Combining Narrative and Structured Approaches to Conducting a Workshop: Evaluation of an Intellectual Capital Framework for Defence

Sean Bergin, Rebecca Heyer and Justin Fidock

Command and Control Division
Defence Science and Technology Organisation

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ABSTRACT

In January 2005, Defence Science and Technology Organisation (DSTO) staff contributed to a workshop exploring the utility and validity of an intellectual capital framework for Defence, developed by the Office of the Chief Information Officer. In particular DSTO staff provided guidance and support to the workshop process. A narrative approach (utilising narrative circles or storytelling, designed to facilitate rapid and in depth sense making) was used to complement a more traditional structured workshop approach (utilising discussions and debates around a structured agenda and question set). The resultant hybrid workshop methodology substantively contributed to the workshop outcomes and was effective in engaging all participants in the process. It is the authors' view that this would have been much more difficult to achieve in a timely fashion using either a narrative workshop or a traditional structured workshop approach alone. This paper provides an overview of the development of the hybrid methodology and discusses the workshop methodology in practice.

RELEASE LIMITATION

Approved for public release
Combining Narrative and Structured Approaches to Conducting a Workshop: Evaluation of an Intellectual Capital Framework for Defence

Executive Summary

Given the changing nature of warfare and the Australian Defence Force’s (ADF) migration towards a seamless and integrated force, as outlined in Force 2020, Australian commanders now need to gain a competitive advantage based around adaptability in decision making and agility in responding to rapidly changing circumstances. "This adaptability and agility rests to a great extent on Defence's intellectual capital", Office of the Chief Information Officer (OCIO). In January 2004, the Defence Science and Technology Organisation (DSTO) began to provide both input and analytical support to the Defence Intellectual Capital Project, run by Defence’s Office of the Chief Information Officer (OCIO). The authors, as Command and Control (C2) analysts, felt it important to be involved in a Defence-wide initiative such as this given its potential impact on C2 in the future and the Australian Defence Force’s (ADF) ability to "embrace bold and innovative ways of operating" (Force 2020, p. 17). To this end, DSTO analysts participated in an initial workshop in November 2004, which discussed preliminary thinking about intellectual capital and its relevance to the Australian Defence Organisation. DSTO was then asked to assist the OCIO project team in formulating goals and a methodology for a follow-up workshop which was held in January 2005.

In designing a workshop methodology the analysts were faced with the choice between two main approaches – a traditional structured versus a narrative approach. A traditional structured workshop involves seeking responses from stakeholders in relation to a series of structured or semi-structured questions, usually in a group setting, guided by a clear agenda and question set. The advantage to such an approach is that results are relatively unambiguous and easy to capture in an explicit format which can be passed on to other interested parties with little degradation of meaning. The analysts’ previous experience has shown that workshops run under this model tend to be prescriptive and not conducive to the discussion of emergent themes, which are often seen as a hindrance to being able to get through the agenda items. Additionally, such an approach assumes that all stakeholders will be able to understand the questions, and moreover, that they will have a common understanding. In many large group discussions, therefore, much of the effort is spent on debates of definitions and semantics, rather than a clear and progressive debate on the real issues of significance.

A narrative approach, on the other hand, would begin by asking participants to tell stories about the issue under study. The only ‘rules’ beyond this point are that stories should be relatively self-contained and that people should not interrupt, or debate. In a sense the process seeks to mimic the normal process that often occurs around water coolers, over coffee, or at the pub (at least in situations where people are good listeners). The principle here is that understanding of the core concepts emerges indirectly, in the form of
contextualised issues and themes in stories (Snowden, 2000b). From a narrative perspective the synthesis of meaning, in which people share stories about a complex concept to the point where they simply ‘get it’, is a more fruitful approach than any analytic perspective relying on a reductionist approach grounded in clarity of definition.

In the current situation, while the sort of outcomes desired were those that a traditional structured approach can provide, the contextual issues with which the analysts were faced (including ambiguity of concepts and the multiple frames of reference of the large group of stakeholders) meant that such a workshop methodology alone would be likely to fail. Thus an alternative approach was needed to overcome the limitations of these contextual constraints and help achieve the desired goal. It was at this juncture that a hybrid workshop methodology was developed. The general idea was to begin the workshop using narrative (including narrative circles/storytelling and sense making activities) to allow the development of a common language and shared understanding of the issues under study, as well as identification of other key issues. Using this as a foundation, the workshop was then moved into a more structured environment focussed on key questions in order to generate more explicit arguments and evidence to support the decision making process at which the workshop was aimed.

This paper provides detail about the hybrid methodology devised for the intellectual capital workshop and discusses the methodology in practice. In a short time frame, it was possible to lead a large group of stakeholders, with disparate experiences and frames of reference, through a deep exploration of a highly complex and ambiguous concept. Further, the stakeholders walked away with a much deeper understanding of intellectual capital in Defence, and what Defence as an organisation might be planning to initiate in this area. The beginning of a shared language and understanding was created in the stakeholder group, which may form a support base for more in depth awareness of intellectual capital in the wider Defence community. Finally, the project team was able to extract explicit guidance and recommendations regarding the validity and clarity of the intellectual capital framework as it stood at the time, and the utility and potential for application and implementation in Defence. In short the authors feel the hybrid workshop structure and process was a success, achieving benefits that would not have been achieved by either a narrative or a more traditional structured approach alone. Accordingly, it is recommended that the hybrid methodology be used for other projects facing similar contextual issues such as ambiguous and complex concepts, large stakeholder groups with multiple viewpoints and frames of reference, and the need to achieve structured and explicit outcomes and recommendations in a relatively short time frame. The contextual environment just described represents one that is often found when exploring concepts of C2 within the ADF and as such this methodology has significant application to future studies of C2.

