An Australian strategic journey of transformation in the digital age

By Geoffrey Peter Mann

Supervisors

Dr. Paul Cerotti

Dr. Vince Bruno

Word Count: 10,125
Table of Contents

Abstract .................................................................................................................. 4
1. Research Overview .......................................................................................... 5
   1.1 Context ......................................................................................................... 5
   1.2 Research Question ....................................................................................... 6
   1.3 Objective ...................................................................................................... 6
2. Methodology ...................................................................................................... 7
   2.1 Underlying Research Philosophy ............................................................... 7
   2.2 Research Approach .................................................................................... 7
   2.3 Research Strategies .................................................................................. 8
3. Research Methods ............................................................................................ 9
   3.1 Case studies ................................................................................................ 9
   3.2 Action Research Approaches .................................................................... 10
   3.3 Participatory action research .................................................................... 12
   3.4 Methods used for participatory action research ...................................... 14
4. Discipline area .................................................................................................. 18
5. Theory review .................................................................................................. 19
   5.1 Strategic transformation theory ............................................................... 19
   5.2 The theory of the business ................................................................. 20
   5.3 Kotter’s eight steps .............................................................................. 23
   6.1 Scope of Digital Transformation .......................................................... 30
   6.2 Scale of Digital Transformation .......................................................... 31
   6.3 Speed of Digital Transformation ......................................................... 32
   6.5 Sources of Value for Digital Transformation ................................... 34
7. summary of progress ...................................................................................... 37
   7.1 Research Plan ............................................................................................ 38
   7.2 Timeline .................................................................................................... 38
8. References ......................................................................................................... 40
9. Appendix .......................................................................................................... 50
   9.1 Ethics Approval ......................................................................................... 50
   9.2 Research Methods Completed ............................................................. 51
Abstract

A myriad of businesses are experiencing the fourth industrial revolution tidal wave. This tidal wave will have the ability to drown businesses in a short time frame. The businesses that survive the prolific change are the companies who have the ability to transform themselves in the digital era and embrace the new never ending opportunities that lie ahead.

The current reality is that 86% of business are failing to transform themselves as they are not able to be embrace the dynamic environment, causing an opportunity to update the linear strategic transformation models into non-linear environments. Thus, the author will advance Kotter’s eight steps of change by applying digital transformation attributes to develop a strategic process to survive the revolution.

The researcher adopted a participatory action research approach as it enabled a collaborative approach with a security firm who wanted to embrace the revolution wave by pivoting to new opportunities. Within the firm the author selected a relevant project, which was able to advance strategic transformation theory within the realms of digital transformation and provide a strategic process for the industry partner.

Keywords: Digital Transformation, strategic transformation, Digital Attributes, Kotter’s 8 steps, Fourth Industrial Revolution technology,
1. Research Overview

1.1 Context

‘We are at the beginning of a revolution that is fundamentally changing the way we live, work, and relate to one another … what I consider to be the fourth industrial revolution is unlike anything humankind has experienced before’ (Schwab 2017, p. 5).

The business environment has gone through immense changes, such as continuous variations in the external environment which are transforming valid business models into outdate models that will eventually be disrupted by digital technologies (Burnes* 2004; Drucker 2017; Kotter 2014; Kotter & Cohen 2002; Mento, Jones & Dimdorfer 2002; Schein 2010).

Foster & Kaplan demonstrated that only 18 of the companies that were printed in the 1917 Forbes top 100 list are still in the top 100 today, with 61 of the original companies no longer existing. This pace-of-change phenomenon is becoming more rapid and is not decelerating as (Foster & Kaplan 2011) explained, a company that entered the Standard & Poor (S&P) 500 during 1920 would normally last for around 65 years. However, the average time in 2011 for a company to last in S & P 500 is has now dropped down to ten years.

The fourth industrial revolution phenomenon is underpinned by the notion of ‘digital transformation’ as companies are now forced to play offensive, and start to transform themselves in the digital era to control new markets and continue to be relevant (Bharadwaj et al. 2013; Matt, Hess & Benlian 2015; Perkin & Abraham 2017). The potential growth of digital transformation should not be underestimated as McKinsey & Company have calculated that the impact of ‘next frontier of productivity and economic uplift for Australia, [will be] between A$140 billion and A$250 billion to Australia’s GDP by 2025’ (Blackburn 2017, p. 2).

However, digital transformation is not an easy journey, as 70% of transformation programs fail (Balogun & Hailey 2004), which increases to 84% for digital transformation programs (Bruce Rogers 2016). What is even more confusing, is the frameworks from strategic transformation literature that is supposed to decrease their failures are providing very sequential models (Kotter 2014; Lewin, Kurt 1947; Sarayreh, Khudair & Barakat 2013; Schein 2010; Tichy & Devanna 1986) in a time that is supposed to be dynamic and fluid (Blackburn 2017; Schwab 2017). Hence, creating the question of how can you have a successful transformation in the digital era?

To narrow the research for digital transformation, the author will partner with an international security firm who has the objective to be successful in transforming itself within the digital era. The author will further narrow the scope by selecting an individual project within the security firm, which is currently going through digital transformation with an external partner in the security industry. Hence providing a contextual situation of a business project that is adopting a strategic framework which can handle the modern dynamic environments.
1.2 Research Question
Due to the new phenomenon of the fourth industrial revolution and contextual investigation, the overall research question has developed to be;

**How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?**

The research question narrows the research scope around digital transformation in the security industry. In particular, focusing around an organization pivoting their direction by adopting digital technology from the fourth industrial revolution.

Though, the research question still remains broad, as digital transformation is a very broad topic, as it can cover Information Systems, Human Resources, Strategy, accounting and many more disciplines. Therefore, the author has extended the research question to be;

**How does an Australian security company transform within a security ecosystem to embrace virtual patrols?** Advancing the theoretical strategic process to enable sustainable digital transformation of an organization.

The modified research question narrows the scope to a strategic process of transformation within the digital era. Focusing particular attention on the strategic transformation strategies that are required for a security firm to transform itself in the digital era. The strategic process will embrace the seminal literature of strategic transformation frameworks while modernizing them from digital transformation articles to develop a process that can handle the unstable times that we currently live in.

1.3 Objective

The research project has two main objectives to ensure it can further advance the conceptual frameworks of strategic transformation in the new era of the fourth industrial revolution.

1. **Develop a strategic process for how a security firm digitally transform themselves.** This will be focused around advancing the seminal work of strategic transformation frameworks (Drucker 2017; Kotter 2014; Lewin, Kurt 1947) from digital transformation research (Bharadwaj et al. 2013; Brown et al. 2014; Hess et al. 2016; Westerman 2016) to develop a non-linear strategic process.

2. **Develop a framework for how a security firm can work with their internal & external networks to further develop agile capabilities.** One of the hardest barriers of transformation is having the agility and capabilities to handle the turbulent times (Battistella et al. 2017; Doz & Kosonen 2008; Goldman 1995; Overby, Bharadwaj & Sambamurthy 2005). Therefore, a sub question is to analyse if an external ecosystem can assist the strategic process of transformation in the digital era.
2. Methodology

Section 2 & Section 3 will explain the research paradigm, methodology and methods that research project will adopt to answer *How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?*

2.1 Underlying Research Philosophy

Research philosophies dictate what type of knowledge is possible and ways of measuring the social constructs in our reality (Collis & Hussey 2013; Crotty 1998; Sauders, Lewis & Thornhill 2003). The research philosophy can be considered the epistemology as its ‘concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate’ (Crotty 1998).

Numerous epistemologies exist, but there are two key epistemological positions, these are *Positivism* and *Interpretivist* (Collis & Hussey 2013; Orlikowski & Baroudi 1991; Quinlan et al. 2011).

The author has decided to use an *interpretivist* approach as it ‘emphasizes the difference between conducting research among people rather than objects such as trucks and computers’ (Sauders, Lewis & Thornhill 2003, p. 106). Hence, an interpretivist holds the social reality is subjective and social actors will interpret things differently by their personal set of meanings (Denzin & Lincoln 2011; Orlikowski & Baroudi 1991).

Transformation in the digital age requires a further understanding on how different social actors embrace transformation in the digital era, which can be captured through an in-depth interpretivist approach.

