congruity with new and emerging data sources and feeds, though this was considered to be less tightly aligned with the parameters of the utility factor definition used, and offered no further substantive examination of related issues in the context of the research question.

**Credibility**

The utility factor of intelligence support credibility was highly regarded by experts in the first round of the Delphi survey process, with 68.4% (n=13) of respondent panellists rating it as of “critical” importance in measuring intelligence effectiveness within a tactical police environment. The remaining six experts rated it as of either “moderate” or “substantial” importance (10.5%, n=2; and 21.1%, n=4 respectively), with none of the panellists asserting this factor was of no importance in the context under examination.

These results saw credibility as a utility factor rated as the equal sixth most important measure of intelligence effectiveness, and therefore included for further
exploration in the second Delphi round. Results from the second round saw support credibility emerge as the panel’s fifth most important utility factor in the tactical policing context, advancing above that of detail in the second survey despite a wide spread in panellists’ individual ratings (mode of 6 [23.5%, n=4] on the 10-point Likert scale).

In relation to IPB’s potential to impact upon tactical policing intelligence support in regard to credibility, experts’ modal response was that IPB offered a potentially “moderate” enhancement effect (42.1%, n=8), and a further six (31.6%) asserting the highest possible rating of a “strong” enhancement effect. None of the panel asserted IPB would incur a negative or detrimental enhancement effect against this factor. These ratings saw the panel rate this as the equal fifth most positively impacted intelligence factor following an adaptation of IPB in the tactical policing intelligence space, alongside considerations of intelligence product specificity.

Qualitative input centring on the utility factor of credibility was varied, and emerged under the broader themes of Command Intelligence Support and Mindset change, sufficient to be identified as a strong subordinate theme under these areas. Issues of intelligence support utility relating to credibility were also prevalent under the parent theme of Caution or resistance, particularly in relation to concerns around militarisation. This prevalence is shown in Figure 36, presented in the next chapter.

Through round 1 of the Delphi, input on the factor of credibility centred on the issue of command acceptance of tactical policing intelligence, with a number of experts expressing opinion that current levels of intelligence support to PTGs were either insufficiently developed, or insufficiently accepted by senior officers. Also emerging through this iteration of the Delphi were contributions highlighting the expert panel’s concern that military terminology inherent in IPB [and other military processes] were ill received by tactical police commanders.

Qualitative input on this utility factor was more prevalent through the second Delphi round, with experts exploring areas of command acceptance and caution around perceived militarisation. Many of these contributions were linked, with experts positing that current and initial resistance from client command elements would fade as the potential benefits offered by IPB were demonstrated, and as the intelligence function within PTGs continued to evolve.
One salient quote noted that the apparent strong resistance [to the use of military processes such as IPB] was counterintuitive given the many aspects of tactical policing practice adopted from military doctrine. Another expert, responding to the same line of questioning, asserted the likelihood of an implementation of IPB in tactical policing was dependent on levels of senior command “buy-in”, stressing the need for procedural actualisation rather than conceptual adoption only in attaining such command acceptance—the question of “being seen” to be implemented as being crucial to attaining credibility.

**Detail**

This utility factor, centring on the level of detail apparent in intelligence support or product, was rated by the expert panel in round 1 as the fifth most important of the examined criteria in measuring tactical policing intelligence support effectiveness, with all panellists rating it as of either “substantial” or “critical” importance. The modal response against this factor was that it was of “critical” importance, with well over half of experts asserting this rating (63.2%, n=12).

These strong results saw the factor of detail included for further examination in round 2 of the Delphi process. Through the second round’s survey, experts collectively affirmed the utility factor of detail as of sixth highest importance in the tactical policing context.

As regards IPB’s potential to impact upon tactical policing intelligence support in relation to levels of detail, experts rated this utility factor as highly enhanced by an application of the IPB framework, second only to that of intelligence gaps. Seventeen of the 19 (89.5%) respondent panellists in round 1 rated IPB as offering a potentially “moderate” or higher enhancement effect on tactical policing intelligence detail, with the modal response of “moderate” being asserted by over half (57.9%, n=11) of experts. A further six (31.6%) asserted IPB offered a “strong” enhancement effect on tactical policing intelligence support, the highest rating, with none of the respondent experts asserting the framework offered a negative impact or would be neutral in its effect.

Qualitative input centring on the utility factor of detail emerged through the sub-theme of the *Bigger picture* under the parent theme of *Enhancement*. Contributions were also evident under the theme of *Command Intelligence Support*, primarily relating to the level of detail required by PTG commanders, and that which IPB as a framework
would help ensure was delivered to these senior officers. One salient contribution noted that exposure to the level of detail IPB would bring to bear to assist PTGs’ operational planning would help reduce any resistance to the process being adopted in such a context.

Considerations of the enhancement effect IPB may bring to tactical policing intelligence support also saw the factor of detail addressed, with experts noting the level of detail the framework would deliver in joint police/military operations, and in PTG operations where time constraints are less influential.

Filtering

In regard to the utility factor of the level of filtered intelligence present in tactical policing intelligence support, results in round 1 were mixed, with a little over half (57.9%, n=11) of the panel rating this consideration as only of moderate importance or lower. An equivalent proportion of the panel rated IPB as offering a potentially moderate or strong enhancement effect against this factor in tactical policing contexts.

Due to these rankings, further exploration was not explicitly sought on this factor in subsequent rounds. None of the commentary provided throughout the Delphi phases offered further examination of this utility factor.

[Level of] Finished Intelligence

Experts in round 1 of the Delphi phase were mixed in their rating of the level of importance of this factor in measuring tactical intelligence effectiveness. The modal response (36.8%, n=7) was that the level of finished intelligence was of substantial import, with a further six (31.6%) panellists attaching a higher level of standing by rating it as of critical importance.

Rating IPB’s potential to enhance tactical intelligence support against this factor, the panel in round 1 was similarly spread, with the modal response (47.4%, n=9) being that the framework offered a potentially moderate enhancement effect. A further six panellists (31.6%) asserted the framework offered a higher, “strong” enhancement effect against this criterion. None of the panel asserted that IPB would incur a negative or detrimental enhancement effect against this factor.

Further exploration was not explicitly sought on this factor in subsequent rounds. Commentary provided throughout the Delphi phases offered only negligible
examination of this utility factor, with contributions touching on levels of finished intelligence product being offered as an aside to matters of completeness addressed above.

**Gaps**

The utility factor around the addressing of intelligence gaps was given substantial focus by the expert panel, which rated it in the top 10 most important criteria for measuring intelligence effectiveness in a tactical policing context, and notably as the area upon which IPB offered the greatest potential positive impact. In the first of the Delphi rounds, experts asserted this utility factor was highly important, with the modal response (47.4%, n=9) rating it as of “critical” importance, closely followed by a rating of “substantial” importance, the next rating below (42.1%, n=8). None of the respondent experts rated this utility factor as of no importance in the tactical policing context.

These first-round results saw this utility factor included for further exploration in the subsequent phase of the Delphi process. Through this second round, experts retained their collective agreement that the addressing of intelligence gaps was the eighth most important utility factor in the context of tactical policing intelligence support, with its position unchanged between the survey rounds and the modal response of a third of the panel (35.3%, n=6) specifically rating it as the eighth most important factor.

In terms of IPB’s potential to enhance tactical policing intelligence support in addressing intelligence gaps, the Delphi panel collectively rated this as a factor upon which IPB offered a potentially positive impact. The modal response in this regard was that the framework offered a potentially “strong” enhancement effect in the addressing of gaps, with over half the panel (57.9%, n=11) offering this rating. A further five experts (26.3%) asserted a rating of a “moderate” enhancement effect, and none of the panel asserted that IPB offered a negative enhancement effect against this factor. This was inherently linked to the Delphi panel’s rating of IPB’s ability to impact on the utility factor of completeness, which also saw it placed in the top tranche of those factors upon which IPB could positively impact.

Notwithstanding the level of importance with which the panel rated this factor and their assessment of IPB’s ability to enhance PTG intelligence support in relation to
gaps, qualitative commentary provided throughout the Delphi phases offered little further examination of these issues. What feedback was given emerged through the first round of the Delphi process, and was spread throughout the overarching themes of Adaptation, Command Intelligence Support, and Mindset change. This input focused upon IPB’s perceived ability, even in an abridged form, to afford analysts a framework to identify intelligence gaps and steer command decision-making in the tactical policing context.

[Use of] Graphics

The response to this question was of interest, noting the common and heavy use of graphics in tactical policing intelligence products. Experts rated this factor as of only relatively little importance in tactical policing intelligence support when compared with other criteria, with only 10.5% (n=2) of respondent experts rating it as of crucial importance. In terms of IPB’s potential to enhance tactical intelligence support in relation to this factor, experts were largely in agreement, with the majority (68.4%, n=13) asserting the framework could provide a moderate or strong enhancement effect.

Qualitative input from the expert panel in relation to the use of graphics centred on questioning around the products most required to implement an adaptation of IPB in tactical policing. Commentary in this regard highlighted a suite of graphical products, including better use of mapping and geographical information systems, and standard IPB overlays for decision support and situational analysis. Beyond noting the potential for use of such products and a perceived underutilisation in current PTG operations, this commentary did not provide further specific exploration as to the relative importance of this utility factor in the context of the core research focus.

[Provision of a] Hypothesis

The modal response for this factor, in relation to experts’ rating of the level of importance in measuring tactical intelligence effectiveness, was of “substantial” importance, with 47.4% (n=9) asserting this ranking. A further three (15.8%) of the panel rated this factor as of “critical” importance, with one (5.3%) expert asserting the provision of an hypothesis was of no importance at all—of note given only four of the 23 utility factors used attracted such a rating from any of the respondent panellists.

Despite this generally strong response, these results saw other utility factors rated as of higher importance overall, and thus further exploration of this factor was not
explicitly sought in the later Delphi rounds. Akin to the results against the utility factors of completeness and finished intelligence, the results against this factor likely reflect the panel’s understanding of, and comfort with, an incomplete situational picture in a tactical setting.

These results, again while generally positive in the level of importance the panel placed on this utility factor, may also suggest a conditioning toward the acceptance of a lower level of prediction from police intelligence analysts and intelligence officers. This was further explored in the panel’s qualitative input around levels of prediction, and under the broad themes of *Enhancement* and the *Bigger picture*.

In terms of IPB’s potential to enhance tactical policing intelligence support on this criterion, the panel’s response was similarly distributed, with 10 (52.6%) of the respondent experts asserting the framework offered a potentially “moderate” enhancement effect, and a total of four experts asserting that IPB would either offer no effect at all (15.8%, n=3) or would rather negatively impact tactical policing intelligence support in regard to the provision of a hypothesis to explain the situation (5.3%, n=1).

As noted above, qualitative commentary provided throughout the Delphi phases offered further examination of this utility factor, and emerged through discussion primarily around the prediction debate, and under the themes of *Enhancement* and the *Bigger picture*. Contributions touching on issues of prediction noted experts’ concerns around the lack of predictive value in contemporary tactical policing intelligence practice, and criminal intelligence practice in general. One salient contribution along this line asserted that “if intelligence is not predictive … it isn’t intelligence, it’s … journalism”.

In relation to IPB, experts emphasised the framework’s potential influence on tactical policing intelligence by forcing analysts to focus on predicting target courses of action. Qualitative input around factors of hypothesis building flowed from this focus on the prediction debate, with contributions again highlighting IPB’s potential utility in forcing mindset change in analysts and the provision of an enhanced, more comprehensive threat picture, through the framework’s focus on courses of action and the “so what” factors commanders require for informed decision-making.
**Information**

The expert panel rated this as the second least important utility factor in the context of the study. In terms of IPB’s potential to enhance tactical policing intelligence support on this criterion, 73.7% (n=14) of the panel asserted an IPB framework could offer at least some positive enhancement effect. Due to the relatively low level of panel interest in this as opposed to other criteria, further exploration was not explicitly sought on this aspect in subsequent rounds.

Qualitative commentary offered by the panel relevant to this criterion was limited, reflecting the low level of importance with which experts rated it. None of the qualitative commentary specifically addressed how (if at all) IPB could affect the level or utility of raw, unevaluated information in the provision of tactical policing intelligence support.

Input was largely limited to contributions noting emerging technologies’ ability to enhance the range of information sources available to command; information required to enable the use of IPB by tactical intelligence operators; and where experts noted that the time restrictions inherent in some reactive tactical policing situations limit the intelligence cycle to a more restricted, information-gathering process largely absent of analysis. Commentary on the latter aspect was offered to reinforce the limited scope for an application of IPB in such situations, and in this regard linked to commentary around timeliness considerations.

**Perishability**

Regarding the criterion of intelligence support’s perishability, 52.6% (n=10) asserted that IPB offered either a moderate or strong enhancement effect to tactical policing intelligence support, and almost all the panel (94.7%, n=18) were in agreement that the utility factor of addressing contextual perishability was of moderate or higher importance in a tactical policing environment. These results were however outweighed by experts’ responses to other criteria, and due to this, further exploration was not explicitly sought on this utility factor in subsequent rounds.

This was considered further justified by the lack of qualitative exploration by the panel, with none of the commentary provided throughout the Delphi phases offering substantive examination of perishability considerations. It was noted that issues of
perishability were largely ignored by the panel, despite a clear focus on linked issues around the utility factor of timeliness, explored below.

**Precision**

Experts were generally, and understandably, in agreement that the utility factor of intelligence support precision was of either substantial or critical importance in measuring tactical intelligence support effectiveness, with 73.7% (n=14) asserting these ratings combined. None of the respondent experts asserted the factor of information precision was of no importance.

In terms of IPB’s potential to enhance tactical policing intelligence support in regard to issues of precision, the panel’s response was generally positive, with a total of 84.2% (n=16) asserting the framework offered at least some enhancement effect and the modal response emerging that IPB offered a “moderate” enhancement effect (47.4%, n=9). This generally strong result was not without dissent however, with one panellist (5.3%) asserting the IPB framework would negatively impact on tactical policing intelligence support in relation to precision, and one other (5.3%) asserting that the framework offered no potential impact either way.

Qualitative commentary provided throughout the Delphi phases offered no further substantive examination of this utility factor.

**Processing**

On the issue of whether information had been processed and synthesised with other sources, experts generally rated this factor as of importance in measuring tactical policing intelligence effectiveness, with the modal response from the panel being that the factor was of “substantial” importance (42.1%, n=8). None of the respondent experts asserted the factor was of no importance.

In terms of IPB’s potential to enhance tactical policing intelligence support against issues of information processing and synthesis, a total of 14 (73.7%) panellists asserted the IPB framework offered a potentially moderate or strong enhancement effect (42.1%, n=8; and 31.6%, n=6 respectively). None of the panel asserted the framework would present a negative impact against this utility factor within a tactical policing intelligence context.
Despite these generally positive rankings, further exploration was not explicitly sought on this factor in subsequent rounds, so as to allow focus on issues of higher weight to the panel. None of the commentary provided throughout the Delphi phases offered further examination of this utility factor, beyond one expert noting the fractured and therefore unprocessed nature of much contemporary tactical intelligence support, and another of the panel highlighting IPB’s potential in forcing an enhancement along this line.