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<td>ADF</td>
<td>Australian Defence Force</td>
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<td>ADO</td>
<td>Australian Defence Organisation</td>
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<td>C2</td>
<td>Command and Control</td>
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<td>DSTO</td>
<td>Defence Science and Technology Organisation</td>
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<td>OCIO</td>
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1. Introduction

In January 2005, Defence Science and Technology Organisation (DSTO) staff\(^1\) contributed to a workshop exploring the utility and validity of an intellectual capital framework for Defence. This framework was developed by the Office of the Chief Information Officer (OCIO). In particular DSTO staff provided guidance and support to the workshop process. Narrative\(^2\) methods, which are designed to facilitate rapid and in depth sense making and analysis of complex organisational problems, were used to complement a more traditional structured workshop methodology. Narrative methods draw upon the social complexity approaches\(^3\) developed by Dave Snowden from the Cynefin Centre (www.cynefin.net).

The hybrid workshop methodology, combining traditional structured and narrative approaches, substantively contributed to the workshop outcomes, and was effective in engaging all participants in the evaluation process. The authors believe that this would have been much more difficult to achieve in a timely fashion using either a narrative or a traditional structured approach in isolation. This paper will set the context, provide an overview of the methodology, and describe the hybrid workshop methodology in practice. In addition, links to resources for those interested in utilising narrative approaches are included in Appendix A.

2. Context

2.1 The Defence Intellectual Capital Project

The Defence Intellectual Capital Project was established within the OCIO to create an intellectual capital framework that can be used across the Australian Defence Organisation (ADO), at all levels, to take account of the intellectual capital components of any project or activity and improve Defence outcomes (OCIO, 2004).

2.2 The concept of intellectual capital

Although there is no single clear cut definition of intellectual capital it is generally accepted that intellectual capital encompasses an organisation’s competencies; the artefacts and measurements of its intangible resources; the capabilities and interactions of its formal organisations, informal communities, customers, and partners; and the knowledge, skills, and potential of its employees and other stakeholders. These attributes can be seen as capital to the extent to which they add value to an organisation. According to the OCIO, Defence’s intellectual capital is defined as “its knowledge and expertise and the processes

\(^1\) Analysts providing support to the Defence Intellectual Capital Project represented both the Command and Control Division and Defence Systems Analysis Division of DSTO.

\(^2\) Note: the words narrative, story and anecdote will be used interchangeably in this paper.

\(^3\) Social complexity approaches are concerned with the application of complexity science to human systems (www.cynefin.net).
2.3 The relationship between intellectual capital and command and control

It is important at this juncture to explain the connection between the concepts of intellectual capital and command and control (C2) and hence the potential benefits to C2 Division analysts in supporting this project. Given the changing nature of warfare and Defence's migration towards a seamless and integrated force, as outlined in Force 2020, C2 is changing. Australian commanders now need to gain a competitive advantage based around adaptability in decision making and agility to respond to rapidly changing circumstances. "This adaptability and agility rests to a great extent on Defence's intellectual capital" (OCIO, 2004, p. 2). Indeed military organisations, much like their civilian counterparts, are beginning to "recognize the important role of intellectual capital in the modern military enterprise" (McIntryre et al, 2003, p. 36). For commanders, "sense-making, problem solving and decision-making are more complex and more essential in military situations than ever before. Similarly, know-how, expertise, and interoperability are also important factors in a military organization's ability to attain knowledge superiority". In line with this, "C2 is taking on new dimensions, and the role of military personnel is evolving into that of 'knowledge worker'" (p. 35). It is important therefore that the authors, as C2 analysts, be involved in a Defence-wide initiative such as this given its potential impact on C2 in the future and the Australian Defence Force's (ADF) ability to "embrace bold and innovative ways of operating" (Force 2020, p. 17).

4 “Human capital is defined as the sum of the individual capability and commitment of the military and civilian personnel employed by Defence. Individual capability consists of the skills and competencies, experience and knowledge, and the behaviours and attitudes of each person. Commitment refers to the individual will of each person to apply this capability in the betterment of Defence outcomes” (OCIO, 2004, p. 9).

5 “Organisational capital is defined as the strategies, systems, methodologies, and operational processes within Defence that allows it to utilise its human and relationship capital. It incorporates the codified experience and knowledge in Defence recorded over time and includes data and information in databases and observations and lessons from the conduct of Defence business (both during operations and in peace) that is recorded as history, philosophy, doctrine, policy and procedures. It is owned by Defence as its intellectual property and proprietary systems” (email correspondence with Pam Frost, this component was formed by merging the two original components of organisational and knowledge capital, defined in OCIO, 2004, p. 9).

