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## Abstract

In the current century, organisations are facing unprecedented changes in their working environments. In order to remain viable, organisations must learn to adapt to the changes they face. We investigate the influence of senior leaders on organisational learning from the employees' perspective. Data were based upon qualitative research utilising a case study of a New Zealand-operated information technology company. By employing an explorative, exploitative and transformative organisational learning framework, and a transactional and transformational model of leadership, the findings contribute empirically to the limited body of research surrounding how senior leaders influence organisational learning. In particular, the findings illustrate the way in which senior leaders employed a transformational leadership approach during explorative and transformative learning, while adopting a transactional leadership style during exploitative learning. Also compelling were participants' comments highlighting how senior leaders had employees emotionally connect and test business ideas and assumptions throughout the learning process.

## Keywords

Organisational learning, senior leaders, transactional leadership, transformational leadership

## Introduction

The adage that 'the only constant in life is change' has never been as pertinent as it is today. While there is generally an acceptance by both academics and practitioners that many of the tried and tested ways of thinking regarding many facets of business may well be outdated (Uhl-Bien et al., 2007), there is now an awakening of the seismic changes in operating environments, workforce demographics and levels of employee mobility (Herstatt et al., 2009). As a result, simply being content with competing in the marketplace will no longer be enough as a business model for businesses to remain viable. Thus, future organisations will need to be able to not only learn internally (e.g. by improving systems and processes) and externally (e.g. learning about competitors, and market demands and trends) (Bess et al., 2010; Bui and Baruch, 2011; Grobler et al., 2006), but

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will also require the willingness to transform the way they think, and to challenge existing operating assumptions in order to create new market opportunities for the future.

As part of the learning process, senior leaders, such as managers at the CEO level, top executives and top-level managers (Vera and Crossan, 2004), are often seen to be a key influence on how an organisation learns and adapts to the changing business environment (Collins, 2010; Elenkov et al., 2005; Kurland et al., 2010). While being limited in nature, studies in the management and learning fields have identified how styles of leadership may affect exploring for information, the exploitation of knowledge and transformation of knowledge within an organisation (Lichtenthaler, 2009; Zahra and George, 2002). In terms of the specific leadership styles employed by senior leaders, transformational leadership has recently been associated with explorative and transformative learning, while transactional leadership has been associated with the exploitation of knowledge (Sun and Anderson, 2011).

In addition to the sparse body of research on senior leader influence on organisational learning, there are also key limitations associated within the existing literature. One limitation pertains to the high proportion of articles on leader/manager influence on organisational learning being based upon either an analysis of current literature, and/or a numerical (quantitative) style of research methodology (Lichtenthaler, 2009). While quantitative approaches provide valuable information, it is difficult to generate the 'how' answers which may underpin participant responses (Myers, 2009; Yin, 1994). A second limitation within the existing literature relates to the belief that once a particular piece of research has been undertaken, further attempts to replicate and substantiate such work is not necessary. As a result, there is a wide, but rather superficial body of literature surrounding the topic of senior leader influence on organisational learning (Crossan et al., 2011).

In an effort to address these limitations, and to build upon the existing literature, our purpose is to address the question, 'how do senior leaders influence organisational learning?' We also highlight the resulting theoretical and practical implications. Based upon the findings from a case study, we apply an organisational learning theoretical framework adapted from a study by Lichtenthaler (2009) which focuses on the various components of explorative, exploitative and transformative learning. In addition, we build upon similar research by Sun and Anderson (2011) who focused on the leadership styles of both senior and middle-level managers within the apparel manufacturing industry. While our framework is similar to earlier models regarding the exploration of new information and the exploitation of newfound knowledge, it has two significant enhancements pertaining to transformative learning.

The first enhancement relates to the positioning of transformative learning as a separate learning component after explorative and exploitative learning. This approach moves away from the body of literature looking at organisational learning through an absorptive capacity lens in which transformative learning acts as a conduit between explorative and exploitative learning in order to allow for the assimilation and retention of knowledge (Gutierrez et al., 2011; Lane et al., 2006; Lichtenthaler, 2009; Sun and Anderson, 2011). The second enhancement builds upon the transformative component in the existing literature (Lichtenthaler, 2009; Sun and Anderson, 2011) by widening the focus from an organisation's effort 'to combine existing knowledge with externally-acquired knowledge so that a new collective schema emerges' (Sun and Anderson, 2011: 26), to also encompass the opportunity and willingness for employees to test ideas and business-operating assumptions.

In addition to the transformative learning enhancements, it is important to note that we do not position the three components of learning as stages, where it is required to complete one component of learning before progressing to the next level of learning. Rather, the three components can be viewed as complementary to each other, and can take place as a parallel and continuous process which resides within the organisational learning framework. The explorative, exploitative and

transformative learning framework will also be supplemented by Bass and Riggio's (2006) transactional and transformational model of leadership. Following on from the theoretical frameworks, the research question and methodology will be outlined. Next, the research findings and discussion are presented. To conclude, the study's limitations and theoretical implications are outlined. The implications section includes the recommendation to build on the qualitative style of research employed by this current study in order to deepen the body of literature on senior leader influence on organisational learning, and to investigate the role of transformative learning as related to the changes in the current societal, environmental, economic and cultural contexts. The study's practical implications are also discussed with a focus on those in a position to lead others towards an organisational goal or objective.