**Relevance**

The utility factor of intelligence support relevance was rated highly by the panel in terms of its importance in measuring intelligence effectiveness in the PTG context, behind only the factors of accuracy and timeliness. The modal response in the round 1 Delphi survey saw 84.2% (n=16) of respondent experts rate this factor as of “critical” importance in the context under examination, with the remainder (15.8%, n=3) of the panel rating this issue as of “substantial” importance, the next option below.

This response saw relevance included for further examination in the second Delphi round. Through the second survey, the modal response saw intelligence support’s relevance to its intended use affirmed as the expert panel’s third most important consideration in the tactical policing context.

As regards the panel’s views on the extent to which IPB could impact upon tactical policing intelligence support in relation to relevance, experts expressed a greater spread of opinion. While generally positive and with none of the respondents asserting the framework would incur a negative impact, three (15.8%) of the panel claimed IPB would be neutral in its influence, the equal highest response in this regard with the exception of that for the utility factor of unusualness or novelty. Notwithstanding this, the modal response against this question remained that IPB offered a potentially “strong” enhancement effect on issues of relevance, with 36.8% (n=7) asserting this rating, and a further 31.6% (n=6) electing for the next highest rating of a “moderate” enhancement effect.

Qualitative commentary on this utility factor was notably limited, possibly reflecting the panel’s acceptance that a strong majority of tactical intelligence is by its very nature tightly focused on the matter at hand and therefore inherently relevant. As
such, none of the commentary provided throughout the Delphi phases offered substantive examination of this measure.

**Reliability**

The utility factor of intelligence support reliability was highly regarded in round 1 of the Delphi process, with experts collectively rating this as the sixth most important factor in measuring intelligence effectiveness in the tactical policing intelligence support context (alongside that of credibility). The modal response for this factor was of “critical” importance (the highest of the survey options), with a large proportion (68.4%, n=13) of the panel asserting this rating. A further five (26.3%) of the panel opted for the second highest of the survey options, rating this factor as of “substantial” importance.

These results saw the issue of reliability included for further exploration in round 2 of the Delphi process. In this second phase, experts affirmed reliability as the seventh most important of the examined utility factors in a tactical policing intelligence context, with the modal response (29.4%, n=5) directly placing it as the seventh highest option.

In regard to IPB’s potential to impact upon tactical policing intelligence support reliability, experts were quite positive, with a total of 14 (73.7%) asserting the framework offered a potentially “moderate” or “strong” enhancement effect, with the modal response being that of a “moderate” enhancement effect (42.1%, n=8). None of the panel asserted the framework would present a negative impact against this factor.

Qualitative commentary examining issues of intelligence product reliability were limited, and briefly touched on themes including *Adaptation, Command Intelligence Support*, and both *Mindset* and *Practice change*. The limited contributions offered highlighted panellists’ views on current levels of standardisation and available doctrine, and IPB’s potential in establishing uniformity in collection, threat assessment, and dissemination, therefore enabling greater consistency in resultant decision-making, even in inherently reactive, unpredictable environments.

**Specificity**

The factor of intelligence product specificity was rated by the entire panel as of some importance or higher in measuring tactical intelligence support effectiveness, with the modal response (42.1%, n=8) rating the factor as of “substantial” importance, and a
further 36.8% (n=7) asserting the highest rating of “critical” importance. This overall ranking saw this utility factor included for further exploration in round 2 of the Delphi process. In this second round, the issue of intelligence product specificity was affirmed as the panel’s 10th most important of the examined utility factors in the tactical policing context.

On IPB’s potential to impact upon tactical policing intelligence support specificity, the modal response from the panel was that the framework offered a “strong” enhancement effect (the highest available rating), with eight (42.1%) of the expert panel asserting this response. A further 31.6% (n=6) of the panel asserted the framework offered a potentially “moderate” enhancement effect on PTG intelligence support. These results saw the factor of specificity rated as the equal fifth most potentially enhanced of all the examined utility factors, through an adaptation of IPB in the tactical policing context, alongside that of product credibility.

None of the commentary provided throughout the Delphi phases offered substantive examination of this utility factor. Contributions were largely limited to identifying emerging technological opportunities for provision of more specific information [to command], and IPB’s potential to force analysts to consider greater specificity in their assessments.

[Provision of a] Summary
Experts’ ratings of the importance of this factor in measuring intelligence effectiveness in a tactical policing context was again mixed, with most respondents (52.6%, n=10) rating it as of substantial importance in round 1 of the Delphi process. In regard to IPB’s potential to enhance tactical policing intelligence support against this factor, experts were similarly spread, with most asserting the framework offered a potentially moderate enhancement effect (47.4%, n=9), or strong enhancement effect (21.1%, n=4).

Despite these generally positive rankings, further exploration was not explicitly sought on this factor in subsequent rounds. None of the commentary provided throughout the Delphi phases offered further examination of this utility factor.

Timeliness
The utility factor of timeliness was rated as of the equal highest importance by the expert panel in round 1 of the Delphi process, with 94.7% (n=18) of panellists rating it
as of critical importance in a tactical policing context. This was considered natural
given the time-critical nature of many tactical policing response operations. In this
regard, timeliness was rated as of equally high importance as the factor of accuracy.

In the subsequent round, the panel placed the factor of timeliness just under that
of accuracy, collectively ranking it as of the second highest importance. Nine of the 17
(52.9%) respondent experts in round 2 concurred on this ranking, with the remaining
panellists split between rating it as of either most (11.8%, n=2) or of third highest
importance (29.4%, n=5), and one (5.9%) panellist rating it substantially lower in the
ratings table.

In relation to IPB’s potential to impact upon tactical policing intelligence
support on issues of timeliness, experts were most critical, with the response to this line
of questioning highlighting IPB as most potentially incurring a negative impact against
this factor. While the modal response saw almost half the panel (42.1%, n=8) assert
the IPB framework offered a potentially “moderate” enhancement effect against issues
of intelligence support timeliness, against this factor more than any other, a number of
experts took the opposing view, with 15.8% (n=3) of respondents asserting IPB would
incur a negative impact. One further panellist (5.3%) stated the framework would offer
no impact either positive or negative.

Qualitative input offered further examination of this utility factor, and largely
emerged through contributions identified as centring on resource limitation and
Practice change. Input against these emergent themes represented the largest single
utility factor/thematic co-occurrence, with most responses being offered in the first of
the Delphi rounds.

Discussion on issues of intelligence support timeliness were varied, and spread
across all parent themes in the first round, with those of Adaptation, Enhancement, and
Practice change being most dominant. Input around the issue of Adaptation centred
on experts’ assertions that IPB was an acceptable platform to adapt from an operational
level emphasis to an appropriately tactical focus. One salient contribution reflected this
consensus, with one panellist noting “The key to IPB is that it’s adaptable. Once
intelligence staff understand and can employ the full process they can begin to
understand how it can be adapted (or abridged) to fit certain circumstances (i.e.
operations with limited timeframes)”.

Contributions focusing on issues of Enhancement centred on experts’ identification of emerging technological opportunities for provision of more timely information [to command], though many of these contributions were offered in response to questioning around current methods of tactical policing intelligence support practice, and not in relation to IPB itself. Those contributions which did refer to IPB’s ability to enhance such support in regard to timeliness factors largely followed that input focusing upon the framework’s adaptability, as explored in the previous paragraph.

As noted above, the co-occurrence of coding on the issue of Practice change and contributions around intelligence support timeliness represented the single greatest convergence among all examined issues in the current study. Many of these contributions centred on experts’ views on inadequate resourcing of PTG intelligence units, particularly in relation to staffing, professional standing, training, and matériel.

A number of experts expanded on their responses to questions 11, 12, and 13 in round 1, discussing the ability for PTG intelligence units to utilise—or continue to utilise—elements of the IPB framework while noting foreseen limitations in purely reactive operational settings such as sieges and abductions, among others. This last factor emerged as the deliberate vs emergency action equation, wherein options for the use of a procedural framework such as IPB were noted by many as useful, but highly constrained in responsive situations. In this regard, these contributions reflected experts’ views of time as a resource, which demanded consideration of the appropriateness in using one intelligence support framework over another in the context of the situation being addressed. Other contributions centred on the need for procedural and/or structural change within tactical policing intelligence support, with experts variously noting the need to embrace new technologies [to address timeliness issues], or by implication, processes which better serve the nuances of the tactical-level environment.

Unusualness or novelty

The expert panel rated this as by far the least important criterion in measuring intelligence effectiveness in round 1. Consistently, the panel also asserted that IPB could impact on intelligence support provided in tactical policing environments the least against this criterion, with 47.4% of experts (n=9) asserting it would be neutral in
its impact. As such, further exploration was not explicitly sought on this aspect in subsequent rounds.

A review of qualitative input confirms the panel’s seeming disregard for this criterion, with none of the panel offering commentary on IPB’s ability to provide unusual or novel intelligence outputs, beyond one expert noting its ability to enable war-gaming not otherwise commonly employed.

SUMMARY

This chapter has presented the results of the collection phase of the research, including the techniques used in preparing the data for analysis and a descriptive overview of the key data points arising from the collection process. Initial inferential analyses drawn from the data and linked to the research question have also been presented.

The chapter has presented and detailed the results of the collection phase in line with Carney’s ‘ladder of abstraction’ progression model (Carney, 1990, as cited in Miles & Huberman, 1994, pp. 91–92), by detailing the outcomes of data collation; quantitative results; qualitative coding and the identification of emergent thematic areas of focus; and inferential analyses against both the chosen intelligence utility factor definitions. Results have indicated that the assertion related to the central research question is supported by the data, with a number of associated considerations for implementation and process adoption. These will now be explored more fully.
CHAPTER 5—ANALYSIS

INTRODUCTION

The chapter details the results of the thematic coding and the assessment against Thompson et al.’s intelligence utility factor definitions, by subjecting these to additive analytical processes of code co-occurrence heat-mapping, and an analysis of strengths, weaknesses, opportunities, and strengths drawn from the findings.

DISCUSSION OF KEY FINDINGS

The study’s results show that an adapted manifestation of IPB within PTG intelligence support practice is desirable; feasible within certain parameters; and that given certain conditions (process maturity, acceptance by command, etc.)—or given an evolution of the same—may offer an enhancement effect.

The expert panel asserted that intelligence support in general was most required in support of PTG areas of practice in CT, tactical response, and in relation to high-risk warrant execution. Examining areas of practice most in need of enhancement to the intelligence support provided therein, experts highlighted along similar lines the specialties of CT, tactical response, and within joint military/police operations. Consolidating questioning in the second round of the Delphi process affirmed the panel’s collective view that an adapted IPB would be of most importance where applied to intelligence processes in support of CT, tactical response, joint military/police operations, foreign peacekeeping/stability operations, and high-risk warrant actions. These results demonstrate the potentially broad scope of application an appropriately adopted IPB-like process could find within PTG environments.

Under direct questioning, the application of an adapted IPB-like process was seen as most likely benefiting intelligence support to PTG CT, tactical response, and high-risk warrant execution activities. As such, the results of the study suggest IPB is potentially of most benefit to PTG intelligence support practice in those areas of PTG activities in which intelligence support is both most required, and most in need of enhancement. This emphasises IPB’s relevance as a candidate for process adoption into a PTG environment.

As shown in the preceding chapter, the results of the study suggest such an IPB-like process is most likely to offer enhancement effects to areas of PTG intelligence
support which see interoperability or cooperation with the military (such as CT, joint operations, or peacekeeping/stability operations), and within longer-term, sustained operations as opposed to reactive situations. This is reflective of considerations around IPB’s acknowledged resource demands, and general limitations on intelligence processing in purely reactive, tactical PTG response actions, and is considered a realistic limiting factor in IPB’s potential application within PTG intelligence support.

In examining the panel’s assessment of those utility factors seen as most important within PTG intelligence practice, experts resolved that considerations of accuracy, timeliness, relevance, clarity, and credibility were of greatest import. This is in line with examples in the literature which consistently identified accuracy, timeliness, and relevance of intelligence support as paramount in PTG settings (Ishimoto, 1984; Garner, 1992; Wargo, 1993; Heal, 2008). In the context of the current study, examining IPB’s potential enhancement impact against these factors was key in determining IPB’s ability to enhance intelligence support as posed in the research question. In assessing the panel’s view on the relevance to, and impact on, intelligence utility factors, it is noted that in the first of the Delphi rounds, only one of the 23 factor definitions was highlighted as being negatively impacted by an application of IPB within a PTG environment.

It can be seen from the results of the study that IPB offers an enhancement effect against most intelligence utility factors, with the majority of experts asserting that the framework offers “some” or higher order enhancement effect against 22 of the 23 factor definitions. Against those factors rated as of most important within a PTG context, IPB was seen as offering a “moderate” or “strong” enhancement effect against all 11 of the panel’s top-rated utility considerations.

In further exploring IPB’s potential to enhance PTG intelligence support, an examination of the framework’s salient elements (as highlighted through the Delphi process) is warranted here. Under phase three of the IPB process, which centres on assessing the threat/adversary, it was of note that despite the expert panel not focusing on threat assessment given the relatively mature state of ILP target profiling, the IPB sub-processes of:

- Identifying threat characteristics / adversary order of battle; and
- Describing how the threat / adversary can affect friendly operations
were respectively assessed by the panel as being most likely, and third most likely to effect a positive enhancement benefit to PTG intelligence operations. It is of further note that the target-centric process of *Identifying the threat’s likely objectives and desired end state* was also highly rated by the panel.

This likely reflects the focus in policing intelligence on target-centric processes, threat, and outcomes, and it is of note that despite the panel’s assertion that existing target development procedures were less in need of enhancement, these IPB elements were seen as still providing a positive enhancement effect. From the examination of the intelligence utility factors, it can be seen that these processes were likely seen as enhancing aspects of tactical intelligence completeness and detail, particularly in relation to the *Bigger picture*. Their structured approach is also relevant to issues of continuity (via integration of other information sources and methods) and in terms of timeliness.

Rounding out the top-rated of IPB’s processes in terms of their potential enhancement effect was that of *Identifying significant characteristics within the AO and area of interest for further analysis*. This process naturally centres on environmental examination and analysis, a process arguably already well-established under existing PTG intelligence processes (Burnes, 1987; Heal, 2000).

Of interest is that all four of these top-rated processes were also identified as being conducted, to some degree and/or in some fashion, in existing PTG intelligence support practice. That they were still rated by the expert panel as being of most impact if adopted under an IPB-like framework offers a strong endorsement of the framework as a candidate for adaptation and adoption. It also offers strong support for the notion that police tactical intelligence practice evolves, or can evolve, via process adoption; thus supporting the theoretical basis for this study.

That both positions present as true (that these processes [and others identified] can have a positive enhancement impact if adopted; and that these processes are already performed) likely reflects two considerations. The first being the immature state of the field (as borne out through the emergent theme of *process maturity*), in that the diversity of the panel enabled examination of tactical policing intelligence support across a number of jurisdictions and therefore highlighted the overall inchoate state of
development therein. This consideration is explored further in the following chapter under *Points of note*.

The second, related issue this highlights is the lack of standardisation, and the evolutionary differences therefore, among jurisdictions’ PTG intelligence support processes, which similarly emerged under the sub-theme of *jurisdictional difference*. That an adapted form of IPB in a PTG context was seen by the panel as offering a platform to address this lack of standardisation was central to its perceived enhancement effect, and is explored through the SWOT process below.