6 “Relationship capital is defined as both the formal and informal interactions with other entities, internal and external to Defence. It consists of the internal relationships between the Groups and Services and the military and civilian members; and the external relationships with other government departments and agencies, the Australian and international community, industry and coalition and alliance partners, and the general public” (OCIO, 2004, p. 9).
2.4 The intellectual capital workshops: DSTO involvement

Since early-2004, DSTO have provided both input and analytical support to the Defence Intellectual Capital Project. DSTO representatives participated in an initial workshop in November 2004, which discussed preliminary thinking about intellectual capital and its relevance to the ADO. It was then requested that DSTO assist the OCIO project team in formulating goals and a methodology for a follow-up workshop which was held in January 2005.

2.5 Goals

The aim of the workshop was to explore the utility and validity of an intellectual capital framework for Defence. More specifically, the goals for the January workshop, according to the project team, included:

- To strengthen the case for evaluating intellectual capital through illustrative case studies, which highlight the effects of intellectual capital on outcomes of activities in Defence.
- To identify the stages of a project/activity in which assessment of intellectual capital will add value to Defence activities, and what benefits may be expected (or risks minimised).
- To validate the conceptual model of intellectual capital proposed by OCIO, and the way it is presented.
- To review the issues raised in the previous workshop and provide specific recommendations.
- To highlight issues providing guidance on:
  - development of an evaluation methodology (an intellectual capital toolkit);
  - possibilities for implementation; and
  - constraints and enablers to implementation in the Defence context.

2.6 Factors impinging upon methodology choice for the workshop

The Defence Intellectual Capital Project team held the workshop in order to test the validity and utility of the intellectual capital framework by exposing it to a large group (>20) of relevant stakeholders. In determining the appropriate approach to take in a workshop like this the analysts needed to take account of a range of factors, including the purpose of the workshop and other contextual issues.

2.6.1 Time available

In order to minimise the impact on participants a maximum of one day was considered the appropriate time limit. The workshop method employed then needed to be able to quickly convey a lot of information, and allow input from a large number of individuals, in a relatively short amount of time.
2.6.2 Ambiguity, complexity and maturity of concepts

The concept of intellectual capital was still being developed, and thus was not a mature concept. Further, the links between intellectual capital and its impact on organisational outcomes is highly complex. The workshop method employed therefore needed to be able to allow for an emergent definition\(^7\) to surface within the stakeholder group, as well as an emergent shared view of the relevance and significance of intellectual capital in Defence activities.

2.6.3 Multiple viewpoints

The project had multiple stakeholders, with a wide variety of backgrounds, experiences, and frames of reference. The workshop method needed to be able to produce some common ground in terms of ways of viewing the issues, in order for a degree of consensus\(^8\) to be reached in terms of recommendations.

2.6.4 The need for structured and explicit outcomes

It was desirable that the workshop produce a series of outcomes that included defensible and well articulated arguments regarding the usefulness and validity of the framework, as well as recommendations for the way forward which were agreed upon and acceptable to multiple stakeholders.

2.7 Traditional structured approaches

More traditional approaches to conducting a workshop with a group of stakeholders might involve seeking responses to a series of structured or semi-structured questions guided by a clear agenda and question set. The advantage to such an approach is that it is relatively easy to produce structured and explicit outcomes, and indeed recommendations can often even be expressed in quantitative terms (e.g. ‘60% of stakeholders believed we should do x, and 20% believed we should do y’). The results of such a process are relatively unambiguous and easy to capture in an explicit format which can be passed on to other interested parties with little degradation of meaning. It can also be very efficient, with participants guided to discuss all relevant topics, and discouraged from diving into ‘rabbit holes’ (topics that sidetrack to the main theme). Control is hierarchical, usually through a nominated facilitator. Sequence and timing can be controlled with a clear agenda, ensuring explicit goals are achieved (or at least addressed). Social dynamics can also be controlled to some extent through the use of clearly defined roles, rules of conduct, and the use of various facilitation techniques\(^9\).

\(^7\) For more on emergence in this context, see Snowden (2000a).

\(^8\) Consensus in this case is taken to mean any serious and stable level agreement reached.

\(^9\) Other facilitation techniques that the analysts have found useful include: parking of ideas that are not core for later discussion; management of group size and composition; or encouraging contribution from multiple stakeholders through self monitoring e.g. the facilitator may encourage those that haven’t said much to say more and those that have had a say to say less.
Such an approach, however, requires that the problem be well defined to begin with in the minds of the organisers. Workshops run under this model tend to be prescriptive and not conducive to the discussion of emergent themes, which are often seen as a hindrance to being able to get through the agenda items. In a sense, workshop planners ‘need to know what they need to know’ before talking to the participants in order to be able to correctly specify the questions that will address the issues of interest in the workshop.

Additionally, such an approach assumes that the participants will be able to understand the questions, and moreover, that they will have a common understanding. The analysts’ previous experience has shown that even in relatively basic structured questionnaires, people will fiercely debate multiple interpretations of seemingly straightforward (in the researcher’s mind) questions. In many large group discussions, much of the day can get caught up with debating definitions and semantics, rather than making progress on other issues of significance.

While the sort of outcomes that a structured workshop can provide were required, the ambiguity of concepts and the multiple frames of reference of the large group of stakeholders, meant that a structured workshop approach alone would be unlikely to succeed. Thus an alternative approach was needed to address the range of issues presented in section 2.5.