2.2 Research Approach

In the context of business research, there are usually two main research approaches to developing or modifying theories (Collis & Hussey 2013; Sauders, Lewis & Thornhill 2003). The two research approaches are an *inductive* approach which focuses on building theory or a *deductive* approach which focuses on testing and modifying theory (Blaikie 2009).

The author has decided to use an inductive approach as it is focused around developing a conceptual and theoretical structure from the social actors. In particular, an ‘*inductive approach is likely to be particularly concerned with the context in which such events were taking place*’ (Sauders, Lewis & Thornhill 2003, p. 119). Hence, an inductive approach often develops their theories from observations made in the social construct (Neuman 2006). This research, will collect initial data through semi-structured interviews and observations to advance strategic transformation frameworks which are relevant to the security industry.
2.3 Research Strategies

The two main research strategies are Qualitative methods and Quantitative methods as they both approach analysing data in two different designs (Blaikie, 2009; Bryman, 2012). Blaikie supports Kaplan and Maxwell’s notion of qualitative methods as it explains qualitative methods ‘are produced by either social actors or … some aspect of social life’ (Blaikie, 2009, p 273).

The author has decided to use a qualitative approach which ‘[stresses] the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry’ (Denzin & Lincoln 1994, p. 8). Thus, allowing the author to collect and validate non-mathematical data points, such as culture and behaviors.

In addition, a qualitative approach has also been widely adopted by other transformation academics to understand the key social constructs (Auguste 2013; Day & Atkinson 2004; Hess et al. 2016; Pollack & Pollack 2015).
3. Research Methods

Due to the research paradigm and research philosophy, the author will conduct action research inside a case study. This approach will allow the author to understand the specific phenomenon of how a security company transforms with an external partner to embrace digital technology? (Kemmis, McTaggart & Nixon 2013; Stringer 2013; Yin 2009). In addition, an action research approach within a IT case study is applicable as ‘IS is a highly-applied field, almost vocational in nature’ (Baskerville, R & Wood-Harper 1998, p. 90). The next sections will outline the methodologies and how the methods will be applied to research.

3.1 Case studies

One of the most widely used methods for a qualitative project, is using a single or multiple case study in specific areas (Yin 2009). A case study approach can be defined as a ‘strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within it its real-life context using multiple sources of evidence’ (Robson & McCartan 2016, p. 150).

Hence the case study approach will be used for a singular project within a security firm to understand its transformation in the digital era. In particular a case study approach can allow a in depth understanding of the transformation phenomenon in a security project where contextual issues, such as culture and behaviour can have be observed (Yin 2009).

In addition, a case study also supports the notion of developing a theory around the specific phenomenon. As stated ‘theory development as part of the design phase is essential, whether the ensure case study purpose is to develop or test theory’ (Yin 2009, p. 35) . Therefore, the author’s development of strategic transformation framework is in line with a case study approach, as they can be considered guidelines around the specific case study.

Overall, the case study method provides a structured framework around how to research a specific phenomenon, however, is limited on the approaches to implement change. Therefore, the author will use the lens of a case study framework to establish a singular security project (Yin 2009). Then applying action research within the case study to establish methods of collaborating in transformation environment (Kemmis, McTaggart & Nixon 2013).
3.2 Action Research Approaches

Action Research was first coined by (Lewin, Kurt 1947), Lewin once stated ‘one cannot understand an organization without trying to change it’ (Burnes* 2004, p. 312).

In principle, action research is pivoted around the ability to engage in a social context and bring about change to solve the struggles (Baskerville, RL 1999; Stringer 2013). Hence, action research is still prominent today in both qualitative & quantitative approaches to advance knowledge and solve industry diplomas (Baskerville, R & Wood-Harper 1998; Orlikowski & Baroudi 1991; Reason & Bradbury 2001; Stringer 2013).

From an information systems perspective, (Baskerville, RL 1999, p. 7) has outlined four major characteristics.

1. Action research aims at an increased understanding of an immediate social situation, with emphasis on the complex and multivariate nature of this social setting in the IS domain.

2. Action research simultaneously assists in practical problem solving and expands scientific knowledge.

3. Action research is performed collaboratively and enhances the competencies of the respective actors. A process of participatory observation is implied by this goal.

4. Action research is primarily applicable for the understanding of change processes in social systems.

Thus, action research methodology is in line with the research question, as its aim is focused around organizational development in the digital world. Furthermore, the project is currently situated in the context of change, providing further reasons to collaborate together and develop a deeper understanding of digital transformation.

This approach is not a new advancement, as other academics have often used action research when analysing strategic transform in order to advance a further understanding about the phenomenon (Ansari & Bell 2009; Pollack & Pollack 2015; Street & Meister 2004). While action research is embedded in qualitative methodology, it still has its limitations.

One of the main limitations of action research is that it can be considered to be consulting, as both approaches have substantial similarities of improving a business process (Baskerville, RL 1999).
To overcome this limitation, academics need to ensure that research provides a dual cycle process to advance the understanding of the research phenomenon (Greenwood, Whyte & Harkavy 1993; Whyte 1989) while also improving the industry partner situation regarding their certain phenomenon (Baskerville, RL & Wood-Harper 1996; Davison, Martinsons & Kock 2004; Street & Meister 2004). As demonstrated by diagram 3.1, both cycles are running simultaneously, as the researcher is advancing the research community while also solving the industry interest (McKay & Marshall 2001). In contrast to a consultant who would be solely interested in advancing the industry interests.

![Diagram 3.1](image)

**Diagram 3.1**

(McKay & Marshall 2001)

In the context of this research, the author will advance the conceptual framework of strategic transformation in the digital era phenomenon while also providing a strategic process for the industry partner.

The final aspect of action research which needs to be explored, is what type of action research will be conducted, as action research over time has develop numerous forms. Some of the forms of action research in Information Systems are canonical action research (Baskerville, R 1993) action science (Reponen 1992) action learning (Naur 1983), participant observation (Jepsen, Mathiassen & Nielsen 1989) and participatory action research (Street & Meister 2004).

In this research situation, the author has decided to use participatory action research (PAR) and will use the next section to expanded on how it will be used in the context of a security firm transforming in the digital age.
3.3 Participatory action research

Participatory action research can be considered an extension to action research, as it takes the perspective of ‘action research that involves practitioners as both subjects and researchers’ (Argyris & Schön 1989, p. 612). The most distinguishing characteristics are the ability for industry and academics to collaborate together on the same level to solve the same phenomenal problem.

Baskerville discusses the importance of ‘researchers and clients bringing their own distinctive sets of theoretical knowledges into the action research process’ (Baskerville, RL 1999, p. 17) It’s the author obligation to bring relevant academic theory around the phenomena, while it’s the industry partner obligation to bring the contextual experiences.

While participatory action research has been used in a variety of different ways, a key leader of the participatory action research provides four underlying principles (McIntyre 2007, p. 1)

1. A collective commitment to investigate an issue or problem
2. A desire to engage in self- and collective reflection to gain clarity about the issue under investigation
3. A joint decision to engage in individual and/or collective action that leads to a useful solution that benefits the people involved
4. Building of alliances between researchers and participants in the planning, implementation and dissemination of the research process

In the research circumstances, the author will join the project team and allow team members to be participants of the research who have the ability to modify the research to ensure it fits the contextual specifications. This provides the author an opportunity to advance strategic transformation theory into the digital era within the contextual phenomena. These opportunities of collaborative work should not be underestimated as ‘current stagnation in our academic field is due in part to the sharp separation between the academic world and the world of practice. PAR provides one pathway toward intellectual revitalization’ (Whyte 1989, p. 384)

One of the key distinguishing facts of action research is the cyclical process of diagnosing a situation then acting upon the certain situation (Argyris & Schön 1989; Greenwood, Whyte & Harkavy 1993; McIntyre 2007). This cyclical process is usually repeated until the research problem has been addressed to a satisfactory level. In the context of this research project, the author will adopt (Susman 1983) action research cycle as demonstrated in diagram 3.2.
Diagnosing
Diagnosing corresponds to the identification of the contextual problems that are causing the security firm to transform in the digital age. The diagnosing stage will develop basic theoretical assumptions about the certain project through observations of the social factors (Baskerville, RL 1999).