Notwithstanding the already-examined assessments against the intelligence utility factors in the preceding chapter, the expert panel’s deliberations on the measure of any enhancement effect an IPB-like framework in a PTG context offers was limited. The panel did not go so far as to quantify limitations of IPB’s assessed practical enhancement effect beyond the direct questioning. But qualitative input reinforced the focus on internal cultural and resourcing constraints, as well as those imposed by the operating environment. This phenomenon is explored further in the following chapter under *Points of note*.

To aid in the examination of the qualitative data and the themes emerging from the analysis against the 23 intelligence utility factor definitions, a process of heat-mapping was undertaken. This process examined the co-occurrence of emergent themes against each utility factor to provide greater insight on experts’ focal points in the context of the analytical framework.

The insights uncovered through this process affirmed the most prominent areas of interest as:

- *Practice change* relating to intelligence support timeliness, with a particular focus on issues of resourcing;
  - The co-occurrence of coding on the issue of *Practice change* and contributions around intelligence support timeliness represented the strongest convergence among all examined issues in the current study. Many of these contributions centred on experts’ views on inadequate resourcing of tactical policing intelligence units, particularly in regard to staffing, professional standing, training, and matériel.
- *Enhancement* relating to intelligence support completeness and detail;
• *Mindset change* and *Command Intelligence Support* issues relating to intelligence support credibility; and

• To a lesser degree, cross-thematic considerations of the predictive value of intelligence product in the context of IPB and tactical policing intelligence support practice.

Conducting the heat-mapping also allowed for visualisation of areas not focused upon by the panellists and therefore not present in the qualitative data. These included issues of intelligence product filtering; the lack of value the panel collectively placed on tactical policing intelligence providing a summary of the factors under consideration; and to lesser degree, issues of intelligence product unusualness or novelty and the provision of a conclusion. Combined, identification of areas of focus and areas disregarded by the expert panel through the Delphi process assisted in providing concentration for the next stage of analysis through the SWOT, below.

Figure 36 presents the results of this analysis as a mosaic plot heat-map, in which areas of greater co-occurrence are represented with gradually darker shades of red.
Figure 3.6. Heat-map of intelligence utility factor occurrence against emergent themes.
Discussion of major themes and key points from each

Adaptation
As introduced in the preceding chapter, this theme stemmed organically from the study’s focus and from the basis of the research question. Through the data collected through the Delphi process, it was clear that the expert panel saw the need for alternative approaches to existing PTG intelligence support methods, and supported the assertion that IPB offered a suitable framework to enhance PTG intelligence support in an applied context. As has been examined earlier in this section, and emphasised through the SWOT analysis below, the theme of Adaptation also emerged through the focus on those elements of an IPB-like framework which are already conducted as, or already form through some analogous way, part of existing PTG intelligence support practice.

Caution or resistance
This theme featured throughout responses to questioning around existing practice, showing concern around the perceived immaturity of tactical intelligence support practice or infrastructure (and therefore not ready to accept an adapted IPB). Notably, these issues were also prevalent in discussions asserting a reluctance toward further militarisation of PTG practice. This thematic circumspection is explored further through the SWOT analysis and as a significant point of note, later in this chapter.

Enhancement
As seen through the results of the SWOT analysis below, the key data points from the study relating to the theme of enhancement pertain to the potential for an adapted IPB process to enhance PTG intelligence support, particularly in relation to measures of completeness and detail. The input of the expert panel in this regard in some ways mirrors other work in the field focusing on improving intelligence analysis by the adoption of scientific and research methodologies, to enhance predictive accuracy and levels of detail (Dhami, Mandel, Mellers, & Tetlock, 2015; Dahl, 2017).

Command Intelligence Support
As highlighted above, this theme coincided heavily with the theme of Mindset change and issues of credibility. Analysis throughout the study, and emphasised through the SWOT process and the examination of Points of note, below, underscored the pivotal role of the commander/user in determining the viability and effectiveness of any
adapted Intelligence Preparation for Tactical Policing (IPTP) framework. Related to this was the exploration of the current state of PTG intelligence support processes, relevant to issues of both credibility and the theme of *process maturity*. These issues are similarly explored below.

*Practice change*

As a study focused on applied practice, this theme was naturally linked to that of *Adaptation*, and the results of the study were clear in their exposing the expert panel’s need for alternative approaches to existing methods. Analysis of this theme logically highlighted areas of practice requiring modification both for an adapted form of IPB to deliver identified potential enhancement impacts, and in some cases, broader reforms to PTG intelligence support practice and resourcing in order to deliver more effective outcomes no matter the framework employed. These issues are explored in greater detail below, under *Implications for practice*.

*Mindset change*

Linked to the related thematic issues under *Command Intelligence Support* and *Practice change*, this theme centred on changes in approach and outlook required to enable acceptance of an adopted IPTP; further exploration of militarisation concerns; and credibility issues. Akin to that shown through the theme of *Practice change*, a number of these issues related both to the exploration of IPB, and also a more holistic view of PTG intelligence support practice; particularly when considering credibility of the field, resourcing, militarisation, and information flow. As such, these issues are similarly explored in greater depth throughout the SWOT and in the ensuing sections below, particularly under *Implications for practice*.

*Analysis of SWOT*

This phase of analysis involved the application and interrogation of the collected data to an analysis of strengths, weaknesses, opportunities, and threats. The purpose of the SWOT analysis in the current study was to provide analytical triangulation of the collected data, by building on the previous analytical iterations and examining collected data in the specific context of the research question. As such the SWOT included data relevant to the assessment of whether IPB offers a framework to enhance intelligence support to tactical policing. Noting Coman and Ronen’s (2009, p. 5679) criteria for
effective SWOT analysis, elements of SWOT analysis were distilled and included in line with key considerations of concision, actionability, significance, and authenticity.

The following table presents the key data points against the four elements of the SWOT analysis, and is followed by in-depth examination of each.
Table 9. SWOT analysis of study results against the research question of whether an application of IPB doctrine can enhance the effectiveness of intelligence support within tactical policing environments.

<table>
<thead>
<tr>
<th>Internal</th>
<th>Supportive</th>
<th>Detrimental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td>• Formalised, proven framework with credible military provenance, and recognised potential to standardise existing processes.</td>
<td>• Resourcing demands.</td>
</tr>
<tr>
<td></td>
<td>• Recognised adaptability and acknowledged as already being conducted in part.</td>
<td>• Perceived as only conditionally applicable, primarily within deliberate action scenarios.</td>
</tr>
<tr>
<td></td>
<td>• Potential to impact on areas of gaps, detail, clarity, and completeness, most beneficially in prominent arenas of practice including CT, tactical response, joint military operations, foreign peacekeeping/stability missions, and high-risk warrant activity.</td>
<td>• Command perception and cultural clash issues.</td>
</tr>
<tr>
<td></td>
<td>• Ability to enhance PTG intelligence support in relation to Bigger picture assessment and predictive value.</td>
<td>• Perceived as potentially less impactful on some utility factors of highest importance.</td>
</tr>
<tr>
<td></td>
<td>• Granular evaluation shows perceived benefit to threat assessment processes.</td>
<td></td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>• Dissatisfaction with existing PTG intelligence processes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Acknowledged gap to fill, noting evolutionary state of PTG intelligence and the immature nature of some processes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Desire for enhancement and acceptance of feasibility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Opportunity to leverage contemporary and emerging technologies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Opportunity to leverage joint police-military operations to assess adoption.</td>
<td></td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td>• Inflexibility of the operating environment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Command acceptance/perception of militaristic process.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Dependency on organisational and jurisdictional context.</td>
<td></td>
</tr>
</tbody>
</table>
In examining the broad themes identified by the SWOT analysis around internal strengths and weaknesses, several areas of focus emerge. These primarily relate to IPB’s perceived strengths as an established framework with potential to further enhance PTG intelligence support practices, and failings (weaknesses) relating to end-user acceptance and resource demands.

**Strengths**

Strength #1 → Provenance and standing of the framework.

IPB’s structured framework was highlighted by the expert panel as the characteristic most likely to influence the method’s ability to enhance intelligence support in the tactical policing context. Further, the framework’s established integration with command decision-making processes and the intelligence cycle were also emphasised by the expert panel as key strengths significant to realising an enhancement effect on existing PTG intelligence support processes, affirming these as relevant to the core research question.

Extending on this, IPB’s military provenance was highlighted as a strength, particularly in regard to areas of practice which see interoperability between “blue” and “green” forces. Notwithstanding concerns around perception and acceptance stemming from caution against the use of militarised language and concepts (explored below), IPB’s proven success in related military fields is as such seen as a strength in the context of its potential to enhance PTG intelligence support.

Examination of the qualitative data showed the emergence of the theme of *standardisation* under the parent theme of *Practice change*, with this data and the SWOT analysis highlighting IPB’s potential to standardise processes and procedures amongst tactical policing intelligence support units across jurisdictions. Jurisdictional differences emerged as another child theme under the broader area of *Practice change*, with a number of experts expressing dismay or concern, or simply highlighting, differences between Australian jurisdictions in terms of their intelligence support practices. Viewed in the positive, experts highlighted the potential for an adapted IPB to span such jurisdictional difference and provide a standardised doctrine for tactical intelligence support protocols, with one expert noting that this would go further, contributing to greater consistency in intelligence-based decision-making.
Strength #2 → Recognised adaptability.

In the second iteration of the Delphi process, 94.1% (n=16) of experts agreed to some degree that IPB offers a framework for enhancement of tactical policing intelligence support, affirming the core premise of the research question. An equal percentage of the panel (94.1%, n=16) acknowledged that it was feasible that the framework could be adapted into the tactical policing intelligence context.

IPB’s readiness for adaptation into complementary fields of practice was a theme emerging through the literature review and was therefore included for exploration in the collection phase. The results of the study affirm IPB’s adaptability across the military and policing divide, at least within the context of similar areas noting tactical policing’s genesis in other military practice. Emphasised in the qualitative data, this affirmation was reinforced by the expert panel’s highlighting of numerous elements of IPB which are in some way already conducted in existing tactical policing intelligence processes.

The results of the SWOT show that the adaptability of IPB (or of IPB elements) is a major strength in the context of the research question, as this facility to adapt and be adapted is a central factor in the framework offering an enhancement effect to existing intelligence support practices. Notwithstanding the acknowledged training and resource requirements (explored below), this strength in adaptability is seen as key, as it may reduce the barrier to implementation and acceptance, minimising the effects of change as it is adopted.

Strength #3 → Potential to impact on intelligence support

The third key strength identified through the SWOT analysis was IPB’s potential to impact on intelligence support. This strength is inherently tied to the core premise of the research question, and will be further discussed later in the proceeding chapter. The analysis has highlighted IPB’s potential to impact tactical policing intelligence support in a number of areas:

- Thematically, in regard to issues of analytical Bigger picture and the predictive value of support produced through an adapted IPB process;

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13 Incorporating points 3-5 from table 5, above.
In relation to a number of intelligence utility measurement factors, specifically enhancing the addressing of intelligence gaps, the level of detail of intelligence support, and the level of completeness the supplied product represents. The data also showed IPB’s potential benefits are most likely to manifest in prominent areas of practice including CT, tactical response, joint military operations, foreign peacekeeping/stability operations, and high-risk warrant activity;

On areas of focus, to positively impact threat analysis and threat picture definition through individual IPB elements centring on identifying threat characteristics, and threat effects on operations. Further, linked to IPB’s assessed strength in enhancing the level of completeness of PTG intelligence support and to the concept of the Bigger picture, individual elements of the framework centring on areas of operations were also identified as strengths, with the potential to enhance intelligence support by expanding the scope of analysis seen as a positive.

Salient commentary from the expert panel reflected these strengths, with one participant offering the following contribution:

What IPB provides is a sound methodology for assessing the physical operating environment and opposing forces scheme and manoeuvre within this environment. In my opinion law enforcement lacks sufficient doctrine on which to base intelligence support to tactical operations. An adapted version of IPB presents as a useful starting point.

Weaknesses

Weakness #1 → Resourcing demands.

IPB’s resourcing demands were identified by the panel as the framework’s greatest weakness, and therefore presenting as the salient limitation in the context of an adaptation in the tactical policing intelligence support setting. This was evident in direct questioning in round 1 of the Delphi process, and was further explored through qualitative input on issues of adaptation under the broader thematic umbrella of feasibility. While not unexpected, the results of the study in this regard add further to the exploration of IPB’s resource demands as detailed in the literature review, and highlight the persistency with which the framework is questioned for its resource drain.
Specifically, the data identified potential areas of weakness relating to drains on time (relevant to the utility factor of timeliness), personnel resourcing, and training. Personnel matters were raised in the context of experts’ views on the current state of PTG intelligence practice, with a number of respondents raising personnel standing and experience as a barrier to effective implementation of IPB within tactical policing intelligence settings. This links to both the perceived experience demand IPB places on intelligence units, and to the external factor of agency resource allocation, explored under Threats below.

Related to this issue was the perceived demand an adaptation of IPB would place on agency and intelligence unit training areas. Examining the feasibility of adapting IPB into the tactical policing context, a number of experts highlighted the need to conduct detailed training needs analyses prior to integration and adaptation. As noted in the examination of the results from the first of the Delphi rounds, experts did not assert that agencies lacked the technological resourcing necessary to conduct IPB in the tactical policing context, and as such this area is demarcated from other identified areas of weakness.

Regarding the prominent issue of timeliness and IPB’s demands on time as a resource, the principal weakness identified by the panel was that IPB—while offering general enhancement to tactical policing intelligence support across most factors—would be only conditionally applicable, primarily within deliberate action scenarios. Deliberate actions—encompassing operations which are deliberately and purposefully planned, as opposed to reactive emergency actions—afford PTGs and their intelligence cells greater time in the planning and analytical phases, and as such, were seen by the expert panel as the context in which an adapted IPB would be most applicable. This limitation touched on the panel’s view that the success of a translated IPB framework being implemented in a PTG setting was dependent on context, and that IPB was possessed of a weakness toward the available resource of time in this regard.

Weakness #2 → Perception and acceptance.

The second prominent area of weakness identified through the SWOT centred on issues of perception and acceptance. Primarily relating to end-user (command consumers), experts were consistent in their view that a weakness of an IPB adaptation was that any
such process adoption would be dependent upon command officer “buy-in” or acceptance.

This weakness was shown in the data through multiple emergent themes, primarily around issues of Caution or resistance and in particular concerns around militarisation. Experts raised acceptance issues pertaining to a resistance toward militarisation through two main factors; a cultural reluctance toward further militarisation of tactical policing process, and lexicon. One salient contribution succinctly encapsulated these concerns around the adoption of a military process such as IPB, despite the apparent contradiction given the many similarities between the disciplines:

I think there is a strong resistance toward some military techniques as a result of an, often unconscious, bias against the army. this (sic), to me, is counter-intuitive given that many aspects of tactical policing is (sic) directly drawn from military doctrine.