2.8 Narrative approaches

Storytelling has existed for centuries as a means of exchanging information and generating understanding. The value of stories within an organisational context came to the fore in the 1980s when organisational scientists and consultants realised the benefits of the storytelling technique as a simple, yet effective, way of conveying complex ideas and enhancing understanding within organisations (Lelic, 2001). Indeed the continued popularity of storytelling among key practitioners in the area, including Snowden and Denning, is attributed to its ability to enhance understanding (or sense making) between participants who create an almost collective identity, and, simultaneously, develop newfound knowledge in the particular subject of interest.

Kahan (transcript of interview in Lelic, 2001) adds that storytelling is also a popular choice for use in organisations as stories can be used as catalysts for change, to develop shared identities and build a sense of community where perhaps one is lacking, to facilitate more effective collaboration, to share knowledge, and to foster a greater understanding of the corporate culture. One of the strongest proponents of narrative approaches is Dave Snowden from the Cynefin Centre (www.cynefin.net). His narrative techniques, which were drawn upon in the present project, were developed within a social complexity framework10.

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10 One of the authors has attended a number of Cynefin workshops delivered by Dave Snowden on using narrative circles as an approach to facilitate rapid and in depth sense making and analysis of
In contrast to narrative approaches, a more traditional structured approach might ask participants something like, “has intellectual capital affected you in your work, and if so how?” and then open the floor to debate. The result of such an open ended question would likely be an immediate block to moving forward in the form of intellectual debates about the definition of intellectual capital, and semantics of the issue. This block could take significant time to remove, and would likely have to be overcome by simply saying, “let’s not get caught up in semantics, but just move forward to address the question”. The problem with this is that discussions from this point will likely be on the basis of fragmented understandings of the issue, and be loaded with negativity from participants feeling that their perspective has not been heard, and the group has ‘missed the point’. Without a shared understanding of the core concept, in which participants can feel some sense of ownership or empathy, any conclusions are unlikely to be accepted across the stakeholder group, and thus face issues not only with validity, but also with potential resistance to implementation at a later date.

A narrative approach on the other hand would begin by asking participants to form into small groups (syndicates) and tell stories that reflect the presence of the issue. The only ‘rules’ beyond this point are that stories should be relatively self contained and people should not interrupt or debate. In a sense the process seeks to mimic the normal process that often occurs around water coolers, over coffee, or at the pub (at least in situations where people are good listeners). The principle here is that understanding of the core concepts emerges indirectly, in the form of contextualised issues and themes in stories. For example, in an organisational setting, if one is interested in management issues, the stories people tell about management are potentially much richer sources of what management means in the context than any ‘definition’ of management ever could be. From a narrative perspective the synthesis of meaning, in which people share stories about a complex concept to the point where they simply ‘get it’, is a more fruitful approach than an analytic perspective relying on a reductionist approach grounded in clarity of definition.

‘Ditting’ is another key mechanism in the narrative approach that provides value (Callaghan, 2004). Ditting is the tendency for people to share stories of their own that are triggered by listening to others, in the sense of “that reminds me of the time when…”. Ditting can help people remember important issues they might otherwise forget or not initially see as relevant, and help key issues to be revealed in an emergent way. This process promotes deeper and broader exploration of an issue by allowing divergence from what we would expect to find (i.e. the focus of structured questions).

It is worth noting that many people who are more accustomed to traditional structured approaches may be hesitant to adopt this sort of approach. An understandable fear is that the loss of hierarchical control over the workshop direction would precipitate a fall into anarchy, the goals of the workshop being forgotten, and participants leaving with the complex organisational problems (see www.cynefin.net). For further information on narrative approaches see Appendix A.
feeling the facilitator didn’t know what they were doing. Done properly however, this should not occur. Correct guiding rules for participants in terms of the core theme, together with the tendency for ditting, will ensure that while stories will (and should) flow from topic to topic, they will tend to congeal in clusters around the central topic, rather than resulting in a series of unconnected personal thoughts.

Stories allow rapid transmission of understanding of complex issues, enabling groups to rapidly build a shared language and context. Much of our understanding of language is embedded in context, and stories in context allow definitions to be built in an emergent way. This can allow dialogue to move forward based on a shared contextual understanding of issues, rather than relying on agreed explicit definitions. This shared understanding can minimise the likelihood of groups getting caught up on personal differences in definitions (a common trap with more traditional structured approaches) and allow them to focus on deeper emergent themes.

2.9 Comparison and combination of traditional structured and narrative workshop approaches

The table below provides a comparison of traditional structured and narrative approaches to the exploration of problems.

<table>
<thead>
<tr>
<th>Narrative Workshop Approach</th>
<th>Traditional Workshop Approach</th>
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<tr>
<td>Useful when problems are messy, ambiguous or complex</td>
<td>Useful when problems are well defined and understood</td>
</tr>
<tr>
<td>Promotes rapid establishment of a shared understanding among multiple stakeholders</td>
<td>A shared understanding of basic concepts is assumed and not expected to be challenged</td>
</tr>
<tr>
<td>Provides rich, contextualised information</td>
<td>Provides more explicit information</td>
</tr>
<tr>
<td>Generates stories that serve as a memory aid</td>
<td>Generates a structured summary (e.g. minutes) that serves as a memory aid</td>
</tr>
<tr>
<td>Empowers all participants to make a contribution</td>
<td>Participant roles tend to be assigned and contributions carefully managed</td>
</tr>
<tr>
<td>Key issues emerge during the workshop</td>
<td>Key issues decided before the workshop</td>
</tr>
<tr>
<td>Allows flexibility in the path taken in the workshop</td>
<td>Agenda helps to keep people on track, focussed and on time</td>
</tr>
<tr>
<td>Allows divergence and exploration of multiple viewpoints</td>
<td>Encourages convergence thinking to a singular viewpoint</td>
</tr>
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</table>
As can be seen in the table, both approaches have characteristics that were desirable to us in terms of helping the analysts to achieve the greatest success from the workshop. Both approaches also had limitations that meant that on their own they would not be likely to achieve the desired outcomes. Thus it was decided to adopt a hybrid workshop approach as illustrated in the figure below. As the figure illustrates, the general idea was to begin the workshop using narrative approaches to allow for the development of a common language and shared understanding of the issues under study. Using this as a foundation, the workshop then moved into a more structured environment. The focus here was on key questions aimed at generating more explicit arguments and evidence to support the decision making process at which the workshop was aimed.