Action planning
Action planning involves the researchers and participants to collaborate together to decide the next plan to allow the transformation in the digital era. In addition, action planning will be able combine the literature and industry knowledge collaboratively to develop a solution (Baskerville, RL 1999; Kemmis, McTaggart & Nixon 2013).

Action taking
Action taking is then implementing the planned action from the previous step. The researcher and the industry experts will work together to ensure the relevant action has been implemented to support digital transformation (Baskerville, RL 1999; Kemmis, McTaggart & Nixon 2013).

Evaluating
Once the action has been completed, the participants and researcher evaluate the outcomes of the certain project. The evaluation stage includes analysing the theoretical implications and determining if the updated strategic transformation steps were successful or unsuccessful (Baskerville, RL 1999; Kemmis, McTaggart & Nixon 2013).

Specifying learning
The final stage can also be considered the reflection stage, as it draws conclusion about the theoretical implications and determines its impact in strategic transformation and digital research community (Baskerville, RL 1999).
3.4 Methods used for participatory action research

The methods selected for this research project were selected within the framework of case studies and action research methodologies, to ensure relevant data collection (Stringer 2013; Yin 2009). The methods that will be utilised will be semi – structured interviews, observations and participatory observations.

Using three data collection methods will help to establish triangulation as ‘each new set of data increases our confidence that the research results reflect reality rather than methodological error’ (Blaikie 2009, p. 265). Triangulation can be considered crucial in a qualitative approach due to the research bias or methodological errors (Blaikie 2009; Yin 2013). The author will expand upon each method and how it will be utilised within the research project.

**Semi structured interviews**

Interviews are considered one of the most fundamental avenues of data collection methods for a case study due to the in-depth data that it can obtain (Blaikie 2009; Denzin & Lincoln 1994; Yin 2013). Semi structured interviews can be considered to be a ‘guided conversation rather than a structured question, [as] your actual stream of questions in a case interview is likely to be fluid rather than rigid’ (Yin 2013, p. 106). Thus, the author will be using a semi-structured interviews to allow this fluid conversation.

The advantages of using semi-structured interviews is the researcher’s ability to ensure all social factors are discussed while simultaneously allowing the social factors to develop (Denzin & Lincoln 1994; Yin 2013). The semi-structured interviews will be used through the diagnosing, evaluating and specifying learning phase of the action research cycle, to collect in-depth data about the social factors of the strategic process of digital transformation (Baskerville, RL 1999; Kemmis, McTaggart & Nixon 2013; Stringer 2013).

**Observations**

The second method will be direct observations of the selected project to ascertain how the security firm utilizes the current strategic process to transform in the digital era. These observations will arise from meetings, office environment and networking functions (Yin 2013). This type of method can validate the data collected from the semi-structured interviews and provide an additional perspective on the phenomenon (Blaikie 2009; Collis & Hussey 2013).

The observations will be used for diagnosing, action planning and evaluating cycles as it will enable the researcher to gain a clearer picture of the social context and how the participants are handling the current phenomena (Stringer 2013)
**Participant observation**

The final method that will be adopted is participant observation which is similar to observation with the expectation of *the researcher attempts to participate fully in the lives and activates of subjects and thus becomes a member of their group, organisation or community* (Sauders, Lewis & Thornhill 2003, p. 283). This method can allow the researcher to collaborate with project participants and validate current strategic transformation literature in the digital era.

The participant observation will be used through the action planning, action taking and evaluation cycles to allow theatrical frameworks and industry leaders to come together and solve the current phenomenal problems (Stringer 2013).

**Data Analysis**

Data analysis is the process that the qualitative data is analysed to ensure the phenomenon under investigation has been developed through deep and rich data points (Quinlan et al. 2011) In the territory of data analysis, there are to be considered three different content analysis approaches, these are conventional, directed and summative.

In the context of this research the author has decided to use a directed content analysis as a *directed approach to content analysis is to validate or extend conceptually a theoretical framework or theory* (Hsieh & Shannon 2005, p. 1281). The author will adopt (Hsieh & Shannon 2005; Quinlan et al. 2011) directed steps to analyse the data gathered from the methods previously mentioned.

1. Transcribed the relevant data from observations and interviews
2. Code initial data to key themes developed from the theoretical framework
3. That data that cannot be coded from the initial themes will be identified as new categories

The *main strength of a directed approach to content analysis is that existing theory can be supported and extended* (Hsieh & Shannon 2005, p. 1283). This approach will enable the author to advance Kotter’s eight steps of change while also categorizing the new digital attributes required for digital transformation.
Summary

These methods combined will allow the author to collect the relevant data to develop a strategic process which in turn will enable the transformation of an organization in the digital era and answer *How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?* Diagram 3.3 provides a complete overview of the selected research paradigms, methodology's and methods used for this research.

While diagram 3.3 provides a comprehensive overview, diagram 3.4 provides a strategic review of the action research cycle within the security case study. It should be noted diagram 3.4 only shows the first cycle, as action research develops and changes throughout the project. (McIntyre 2007)
Diagram 3.4

**Action Research Cycle 1**

**Diagnosing**

**Methods:**
Observations & Interviews

**Objective:**
Analyse the current situation of the project.

**Participants:**
Invested employees within Security firm about digital transformation

**Action Planning**

**Methods:**
Interviews & Participant Observation

**Objective:**
Develop a plan with the project team to change the current situation to embrace digital transformation.

**Participants:**
Project team members of the selected action research project

**Action Taking**

**Methods:**
Participant Observation

**Objective:**
Implement the plan with the project team to change the current situation to embrace digital transformation.

**Participants:**
Project team members of the selected action research project

**Evaluating**

**Methods:**
Observation & Interviews

**Objective:**
Evaluate if the initial plan was for digital transformation was successful

**Participants:**
Project team members of the selected action research project

**Specifying Learning**

**Methods:**
Observation & Interviews

**Objective:**
Reflect upon the action cycle and determine its impact on theoretical frameworks.

**Participants:**
Invested employees within Security firm about digital transformation

---

Geoffrey Peter Mann
S3426657
4. Discipline area

The research nature of *how does an Australian Security company transform itself within security ecosystem to embrace virtual patrols*’ has two research discipline areas.

The first discipline area is focused around the digital technology, in particular digital transformation. Digital transformation can be defined as *‘digital transformation encompasses everything from the cultural and organizational change required to the related use of new digital technologies’* (Brown et al. 2014, p. 165). This perspective is focusing on how a security firm can embrace and utilise the new opportunities in the digital era. The digital transformation attributes will be focused around the seminal work of (Bharadwaj et al. 2013) digital business strategy, which was then modified to include key attributes from digital transformation articles (Brown et al. 2014; Hess et al. 2016; Westerman 2016).

The second discipline area is focused around the transformation of a security company, which can be considered the strategic process of transformation. A transformation, can be considered *‘the process of continually renewing an organization direction, structure, and capabilities to serve the ever changing needs of external and internal customers’* (Moran & Brightman 2000, p. 66). Hence providing a context of how a security firm can renew a direction and capabilities to serve the external customers digital demands (Cao, Clarke & Lehaney 2000; Moran & Brightman 2000; Todnem By 2005)

The main focus points within transformation is strategic process of transformation which is focused around the seminal work of (Kotter 1995, 2014)

Therefore, a multi discipline approach is required to develop a strategic process to enable transformation of an organization in the digital era. Table 4.1 provides an overview of the discipline area.

<table>
<thead>
<tr>
<th>Discipline Area</th>
<th>Justification</th>
<th>Key Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital transformation</td>
<td>To develop a process to transform</td>
<td>(Drucker 2017; Kotter 1995, 2014; Lewin, Kurt 1947)</td>
</tr>
<tr>
<td>Strategic process of transformation</td>
<td>To develop further attributes of transformation in the digital age</td>
<td>(Bharadwaj et al. 2013; Brown et al. 2014; Hess et al. 2016; Westerman 2016)</td>
</tr>
</tbody>
</table>

Table 4.1

Then finally the community of practice will be around the security and defense industry due to the nature of the research project, being a security project.
5. Theory review

The review of the literature will be separated into two sections to define the digital transformation journey. The first section will be focused around the transformation theory as it will draw upon works from seminal strategic transformation articles (Drucker 2017; Kotter 1995; Lewin, Kurt 1947; Schein 2010). The second section will focus around the digital aspects, and the digital attributes required to handle digital transformation (Bharadwaj et al. 2013; Hess et al. 2016; Westerman 2016)

5.1 Strategic transformation theory

The environment that we currently live in is extremely dynamic in that it can cause a ‘company that was superstar an only yesterday, [to become] stagnating and frustrated, in trouble and often in a seemingly unmanageable crisis’ (Drucker 2017, p. 2).