Finally, regarding the issue of practitioner acceptance, there was slight dissonance between those utility factors experts collectively ranked as of most import, and those against which the panel saw IPB as most positively impactful. Experts rated IPB as generally offering a potentially moderate enhancement in regard to the three utility factors rated of highest importance (accuracy, timeliness, and relevance), but it is noted that relevant to the issue of timeliness, more experts rated IPB as incurring a negative enhancement (detracting) effect than against any other utility factor. While not necessarily presenting as a direct methodological weakness, such dissonance may impact on user acceptance of an IPB-based adaptation, if the framework is seen as enhancing on factors of secondary, but not primary, concern.

It was noted that with the exception of factors of timeliness, vulnerabilities identified by the expert panel and through the SWOT analysis all related to potential or perceived weaknesses in an implementation phase of an IPB adaptation into a tactical policing context, as opposed to assessed weaknesses of the framework itself. As such, while these weaknesses would undoubtedly need to be addressed as IPB processes are translated into the tactical policing intelligence support setting, their identification and exploration here do not negate the core premise of, nor the expert panel’s agreement with, the research question and its related assertion.
In examining the broad themes identified by the SWOT analysis in relation to external opportunities and threats, three areas of focus emerge. These were the window for application or translation noting the current state of practice, the importance of leveraging and/or overcoming external stakeholder predispositions, and the threat posed by environmental factors.

*Opportunities*

**Opportunity #1** → Window for application/translation.

The opportunity to capitalise on current levels of dissatisfaction with existing tactical policing intelligence processes was evident throughout the early results of round 1, and continued throughout the data under the emergent theme of *Room to improve*. This opportunity was highlighted by the response of the panel contesting the assertion that current methods of tactical policing intelligence support are sufficient, and qualitative commentary expanding on current deficiencies.

This dissatisfaction offers opportunity as it reflects a desire to enhance existing process, and therefore an openness to change. This assessment is further bolstered by the expert panel’s collective view on the feasibility of adapting an IPB framework into a tactical policing intelligence support context, which saw 94.1% of panellists agree to some degree that such a translation was achievable.

Qualitative responses further emphasised this openness by highlighting the evolutionary nature of much of PTG/PPU intelligence support practice and the relative immaturity of certain of these processes. One salient contribution underlined the opportunity offered by recognising the current state of practice, noting that the “tactical intelligence capability is still evolving across most [Australian] jurisdictions and would benefit from a centralised influence [in the form of an adapted IPB-type framework] on this”.

Indeed, direct questioning against the assertion inherent in the core research question throughout the Delphi rounds prompted several responses highlighting the opportunity inherent in adopting a translated version of IPB into the tactical policing context. Responses to this line of questioning noted the opportunity to redress entrenched modes of thought and practice, notwithstanding the perceived limitation of time as meaning an implementation would be restricted to deliberate action events.
Opportunity #2 ➔ Technological opportunity.

The second area of opportunity was identified as the collective opportunity emerging technologies offer intelligence units in seeking to adopt a translated form of IPB into the tactical policing context. The data was clear in reflecting the panel’s view that contemporary technological avenues are both suitable and available to western PTGs, and that any disparity between military [read: classified and restricted] technology and that available to police agencies would not hinder an adoption.

The rapid growth of commercial and open source geospatial information collection and analysis systems was specifically highlighted by the panel as offering technological opportunity, one which in previous years may have been out of reach of many police units. The availability of communication platforms and technologies enabling “fused” analysis of multiple information streams was also noted by the panel, and was linked to the emergent theme of offering analysts and commanders a Bigger picture analytical product and one which is more easily disseminated.

Opportunity #3 ➔ Exploitation of existing partner relationships.

The final area of opportunity identified related to issues around implementation of a translated IPB framework into the tactical policing context, and centred on the opportunity to leverage partnerships with military counterparts in order to implement an adopted IPB. This opportunity was framed in the context of leveraging the common lexicon required—and which an adapted and compatible IPB framework would provide—for joint police/military operations, and it was noted that adopting IPB within the tactical policing intelligence support context would enhance such operations where joint or consecutive deployments were undertaken.

The opportunity to leverage military partner relationships also offers the secondary benefit of exposure of PTG commanders and other consumers to the output and potential advantages of an adopted IPB. This would have the effect of helping overcome Caution or resistance factors (as explored earlier in this section and under Threats, below) which pose a barrier to acceptance of IPB within tactical policing settings, by increasing the understanding of the processes and product of the framework.

Applying IPB in joint space operations would have the secondary benefit of establishing PTG intelligence operating procedures in relation to IPB, and afford
command elements time to properly assess the value of the IPB framework to other areas of tactical policing practice. This increased exposure was noted by the expert panel as key in overcoming command skepticism and resistance, and would likely lead to further application of IPB processes across tactical policing intelligence support sub-disciplines.

**Threats**

Threat #1 → Operating environment inflexibility.

The first external factor posing a threat to the adoption of IPB into tactical policing was evident throughout the data, and related to the restrictions placed upon intelligence support practitioners (and as such their processes and procedures) by the dynamic and often inflexible operating environment in which PTG operations are at times conducted. As noted above under Weaknesses, this most often related to timeliness considerations and the deliberate vs emergency action equation, but also to the limitations placed upon analysts, operators, and command in relation to decision scope.

The shortened interval between decision and action in many PTG settings (compared to higher-order intelligence levels) was highlighted by experts, noting the criticality of timely intelligence support. Compounding this, responses also noted the lessened scope for decision-making and more greatly restricted scope of action in policing settings when compared with many military environments, particularly in relation to rules of engagement.

Related to this, the impact on decision scope by legislative and policy restrictions also presents as a “threat” to the implementation and use of the IPB framework in the context of the current study, as these external factors further impinge upon available decision options resulting from any intelligence process, including IPB. Exploring these aspects further, the threat of reduced decision scope from the unpredictability of offender/adversary actions was also raised, with experts noting the
reduced or eliminated ability to establish target pattern intelligence as a key threat to the conduct of IPB and other intelligence analysis processes.

Despite the discussion around this threat, it was noted by a number of experts that IPB’s adaptability is such that it can be modified to compensate for the reduced resource of time, with contributions noting:

Even an abridged form of IPB ... will still produce useful intelligence outputs which can guide decision making at the tactical level.

and:

I have used IPB in a ‘scaleable’ form. IPB can be sped up for tactical operations.

Threat #2 → Command acceptance/perception.

Seen as an internal, procedural vulnerability in the tactical policing context, IPB’s reliance on command acceptance/perception has already been explored as a weakness. Viewed from the perspective of external vulnerabilities, the panel also highlighted the threat to an implementation of IPB—and therefore the framework’s potential to enhance intelligence support to tactical policing units—from external command and consumer elements.

This threat was detailed in two main forms, both of which relate heavily to factors of credibility; the first being the general apathy with which experts claimed many commanders view the tactical intelligence function broadly, and the second relating to issues of command exposure to the benefits of IPB-type processes. The threat posed by the latter form was encapsulated by one expert, who observed that:

The major barriers to effective use of IPB (including Urban-IPB and IPO. (sic) Intelligence Preparation for Operations) are lack of doctrine, lack of training among intelligence staff, [and] lack of familiarity of the benefits of IPB-type processes among command staff.

Threat #3 → Dependency on organisational and jurisdictional context.

The third threat to IPB’s potential to enhance tactical policing intelligence support processes emerged quite strongly through the data, with experts collectively raising issues of organisational and jurisdictional context as external forces with the scope to negatively influence any IPB adaptation. This threat was framed in a number of ways,
including the general observation that adaptation of an intelligence-specific process such as IPB needs to be considered in the context of overall police/PTG willingness to adapt operating procedures.

Linked to the issues of command acceptance and perception (as both “Weakness” and particularly a “Threat”), this aspect of the external environment related more broadly to individual organisations and their disposition toward accepting change. One expert noted that this willingness toward change, and the motivation to resource intelligence support units [which would conduct an adapted IPB framework] varies across Australian jurisdictions. Another of the panel noted that “Effectiveness or use of IPB very much depends on the police department, e.g., quality of training, manning, leadership, experience working with military organizations, type (local, state, federal police), and other factors”.

Issues of jurisdictional difference were prominent throughout the data, and present as both threat and opportunity (as explored above in relation to the opportunity for standardisation). Jurisdictional disparities in regard to resourcing (personnel, training, and technology) were borne out as potential threats to an adapted IPB framework, as both a lack of standardisation and/or a lack of proper resourcing in any aspect would likely present a hindrance to proper implementation and exploitation of IPB processes, noting the well-established acknowledgement of IPB’s resource demands. One salient contribution noted the following in relation to this threat aspect:

The worth of Tactical Intelligence is not universally accepted at the same level across specialist policing jurisdictions, as each state/territory has self autonomy in managing resources. The capability is relatively new from a centralised skills perspective [REDACTED ON NATIONAL SECURITY GROUNDS] and there is a lack of consistency in skill level for TI officers across jurisdictions.

More broadly, organisational context also poses a threat as each agency’s tolerance of risk differs. In the context of the current study, this threat factor emerged through discussion around command acceptance of processes seen as militaristic, and is linked to the perceived threat of command and public reaction to police militarisation. This threat is therefore formed by both external command tolerance of risk, and the
susceptibility of agencies to influence by possible public intolerance for further, perceived militarisation of police units.

Finally, the threat posed by disparities in technological resource allocation between PTGs was also evident in the data, with experts citing the allocation of resources as having the potential to impact on the success of an adapted IPB-type framework in a tactical policing context. While the data was clear in noting that current technologies were sufficient to enable an adaptation of IPB processes, qualitative contributions from the panel noted the threat borne by inadequate resource allocation and the variance between jurisdictions in this regard.

Analytical summary

Furthering the analysis enabled after the examination of the results against Thompson et al.’s utility factor definitions (earlier in this chapter), a summary of the SWOT reveals the prominent areas of consideration for any implementation of an IPB adoption into tactical policing intelligence as:

- **Strength**, through leveraging IPB’s established nature and adaptability, to enhance tactical policing intelligence support in areas of intelligence gaps, detail, and in particular, completeness. Such enhancement is likely to impact on the emergent theme of *Bigger picture* analysis and support, and contribute to intelligence products’ predictive value. To a lesser degree, IPB’s strength in enabling standardisation and therefore enhancing support reliability was also asserted through the data.

- **In regard to areas of weakness**, emergent themes around IPB’s resource demands and real-world limitations on available resources were prominent, as were the framework’s conditional applicability within deliberate action scenarios. Both these areas related most heavily to considerations of the utility factor of timeliness. Further, the emergent themes of *Command Intelligence Support* and *Caution or resistance* also featured in relation to weaknesses around the utility factor of credibility, identifying potential internal procedural susceptibilities to stakeholder perception.

- **Opportunities exist** in addressing utility factor measures of completeness and detail by leveraging contemporary GIS and communications technologies, negating previous need for classified platforms. Further, opportunities exist to
capitalise on the acknowledged *Room to improve* and command *Caution or resistance*, potentially increasing intelligence support factors of credibility. In terms of opportunity, this is most achievable through leveraging police-military relationships where operations overlap, potentially enhancing intelligence support continuity and credibility in the process.

- In relation to threats, certain external environmental factors will remain dynamic and issues of timeliness around time as a resource will threaten the utility of an IPB framework in some settings. While greater scope for mitigation exists, threats to factors of intelligence support credibility continue and were explored through themes of *Command Intelligence Support* and *Caution or resistance*. The utility factor of intelligence support credibility also faces threats from organisational and jurisdictional context, particularly relating to resourcing and procedural disparities.

The following figure shows mapping of prominent emergent sub-themes (shown in blue) against their most relevant utility factors (shown in red), and overlaid on areas of the SWOT.
Figure 37. Emergent qualitative themes against prominent intelligence utility factors, and identified SWOT elements.

The insights uncovered through this process largely confirmed the heat-mapping analysis in figure 36, earlier in this chapter, verifying prominent areas of interest as:

- **Practice change** relating to intelligence support timeliness, with a particular focus on issues of resourcing;
- **Enhancement** relating to intelligence support completeness and detail under the sub-themes of the Bigger picture and Prediction;
- **Mindset change, Practice change, and Command Intelligence Support** issues relating to intelligence support credibility; and
- To a lesser degree, cross-thematic considerations of the predictive value of intelligence product in the context of IPB and tactical policing intelligence support practice.
SUMMARY

This chapter has connected the results of the qualitative coding from the Delphi collection process and the assessment of those data against Thompson et al.’s intelligence utility factors. These analyses were then subjected to a process of code co-occurrence heatmapping, which allowed for greater examination on areas of focus and also on those areas ignored by the expert panel.

Finally, an assessment of strengths, weaknesses, opportunities, and threats provided a distillation of all results and affirmed the prominent findings. These findings have been seen to focus on implications for praxis, centring on areas of resourcing; enhancement of intelligence support in relation to completeness and detail, with a focus on expanding the scope of analysis to encompass a bigger picture and embrace prediction; and issues of intelligence support credibility (both positive and negative).

Implications of these findings will now be explored in the next chapter.
CHAPTER 6—DISCUSSION AND CONCLUSIONS

The purpose of the study was to explore—by examining the perceptions and opinion of the panel of experts—the extent to which IPB and its adaptations can enhance the utility of intelligence support provided to PTG commanders and other decision-makers. In doing so, the study also assessed, by extension, whether PTGs—with their historical and doctrinal parentage from the military services—can benefit by further adapting military intelligence method in the form of IPB. Answering this question addressed two sides of the current gap in understanding—the first being the identified absence of research designed to aid in professionalising and enhancing the deployment of PTG intelligence; the second being to add to the body of research on IPB by examining its adaptability outside of military operations, specifically within a defined area of policing.

The central research question, exploring whether an application of military IPB doctrine can enhance the effectiveness of intelligence support within tactical policing environments, was positively supported by the analysis. The results of the study indicate an adaptation of IPB into PTG intelligence support practice is seen as desirable, and feasible within certain parameters and given certain conditions.

This chapter presents discussion of the results of the collection process in relation to the research problem and the core research question, and in the context of the underlying theoretical base. Also presented are the key conclusions from the study and identified areas for further research.

The results of the study make a number of contributions to the literature, as was outlined in chapter two. These contributions centre primarily on the areas of IPB’s continuing utility as an adaptable methodological framework; the importance of the prediction debate to experts in the context of IPB’s contemporaneous use; at least one aspect of the militarisation debate; and, importantly, a contribution toward the gap in the literature around PTG intelligence practice.

This research makes a contribution to the contemporary literature by adding to the continuing examination of IPB, in a new context. By virtue of its examination of the potential to apply an IPB adaptation within a PTG context, the study holds

14 As acknowledged at the beginning of this chapter, the study examined the perceptions and opinions of the collective expert panel, rather than directly assessing an implementation of
similarities to other examples in the literature, particularly those examining IPB applications to military special forces units (Scofield, 1999; Don, 2003) given those units’ inherent practical, operational, and attitudinal similarities to many PTGs; or those examining the framework’s applicability to wider considerations such as counterinsurgency operations (Groves, 2008) or non-war operating environments (Schnaubelt, 1995).

The study provides further extension of these examinations of IPB in non-military settings, adding to the small body of work investigating the potential and utility of the use of IPB adaptations and elements in policing applications. In this regard, the current study is most closely aligned with contemporary examples around IPO by Sullivan and others (Sullivan, 2000; Sullivan et al., 2005; Sullivan & Bauer, 2008). Where the current study differs is in its specificity to the PTG context, and in its choice of method and analytical framework.