2.10 The workshop methodology

The following section presents a more detailed description of the hybrid methodology devised for the intellectual capital workshop. It should be noted that the following is not a prescriptive methodology, rather an adaptation specifically designed for use with the Defence Intellectual Capital Project. Generally speaking though this structure, in moving from a narrative and sense making approach through to the use of structured questions, would be suitable for application in areas where 1) the nature of the concept under study is ambiguous, 2) the core concepts are not clearly understood in the same way by stakeholders, and 3) the outputs required include explicit structured arguments, analyses and recommendations.

2.10.1 Workshop sequence

The workshop process involved seven steps:

1. An initial introduction to the problem, and the concept under study (to the whole group).
2. Sharing of stories within small syndicate groups to build a common contextualised understanding of the issues, the framework and the terminology – the narrative circle.
3. A small group sense making activity in which stories were discussed with reference to the explicit components of the intellectual capital framework.
4. A collective sense making activity to explore the issues raised in the syndicate groups in step 3.
5. Creation of detailed case studies in syndicate groups.
6. Discussion of structured questions in smaller syndicate groups.
7. Collective discussion revolving around a set of structured questions.

These steps are discussed in more detail in the following sections.

2.10.2 Introduction to organisational problem or issue

The workshop began with a concise introduction to the organisational issue to be discussed, in this case an introduction to the Defence intellectual capital framework and concepts\textsuperscript{11}, as well as an introduction to the goals of the day’s activities. In particular the three components of intellectual capital were discussed in the context of some general examples. For the purposes of this workshop the level of detail was kept deliberately low. This was deemed appropriate in the context of using narrative to further investigate the concept, since this approach seeks to allow understanding to emerge, almost as a by-product of participants’ stories. What was being sought in this case was to get the audience to generally ‘get’ the idea of intellectual capital, such that they could draw upon their own experiences to find examples of the manifestation of intellectual capital, without them being overly constrained and blinded by the theoretically based definitions and delineations; a danger if the initial introduction had been too detailed.

In addition to introducing participants to the issues a number of additional items were also discussed.

2.10.2.1 Role clarification
Firstly, it was deemed important to provide an introduction to the people involved in running the workshop together with a description of each of their roles, in order to clarify expectations between all the people involved. This was particularly important since a number of participants were adopting hybrid roles, both contributing as would a ‘normal’ participant, as well as assisting with technical and administrative roles such as monitoring the recording equipment. There was a strong desire to create an equal playing field in terms of input, and avoid people being either treated as outsiders or authorities on the basis of their administrative support in running the workshop.

\textsuperscript{11} It is important to note that although in this case a detailed framework was discussed, for many instances a simple issue statement would be sufficient to guide participants as to the core topic.
2.10.2.2 Introduction to narrative reasoning and methodology
Secondly, a very brief introduction to the reasoning and processes behind narrative approaches was also provided. This was deemed important to provide credibility in the minds of participants for the narrative activities in the face of the risk that participants accustomed to more structured approaches may have had negative reactions to being asked to ‘waste time’ telling each other stories, when they had come under the expectation of providing input into the outcomes of the workshop.

2.10.2.3 Ethics and informed consent for recording of conversations
In addition, since the conversations during the day were to be recorded, signed statements of informed consent were collected in accordance with standard ethics protocol for conducting research with human participants (ADFP 1.2.5.3).

2.10.3 Sharing of stories within small syndicate groups: narrative circles

After the introduction of the problem and other preparatory issues, the large group was broken into smaller syndicate groups each comprising four to five people. The syndicate groups were asked to share anecdotes “…about a time when intellectual capital was a salient factor in terms of outcomes in a project, for good or for bad”. Or, in other words, “tell the group members a short story about when intellectual capital had an effect on your work, or on a project you were involved in. It might have been relationship capital, organisational capital, or human capital; it could have been when something about intellectual capital helped the activity work out well, or contributed to it not doing so well”.