One of the answers to survive the dynamic phenomenon is called strategic transformation, which can be considered ‘the process of continually renewing an organization direction, structure, and capabilities to serve the ever changing needs of external and internal customers’ (Moran & Brightman 2000, p. 66). Creating the notion of the company’s ability to recognise the current digital age and being able to transform itself to handle the new demands of the external environment.

Strategic transformation has been categorised in many different ways over the years as demonstrated in table 5.1, which has been drawn up from the works of (Cao, Clarke & Lehaney 2000; Todnem By 2005) review of strategic transformation.

<table>
<thead>
<tr>
<th>Strategic and non-strategic change</th>
<th>Pettigrew, 1987; Rajagopalan and Spreitzer, 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental and radical change</td>
<td>Burnes 1992; Johnson and Scholes 1993; Goodstein and Warner, 1997</td>
</tr>
<tr>
<td>Incremental change and quantum change</td>
<td>Greenwood and Hinings, 1993</td>
</tr>
<tr>
<td>Changes of identity, co-ordination and control</td>
<td>Kanter et al, 1992</td>
</tr>
<tr>
<td>Human-centred classification of change at individual, group, inter-group or organisation level</td>
<td>Burnes 1992</td>
</tr>
<tr>
<td>Planned change and emergent change</td>
<td>Wilson 1992</td>
</tr>
<tr>
<td>Change in terms of scale and centrality to the primary task of the organisation</td>
<td>Buchanan and boddy, 1992</td>
</tr>
<tr>
<td>Continuous and punctuated equilibrium</td>
<td>Balogun and Hope Hailey, 2004</td>
</tr>
<tr>
<td>Discontinuous, smooth incremental and bumpy incremental</td>
<td>Groudny, 1993</td>
</tr>
</tbody>
</table>

Table 5.1
(Cao, Clarke & Lehaney 2000; Todnem By 2005)
While the investigation may adopt a strategic transformation theory, reviewing each strategic transformation approach is outside the scope of this research as the focus is around the strategic process to enable digital transformation in the digital age.

Thus, the focus is around i) providing an underpinning theory to explain if transformation is required ii) providing systematic framework to enable the process of transformation in a digital era. Section 5.2 will provide an underlining theory to outline if transformation is required, while 5.3 will provide the systematic framework to enable the process of transformation.

The theory and framework will then be updated from the literature review of digital transformation, to provide a strategic process to enable transformation in the digital era in the context of the security industry. Which will endeavour to provide a model to answer **How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?**

### 5.2 The theory of the business

The theory drawn upon to provide an outline of transformation will be from the seminal work of Drucker, who has been considered the father of modern management in the times of uncertainty (Daly & Walsh 2010; Drucker & Wilson 2001; Welch 2014; Wind 2009). Drucker has been a management consultant, author and educator who has published such seminal works as *People and performance* (Drucker 1995), *The age of discontinuity* (Drucker 2011), *Management challenges for the 21st century* (Drucker 2007).

Drucker proposed a theory called ‘The Theory of the Business’ in 1994, which can be adopted to determine if a strategic process for digital transformation is required. The seminal work that outlined the theory of the business was originally published in 1994 in the Harvard business review, and has been recently republished in Harvard business review Classics (Drucker 1994, 2017).

(Drucker 2017) proposed a theory that argues every business has a theory of business as its built upon assumptions which guide and monitor the sustainability and growth of a certain business. The author has decided to use the ‘theory of the business’ as one of the key foundations of the research for the following reasons;

1. Developed by the founder of modern management in times of turbulent environments (Daly & Walsh 2010; Drucker & Wilson 2001; Welch 2014; Wind 2009).

2. Provides simplicity in times of complexity (Daly & Walsh 2010)

3. The theory is multi discipline allowing the author to apply the theory to the context of the research (Wind 2009)

The theory of the business is built around, assumptions, specifications and early warning signs to inform companies when their theory is no longer relevant in reality as demonstrated in diagram 5.1 (Burke 2017; Drucker 1994; Wind 2009).
Diagram 5.1

Theory of the Business

Theory of the Business Assumptions

1. Assumptions about the external environment of the organisation such as society and its structure, the market, the customers and technology.

2. Assumptions about the specific mission of the organization.

3. Assumptions about the core competencies needed to accomplish the organization mission.

Transformation or Change is required if

Theory of the Business Specifications

1. The three assumptions must fit reality

2. All three assumptions must fit or be congruent with one another

3. The theory of the business must be known and understood by all organizational members

4. The theory needs to be tested constantly.

Theory of the Business Early Warnings

1. When the organisational goals were met

2. When rapid growth was experienced

3. When unexpected success whether its one's own or competitor was experienced

4. When a competitor experienced unexpected success or failure
Overall the theory of the business is stating that a valid company can only remain
vailed if it transforms with the reality it surrounds itself with, otherwise it will
eventually disappear (Burke 2017; Daly & Walsh 2010; Foster & Kaplan 2011).

Thus, providing the author with a theoretical theory of a strategic process to decide if
a company needs to transform in the digital age or if its current theory is valid (Burke
2017; Daly & Walsh 2010; Drucker 2017).

The author will draw upon a recent example to demonstrate how the theory could
provide companies insights that a change in direction was required to remain
relevant.

The example is drawn upon the current situation with the taxi industry and Uber, as
the taxi industry is becoming increasingly disrupted by the new digital era. This
example is focused around (Cramer & Krueger 2016) case study of Uber in America.
Uber’s was able to adopt new digital technology in the market while also provide a
mission of providing cheaper and more reliable transport (Uber 2017).

Uber’s approach changed the industry assumptions of technology and missions,
which require the taxi industry to realise their assumptions no longer fitted reality.

The taxi industry realised too late that the theory of the business was no longer valid,
which forced the taxi industry to react to a transformation to handle the digital
disruption of reality (Cramer & Krueger 2016; Drucker 2017). The theory of the
business could have provided the taxi industry with ample warning if they realised
their Theory of the business specifications did not meet reality.

The example of the taxi industry demonstrated how the disruptive environment can
impact your company. Reinforcing the importance of knowing if your theory of the
business is valid or if requires management to take correctives action to ensure the
company no longer becomes invalid (Cramer & Krueger 2016; Daly & Walsh 2010;
Drucker 2017). As a ‘degenerative disease will not be cured by procrastination. It
requires decisive action” (Drucker 2017, p. 47). The Theory of the Business will
decide if company has a disease or not, while section 5.3 will further expand upon
the strategic process to cure the disease.
5.3 Kotter's eight steps

Companies need to accept that the status quo of a business is ‘a live process, like a river which moves but still keeps to a recognisable form’ (Lewin, K 1943, p. 3). Thus, the continuous changes in the external environment are transforming valid business models into outdated models that will eventually be disrupted by the new reality (Burnes* 2004; Drucker 2017; Kotter 2014; Kotter & Cohen 2002; Mento, Jones & Dirndorfer 2002; Schein 2010).

Building upon the previous section, a strategic process is required to transform a company that currently has an invalid theory of the business due to a new reality, such as the fourth industrial revolution (Blackburn 2017; Drucker 2017; Schwab 2017).

One of the first academics to provide a model to support a company’s transformation during turbulent times, is Kurt Lewin, who has been considered the founding father of change management (Burnes* 2004; Cummings, Bridgman & Brown 2016; Lewin, Kurt 1947; Sarayreh, Khudair & Barakat 2013). The Kurt Lewin model proposed three steps to ensure successful change (Burnes* 2004; Lewin, Kurt 1947)

1. Unfreezing the company’s behaviour to destabilised the equilibrium
2. Moving the company’s behaviour and acting upon the new desire stage
3. Refreezing the company to stabile the company’s new equilibrium

The model has then been adopted by other academics to create a framework for a transformation process to enable companies to change. Overtime further strategic transformation academics, consultants and researchers (Kotter 1995; Peters & Waterman 1984; Schein 2010; Tichy & Devanna 1986) have developed processes to handle change during turbulent times as shown in diagram 5.2.
While there are numerous models, the author has decided to use the seminal work of Kotter’s 8 step framework to outline the strategic processes of transformation in the digital age.