With a predominantly (though not exclusively) Australian focus, the current study provides a further contribution to the IPB literature outside the main body of US-centric works. Of note, notwithstanding Weeker’s disclosure of the use of IPB in setting environmental compliance patrols through the Great Barrier Reef, the study is the first known examination of IPB’s application to an Australian police setting. Combined, this non-US, non-military-specific examination of IPB’s utility to other related applications aligns the current research with other salient contemporary contributions such as Wineera’s (2011) examination of IPB in the New Zealand context; expanded explorations of IPO as forming an element of operational art to support tactical police emergency response (Sullivan & Elkus, 2009); examinations of the adaptation of IPB tenets into organised crime and counter-terror investigative practice (Shelley et al., 2005); competitive intelligence (Lauglaug & Taylor, 1994); and even the small body of literature assessing IPB’s utility in online environments (Lemay et al., 2014; Kieffer, 2016; Kime, 2016).

While similar in purpose and intent to other examples in the literature such as the work of Don (2003), the current study is dissimilar in that it does not prescribe the specifics for an adoption of IPB processes into an applied PTG setting. Many examples

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IPB in a tactical policing environment. Such an assessment may be a viable option for future research in the area.
in the literature (Kim & Allard, 2008; Huller, 2011; Lemay et al., 2014) can be seen to take an “end-to-end” approach, determined that IPB could be applied to a particular context and proceeding to examine the framework’s components to develop an argument for a particular modification or adaptation. Others, looking more critically inward, examined IPB to determine what changes may be required to the core framework to account for expanded uses in contemporary settings (Frooninx, 1998; Johnson, 2002; Karabaich & Pfautz, 2006; Murray, 2008).

In contrast, this study, as focused on the research question, more closely examined the question of whether an adapted form of IPB could benefit PTG intelligence support outcomes, and in doing so, rather than prescribing the form of such an adaptation, elicited from the expert panel a number of areas of focus for changes in practice to enable any such adoption of process to effect a positive change. In this regard, in purpose if not method, the study and its results bear some similarity to examples in the literature which pose a similar question around the adaptability of IPB-like frameworks to non-traditional areas of application (Davies, 2014; Kieffer, 2016). Where these examples in some cases go deeper in their analysis of IPB’s composite elements and their applicability to the area of focus, the current study demonstrates further alignment with the contemporary literature, particularly in its exploration and identification of those elements of IPB already conducted within PTG intelligence practice, and those elements of IPB most likely to result in an enhancement effect.

Structurally, the choice of the Delphi method set the current study apart, as no other examination of IPB identified in the literature explicitly noted the method’s use. As noted in chapter three, the use of the Delphi continues in the broader policing and military studies literature, with its structured approach to eliciting expert opinion still evident in studies around futures and management issues in these fields (Silberglitt et al., 2015). The current study therefore makes a contribution demonstrating the use of Delphi studies as relevant in contemporary policing and intelligence research.

One evident theme within the literature review was that of the prediction debate. As discussed in chapter two, this theme has persisted in the IPB literature since the 1980s, with some scholars questioning IPB’s place as a primary predictive methodological framework for the intelligence analyst (Thaden, 1986). Others still concluded that IPB as it then stood was inadequate to deal with prediction at the tactical level (Linden, 1989), and more recent examinations have revisited this finding in the
context of more modern, asymmetric, and arguably “unpredictable” targets (Brown, 2004).

The results of the current study validate the continued importance of that debate, and contribute to this discussion in the literature by highlighting the need for prediction in PTG intelligence practice and mindset. While the results of the study by no means resolve the prediction debate even within the examined PTG intelligence context, they do offer a contribution worthy of further exploration.

Issues of prediction were raised across a number of emergent themes, and related naturally to the discussion around the intelligence utility factor of hypothesis provision. Most notably, discussion of IPB’s ability to impact on the predictive value of intelligence support centred on, and sprouted from, experts’ contributions around the themes of Command Intelligence Support and the need for mindset change. This latter thematic consideration was pertinent to the perceived need for mindset change among both practitioners (as the generators of intelligence support including that generated through an adapted IPB framework) and command elements (as the end consumer of that predictive intelligence).

In examining where the contribution made by the current study to the prediction debate landed, one can see that due to the research question, discussion around issues of prediction focused on matters of enhancement. While this is immediately and validly attributable to the crux of the study, there is more to these contributions which focused on extraneous factors. This was borne out in contributions discussing the often inherent unpredictability of PTG response scenarios, and where IPB forces the intelligence practitioner to predict and articulate threat courses of action as a core part of the analytical process.

On further examination, this focus on the enhancement effect of IPB on intelligence product’s predictive value can be seen more as a reflection on the state of contemporary PTG intelligence support practice rather than strictly on IPB’s suitability for adaptation, which was addressed in greater detail within other responses. This is evident in the data within contributions relating to assertions around PTG intelligence support practice and the need for improvement in round 1 of the Delphi process, and further, direct interrogation against the research question. This was most evident with certain of the panel’s experts highlighting the need for a shift in the police intelligence
mindset within PTG contexts to one that is more greatly predictive, and other contributions supporting the notion that an adapted IPB process could enhance praxis by forcing such a mindset change.

Viewed from this perspective, one can see that the study’s results pertaining to prediction and the state of maturity within PTG intelligence practice are of value in that they touch on issues wider than the core research question. These contributions also relate to the line of discussion around the information versus intelligence question explored in the literature review.

As highlighted through the literature review, a marked gap persists in the literature in relation to PTG intelligence support, with the tendency to conflate information with intelligence being particularly conspicuous. Further, noting the identified gap in the PTG literature on intelligence support frameworks, the study makes a contribution to this void, positing IPB/IPTP as a candidate for translation and implementation. These phenomena may be due in part to the developing nature of the field, as underscored through the study’s results under the themes of process maturity and credibility, which arguably echoes the state of the PTG intelligence literature. While not the prime objective of the study, the results of the research contribute to addressing this gap, and may provide a starting point for further research in this regard.

The results of the study show that IPB offers some positive enhancement effect in relation to practitioners’ use of raw, unevaluated information in the provision of tactical policing intelligence support. Principally, these enhancement effects were seen as relating to access to, and organisation of, multiple intelligence feeds, and can be seen as somewhat tangential to the IPB framework itself.

That the Delphi panel rated such information as the second least important utility factor in the context of the study’s PTG focus is telling, as it suggests experts see little value in such raw, unevaluated information comprising part of PTG intelligence support outputs. This is particularly noteworthy when the panel’s higher ratings for the utility factors of completeness and finished intelligence are considered, as well as their generally more favourable assessment of IPB’s potential to enhance practice in relation to these measures in a PTG setting.

The study’s results are relevant to the examination of the PTG literature as they highlight experts’ rejection of any conflation of raw, unevaluated information as a
substitute for properly processed and developed intelligence. This is the case even despite experts’ broad acknowledgement of the reality that many PTG response scenarios inherently limit the time and resources available to intelligence practitioners to develop such intelligence beyond a raw form. As such, the results of the study make a contribution to the literature by reinforcing the inadequacy of conflating information and intelligence even in time-poor settings.

As highlighted above in the discussion of key findings, the results of the study also make a contribution to the PTG literature by reaffirming those measures of intelligence utility of most importance in tactical policing settings. In this manner, the current study responds to the work of early practitioner-authors since the mid-1980s, confirming their importance in the contemporary operating environment.

The study’s results in terms of enhancement effect provide a counterpoint to Herbert’s (2013, p. 660) assertion that IPB offers little utility to law enforcement analysts. Further, the study’s identification of a number of IPB elements which are already in some form conducted as part of tactical policing intelligence support can be seen as an additional rebuttal to Herbert’s assertions that IPB would be recondite to the law enforcement analyst.

While the study did not deliberately explore issues of police militarisation, the expert panel touched on such matters. This was considered natural in light of the subject matter of IPB and its military provenance, and the PTG context.

The results of the study are relevant to the ongoing debate around militarisation due to the unique perspective they offer the discussion. By directly probing the collective views of the expert panel—many of whom are current or former practitioners—the study has raised a number of points of interest showing an undercurrent of rejection of further militarisation. This was prevalent in the data despite the acceptance by the panel of IPB as offering a positive and beneficial enhancement effect within PTG intelligence support contexts. This aspect is explored in the next section, below.

POINTS OF NOTE

The results of the study raised a number of points of note, both directly relevant to the core research question and to associated lines of inquiry. Salient among these points included contributions around the state of PTG intelligence support practice and its
standing; contributions expressing caution or resistance to further militarisation of PTG practice; and the highlighting of extant jurisdictional differences in the Australian context, with potential implications for existing coordination arrangements.

The first point of note in the data emerged through contributions commenting on the state of PTG intelligence in general, and on the state of acceptance amongst PTG command and practitioners [of immature or imperfect] intelligence service. These contributions emerged through the themes of Caution or resistance and process maturity, and centred on both procedural standardisation (or lack thereof), and related issues of credibility and standing as seen in the code co-occurrence chart provided at figure 36 earlier in the preceding chapter. It is of further note that this issue related to internal, rather than external, clients of PTG intelligence elements, thus highlighting the often closed or discrete nature of PTG activities, and therefore posing questions around whether any perceived process immaturity is due in part to a separation from wider policing intelligence process development.

As outlined in the preceding section in this chapter, the emergence of this aspect under those themes of Caution or resistance and process maturity is relevant to the identified gap in the literature on PTG intelligence support processes, in that the results of the study in this regard further call attention to the arguably inchoate state of the field. Further, a number of contributions under these themes reflected a view that the problems highlighted with contemporary PTG intelligence support practice—and their relative lack of maturity and development—are in fact symptomatic of wider problems in intelligence-led policing as a whole.

These data are of note for two reasons; first in that they provide context to any critique of PTG intelligence support practice and therefore the potential enhancement effect to be realised through the adaptation and adoption of applicable processes such as IPB. Secondly, the data suggest deficiencies in PTG intelligence support processes and frameworks have not developed anomalously, and can perhaps be viewed as reflective of the state of the wider field of criminal intelligence. It is noted that such a view would not be without controversy, but would contribute to recent critiques of intelligence-led and related criminal intelligence models’ implementation and their effectiveness (if not their underlying principles) (James, 2014), as well as police services’ willingness to learn from such critique and review (Heaton & Tong, 2016).
The data provided by the current study does therefore provide an interesting starting point for further exploration within the field.

As discussed in the preceding section, while the results of the study support the assertion that an adapted IPB framework, in the suggested form of IPTP, offers the potential to enhance PTG intelligence support utility, there was a noteworthy emergent theme in the data highlighting caution or resistance to further militarisation of PTG practice. This was articulated in quite vehement terms by members of the expert panel, who expressed discomfort with the use of militaristic language in a policing context. It is of further note that such concerns were raised by both Australian and US-based members of the expert panel, indicating that such a position is not geographically or jurisdictionally limited.

This concern regarding militarisation and militaristic terminology is seen as linked to concerns around the relative immaturity of PTG intelligence practice, a theme that similarly emerged from the data as a point of note in its own right. Assessing the data from this perspective, it can be posited that the expression of this position represents an emerging independence in the tactical policing domain from military thought lines and further military influence. This could be seen as reflecting the evolutionary state of PTG professionalisation as at 2016, emphasising a duality within a profession asserting its professional independence and maturity of practice, while accepting—as the results of the study clearly support—that further advancements in practice may still benefit from the influence of frameworks (such as IPB) with a basis in military science. This may warrant further inquiry in future research.

Related to this focus of professional standing and the emergent theme of process maturity was the broader issue of feasibility. Multi-faceted, this issue highlighted a further point of note in regard to the strong assertion in the data that the feasibility of an adapted IPB in the form of IPTP would be determined by the ability of an implementation to overcome internal acceptance factors rather than external forces. Notwithstanding the valid considerations of time and other constraints posed by the dynamic operating environment, the results of the study highlighted that these extraneous factors may be less influential than internal dynamics of command acceptance, and a lack of standardisation across jurisdictional approaches and resourcing. As was noted in chapter four, one expert squarely offered that the feasibility of an IPTP would be dependent on commanders’ exposure to the framework’s
effectiveness, and this is explored further in this chapter. As the literature review had highlighted the prominent recognition of IPB’s time and resource requirements, and this had therefore been explored through the data collection process, this focus on internal factors was unexpected and therefore of note.

Another area of note was the matter of what experts did not focus on through their responses. An exploration of this area assists in the overall analysis of the answer to the research question, and in an assessment of future work by identifying areas of least importance, and perhaps, in light of the study’s focus on enhancement, those areas of practice least requiring improvement or refinement.

One key finding from the data in this regard emerged through analysis of the intelligence utility factors. Many utility factors/areas rated by the expert panel as of lesser importance saw less of a strong reaction when panellists were asked to rate the ability of an adapted form of IPB to enhance support in those areas. This was seen as likely reflecting panellists’ views that current support practices in some of these areas are generally sound, and that there was less value in focusing an IPB adaptation toward improving on processes viewed as already well refined.

This analysis was most profound when examining the panel’s relative lack of enthusiasm for an adapted IPB’s ability to enhance tactical policing intelligence support in the area of threat profiling. Given phase three of the IPB process focuses on developing the understanding of the threat picture, it was seen that given much of established criminal intelligence and ILP is inherently focused on offender and threat profiling, panellists likely saw less of a potential for IPB to enhance practice in this regard.

The expert panel’s relatively low rating of the importance of the provision of a conclusion or summary as a measure of intelligence utility was also of note, with this falling outside the top half of all utility factors in this regard. Despite the prevalence in the data of the theme of Enhancement relating to IPB’s potential to provide a bigger picture to consumers, there was also evidence from the panel which emphasised an acceptance that tactical police operators and command will never have a complete understanding of the operational picture. This acceptance likely explains the low level of importance attached to this utility factor in the qualitative input.
In relation to intelligence product unusualness or novelty, rated by the panel as of least import of all intelligence utility factors, it was of note that despite the level of acceptance of the need for enhancement and change in the way in which tactical policing intelligence is performed, the panel was clear that achieving this by unusual or novel intelligence outputs was not a high priority. Exploration of the qualitative data suggests this low prioritisation is likely linked to a number of factors, including:

- the acknowledged developmental state of PTG intelligence support practice, which would therefore potentially be damaged by introducing a poorly executed (though novel) framework or component;
- relatively strict parameters for PTG operations and the recognised constraints of dynamic operating environments on intelligence support elements, thus limiting the window for the use of the novel or unusual. It is of note that such an assessment implies a negative connotation to product or solutions seen as novel, rather than the more commonly positive connotations associated with a label of “innovative”; and
- the identified need to influence mindset change on the part of consumers (command) in order to both increase the standing of PTG intelligence elements and allow an acceptance of an adapted form of IPB, thus further limiting a willingness to experiment outside of certain parameters.

While it can be seen that the mindset change an IPTP offers and could lead to—as highlighted by experts across several emergent themes—will provoke intelligence outputs novel from those currently produced, this does not appear to have been the way in which the majority of the panel has viewed the notion of intelligence product novelty or unusualness as representing. This was despite the salient contribution of one expert, who noted that “the theory behind IPB is to think outside the thought of ‘these are the bad guys and this is where they live’”; arguably an inherently novel proposition.