2.10.3.1 Additional guidelines for narrative circles
Additional guidelines for the narrative circles were provided initially, and reinforced throughout the session by a wandering facilitator. These included:

1. Only one person to speak at a time, as interruptions do not allow full stories to develop. In cases where someone’s story is not clear, then clarifying questions can be posed (preferably at the end) but debates, corrections, alternative interpretations etc. should be avoided at all costs. 12
2. Keep the stories to a maximum of a few minutes, but still ensure the story is as complete as possible. A good aim is to get enough detail in the stories such that someone from another syndicate group could listen in and get the point. In this case it was desirable that all stories aim to include the following components:
   i. What was trying to be achieved?
   ii. What happened in terms of intellectual capital?
   iii. What were the implications in terms of desirable/undesirable outcomes?
3. Stories should not be statements, opinions or analyses, but rather more complete anecdotes i.e. stating what actually happened, within a framework of a beginning,

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12 If facilitators see this occurring, then one option would be to resolve it using a sort of game in which people are reminded of the guiding principles, but then it is suggested that if one has a counter opinion, one is only allowed to express it indirectly in the form of a complete story of their own.
middle and end. This was important in terms of ensuring that the workshop output was a set of complete anecdotes (as opposed to a set of statements) for the Defence Intellectual Capital Project team to analyse.

4. Aim for at least 15 stories per group to be told by the end of the session. The reason for this was to gather a sufficient sample of anecdotes to illustrate a wide variety of intellectual capital issues, and to allow all group members to provide an input.

2.10.3.2 Capturing the anecdotes
The anecdotes were captured via three channels: 1) in the minds of the participants themselves; 2) on audio recorders for the Defence Intellectual Capital Project team to review; and 3) on a post-it-note (participants were asked that for each anecdote they record the key aspects, or at the very least the title, on a post-it-note for future reference. The post-it-notes produced were to be retained by participant groups for use in the following session).

2.10.3.3 Facilitator(s) roles
An important point of note for facilitators in such sessions is that their role should be as non-directive as possible, and that they should limit themselves to reminding participants about the guidelines if they notice behaviours that contradict them. Whilst not done in the present workshop, a future option might be to provide the group with a card listing the guidelines (outlined in section 2.9.3.1) and encouraging the group to self select a mechanism for enforcing (or at least monitoring) the guidelines.

2.10.4 Sense making activity

After sharing anecdotes, participants remained in their syndicates and undertook a sense making activity (see Kurtz and Snowden, 2003). The purposes of the sense making activity included:
- To start to reveal emergent patterns and themes coming out of the stories about intellectual capital.
- To see how well the intellectual capital related experiences embedded in the stories fit within and across the three components of intellectual capital identified a-priori by the project team.
- To continue to build a common language, emergent definitions, and shared understanding of intellectual capital generally, through dialogue and debate stimulated within the context of common stories.

As mentioned previously, participants had generated and retained labelled post-it-notes for each anecdote told by group members. These post-it-notes, while small on detail in themselves, served as powerful memory aids linked to the much richer information embedded in the group members’ minds in the form of the story. Simply by looking at the title, group members could refer to ‘the fishing story’ or ‘the one about the horse’ and access a much richer body of common knowledge and experience.

Next, a large triangle was drawn on a piece of paper and the three points on the triangle were labelled, in turn, with one of the three components of intellectual capital (relationship
capital, organisational capital, and human capital). Participants were then asked to place their post-it-notes on the paper in a location that best represented how the story sat in terms of the three components (groups had also been provided with definitions of each of the components on a large printout, for reference). For example, if the focus of an anecdote was seen as a relationship capital issue the post-it-note should be placed right over the relationship capital point on the triangle. If it was considered to be half relationship and half organisational capital, then the post-it-note should be placed half way between the two appropriate points.

Additionally, participants were provided with the following guidelines13:
1. Group members should aim to reach consensus on the placement of items.
2. Group members should try to put similar issues together, and then look for clusters and higher order categories.
3. Group members should look for outliers (stories that don’t seem to fit in the classification system, or with the rest of the items being explored).
4. Group members should step in, where appropriate, and ‘reshuffle’ the post-it-notes into a position they are happier with, but the person must discuss their reasoning as they move the item.
5. If an item is seen in two ways by different group members, or there are multiple independent issues embodied in the story (i.e. a relationship capital issue and an organisational capital issue) then these issues can be split into multiple new items.

At its most basic level this exercise was a validation test for the three components of intellectual capital. If the anecdotes all fell neatly into single categories then this would provide support to a reductionist categorisation approach to intellectual capital, and the current boundaries and delineations between the components of intellectual capital. Additional clustering (guideline 2) might indicate sub-categories, and outliers (guideline 3) might indicate the need for an additional component level construct of intellectual capital.

Whilst the outcomes of consensus in terms of clustering and placement were important, in terms of informing the intellectual capital team about the validity of the framework, many equally valuable insights were generated in the cases in which consensus was not reached (i.e. the realm of guidelines 4-5 above). In such cases the process of debate and resolution, where there is ambiguity and a lack of shared understanding, is itself a very positive process. In debates around a well-known and unambiguous topic participants are likely to try to persuade each other of the objective truth of a conclusion, based on presentation of facts. Debates on more ambiguous topics however, within the sort of environment of the sense making activity, are often more about how one sees the issue in question. People seem to be more open to uncovering the meanings associated with each other’s language, and discussion tends to focus on reframing each other’s way of looking at a problem. Debates in such circumstances are valuable not only in that they can crystallise a common agreement

13 These guidelines were developed as a result of one of the author’s experiences as a participant in Cynefin workshops facilitated by Dave Snowden, as well as all the authors’ experiences as participants and facilitators of workshops in general.
on what is a ‘right’ view, but also that they highlight differences with interpretation of language. Recognition (if not resolution) of these language and interpretation issues can reduce the potential for later conflict and provide a foundation for deeper and more efficient exploration of issues.