Kotter’s is a Professor at Harvard University, whose work remains ‘a key reference in the field of strategic transformation’ (Appelbaum et al. 2012, p. 765). Kotter’s 8 steps change process provides simplicity to a transformation process during a time of complexity (Burke 2017; Kotter 2007; Mento, Jones & Dimdorfer 2002). The author has decided to use ‘8 Steps of change’ as the framework of the research for the following reasons;
1. Developed by a seminal academic who has a strong reputation in the field of strategic transformation (Appelbaum et al. 2012; Burke 2017)

2. Provides simplicity in times of complexity with eight practical and relevant steps to transformation (Appelbaum et al. 2012; Auguste 2013; Burke 2017)

3. Provides a tested framework for a strategic process to handle transformation which can be adopted to digital transformation (Auguste 2013; Kotter 2007)

Kotter’s 8 steps of change was initially published in the Harvard business review (Kotter 1995), which was then expanded into the book called leading change (Kotter 1996). Eventually the initial work of Kotter got republished by Harvard as Kotter’s work still remains definitive (Kotter 2007). Even Kotter states ‘how robust the conclusions from these studies remain today – how they still speak to us even though the world facing business leaders has changed so much’ (Kotter 2014, p. 6).

The author notes that Kotter has published other works (Kotter 1995, 1996, 2007, 2008; Kotter & Cohen 2002; Kotter & Rathgeber 2006), however the author will use the original theory of ‘8 Steps of Change’ (Kotter 2007) as it is the most relevant and suitable to answer ‘How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?’ While the theory will be based around (Kotter 2007) seminal work, it will included some of Kotter’s other work which is relevant to the research.

Furthermore, Kotter’s eight steps does not fit within one discipline as it has been applied in many different industries, such as nursing (Springer et al. 2012), sports (Langton, Khan & Lusina 2010), Education (Eddy 2003), Pharmaceutical (Joffe & Glynn 2001), Finance & Insurance (Pollack & Pollack 2015), Aerospace (Day & Atkinson 2004), Non for profit (Richesin 2011) and Libraries (Sidorko 2008).

To illustrate the applicable nature of Kotter’s Theory, the author will explain each step and its relevancy to the research question.

1. Establishing a sense of urgency
In essence, creating a sense of urgency is where the transformations can begin or fail, as it has the ability motivate people to a new opportunity (Kotter 2007). A low sense of urgency around the transformation can cause complacency between employees which eventually causes the transformation to dissolve (Kotter 1996, 2007; Springer et al. 2012). Increasing urgency can be difficult, as it can also sometimes causes a crises or a source of anxiety where employees would rather focus on self-protection (Kotter & Cohen 2002)

2. Forming a powerful guiding coalition
Transformation requires more than a single person having an idea, because no one individual person can transform the whole company by themselves, even if it is the CEO (Kotter 1995, 1996, 2007). Therefore, a power guiding coalition of employees who are motivated by the sense of urgency is required to enable the transformation (Kotter 2007; Langton, Khan & Lusina 2010).
3. Creating a vision
Sometimes stepping into the unknown without a map can cause employees to turnaround and bunker down before the change hits (Kotter 1996, 2007). Therefore, transformation needs a vision that can develop a shared sense of a desirable future in times of uncertainty (Eddy 2003; Kotter 2007).

4. Communicating the vision
Some of the phrases you might hear from employees involved with company transformation is ‘we’ll never be able to pull this off’ or ‘good heavens, what will happen to me’ (Kotter & Cohen 2002). The most rationale response to overcome these phrases is communicating a meaningful vision to motivate hundreds or thousands of individuals to make a difference towards the transformation, even if it means short-term sacrifices (Joffe & Glynn 2001; Kotter 2007, 2014).

5. Empowering others to act on the vision
Empowerment over time has become a buzz word, however in the world of transformation is has become so crucial, as it can enable employees to act upon the new vision (Kotter 1995, 1996, 2007). As this phase is primarily focused around employees acting upon the transformation, and personally taking up the challenge of the transformation (Pollack & Pollack 2015).

6. Planning for and creating short-term wins
Transformation is not a short term process and sometimes there is a risk of losing momentum, even if there was high urgency created by the guiding coalition at the beginning (Kotter 1995, 1996, 2007). Thus, the sixth phase is focused around the ability to generate short term wins which have the ability to continually energize and build momentum for the overall transformation (Day & Atkinson 2004; Kotter 2007; Kotter & Cohen 2002).

7. Consolidation improvements and producing still more change
It can be difficult to keep transforming, especially if you think your company is on the top of the mountain (Kotter 1995, 1996, 2007). This attitude can become extremely dangerous, because ‘after a big win, urgency can slide with remarkable speed into a new complacency – a problem under any circumstances, but much more significant problem in an era of change’ (Kotter 2008, p. 171). Reinforcing the notion, urgency of change is still vital, even if the company thinks the transformation is nearly completed (Richesin 2011).

8. Institutionalizing new approaches
Have you ever had the experience of walking into a room of unruly children, and stopping them from their madness, only to discover that they have gone back to their madness once you have left the room? Well, this can be like transformation, as it is ‘until new behaviours are rooted in social norms and shared value, they are subject to degradation as soon as the pressure for change is removed’ (Kotter 2007, p. 127). The final phase is primarily focused about embedding the new norms and behaviour of the transformation in the culture of the company (Sidorko 2008).
EIGHT STEPS TO TRANSFORMING YOUR ORGANIZATION

1. Establishing a Sense of Urgency
   - Examining market and competitive realities
   - Identifying and discussing crises, potential crises, or major opportunities

2. Forming a Powerful Guiding Coalition
   - Assembling a group with enough power to lead the change effort
   - Encouraging the group to work together as a team

3. Creating a Vision
   - Creating a vision to help direct the change effort
   - Developing strategies for achieving that vision

4. Communicating the Vision
   - Using every vehicle possible to communicate the new vision and strategies
   - Teaching new behaviors by the example of the guiding coalition

5. Empowering Others to Act on the Vision
   - Getting rid of obstacles to change
   - Changing systems or structures that seriously undermine the vision
   - Encouraging risk taking and nontraditional ideas, activities, and actions

6. Planning for and Creating Short-Term Wins
   - Planning for visible performance improvements
   - Creating those improvements
   - Recognizing and rewarding employees involved in the improvements

7. Consolidating Improvements and Producing Still More Change
   - Using increased credibility to change systems, structures, and policies that don't fit the vision
   - Hiring, promoting, and developing employees who can implement the vision
   - Reinvigorating the process with new projects, themes, and change agents

8. Institutionalizing New Approaches
   - Articulating the connections between the new behaviors and corporate success
   - Developing the means to ensure leadership development and succession

Diagram 5.3
(Kotter 2007)
As illustrated throughout the theory and framework review, the world is in constant flux as globalisation, economic policies, sanctions, technology adoption and government regulations and many other are disrupting the industries around us (Day & Atkinson 2004; Eddy 2003; Joffe & Glynn 2001; Langton, Khan & Lusina 2010; Pollack & Pollack 2015; Sidorko 2008; Springer et al. 2012).

Analysing each disruption is beyond the economic and time restraints of the research inquiry, therefore the author has narrowed down into the digital era. In particular, how does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?

The author will first utilise the theory of the business to outline if the business model fits reality or if transformation is required (Cramer & Krueger 2016; Daly & Walsh 2010; Drucker 2017). This will start the strategic process and understanding if a security firm in particular needs to adopt digital technology to remain in reality.

The researcher will then utilise Kotter’s 8 step framework to complete the process of transformation in the digital era (Kotter 2007) as it will provide a decision making process. This strategic process will then be applied to see how the security company can transform to embrace the digital technology.