At this point, it can be seen that the constraints placed on PTG operators, command, and intelligence support personnel by the dynamic operating environment within which they operate have been raised as a hindrance to innovation across a number of areas, and as such identified as a prominent threat through the SWOT analysis. While these constraints are not in dispute, this observation is of note given that despite similar inflexibility in their operating environments, IPB has already been adapted to suit the needs of military special forces units.
This focus on environmental constraints persisted despite the strong endorsement from the panel that an adapted (or adopted) form of IPB would be most suitable to deployments alongside partner military elements. This poses the question as to why this disparity in perception/assertion exists. In the context of the other data, possible explanations may include:

- lack of confidence in PTG-specific intelligence processes and their independent maturity to deal with the complexity of the operating environment (as borne out under the theme of process maturity);
- a deferential willingness to trust proven military processes and doctrine when working with analogous military units; and/or
- a perception that certain joint deployments, such as peacekeeping and stability operations, allow substantially greater time in planning and do not suffer from the same time constraints, therefore allowing for employment of IPB and IPB-like elements.

These issues warrant further exploration in any future research.

The emergence through the data of the theme of Jurisdictional differences was of particular note in the Australian context, given the relatively few (n=8) police jurisdictions and in light of existing coordination frameworks. As discussed earlier in this chapter, considerations of jurisdictional difference can be viewed in both the positive and the negative, as offering both opportunity in implementing an adapted IPB into a PTG context (through the need, and potential, to standardise existing procedural variance); and as a threat to such an implementation due to the potential for such difference to hinder reform.

The results of the study relating to perception of these extant differences are of note particularly in the Australian context, as they highlight areas for improvement in coordination arrangements governing cross- and inter-jurisdictional arrangements between the State and federal PTGs. In highlighting inconsistencies between the respective intelligence frameworks and procedures underpinning support to PTG activities, the results of the study have implications for coordination bodies such as the Australia-New Zealand Counter-Terrorism Committee (ANZCTC) and its sub-committees and working groups with mandates to develop and coordinate PTG and related intelligence capability development.
USING A TRANSLATION LENS AS A FRAMEWORK FOR UNDERSTANDING PTG INTELLIGENCE PRACTICE DEVELOPMENT

The research question for the current study explored whether IPB presented as an established framework offering the ability to enhance PTG intelligence support effectiveness. That is, whether IPB presented as a fitting candidate process appropriate to be translated or rationalised into the PTG context. The results of the study support IPB as such a rationalised symbol, and offer a starting point for considerations around manifesting an adaptation of IPB for tactical policing. Noting the identified gap in the literature around the development and translation of PTG intelligence practices, the current study makes a contribution to the field in this regard.

The results of the study support the use of the translation lens as an appropriate framework to assess PTG intelligence support process development. This is due to the established institutional nature of many Western PTGs (notwithstanding the identified theme of process maturity in the context of PTG intelligence support). The use of the translation lens is also considered appropriate in the context of the ongoing militarisation debate, in that this theoretical framework offers an alternative perspective—from an organisational theory viewpoint outside that of a narrower policing or military studies focus—on assessing the potential value of adopting processes with a military provenance. Data from the current study relating to the theme of Caution or resistance to further militarisation suggests the translation lens encourages due consideration of a candidate process, lessening the risk of blind acceptance and use. In the context of the militarisation question, this is seen as a positive.

The results of the study support the use of the translation lens and demonstrate the ways in which a receiving organisation or PTG could modify and implement an IPB-like framework to suit the nuances of their organisation or environment. Examples from the data include the asserted need to alter terminology to minimise or eliminate militaristic language; prioritising individual sub-elements of IPB’s phases for implementation, particularly where certain of these are already conducted in existing practice and where therefore IPB offers less scope for enhancement. These considerations are explored further below in this chapter, under Implications for practice.
It is noted that “cure-all recipes to organisational change are bound to fail” (Jacobs, Witteloostuijn, & Christe-Zeyse, 2013, p. 772). This underscores the need to focus on the ways in which a process is translated and implemented, and what support such translation is provided by key stakeholders. The results of the study around the standing of PTG intelligence units; command acceptance of these units; and inconsistencies between jurisdictions highlight the reality that an adaptation of IPB cannot be seen as a cure-all to all factors facing PTG intelligence practice. But the results do support the assertion that an adapted form of IPB can enhance current levels of practice in certain key areas, particularly in regard to deliberate actions.

A final note in examining the suitability of the translation lens in the current study pertains to whether the results in relation to the theme of Command Intelligence Support (and aspects of command acceptance) align with a myth perspective. This question arises from the insight offered by the data into the role an organisation’s leadership—in this case PTG command elements—plays, and their ability to accept or resist pressure to conform with environmental myths. This reflects the question of distinction, as raised by Dinsmore (2018), of whether the adoption and translation of processes is undertaken due to external pressure to conform with environmental trends and obtain legitimacy, or by choice in an effort to achieve greater efficiency.

Christensen et al. identify the powerful role of “authorisers”, who by “virtue of their position and status, have the ability to endorse specific recipes and enhance their popularity and capacity for diffusion” (2007, p. 63). It can be seen in this study’s results that overcoming command caution and resistance is a clear hurdle to the success of an adapted form of IPB into the PTG intelligence support context, and that the role of command is as authoriser of the rationalised myth of IPTP.

**CONCLUSIONS**

The central research question, probing whether an application of military IPB doctrine can enhance the effectiveness of intelligence support within tactical policing environments, is answered in the affirmative by the results of the study and their analysis. The results of the study indicate that an adaptation of IPB into PTG intelligence support practice is seen as desirable, and feasible within certain parameters and given certain conditions.
As detailed in the introduction, the gap this study sought to address was two-sided; the first centring on the identified absence of focus in the research on the professionalisation and enhancement of PTG intelligence practice; the second being to add to the body of research focusing on IPB’s utility outside of military settings, particularly as a military process with potentially positive impacts on policing practice. The research achieved both these aims.

**IMPLICATIONS FOR PRACTICE**

The results of the study present two major implications for practice. The first relates to the potential to implement a modified IPB-type model to enhance the utility of intelligence support provided to PTG units. Applying an adapted form of IPB, defined here as IPTP, allows for pursuit of enhancements to PTG intelligence practice as identified through this study, and may realise improvements in intelligence outcome utility in relation to measures of completeness and detail; enhancing process maturity in relation to standardisation and the bridging of jurisdictional differences; and is of most immediate utility in areas of operation which see interoperability with analogous military units: CT, joint operations, and peacekeeping or stability operations.

Noting the opportunities highlighted by the SWOT analysis, the IPTP model would focus on the present, perceived window of opportunity to experiment with new methodological frameworks aimed at developing PTG intelligence support practice. The results of the study highlight the desire for change in intelligence support practice and the foundational frameworks supporting this, and therefore an openness amongst practitioners to adopting, and welcoming, change. That the expert panel so strongly and positively agreed on the feasibility of adapting an IPB framework into a tactical policing intelligence support context further supports a contemporary adaptation.

The potential for IPTP was further bolstered by the opportunity experts perceived is offered by contemporary and emerging technology. While emphasising the axiom that a rudimentary though acceptable IPB can be conducted using nothing more than “… maps and pen and paper – in case the power goes out”\(^{15}\), the considered use of all available analytical technologies to enable a successful adaptation of IPTP emerged across the parent themes of *Adaptation, Command Intelligence Support, Enhancement, and Practice change*, and as such cannot be ignored. This focus on the

\(^{15}\) Round 1, respondent 22.
intelligent application of current and nascent technological support tools in implementing an adapted form of IPB has been made by previous researchers (Shelley et al., 2005, p. 79), and highlights the need for continued investment in such platforms to support process adoption.

Given the extant, expressed differences between respective jurisdictions’ resourcing of their PTGs and therefore the intelligence elements supporting PTG activities, it is essential to note that technological requirements for IPTP are scalable, and both can and should leverage commercial-off-the-shelf, as well as classified/restricted technologies where available and where demanded by the operational need. It is also of note that the study’s results assert that despite resourcing differences, the expert panel agreed that law enforcement agencies do in fact possess the technological resources required to conduct IPTP. As such, future investment in technology to support an implementation of IPTP would focus on refinements and enhancement to existing platforms, rather than on core, enabling tools.

One related area of application IPTP offers is as a framework to a collection management system, where none otherwise exists. The need for management systems in complex, dynamic, and time-constrained intelligence operating environments is widely acknowledged, particularly as the amount of inputs expands (Leary & Thomas, 2011; DeMattei, 2013). Knowledge management relating to IPB has been raised in the context of incorporating civil information into the IPB process during counterinsurgency operations (Purser, 2014), and in regard to the evolution of IPO into a knowledge-based system to assist decision-making in disaster response situations (von Lubitz, Beakley, & Patricelli, 2008). However, IPB in itself does not constitute a collection management system, nor a collection architecture.

The scope for IPTP to guide collection and generate lead to higher-order knowledge (as opposed to information or intelligence), poses interesting questions for further research. However, noting the results of the study have highlighted the issue of process maturity within current PTG intelligence support practice, IPTP does present potential benefits to enhancing levels of detail and completeness, and in overcoming issues of standardisation. As such, IPTP can be seen as akin to a “baseline” framework on which future evolutions of advanced collection architectures in support of PTG activities could be built (Hall & Citrenbaum, 2012, pp. 266–267).
One relevant example in the tactical policing space relates to contemporary developments in the use of augmented reality and virtual reality technologies to assist PTGs with reconnaissance, situational awareness, training and operational preparation, communications and safety, and post-operational review. Being examined and implemented by PTGs and police futurists (Cowper & Buerger, 2003; Jontz, 2016) and with potential to assist with consolidated common operating picture(s), such technological systems also increase the amount of information flowing into an intelligence system. Technology-agnostic and with proven scalability, IPTP offers a framework to underpin and assist with organising these, and other, inputs in dynamic operating environments. Figure 38 below demonstrates the relationship with intelligence collection vectors, collection requirements, and outputs that IPTP would provide.

**Figure 38. Relationship between IPTP and intelligence requirements, collection vectors, and outputs.**

Unlike other adaptations, IPTP does not prescribe significant changes to the core IPB structure. It is of note at this point that while the expert panel proposed a number of actions and products to facilitate successful implementation of IPTP (explored later in this section), no change to the core IPB workflow was proposed. This fundamentally enhances the framework’s utility for adaptation, as implementation considerations are minimised. Noting the study’s results asserting that an adaptation of IPB into the PTG context would be most feasible in joint police-military operations,
that IPTP demands no structural change to the IPB doctrine is likely to assist in adaptation and adoption, as lexicon, structure, tools, templates, and certain training materials, could likely be more readily utilised.

Implementation considerations should also take into account factors potentially impacting on the feasibility of such a model, as highlighted throughout the collection phase and the threats component of the SWOT. Prominent amongst these considerations include the multi-faceted issue of intelligence support acceptance and credibility within PTG environments, and would need to be addressed in implementation planning and any trial phase of a new model based upon IPB principles. Absent consideration of these mindset-change and credibility factors, it is possible that the likelihood of a successful (and therefore impactful) adaptation of IPB into a PTG environment will be decreased. This would see a negative impact on the feasibility of such an implementation, thus overshadowing the clear desirability estimation raised through the study.

As was noted in chapter four, one expert squarely offered that the feasibility of an IPTP would be dependent on commanders’ exposure to the framework’s effectiveness. Issues of credibility granted respective jurisdictions’ tactical intelligence support frameworks featured throughout the study, and these were tied to perceptions of acceptance and therefore the ability to implement change. The issue of intelligence credibility features throughout the literature in regard to that of practitioners (Martin, 1993), of their sources, and of their assessments (Petersen, 2011) among other topics. As one of the intelligence utility measures used in this study and as shown through the thematic analysis, issues of credibility are also seen as key to communicator-receiver acceptance.

At a practical level, the results of the study highlight several changes to practice and operator focus to enable an adaptation of the IPB framework to effect enhancement. In this regard, the study’s results highlight the apparent gap between the desirability and potential impact of an adapted IPB framework, and the likelihood of this occurring.

Focused upon overcoming command and operator skepticism and the issue of low credibility, a number of implications and recommendations for practice change emerged through the results. These centred on the ways in which an adapted IPB-like
intelligence support model should be introduced, to build both command and end-user acceptance and therefore procedural credibility.

To this end, the study’s results offer a number of informed avenues via which these benefits of an adapted IPTP framework can be introduced and extant caution, resistance, or skepticism overcome. The first of these relates to addressing the considerations raised through the data around command and practitioner acceptance and trialling of any adopted process. Most relevant to these was the focus on pre-application rollout, education, and setting of doctrine and support products.

The results of the study are clear in identifying a number of activities to address these credibility and command support issues. These included:

- Development of an engagement and education plan to market IPTP’s benefits to command and operators;
- Development of written doctrine to underpin IPTP and reduce intelligence personnel error, as well as the preparation of sample outputs to guide intelligence personnel in performing IPTP;
- Changes required to eliminate or minimise militaristic language, and to include terminology more appropriate to the police context; and
- Considered leveraging of relationships with analogous military elements, in order to access training and advisors, and to selectively apply IPTP to suitable operational situations.

In terms of addressing the critical intelligence utility factors used as a measure of intelligence product efficacy, relevance, and value, these foundational, pre-application works can be seen as directly targeting improvements in the credibility—procedural, and in terms of standing—of both an adapted IPB-like framework, and PTG intelligence support in general.

Also required for the success of any adaptation of an IPB-like framework into a tactical police setting are the types of outputs seen as most important, or influential, in building practitioner and command acceptance. The results of the study strongly highlight the need to prioritise the generation of fit-for-purpose mapping and GIS products utilising contemporary platforms and data sources, to progress from an historical reliance on sub-standard sources of mapping information. Other adaptations—principally IPO—have suggested generation of products including
“playbooks”, targeting materials, and mission folders, and these should also be considered.

This has implications for practice due to the potential shift in practitioner focus and skillsets to be employed, and potentially due to the need to train PTG intelligence staff to develop proficiencies regarding these types of outputs. It may also require a shift in recruitment practices, to allow for the recruitment of technical intelligence specialists with needed skillsets. As emerged through the data, such a shift may also have further implications for PTGs by encouraging better relationships with third-party (government and commercial) technical support and information holders, to ensure intelligence support processes are properly serviced by access to data and systems needed to appropriately generate products of utility under any adapted IPB framework.

These factors in relation to products and end-user acceptance naturally incur consequences on PTG intelligence support element resourcing, with resourcing having itself emerged in the data as a key theme with possible implications for practice. Analysis of the data from the expert panel suggests there is in fact no clear or inherent deficiency in overall resourcing of PTGs to be able to implement an adapted form of IPB, but that available resources were perhaps not aligned to their intelligence support units in able to enable them to effectively conduct IPB as part of their operational mission. This suggests implications for practice in the need to realign resourcing to these PTG intelligence support elements to enable development of training schema, doctrine, and again promulgate awareness of the benefits of an IPTP to command and other end users.