2.10.5 Collective sense making

Following the smaller syndicate work the whole group assembled for a roundtable discussion on the issues raised in the previous sessions. The primary focus was on the implications for the intellectual capital framework, in particular the validity of its three components. Of particular interest was firstly, the exploration of significant debates raised in the previous session and secondly, similarities and differences in experiences and outcomes between groups. With regard to comparisons between group outcomes, the degree of similarity might be reflective of the significance of an issue in terms of the wider population. For instance, if all groups spent time debating communication in Defence then we may conclude that this issue is of significance to a wider audience. If only one group spent time on the issue, then perhaps it is not as pervasive as may have been thought.

2.10.6 Construction of detailed case studies and structured syndicate discussion

One of the key aims of the intellectual capital workshop was to develop a series of case studies that could be used within the workshop to assess the value of the intellectual capital concept, and its associated framework, for the ADO.

2.10.6.1 Case study construction

Syndicate groups were asked to construct one or more case studies based on a shared anecdote from within the group. To this end, groups were supplied with a template for case study construction, and asked to appoint someone to capture the case study. The template prompted the groups to:

- Provide a short statement setting the broader context in which the events occurred; and
- Provide more detailed commentary about an incident within this context in which intellectual capital had an effect on the outcomes of Defence activities.
- Address the following questions in relation to the anecdote:
  - What was the purpose? (what was trying to be achieved)
  - What happened? (in terms of intellectual capital)
  - What was the implication? (in terms of desired outcomes)
  - What initiatives were (or could have been) spearheaded?
  - What was (or could be) the measure of success?

In addition, groups were requested to: describe incidents within a single broader context and indicate which, if any, of the three components of intellectual capital the incident best illustrated. Groups were requested to make the case study sufficiently clear, detailed and compelling such that a person who was not part of the workshop would be able to understand the story and its significance without any knowledge of intellectual capital.
These case studies were intended to be illustrative case studies that were detailed enough to be compelling examples of intellectual capital’s influence over project outcomes, from the point of view of someone who was not at the workshop. In other words, to tap into the question of *does intellectual capital matter?*

### 2.10.6.2 Structured syndicate discussions - case studies in light of the intellectual capital framework

After the case studies were developed the syndicate was asked to collectively discuss the case study using a series of structured questions designed to focus discussion toward achieving the explicit information output requirements of the workshop. The questions included:

1. Did intellectual capital influence performance or effectiveness in Defence activities?
2. What benefits would consideration of intellectual capital before, during and after have had on outcomes? Who would these benefits be relevant to?
3. How valid and useful is the framework in its current form?
4. Does the framework (i.e. the components) capture all of the intellectual capital elements in the case study?
5. How could the framework implementation help, and what obstacles might we encounter?

If the case studies had been exhaustively explored in terms of the structured question set, participants were asked to consider the questions more generally. Participants were also informed that they would be asked to briefly present their case studies and answers to their questions to the larger group in the following session.

### 2.10.7 Structured collective discussions

The final session provided the syndicate groups with an opportunity to present their case studies and report back to the collective group about their discussions regarding the questions listed above.

#### 2.10.7.1 Sharing of group experiences

Sharing the small groups’ perceptions in the larger group served as a second order synthesis of perceptions and opinions. It was reasoned that the degree of similarity in groups’ experiences and opinions would be an indicator of the wider stability and generalisability of the significance of issues.

#### 2.10.7.2 Open floor large group structured discussions

Once all the groups had finished presenting, the floor was opened to all members of the workshop to discuss the structured questions within the broader Defence context. By this stage the primary focus had begun to shift away from developing shared understanding toward achieving the more explicit information outcomes of the workshop, in order to be able to provide more concrete guidance to the intellectual capital project team on the way ahead. To do this there was a requirement to converge toward a set of explicit recommendations regarding the issues surrounding the application of intellectual capital.
within Defence. Specifically there was a desire to reach some form of concrete assessment of 1) whether or not the framework was understandable and unambiguous, 2) whether the framework should be implemented,\textsuperscript{14} and 3) if so, how might it be implemented and what might the obstacles to implementation be.

2.10.8 Final session – review

The final session was a brief review and summary of the general themes and recommendations that emerged from the day.

2.11 An issue in workshop design and facilitation: moving from small to large groups

Whilst a large group potentially provides a wider range of perspectives, and ensures a number of different stakeholders gain insights into the focal issues, keeping such a large group together for a whole day presents several challenges. In larger groups, the total amount of ‘air time’ per person is reduced. This has numerous implications including:

1. The potential for frustration due to greater time pressures – people have to fight to get a say, and often have to wait a long time (becoming disengaged) before their chance to have input.
2. Due to these time pressures people will tend not to ask clarifying questions, especially when this can only be achieved at the expense of providing more ‘valuable’ input, such as a statement of opinion or ‘fact’.
3. Difficulties in gaining both a depth and shared sense of understanding since misunderstandings often go unchallenged because either they are not recognised or people do not want to ‘waste’ time seeking clarification.
4. The time pressures can also lead to dissatisfaction in individuals who do not have a chance to be heard, which causes a greater sense of frustration toward dominant individuals, leaving participants with negative feelings about the workshop experience.