While this will enable a strategic process to transform in the digital era, they both have their limitations in the digital era. Even Kotter mentions ‘there is no question in my mind that much more is required in order to build organizations that win today and will win again in the future’ (Kotter 2014, p. 5).

The context of the fourth industrial revolution provides a pivotal time to ascertain if Kotter’s linear transformation can still be relevant in reality which is not linear (Appelbaum et al. 2012; Blackburn 2017; Kotter 2007; Schwab 2017). Chapter 6 will be conduct a literature review of digital transformation. Then applying the key digital attributes and characteristics to strategic transformation model.
6. Literature Review of Digital Transformation Attributes

To ascertain the digital transformation attributes, the author has conducted a systematic review of digital transformation and digital disruption literature, which generated a database of over 3,141,000 articles. The aim of a systematic literature review was to condense the key themes of the selected 36 articles and create a foundation for the digital transformation attributes. (Bharadwaj et al. 2013; Hess et al. 2016; Westerman 2016).

One of the main reasons for this complexity is that the definition of digital transformation encompasses many ideas that can create vastly different opinions (Andal-Ancion, Cartwright & Yip 2003; Kohli & Johnson 2011; Westerman & Bonnet 2015). Therefore the author has decided to embrace Brown’s definition as it clearly articulates that ‘digital transformation encompasses everything from the cultural and organizational change required to the related use of new digital technologies’ (Brown et al. 2014, p. 165).

One of the key themes from this definition is that it is a moment in time that a company pivots its direction to develop a business model that embraces new digital technologies (Henriette, Feki & Boughzala 2015; Matt, Hess & Benlian 2015). Another key aspect that requires a clear definition is digital transformation is not linear nor is it fixed in a moment of time (Brown et al. 2014; Perkin & Abraham 2017).

The nonlinear approach is caused by the customers and world’s fluid motion of drastically changing markets (Blackburn 2017; Leavy 2017; Schwab 2017). Take the example of radio versus WeChat, radio took 38 years to reach 50 million viewers, which enabled companies to have a fixed business model that slowly grew over 38 years. In contrast WeChat only took 4 months to reach 50 million viewers, thus companies only had 4 months to change their marketing direction (Blackburn 2017).

To handle the fast dynamic world, the author has developed a review of digital transformation attributes based around the seminal work of (Bharadwaj et al. 2013) digital business strategy, which was then modified to include key aspects from digital transformation articles (Brown et al. 2014; Hess et al. 2016; Westerman 2016). The Digital business Strategy developed by (Bharadwaj et al. 2013) and the additional transformation articles outline four key areas, Scope, Scale, Speed and Sources with the aim to capture key attributes and nuances of digital transformation.

The digital transformation attributes are not exhaustive however it is able to capture the current view of the significant attributes required for transformation in the digital era. The following sections will demonstrate and ascertain the key areas of the Digital Transformation Attributes as shown in table 4.1.
## Digital Transformation Attributes

<table>
<thead>
<tr>
<th>Scope of Digital Transformation</th>
<th>Scale of Digital Transformation</th>
<th>Speed of Digital Transformation</th>
<th>Sources of Value Creation for Digital Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Silos in Digital Business</td>
<td>Scale through Alliances and Partnerships</td>
<td>Speed of product launches</td>
<td>Customer value and customer focused</td>
</tr>
<tr>
<td>Redefining scope of the business service or product</td>
<td>Companies Capabilities to scale</td>
<td>Speed of Decision Making</td>
<td>Value creation from networks</td>
</tr>
<tr>
<td>Redefining your scope of your competitors</td>
<td>o Skill Development</td>
<td>Clear Visions &amp; Goals</td>
<td>Customer trust and adoption</td>
</tr>
</tbody>
</table>

### 6.1 Scope of Digital Transformation

The first key area of the digital transformation model is ‘Scope’, which is the ‘fundamental question in strategic management … which defines the portfolio of products and business as well as the activities that are carried out within a company direct control and ownership’ (Bharadwaj et al. 2013, p. 471).

It encompasses the idea of the firm’s resources as the key assets it utilizes to gain market share in their industry. The author has narrowed the Scope into three key sections, the first two sections are discussed briefly within (Bharadwaj et al. 2013) while the third section comes from other key academics (Christensen 2013; Rogers, DL 2016). These three sections outline some of the key areas of scope for digital transformation.

### Removing silos in digital business

The first concept within the scope of digital transformation is the alignment of the digital business strategy with other departments in the firm. This topic is one of most discussed topics in the systematic literature review as different academics argue who should define the scope of the digital transformation? (Bharadwaj et al. 2013; Fitzgerald 2013; Kohli & Johnson 2011; Matt, Hess & Benlian 2015).

One of the common answers discussed throughout all the articles, and (Bharadwaj et al. 2013, p. 471) discuss this in detail, is the requirement of a trans functional approach (Brown et al. 2014; Chui & Fleming 2012; Fitzgerald 2013; Hess et al. 2016). Starbuck implemented the trans functional approach as it allowed the CDO & CIO to incorporate different perspectives and ideas from all functions (Fitzgerald 2013).
Redefining the scope of the business service or product

The second concept within the scope of digital transformation is redefining the products scope, with the power of digital resources and new IT capabilities. One of the most demonstrated examples of a company redefining a product to increase their scope of a product is Netflix. Netflix’s ability to embrace their corporate strategy with new digital technologies enabled them to create a new market for potential growth (Berman 2012; Bharadwaj et al. 2013; Blackburn 2017; Rogers, DL 2016).

Redefining your scope of your competitors

The third concept within the Scope of digital transformation was discussed very briefly within (Bharadwaj et al. 2013) and does not clearly highlight the importance of monitoring the changing scope of your competitors.

The seminal work of Christensen’s theory shows how disruptive challenge can outpace long standing incumbents (Christensen 2013). Thus, creating the importance for the long-standing incumbent to continually watch if the scope of their competitors change (Moore, J 1996; Rogers, DL 2016).

6.2 Scale of Digital Transformation

The second key area of the digital attributes is ‘Scale’, which is the scale of the product or project with the focus on scaling both physical and digital terms (Bharadwaj et al. 2013)

It encompasses the idea of the firm’s ability to scale up or down a certain project with its internal and external capabilities. The author has narrowed scale into two key sections, the first two sections is discussed within (Bharadwaj et al. 2013, p. 471) while the second section becomes expanded from another literature to clearly illustrate internal capabilities (Kane et al. 2015; Warren 2011).

Scale through alliances and partnerships

The first section for scale of digital transformation is focused around how your alliances can assist with your project being scaled up or down. As ‘scaling options are more likely to be based on alliances and partnership through shared digital assets with other firms in the business ecosystem across different traditional industry boundaries’ (Bharadwaj et al. 2013, p. 476)

This approach is utilising your external network to provide you capabilities to scale up a project (Bharadwaj et al. 2013; Livari et al. 2016; Moore, JF 2006). This can be utilising your alliances knowledge, resources or skill, so you do not have to invest into new capital to get a project started. An additional benefit, is the opportunity to collaborate and share ideas to develop new business models that can benefit both parties (Berman 2012; Chui & Fleming 2012; Hess et al. 2016; Weill & Woerner 2015).
Companies Capabilities to scale

The second section for scale of digital transformation is focused around the companies’ capabilities to scale. Internal ‘scaling with digital business strategy will require understanding how to develop the organizational capabilities’ (Bharadwaj et al. 2013, p. 475). While (Bharadwaj et al. 2013) briefly discuss the capabilities, a further in-depth approach is required as other key articles argue the importance of these capabilities (Brown et al. 2014; Hess et al. 2016; Kane et al. 2015; Warren 2011).

A company’s capabilities to scale can be divided into two key segments, a) the company’s skill to handle the scale of a digital transformation b) the company’s cultural acceptance of the digital transformation.

Company’s skill to handle the scale of a digital transformation

The company skills to handle the scale of digital transformation can be considered the ‘application of physical or intangible IT resources such as technology, knowledge, practices, relationships, management skills, business process understanding and human resources to further organizational goals’ (Sandberg, Mathiassen & Napier 2014, p. 423). These capabilities will become part of their digital literacy and enable the employees to conduct new digital projects without relying on third parties to provide knowledge or skills (Sandberg, Mathiassen & Napier 2014; Warren 2011).