It is of note that despite the split among the expert panel on whether IPB’s inherent resource demands make it ineffective in tactical policing contexts, and on whether PTG intelligence elements lack the resourcing to implement an adaptation of the framework, this was not assigned to a lack of organisational capability or capacity. The panel did specifically acknowledge that while technical support to PTGs is [most often] not equal to those provided to analogous military units, it is sufficient to enable an adaptation of IPB into the tactical policing context. As the gulf between the availability of technological support systems to PTGs and their military equivalents continues to narrow due to cost, commercial alternatives, or policy (American Civil Liberties Union, 2014), remaining concern in this regard will diminish further.
Notwithstanding the results of the SWOT analysis highlighting IPB’s resource draw as a potential weakness, the results of the study support the notion that IPB can be supported within, and therefore enhance outputs for, PTGs which have the technological and human resources to implement and utilise an adapted IPTP framework. To address this identified potential weakness, resource alignment to “back-end” training and doctrinal development is likely to be of greater impact, given that resourcing “front-end” personnel is not always feasible.

The results of the study are also of note in highlighting the recognition that a measure of effectiveness is situation dependent. Noting the emphasis placed by the expert panel on time as a more needed resource than any particular technological platform, and notwithstanding that no significant change to the IPB structure was prescribed, the data also supports the notion that an implementation of IPTP need not entail the entire IPB. This was supported by the expert panel in suggesting that the complete IPB template may not be feasible given time constraints, nor required due to the specifics of the operational context, and that selected elements could be generated and therefore enhance the overall value of the intelligence output. Again, this supports the position that resourcing allocation would be required to support the development of training and doctrine, to enable PTG intelligence support units to identify those elements of IPB/IPTP of most value and effect in particular scenarios.

Given the support for the assertion that an adapted IPB offers the potential to enhance the utility of PTG intelligence support, this validates the notion that resourcing be sought from cross-jurisdictional coordination bodies, in order to develop standardised doctrine and practice guides. In the Australian context, this could have implications for coordination bodies such as the ANZCTC and other cross-jurisdictional intelligence and PTG working groups. Such work could focus on addressing the identified need for training materials, doctrinal guidance, and on minimising differences in approach across jurisdictions. The results of the study support the notion that an adapted IPTP framework offers the potential to enhance outcomes against these issues, given IPB’s recognised adaptability, scalability, and established nature. This presents further opportunity for future research.

The study has highlighted the potential for an adapted IPB to enhance PTG intelligence support in relation to the predictive value of intelligence outputs, and as a consequence offering the potential to overcome perceived/stated end-user skepticism.
From a practice perspective, the data highlighted the potential for IPTP to assist in shifting the mindset of PTG practitioners toward greater consideration of predictive intelligence.

As an implication for practice, the results of the study therefore suggest the need for greater focus on prediction within PTG intelligence product, in both a transactional (product/situation-specific) context, and also within the wider context of the acceptance by command and other end users, of intelligence elements and their contribution to overall PTG effect. This will likely incur practical implications in relation to intelligence product templating; doctrinal development; validation; intelligence practitioner training; intelligence element resourcing; and socialisation/awareness raising among command and end users of the utility of an increased focus on predictive elements in the intelligence support provided to them.

The second, related, implication for practice centres on the theoretical basis for the study, which asserts that notwithstanding the valid and important debate around police militarisation, police units evolve by adapting existing models (myths). That certain of these legitimately come from a military provenance should not deter their examination and adoption, and in an applied setting, the study’s results support the adoption of select, mature military-developed processes into PTG settings. This finding has implications for future evolutions of specialist intelligence processes, supporting the position that existing practical frameworks can, and should, be regularly assessed against those both employed, and developed by, compatible or analogous entities.

While this also has implications for theory, the practical implication in this regard presents as an opportunity to re-evaluate existing praxis and enhance congruity between existing processes. These opportunities emerged through the results of the study in relation to those elements of IPB already conducted as part of PTG intelligence support methods, and where differences persist between the various jurisdictions.

Relevantly, the results of the study suggest an adapted IPTP model offers PTG intelligence practitioners the opportunity to harmonise existing processes which are already being done in isolation. Whether this segregation of practice is due to the acknowledged transactional or “case-focused” nature of criminal intelligence upon which existing PTG intelligence processes are in part built, or due simply to the lack of an overarching framework, was not suggested in the data. However, the results of the
Delphi process indicated strongly that much of existing practice replicates IPB processes, with 84% of experts, combined, identifying all elements of IPB as being already in some way implemented in tactical policing environments. Noting the strong response from the expert panel highlighting the prevalence of target evaluation (phase three of the IPB framework) as most commonly already applied/replicated by PTG intelligence practitioners, the opportunity an adapted IPB framework would provide would focus on those other three phases less universally conducted.

Examining the issue of cross-jurisdictional interoperability, the study’s results highlighted both the extant differences between Australian jurisdictions and their tactical intelligence support practices, and IPB’s potential to address this by providing a standardised doctrinal base. IPB’s strength in its adaptability, and its established and comprehensive nature as a mature methodological framework, offer practitioners the prospect to rapidly expedite doctrinal development through process adoption. This presents both opportunity and implication for the way in which coordinating bodies approach the development of standardising doctrine, by supporting the notion that adapting existing recipes from analogous disciplines—in this case comparable military provenance—can address standing gaps in an accelerated fashion, potentially reducing the lead time required for evolutions in practice.

**IMPLICATIONS FOR THEORY**

The results of the study confirm the validity of the theoretical base for the research, supporting the use of the translation lens when examining notions and possibilities for evolving PTG intelligence support processes. The results of the study also support the assertion that the IPB framework has utility and benefit outside of the military environment. Having been adapted previously in emergency management settings, the results of this study add further to the literature demonstrating the framework’s candidacy as a process recipe, by focusing further on a specific applied area.

A final yet noteworthy contribution with theoretical implications is the study’s collection of data indicating experts’ rejection of, or at least caution toward, further militarisation in evolving PTG processes. Noting the identified gap explored in the PTG literature, this study makes a contribution showing that there are military-derived solutions worthy of assessment, development, and implementation despite the legitimate concerns and negative connotations associated with many aspects of the
militarisation phenomenon. While this study deliberately eschewed a focus on the militarisation debate, the emergence of this theme is noteworthy, and warrants further exploration.

ORIGINALITY, SIGNIFICANCE, AND BENEFITS OF THE STUDY

Among other criteria, doctoral research is required to exhibit an “original and significant contribution to knowledge of the subject” under examination (Charles Sturt University, 2017, p. 1). For the purposes of the current study, originality was demonstrated against a number of identified criteria (Phillips & Pugh, 2005, pp. 61–62). These included, but were not limited to:

- **Creating a synthesis that hasn’t been made before.**
  This was demonstrated through the study’s highlighting of IPB as a militaristic process which could be applied within a police setting to realise an enhancement to current praxis. This was further shown by the study identifying areas of PTG intelligence support practice which already utilise, or could benefit from, applied IPB techniques.

- **Looking at areas that people in the discipline haven’t looked at before.**
  As identified through the literature review, there was a clear gap in the published research on intelligence processes for PTGs and PPUs. Gaps were also identified in relation to the potential positives in the application of IPB (a process developed within military intelligence) and other military intelligence processes within law enforcement settings. The study’s highlighting of experts’ levels of caution in regard to militarisation of police practice is of further note, and may allow for examination of an aspect of the militarisation debate not markedly focused upon.

The current research, as an example of both integrative and applied scholarship (Boyer, 1990, pp. 18–23), demonstrates its originality by its opening “up a deeper and more complex perspective from which to view …” the application of IPB as a militaristic process, which had previously been discussed in narrower contexts (Gordon, 2007, p. 198).
• Adding to knowledge in a way that has not been done before.

This study’s use of the panel of experts enabled the production of work in an unclassified form, to the benefit of the wider scholarship on an area of emerging police practice. Through this, the study is original in that it contributes to the body of knowledge in the fields of police intelligence practice in a novel way.

The applied nature of the study provides incremental, consequential advancement to the academic base for the profession, in line with Walsh’s (2011, p. 288) assertion that the intelligence discipline cannot develop unless research can be conducted with industry-relevant impacts which can improve practice, as well as Mijares and McCarthy’s exhortation of the need to further research the tactical policing domain (2008, pp. 256–257, 272–273). The study addresses these considerations by generating knowledge grounded in the expertise of industry experts, of direct relevance to intelligence-driven tactical policing practice and the development of relevant policy options therein.

OPPORTUNITIES FOR FURTHER RESEARCH

The results of this study highlight a number of areas for further research. These include further exploration into the relatively low levels of credibility afforded to intelligence support processes and units within PTG contexts, and the interesting phenomenon of practitioner resistance to militarisation. Also warranted is more detailed examination into the implementation of an IPB framework within PTG intelligence support units, potentially leading to verification and a more refined measurement of its enhancement effect within an applied setting.

Unlike other relevant contributions (Sullivan & Wirtz, 2008; Shelley et al., 2005), the current study does not extend to prescribing a structure to the proposed IPTP framework. This offers a further opportunity for future research.

Outside the narrowly-defined area of tactical policing practice, future research could build upon the examination of IPB’s applicability in the tactical policing context, by examining its utility in other areas of ILP practice.

Further exploration of IPB’s potential to harmonise existing processes and address inter-jurisdictional differences is also of merit, and may offer benefits to cross-jurisdictional coordination and doctrine-setting bodies. Noting the assessment that joint
police and military activities would best facilitate adaptation and acceptance of an IPB-like framework into a tactical police intelligence support setting, future research on this topic may benefit by focusing on these specific areas of practice.

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APPENDIX A—Participant information sheet and consent form

PARTICIPANT INFORMATION SHEET

Project name: Intelligence Support for Tactical Policing: Intelligence Preparation of the Battlespace

Investigator: Daniel Boyd, student/PhD candidate, Australian Graduate School of Policing & Security

Supervisor: Dr Henry Prunckun Associate Professor, Australian Graduate School of Policing & Security

Host Institution: Charles Sturt University, Australian Graduate School of Policing & Security

Invitation

You are invited to participate in a research study on intelligence support to tactical policing units.

The study is being conducted by Mr Daniel Boyd, a doctoral candidate with the Australian Graduate School of Policing & Security.

Before you decide whether or not you wish to participate in this study, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

1. What is the purpose of this study?

The purpose of the proposed research is to explore the extent to which military Intelligence Preparation of the Battlespace (IPB) doctrine and its adaptations can enhance the utility of intelligence support provided to commanders and other decision makers relevant to police tactical group applications.

2. Why have I been invited to participate in this study?

You have been selected for your expertise and/or experience relevant to tactical police operations, tactical military operations, tactical intelligence, and relevant policy analysis and academic practice. Your name was identified through a process of identifying individuals with the requisite expertise to contribute to the expert panel.

3. What does the study involve?

If you agree to participate, you will be asked to complete a short series of...
online surveys as part of a Delphi expert panel group. It is anticipated that three (3) surveys will be conducted over a maximum of a six (6) month period.

Each questionnaire will take an estimated 10-15 minutes to complete, though there is no limit to how long you wish to spend completing the surveys. Subsequent rounds of the study will present questions formulated following the analysis of the results of the Round 1 survey.

Your frank and honest input is requested, and will be kept confidential as outlined below.

4. **Are there risks and benefits to me in taking part in the study?**

   It is expected that this project will not directly benefit you in the short term. However, it may benefit you indirectly in the long term, through the development of guidelines to assist in enhancing intelligence practice in your field of work.

   There are no identified risks beyond normal day-to-day living associated with your participation in this project.

5. **How is this study being paid for?**

   This research is being self-funded by the Investigator.

6. **Will taking part in this study (or travelling to) cost me anything, and will I be paid?**

   There is no anticipated cost to you for your involvement in this study, and no travel is required. You will not be paid for your involvement in this study.

7. **What if I don’t want to take part in this study?**

   Participation in this research is entirely your choice. Only those people who give their informed consent will be included in the project. Whether or not you decide to participate is your decision and will not disadvantage you.

   If you do decide to participate, you may withdraw from the project at any time without giving a reason and have the option of withdrawing any data that identifies you.

8. **What if I participate and want to withdraw later?**

   You may withdraw from the research project at any time. If you do choose to withdraw, you may also request removal of any of your data, however due to the nature of the research method being used, removal of any of your de-identified data which has been aggregated with other responses may not be possible during the later stages of the project.

9. **How will my confidentiality be protected?**

   Your confidentiality will be ensured by the removal of all identifying information from your responses and any subsequent analysis. Your completed consent form will be kept in secure storage separate from your completed questionnaire.
Any information collected by the researchers which might identify you will be stored securely and only accessed by the researchers unless you consent otherwise, except as required by law. Data will be stored for five years and then destroyed.

10. **What will happen to the information that I give you?**

    Collected data will be utilised by the investigator in the preparation of a dissertation, to be presented to Charles Sturt University to fulfil the requirements for a Doctor of Philosophy degree. Collected data may also be used for the preparation of other publications including, but not limited to professional journals.

    No publishing of names or other identifying information will occur.

11. **What should I do if I want to discuss this study further before I decide?**

    If you would like further information please contact the chief investigator, Mr Daniel Boyd, on [redacted] or the research supervisor, Dr Henry Frunckun, on [redacted].

12. **Who should I contact if I have concerns about the conduct of this study?**

    **NOTE:** The Human Research Ethics Committee has approved this project. If you have any complaints or reservations about the ethical conduct of this project, you may contact the Committee through the Executive Officer:

    The Executive Officer
    Human Research Ethics Committee

    Tel: (02) 6338 4628
    Email: ethics@csu.edu.au

    Any issues you raise will be treated in confidence and investigated fully and you will be informed of the outcome.