In the present workshop there was a desire to try and reap the benefits of a large group of stakeholders, but avoid the types of problems associated with large groups described above. To this end, an approach of alternating small group activities with large group activities was undertaken. Generally the detailed information sharing, debate, and clarification occurred within the small groups (narrative circles, initial sense making, initial structured discussions) and the larger groups were used to synthesise the emergent outcomes of the small groups (sharing of sense making experiences, sharing case studies and question responses, and broader discussion of structured questions). This allowed large group discussions to flow smoothly at a higher level of abstraction, with many of the more detailed debates and generation of shared terminology and understanding having been thought about or resolved at the smaller group level. This process also ensured that everyone got significant airtime and input at the lower level, and then felt less pressure to

\textsuperscript{14} Implementation in this context simply means to use in some way to improve outcomes, no assumption is made about what form that implementation might take.
be heard in the larger group settings, since group members had generally developed common arguments and frames of reference by the time the large group discussions occurred. Thus when one person provided input to the larger group, it was likely that the views expressed were essentially representative (or at least sympathetic) to the views held by other group members.

3. Looking back - the workshop in practice

Whilst it is not the intention of this report to comment on the implications and outcomes of the workshop for the Defence Intellectual Capital Project (these outcomes are being reported in a separate document by the OCIO) comment will briefly be made on the workshop structure and process, in terms of achieving the desired goals of the day.

Generally the feeling amongst the organisers was that the workshop structure and process worked well. Verbal feedback from participants during the workshop indicated that they felt fully engaged in the process. Indeed several participants expressed interest in gaining further information about the process for use in their own work activities. The process assisted in addressing most of the structured questions. Whilst some questions were not fully addressed, this was in fact not a weakness of the workshop, but rather a strength. The use of the narrative and sense making approaches promoted an emergent understanding of intellectual capital and related issues, which led the group to conclude that the questions were not relevant at this time. This outcome highlighted the limitations of the traditional structured approach which is often designed to work through a set of structured questions. The hybrid workshop process allowed for an assessment of the relevance of the questions in the face of emergent themes and issues, and refocus and modify them as necessary. This allowed deeper exploration and understanding of issues which may not have been identified, let alone explored, using traditional structured approaches. In addition, alternating from the small groups to the large group contributed to the achievement of the workshop design objectives. In particular, participants were kept engaged and alert, and the positive comments from participants indicated that they generally felt they had an input, and felt that some greater level of understanding had been achieved.

3.1 Conclusion

In conclusion the authors felt that the workshop structure worked very well. In a short time frame it was possible to lead a large group of stakeholders with disparate experiences and frames of reference through a deep exploration of a highly complex and ambiguous concept. Further, the stakeholders walked away with a much deeper understanding of intellectual capital in Defence, and what Defence as an organisation might be planning to initiate in this area. The beginning of a shared language and understanding was created in the stakeholder group, which may form a support base for a more in depth awareness of intellectual capital in the wider Defence community. Finally, the Defence Intellectual Capital Project team was able to extract explicit guidance and recommendations regarding
the validity and clarity of the intellectual capital framework as it stood at the time, and the utility and potential for application and implementation in Defence.

In short the authors feel that the hybrid workshop structure and process was a success, achieving benefits that would not have been achieved by either a narrative approach alone, nor a more traditional structured approach alone. Accordingly, it is recommended that the hybrid methodology be used for other projects facing similar contextual issues such as ambiguous and complex concepts, large stakeholder groups with multiple viewpoints and frames of reference, and the need to achieve structured and explicit outcomes and recommendations in a relatively short time frame. The contextual environment just described represents one that is often found when exploring concepts of C2 within the ADF and as such this methodology has significant application to future studies of C2.
4. References


Office of the Chief Information Officer (2004). *The Case for Measuring, Reporting and Managing Intellectual Capital in Defence*. Information Strategy and Futures Branch, Office of the Chief Information Officer, Department of Defence, Australia with assistance from Noetic Solutions Pty Ltd.


Appendix A: Resources

Further information about anecdotes, stories and narrative
- Visit the Anecdote Pty Ltd website (AUS) for relevant articles, useful links and workshop details – www.anecdote.com.au
- Access the paper *How to use stories to size up a situation* by Shawn Callahan of Anecdote Pty Ltd from: http://www.anecdote.com.au/papers/Narrative_to_size_up_situation.pdf
- Visit the Storytelling website (US) for relevant articles and useful links – www.creatingthe21stcentury.org

Further information about Cynefin and Dave Snowden
- Visit the Cynefin Centre website (UK) for relevant articles, useful links and training opportunities – www.cynefin.net

Further information about the Defence Intellectual Capital Project
Combining Narrative and Structured Approaches to Conducting a Workshop: Evaluation of an Intellectual Capital Framework for Defence

In January 2005, Defence Science and Technology Organisation (DSTO) staff contributed to a workshop exploring the utility and validity of an intellectual capital framework for Defence, developed by the Office of the Chief Information Officer. In particular DSTO staff provided guidance and support to the workshop process. A narrative approach (utilising narrative circles or storytelling, designed to facilitate rapid and in depth sense making) was used to complement a more traditional structured workshop approach (utilising discussions and debates around a structured agenda and question set). The resultant hybrid workshop methodology substantively contributed to the workshop outcomes and was effective in engaging all participants in the process. It is the authors' view that this would have been much more difficult to achieve in a timely fashion using either a narrative workshop or a traditional structured workshop approach alone.

This paper provides an overview of the development of the hybrid methodology and discusses the workshop methodology in practice.