Company’s cultural acceptance of the digital transformation

There is a strong argument that there is a requirement for a shift in the cultural mindset that fosters agility, creativity, risking taking and collaboration in supportive environment (Brown et al. 2014; Hess et al. 2016; Kane et al. 2015). The challenge now is modifying your culture to handle scale, which as discussed by (Perkin & Abraham 2017) is considered one of the hardest aspects.

6.3 Speed of Digital Transformation

The third key area of digital transformation is ‘Speed’, which is the speed of the transformation to allow new products to reach the market before your competitors (Bharadwaj et al. 2013).

It encompasses the idea of the firm’s ability to make a decision and release a product in a short time period. The author has narrowed speed into three key sections, the first two sections are discussed within (Bharadwaj et al. 2013, p. 471) while the third section is developed from other key literature to expand the importance clear visions (Earley 2014; vanZeebroeck & Bughin 2017; Westerman & Bonnet 2015).
Agility of product launches

The leading digital companies of the world, such as Amazon, Facebook and Google have set the standards for the speed of product launches that now compels companies that incorporate digital technology to sustain competitive advantage (Bharadwaj et al. 2013). Barnes & Noble is an example of a company that aligned its launch speed of products not with just traditional book seller, but with Amazon (Bharadwaj et al. 2013).

These rapid product launches and continuous pivoting of new business models requires the company to be agile enough to change direction in a short time period (Fitzgerald 2013; Hess et al. 2016; vanZeebroeck & Bughin 2017).

Speed of Decision Making

Speed of decision making is becoming more vital as ‘slow response could … perceived as being out of tune with the new reality’ (Bharadwaj et al. 2013, p. 476). The model discussed by (Bharadwaj et al. 2013) rationalizes that real time data has allowed firms such as Cisco & GE make faster decisions. While new digital technologies have enabled faster decision abilities, it does not always correlate with fast decision making.

Speed of decision making will be expanded to include the role of leadership as the executives must have the skills to make quick decisions while also empowering the speed of the transformation (Legner et al. 2017; Perkin & Abraham 2017; Westerman 2016). A leadership style that is required for these quick decisions, is a CEO who is unafraid to pivot the company in new directions towards reshaping its scale and scope (Brown et al. 2014; Perkin & Abraham 2017).

Clear Vision & Goals

The third concept within the speed of digital transformation was not explicitly discussed within (Bharadwaj et al. 2013) model, and it’s a gap that needs to be clearly explained. A leader that does not outline the vision or goals of the decision, can limit or confuse the new direction (Brown et al. 2014; Fitzgerald et al. 2014; Hess et al. 2016; Perkin & Abraham 2017). Therefore, an agile decision without clarity can cause ramifications that hinder the possibility of the project.

The importance of a clear vision, should not be understated as a ‘type of leader who can articulate a vision and then enthuse people to follow them on the journey to realizing it’ (Perkin & Abraham 2017, p. 236). As stated before, people make the company run, therefore it is important to enthuse people to follow the vision that is developed by the executives.
6.5 Sources of Value for Digital Transformation

The fourth key area of digital transformation is the sources of “Value”, which is the value to the customer, and more importantly how a digital business develops additional dimensions (Bharadwaj et al. 2013).

It encompasses the idea of the firm’s ability to develop customer value through use of new digital technologies and ensuring the customer can adopt the new value. The author has narrowed the sources of value into three key sections, the first two sections are discussed within (Bharadwaj et al. 2013, p. 471) while the third section coming from key literature to expand the importance of customer trust (Leavy 2017; Legner et al. 2017; Tornjanski & Cudanov 2017)

Customer Value and customer focused

Customers are becoming the center of attention, and with the ability of digital technologies companies are developing models to generate new value for their customers (Bharadwaj et al. 2013; Brown et al. 2014; Remane et al. 2017). This value proposition is essentially the ‘reason why a particular customer is willing to pay for a product or service’ (Remane et al. 2017, p. 42). Hence the ability to increase the customer value of a certain product or service, can increase the chances of the customers purchasing it.

One of the key areas of discussion is the importance of becoming more customer focused, to a point where the digital technologies will enable more tailored products or services. P&G explain ‘with digital technology, it’s now possible to have a one-on-one relationship with every consumer in the world’ (Chui & Fleming 2012, p. 2) The expectations of personalized products or services for the customers’ can be a challenge, however, due to social media platforms and real time data it has become possible (Andal-Ancion, Cartwright & Yip 2003; Bharadwaj et al. 2013; Leavy 2017).

Value creation from networks

The next discussion is focused around if a single company can create a higher value proposition for a customer compared to co-creating a product or service in a network. The model from (Bharadwaj et al. 2013) and other academic journals explains that co-creation in an ecosystem can be an option to increase the value (Hess et al. 2016; Moore, J 1996).

Customer trust and adoption

The third concept within the Sources of Value of digital transformation was not explicitly discussed within (Bharadwaj et al. 2013) model, and it’s a gap that needs to clearly explained. The customer centric approach is becoming more critical, to a point that it is important to ensure the customer trusts the brand and has the ability to adopt the value (Legner et al. 2017; Tornjanski & Cudanov 2017).
A survey conducted in the banking sector in Serbia found that ‘customers have an equal preference between traditional and e-business services’ (Tomjanski & Cudanov 2017, p. 1030). This survey indicated that now every customer was ready to adopt the new digital value, hence expanding that notion customers have different adoption rates (Rogers, EM 2010; Weill & Woerner 2015)

6.5 Summary

Companies in the 21st century are realizing that these disruptions are going to impact them and have the opportunity to disrupt entire industries. Uber disrupting the taxi industry, Airbnb disrupting the hotel industry or Amazon impact the local food suppliers demonstrate a few examples of the new digital era (Brown et al. 2014; Rogers, DL 2016; Schwab 2017).

As stated in section 6, digital transformation is not a fixed event nor is it a linear event, thus required a model that can be fluid to adjust to changing demands (Brown et al. 2014; Perkin & Abraham 2017). The Digital transformation attribute exemplifies this, by demonstrating a continuous and fluid motion, as each section is impacted by each one another as demonstrated in diagram 6.1.

However, these attributes juxtapose the linear strategic transformation model established in section three, as Drucker & Kotter’s is a linear process (Drucker 2017; Kotter 2007). The digital transformation attributes will provide a non-linear approach in a strategic process that is based in reality that is in constant flux.

These attributes will be combined with Kotter’s linear change model to develop a strategic process that enables transformation of an organization in the digital era. Diagram 6.2 provides an overview of the strategic process that the author will adopt to answer How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?
Overview of the Literature Review

Diagram 6.1

Advancing theoretical frameworks for a strategic process of digital transformation
7. Summary of progress

Firstly, the research has completed a sufficient review of strategic transformation and digital transformation attributes to develop an initial conceptual framework for the action research project. While the literature review may be sufficient to commence the research, it is not completed as the literature will be continually updated as the project develops.

Secondly, the research has completed a sufficient review of the methodology and methods required to commence the research project. The action research within a case study will provide a framework where the research will endeavor to answer *How does an Australian security company transform itself within a security ecosystem to embrace virtual patrols?* The methods mentioned in section three should remain the same, however might be updated if a change in the action research occurs.

Finally, the researcher has conducted seven semi-structured interviews during December 2017 with the executives of the security firm, as the literature and methodology was completed to a satisfactory level. Therefore, first diagnose stage of the action research cycle has been semi completed as the executive’s opinions provide an overview and context of the current project. The research will then move to action planning with the project members once the diagnose phase is complete. Diagram 7.1 provides a clear overview of what has been completed for the first research cycle.
7.1 Research Plan

The research plan is to complete the action research cycle from January 2018 to December 2018, as the required academic and industry requirements have been meet by January 2018. However, it should be noted that the research project is situated in a real-life context, therefore there are external events outside the research control that could either increase or decrease the action research cycles.

7.2 Timeline

In terms of the time, the researcher is currently undergoing full time study at RMIT, thus, completion should be approximately three years from 2017. Currently the researcher is on task, and will be able to submit the required documentation for the confirmation milestone on February 2018.