    **Thank you for considering this invitation.**
    **This information sheet is for you to keep.**
RESEARCH PROJECT CONSENT FORM

Project name: Intelligence Support for Tactical Policing: Intelligence Preparation of the Battlespace

Investigator: Daniel Boyd, student/PhD candidate, Australian Graduate School of Policing & Security (AGSPS)

Supervisor: Dr Henry Prunckun, Associate Professor, AGSPS

Host Institution: Charles Sturt University, AGSPS

- I agree to participate in the above research project and give my consent freely.
- I understand that the project will be conducted as described in the Information Statement, a copy of which I have retained.
- I understand that I am free to withdraw from the project at any time and do not have to give any reason for withdrawing. I also understand that if I choose to withdraw at a later stage of the project, removal of my de-identified data that has been aggregated with other responses may not be possible.
- I consent to participating in the Delphi panel surveys comprising this research project.
- I understand that my personal information will remain confidential to the researchers. I also understand that all information gathered about me will be kept in secure storage.
- I have had the opportunity to have questions answered to my satisfaction.
- I understand that the Human Research Ethics Committee has approved this project. I understand that if I have any complaints or concerns about this research I can contact:

  The Executive Officer  
  Human Research Ethics Committee
  
  Tel: (02) 6338 4628  
  Email: ethics@csu.edu.au

Name:  
Signed:  
Date:  

www.csu.edu.au

The Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) Provider Number is 00037F (FW) and 01647G (VIC) for Charles Sturt University.
APPENDIX B—Delphi rounds 1 and 2 survey questions

ROUND 1 QUESTIONS:

1. To what extent do you agree or disagree with the following statement:
   Current methods of providing intelligence support to tactical police unit commanders are sufficient?
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree
   - Don’t know

Comments:

2. Based on your experience, what areas of responsibility within tactical policing most require specific intelligence support? (Please select up to three areas)
   - Tactical response
   - High-risk warrant execution
   - Counter-terrorism response
   - Foreign peacekeeping / stability operations
   - Foreign police training / capacity development deployments
   - Public order management / riot control
   - Search and rescue operations
   - VIP Protection operations
   - Joint police/military operations
   - Force protection
   - Police Technical / Surveillance / Reconnaissance Operations
   - Other (please specify)

3. Based on your experience, which areas of responsibility within tactical policing most require enhancement to the level of intelligence support they receive? (Please select up to three areas)
   - Tactical response
   - High-risk warrant execution
   - Counter-terrorism response
   - Foreign peacekeeping / stability operations
• Foreign police training / capacity development deployments
• Public order management / riot control
• Search and rescue operations
• VIP Protection operations
• Joint police / military operations
• Force protection
• Police Technical / Surveillance / Reconnaissance Operations
• Other (please specify)

4. Based on your experience, please rate the importance of each of the following criteria for measuring intelligence effectiveness in relation to the tactical policing environment:

[Scale:]
No importance Some importance Moderate importance
Substantial importance Critical Don’t know

• Intelligence support provided is accurate.
• Intelligence support provided is clear.
• Intelligence support provided is complete.
• Intelligence support provided is concise.
• Intelligence support provides a conclusion.
• Intelligence provided has continuity with previous material and knowledge.
• Intelligence support provided appears credible.
• Intelligence support provided is of sufficient detail.
• Intelligence support provided has been filtered.
• Intelligence support provided is finished intelligence, the result of analysis and fusion of all sources and materials.
• Intelligence provided addresses gaps.
• Intelligence provided appropriately uses graphics.
• Intelligence support provides a hypothesis.
• Intelligence provided addresses its perishability in the context of circumstances.
• Intelligence provided has been processed and synthesised with other sources.
• Intelligence provided has relevance to the intended use.
• Intelligence support provided appears reliable.
• Intelligence support provided is sufficiently specific.
• Intelligence support provides a usable summary of the matter examined and the material included.
• Intelligence support is timely.
• Intelligence provided includes a quality of unusualness or novelty.

5. To what extent do you agree or disagree with the following statement?
‘Intelligence preparation of the battlespace (IPB) doctrine offers a framework for enhancing intelligence support to tactical policing.’

• Strongly disagree
• Disagree
• Neutral
• Agree
• Strongly agree

Please explain your answer:

6. Based on your experience, what area of modern tactical policing operational responsibilities could most benefit from IPB techniques being applied to their intelligence support processes? (Please select up to three)

• None
• Tactical response
• High-risk warrant execution
• Counter-terrorism response
• Foreign peacekeeping / stability operations
• Foreign police training / capacity development deployments
• Public order management / riot control
• Search and rescue operations
• VIP Protection operations
• Joint police / military operations
• Force protection
• Police Technical / Surveillance / Reconnaissance Operations
• Other (please define)

7. In your view, to what extent could the IPB framework impact on intelligence support to tactical policing in regard to the following specific criteria:

[Scale:]
Negative net enhancement effect  Neutral net effect
Some enhancement effect       Moderate enhancement effect
Strong enhancement effect      Don’t know
• Accuracy of support / product
• Clarity of support / product
• Completeness of support / product
• Conciseness of support / product
• Provision of a conclusion
• Ensuring continuity of intelligence with previous material
• Credibility of support / product
• Level of detail of support / product
• That support / product has been filtered
• That intelligence provided is finished intelligence, the result of analysis and fusion of all sources and material
• Addressing identified intelligence gaps
• Use of graphics
• Provision of a hypothesis to explain the situation
• The level of raw, unevaluated information included
• Precision of support/product
• Addressing perishability of the support/product
• That support / product has been processed and synthesised with other sources
• Relevance of support / product
• Reliability of support / product
• Specificity of support / product
• That the intelligence support provides a usable summary of the matter examined and the material included
• Timeliness of support / product
• The level of unusualness or novelty of the support/product

8. In your view, to what extent could the following elements of IPB impact on intelligence support within tactical policing?

[Scale:]
Negative net enhancement effect  Neutral net effect
Some enhancement effect  Moderate enhancement effect
Strong enhancement effect  Don’t know

Stage One (Define the operational environment)

• Identifying the limits of the commander’s area of operations (AO)
• Identifying the limits of the commander’s area of interest
• Identifying significant characteristics within the AO and area of interest for further analysis
• Evaluating current operations and intelligence holdings to determine additional information needed to complete IPB
• Initiating processes to acquire information necessary to complete IPB

Stage Two (Describe environmental effects on operations)
• Describing how the threat / adversary can affect friendly operations
• Describing how terrain can affect friendly and threat / adversary operations
• Describing how weather can affect friendly and threat / adversary operations
• Describing how civil considerations can affect friendly and threat / adversary operations

Stage Three (Evaluate the threat)
• Identifying threat characteristics / adversary order of battle
• Creating or refining threat / adversary models (converting threat doctrine or patterns of operations to graphics; describing the threat’s tactics and options; and identifying high-value targets)

Stage Four (Determine Threat Courses of Action [COAs])
• Identifying the threat’s likely objectives and desired end state
• Identifying the full set of COAs available to the threat / adversary
• Evaluating and prioritising each COA
• Developing each COA in the amount of detail time allows
• Identifying high value targets for each COA
• Identifying initial collection requirements for each COA
• Developing the event template and matrix (including named areas of interest, time-phase lines, and enemy decision points)

9. Based on your experience, what elements of IPB, if any, are already currently conducted, in whole or part, in the provision of intelligence support to tactical policing?

(Please select all that apply.)

Stage One (Define the operational environment)
• Identifying the limits of the commander’s area of operations (AO)
• Identifying the limits of the commander’s area of interest
• Identifying significant characteristics within the AO and area of interest for further analysis
- Evaluating current operations and intelligence holdings to determine additional information needed to complete IPB
- Initiating processes to acquire information necessary to complete IPB

**Stage Two (Define environmental effects on operations)**

- Describing how the threat / adversary can affect friendly operations
- Describing how terrain can affect friendly and threat / adversary operations
- Describing how weather can affect friendly and threat / adversary operations
- Describing how civil considerations can affect friendly and threat / adversary operations

**Stage Three (Evaluate the Threat)**

- Identifying threat characteristics / adversary order of battle
- Creating or refining threat / adversary models (converting threat doctrine or patterns of operations to graphics; describing the threat’s tactics and options; and identifying high-value targets)

**Stage Four (Determine Threat Courses of Action [COAs])**

- Identifying the threat’s likely objectives and desired end state
- Identifying the full set of COAs available to the threat / adversary
- Evaluating and prioritising each COA
- Developing each COA in the amount of detail time allows
- Identifying high value targets for each COA
- Identifying initial collection requirements for each COA
- Developing the event template and matrix (including named areas of interest, time-phase lines, and enemy decision points)

Further comments:

10. The following key characteristics of IPB have been identified during analysis of the existing literature. In your view, what are the characteristics most likely to influence IPB’s ability to enhance intelligence support to tactical policing?

(Please select up to three)

- IPB’s structured framework
- IPB’s proven adaptability to new applications
- IPB’s extensive use of graphics
- IPB’s integration with command decision-making processes
• IPB’s integration with other specialist staff processes
• IPB’s continuous nature and sustained process throughout operations
• IPB’s integration with the intelligence cycle
• IPB’s time and resource demands

11-13. To what extent do you agree with the following statements?

[Scale]

• Strongly disagree
• Disagree
• Neutral
• Agree
• Strongly agree

11. IPB’s inherent time, technical, and human resource demands make it ineffective in tactical policing situations.

12. Intelligence staff supporting tactical police operations lack the resourcing to effectively conduct IPB.

13. Law enforcement agencies typically lack the technological resources to conduct and utilise IPB.

14. Please provide any further relevant comments:

Your name (optional):

Your position title and organisation (optional):

In which age bracket are you? (optional)

20-25  26-30  31-35  36-40  41-45
46-50  51-55  56-60  Over 60

How many years experience, in total, do you have in policing / military / academia / other relevant work?

Less than 1  1-2  3-5  6-10  11-15
16-20  More than 20
Which of the following best describes your current field of work?

- Policing (non-tactical or command position)
- Policing (tactical operations)
- Policing (intelligence)
- Policing (policy)
- Military
- Other government agency
- Academia
- Other (please specify)

Which of the following best describes areas in which you have worked or have expertise in? Please select all that apply.

- Tactical response
- High-risk warrant execution
- Counter-terrorism response
- Foreign peacekeeping / stability operations
- Foreign police training / capacity development deployments
- Public order management / riot control
- Search and rescue operations
- VIP Protection operations
- Joint police / military operations
- Force protection
- Police Technical / Surveillance / Reconnaissance Operations
- Planning or policy
- Other (please specify)
ROUND 2 QUESTIONS:

1. Noting the level of consensus around whether current methods of providing intelligence support to tactical policing are sufficient, and around whether IPB offers a framework for enhancing such intelligence support, what is the likelihood of IPB being implemented for such a goal within tactical policing?

   - Highly unlikely
   - Unlikely
   - Likely
   - Highly likely or Already confirmed

2. In your opinion, please rank the importance of applying IPB techniques to intelligence support in these particular areas:

   - CT
   - Tactical Response
   - High-risk warrant execution
   - Foreign peacekeeping / stability operations
   - Joint military / police operations

Further comments:

3. Based on your experience and opinion, and noting the summarised results from round 1, please rank each item in order of importance from 1 (most important) to 10 (least important):

   - That intelligence support provided is accurate
   - That intelligence support is timely
   - That intelligence provided has relevance to the intended use
   - That intelligence support provided is clear
   - That intelligence support provided is of sufficient detail
   - That intelligence support provided appears credible
   - That intelligence support provided appears reliable
   - That intelligence provided addresses gaps
   - That intelligence support provided is concise
   - That intelligence support provided is sufficiently specific

4. To what extent do you agree or disagree with the following statement: “Intelligence preparation of the battlespace (IPB) doctrine offers a framework for enhancing intelligence support to tactical policing.”

   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree
5. Noting the feedback from round 1 regarding experts’ views on agencies’ resourcing in the context of IPB implementation in tactical policing environments, and the suggestion that IPB's characteristics of its structured framework and its integration with command decision-making processes would most impact on the framework’s ability to enhance intelligence support, what is the feasibility of IPB being successfully implemented within a tactical policing environment?

- Highly unfeasible
- Unfeasible
- Feasible
- Highly feasible or Already confirmed

Further comments:

6. Based on your experience, and noting the results of round 1, please rank each item in order of their likelihood to be positively impacted by the application of IPB in tactical policing, from 1 (most likely to be impacted) to 11 (least likely to be impacted):

- Identifying significant characteristics within the AO and area of interest for further analysis.
- Addressing identified intelligence gaps.
- Level of detail of support/product.
- Initiating processes to acquire information necessary to complete IPB.
- Identifying the limits of the commander’s AO.
- Clarity of support / product.
- Completeness of support / product.
- Credibility of support / product.
- Specificity of support / product.
- That support / product has been processed and synthesised with other sources.
- That intelligence provided is finished intelligence, the result of analysis and fusion of all sources and material.

NB. Note aforementioned removal of question 6.

7. Noting this, and the summarised results of round 1, please rank the following items in order of their likelihood of positively impacting on intelligence support provided to tactical police units:

- Identifying significant characteristics within the AO and area of interest for further analysis.
- Identifying threat characteristics / adversary order of battle.
- Describing how the threat / adversary can affect friendly operations.
- Describing how terrain can affect friendly and threat / adversary operations.
- Describing how civil considerations can affect friendly and threat / adversary operations.
• Identifying the threat’s likely objectives and desired end state.
• Identifying high value targets for each COA.
• Initiating processes to acquire information necessary to complete IPB.

8. In your view, what particular products would be most required for any adaptation of IPB for use by tactical police units?

9. Please provide any further relevant comments here, including any commentary on the results of round 1:
APPENDIX C—Intelligence utility factor definitions

1. **Accuracy:** The condition or quality of representing reality about enemy forces, enemy capabilities, enemy intentions, weather, or terrain. For example, the degree to which something is where it is said to be.

2. **Clear:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is free from obscurity or ambiguity, and is easily understood and unmistakable.

3. **Complete:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which has all the necessary parts or elements, is fully developed, and does not carry the implication that something is missing.

4. **Concise:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which covers much in a few words, is succinct and free from elaboration and superfluous detail. See “detail” and “summary” for related concepts.

5. **Conclusion:** A reasoned judgment, such as the enemy most likely courses of action, accepted as a possible outcome with regard to enemy forces, enemy capabilities, enemy intentions, weather, or terrain.

6. **Continuity:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which represents a succession of data without essential change. See “gaps” for [a] related concept.

7. **Credibility:** The demonstrated quality, over time, of presenting finished intelligence about enemy forces, enemy capabilities, enemy

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intentions, weather, or terrain which is accepted by users as being, more often than not, correct.

8. **Detail:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is an extended treatment or exhaustive, thorough and comprehensive, but focused on a specific operational purpose or use. See “concise” and “summary” for related concepts.

9. **Filtered:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which has been pre-screened to remove unnecessary redundancy or spurious facts or data.

10. **Finished intelligence:** The result of evaluation, analysis or fusion of facts or data with new facts or data pertaining to enemy forces, enemy capabilities, enemy intentions, weather, or terrain. See “information” for [a] contrasting concept.

11. **Gaps:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which reflects a break in continuity. See “continuity” for [a] related concept.

12. **Graphics:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is portrayed as a picture, map, overlay, chart, table, or graph.

13. **Hypothesis:** A proposition or set of propositions, such as potential enemy courses of action, set forth as an explanation or projection of what may occur with regard to enemy forces, enemy capabilities, enemy intentions, weather, or terrain.

14. **Information:** Facts or data pertaining to the enemy forces, enemy capabilities, enemy intentions, weather, or terrain. See “finished intelligence” for [a] contrasting concept.
15. **Precise:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather or terrain which is definitely or strictly stated, defined or fixed; minutely exact.

16. **Perishability:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which by its very nature deteriorates rapidly in terms of permitting reasonable operational response. See “timeliness” for a related concept.

17. **Processed:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which has been synthesized with other information or finished intelligence.

18. **Relevance:** The degree to which information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain applies to the mission and area of operations and satisfies the needs of the user.

19. **Reliability:** The quality or state of being dependable in the portrayal of information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain.

20. **Specific:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is peculiarly adapted to an operational purpose or use, such as planning, targeting, or maneuver.

21. **Summary:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is comprehensive and covers the main points succinctly. See “concise” and “detail” for related concepts.

22. **Timeliness:** The availability of information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain in terms of whether or not it permits
reasonable operational response. See “perishability” for a related concept.

23. **Unusualness:** Information or finished intelligence about enemy forces, enemy capabilities, enemy intentions, weather, or terrain which is uncommon, rare, or unanticipated.