Please find below a timetable of the completion of the research project.
<table>
<thead>
<tr>
<th>Event</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar-17</td>
</tr>
<tr>
<td></td>
<td>Apr-17</td>
</tr>
<tr>
<td></td>
<td>May-17</td>
</tr>
<tr>
<td></td>
<td>Jun-17</td>
</tr>
<tr>
<td></td>
<td>Jul-17</td>
</tr>
<tr>
<td></td>
<td>Aug-17</td>
</tr>
<tr>
<td></td>
<td>Sep-17</td>
</tr>
<tr>
<td></td>
<td>Oct-17</td>
</tr>
<tr>
<td></td>
<td>Nov-17</td>
</tr>
<tr>
<td></td>
<td>Dec-17</td>
</tr>
<tr>
<td></td>
<td>Jan-18</td>
</tr>
<tr>
<td></td>
<td>Feb-18</td>
</tr>
<tr>
<td></td>
<td>Mar-18</td>
</tr>
<tr>
<td></td>
<td>Apr-18</td>
</tr>
<tr>
<td></td>
<td>May-18</td>
</tr>
<tr>
<td></td>
<td>Jun-18</td>
</tr>
<tr>
<td></td>
<td>Jul-18</td>
</tr>
<tr>
<td></td>
<td>Aug-18</td>
</tr>
<tr>
<td></td>
<td>Sep-18</td>
</tr>
<tr>
<td></td>
<td>Oct-18</td>
</tr>
<tr>
<td></td>
<td>Nov-18</td>
</tr>
<tr>
<td></td>
<td>Dec-18</td>
</tr>
<tr>
<td></td>
<td>Jan-19</td>
</tr>
<tr>
<td></td>
<td>Feb-19</td>
</tr>
<tr>
<td></td>
<td>Mar-19</td>
</tr>
<tr>
<td></td>
<td>Apr-19</td>
</tr>
<tr>
<td></td>
<td>May-19</td>
</tr>
<tr>
<td></td>
<td>Jun-19</td>
</tr>
<tr>
<td></td>
<td>Jul-19</td>
</tr>
<tr>
<td></td>
<td>Aug-19</td>
</tr>
<tr>
<td></td>
<td>Sep-19</td>
</tr>
<tr>
<td></td>
<td>Oct-19</td>
</tr>
<tr>
<td></td>
<td>Nov-19</td>
</tr>
<tr>
<td></td>
<td>Dec-19</td>
</tr>
<tr>
<td></td>
<td>Jan-20</td>
</tr>
<tr>
<td></td>
<td>Feb-20</td>
</tr>
<tr>
<td></td>
<td>Mar-20</td>
</tr>
<tr>
<td></td>
<td>Apr-20</td>
</tr>
<tr>
<td></td>
<td>May-20</td>
</tr>
<tr>
<td></td>
<td>Jun-20</td>
</tr>
<tr>
<td></td>
<td>Jul-20</td>
</tr>
<tr>
<td></td>
<td>Aug-20</td>
</tr>
<tr>
<td></td>
<td>Sep-20</td>
</tr>
<tr>
<td></td>
<td>Oct-20</td>
</tr>
<tr>
<td></td>
<td>Nov-20</td>
</tr>
<tr>
<td></td>
<td>Dec-20</td>
</tr>
</tbody>
</table>

**Agenda**

- First Milestone (Confirmation)
- Second Milestone (Progress)
- Third Milestone (Completion)
- Literature Review
- Document Data Collection
- Interview preparation
- Data Collection
- Transcription process
- Data analysis
- Data Discussion
- Thesis writing
- Chapter Completion
- Chapter 1 (Overview)
- Chapter 2 (Context)
- Chapter 3 (Lit Review)
- Chapter 4 (Methodology)
- Chapter 5 (Results)
- Chapter 6 (Discussion)
- Chapter 7 (Conclusion)
8. References


Ansari, S & Bell, J 2009, 'Five easy pieces: a case study of cost management as organizational change', *Journal of Accounting & Organizational Change*, vol. 5, no. 2, pp. 139-167.


Auguste, J 2013, 'Applying Kotter’s 8-step process for leading change to the digital transformation of an orthopedic surgical practice group in Toronto, Canada', *J Health Med Informat*, vol. 4, no. 3.


Baskerville, RL 1999, 'Investigating information systems with action research', *Communications of the AIS*, vol. 2, no. 3es, p. 4.


Blackburn, DG, Michaela Freeland, Amy Kelley, Sam Pickover, Sev Thomassian, Nina Ubaldi 2017, *Digital Australia Seizing the opportunity from the fourth industrial revolution*, Melbourne.


Cummings, S, Bridgman, T & Brown, KG 2016, 'Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management', *Human Relations*, vol. 69, no. 1, pp. 33-60.


Greenwood, DJ, Whyte, WF & Harkavy, I 1993, 'Participatory action research as a process and as a goal', Human Relations, vol. 46, no. 2, pp. 175-192.


Kotter, JP & Rathgeber, H 2006, Our iceberg is melting: Changing and succeeding under any conditions, Macmillan.

Langton, N, Khan, KM & Lusina, SJ 2010, FIFA's Football for Health: applying Kotter's eight-step programme for transformational change to a mass participation activity, British Association of Sport and Exercise Medicine, 0306-3674.


Neuman, WL 2006, *Social Research Methods: Qualitative and Quantitative Approaches*


Schein, EH 2010, *Organizational culture and leadership*, John Wiley & Sons.


Tichy, NM & Devanna, MA 1986, *The transformational leader*, JSTOR.


Whyte, WF 'Advancing scientific knowledge through participatory action research', Springer, pp. 367-385.


Yin, RK 2013, *Case study research: Design and methods*, Sage publications.
9. Appendix

9.1 Ethics Approval

Notice of Approval

Date: 14 September 2017
Project number: 21044
Project title: How is a keystone company in an ecosystem remaining agile to transform itself within the digital age?
Risk classification: Low Risk
Chief Investigator: Dr Paul Cerotti
Student Investigator: Mr Geoffrey Mann
Other Investigators: Prof Karlheinz Kautz; Dr Vince Bruno
Project Approved: From: 5 September 2017 To: 1 March 2021

Terms of approval:

Responsibilities of the principal investigator

It is the responsibility of the principal investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by BCHEAN. Approval is only valid while the investigator holds a position at RMIT University.

1. Amendments
   Approval must be sought from BCHEAN to amend any aspect of a project including approved documents. To apply for an amendment submit a request for amendment form to the BCHEAN secretary. This form is available on the Human Research Ethics Committee (HREC) website. Amendments must not be implemented without first gaining approval from BCHEAN.

2. Adverse events
   You should notify BCHEAN immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

3. Participant Information and Consent Form (PICF)
   The PICF must be distributed to all research participants, where relevant, and the consent form is to be retained and stored by the investigator. The PICF must contain the RMIT University logo and a complaints clause including the above project number.

4. Annual reports
   Continued approval of this project is dependent on the submission of an annual report.

5. Final report
   A final report must be provided at the conclusion of the project. BCHEAN must be notified if the project is discontinued before the expected date of completion.

6. Monitoring
   Projects may be subject to an audit or any other form of monitoring by BCHEAN at any time.

7. Retention and storage of data
   The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

Regards,

Associate Professor Penny Weller
Chairperson
RMIT BCHEAN
9.2 Research Methods Completed

Geoffrey Mann (University ID: 3426657)

Academic history – course

DR201 PhD (BusInfoSys)

Research

<table>
<thead>
<tr>
<th>Semester:</th>
<th>RSCH Academic Year 2017</th>
<th>Academic Group:</th>
<th>BUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course:</td>
<td>ISYS3347</td>
<td>Course Title:</td>
<td>Intro to Research Methods</td>
</tr>
<tr>
<td>Grade:</td>
<td>HD</td>
<td>Date Graded:</td>
<td>2017-07-14</td>
</tr>
<tr>
<td>Mark:</td>
<td>80</td>
<td>Date Withdrawn:</td>
<td></td>
</tr>
<tr>
<td>Units of Credit:</td>
<td>12</td>
<td>EFTSU:</td>
<td>0.125</td>
</tr>
</tbody>
</table>

Copyright © RMIT University
ABN 49 781 030 034
CRICOS provider number: 00122A

15 December 2017