## **Theoretical background**

Based upon the necessity of learning and adaption, this section will provide a brief outline of the existing literature pertaining to organisational learning, and the potential influence of senior leaders on such learning.

### ***Organisational learning***

Organisational learning, as a concept, has received an increased level of interest in recent years (Crossan et al., 2011). However, one of the contentious issues regarding organisational learning is the ongoing debate surrounding how best to define the concept (Flores et al., 2012; Foil and Lyles, 1985). For our study, organisational learning is centred upon two widely cited viewpoints. The first is that 'organisational learning implies that individuals learn as agents for the organisation [and that] knowledge must be stored in the memory of the organisation. This consists of routines, rules, procedures, documents and culture (i.e. shared mental models)' (Ortenblad, 2001: 130). The second viewpoint regards learning as a means of 'participation not acquisition. Neither the individuals nor the organisation as an individual learn. Instead, it is more correct to say that the collective learns' (Ortenblad, 2001: 131). In combining these two views of organisational learning, we not only recognise the more 'traditional' work processes and formal organisational functions, but also acknowledge the often borderless working environments resulting from new technologies and flexible work arrangements (Uhl-Bien and Marion, 2009).

Although the literature in the field of organisational learning provides a wide variance in what constitutes learning, many recent articles have focused on three key components. These include explorative, exploitative and transformative learning (Lichtenthaler, 2009; Sun and Anderson, 2011; Yukl, 2009). We take a macro-level view of the organisational learning components based on the assumption that senior leaders are the key influence on organisational learning. Therefore, the explorative, exploitative and transformative learning components are viewed as applicable across multiple contexts and business-operating environments. Moreover, while each component has been separated within the organisational learning framework, it contains elements that are not mutually exclusive to each other (e.g. risk taking, challenging assumptions, and adaptability).

### ***Explorative learning***

The first component of the organisational learning process pertains to explorative learning. Explorative learning refers to the ability to both recognise information (e.g. through scanning the environment for new technologies, market trends and industry information), and to assimilate the information within the organisation (Lichtenthaler, 2009; March, 1991). Common terms within

the literature relating to explorative learning include ‘search, variation, risk taking, experimentation, play, flexibility, discovery, and innovation’ (March, 1991: 71). These terms are pertinent because they highlight an organisation’s willingness to be proactive about learning. Research by Danneels (2002) notes that exploring and being able to innovate allows organisations to build a capacity of adaptability and flexibility and an awareness of the changing environment. Moreover, exploring for information can also be seen as the ability to interact with the external environment, rather than simply being affected by it (Alegre and Chiva, 2008).

While a key aspect of an organisation’s explorative learning is in the scanning of the external environment, another facet relates to an organisation’s ability to integrate new information back into its existing knowledge base for future use (Cohen and Levinthal, 1990; Lenox and King, 2004; Lichtenthaler, 2009; Lopez et al., 2005). Although there is little known about the process of assimilating new knowledge back into the organisation (Nevis et al., 1995), Ulrich et al. (1993) suggest that existing knowledge is useful in the assimilation process. This is possibly because it allows people within the organisation to draw from past assimilation experiences and problem-solving methods (Eva, 2011; Ulrich et al., 1993).

### *Exploitative learning*

The second component of the organisational learning process pertains to exploitative learning. Within exploitative learning, Lichtenthaler (2009) outlines two phases. The first phase relates to the conversion of knowledge. This is a key aspect because for organisations to survive, it is critical that they know how to change and convert what they have learnt into something of value (Marsh and Stock, 2006). While there appears to be a limited amount of information regarding the conversion process, Nonaka and Takeuchi (1995) advocate that if anything of value were to be created, there needs to be both a context in which knowledge can exist, and an active effort by the organisation to convert knowledge (e.g. concepts, ideas, information and knowledge) from the unknown to the known. While not specifically answering the question of how to go about the conversion process, Sharif (2008) raises a pertinent question – ‘where and when does information [convert] into knowledge, and what ... supports it?’ (p. 10).

The second phase of exploitative learning relates to the actual ‘application’ of newly acquired knowledge. This is important because organisations which are able to apply the converted knowledge are in a better position to achieve superior innovation, production, processes and outputs (i.e. products and services) (Zahra and George, 2002). Although the concept of application may sound logical, many organisations fail to apply their newfound knowledge (Yukl, 2009). For example, a study by Ulrich et al. (1993) found that while an Australian division of a multinational firm applied a number of new marketing pilot programmes – which allowed for a 25 per cent market share increase – the other divisions (in Europe and the United States) decided against applying those programmes. The decision not to implement such programmes is questionable because it is likely that they would have potentially been more effective in their larger markets.

### *Transformative learning*

The third component of the organisational learning process relates to transformative learning. Transformative learning pertains to the maintenance and reactivation of knowledge over time (Garud and Nayyar, 1994; Lichtenthaler, 2009). This aspect of organisational learning is critical for organisations because knowledge management and retention not only assists organisations to

develop new and innovative products, but also influences the way a firm is able to ‘apply knowledge developed in prior new product development projects’ (Marsh and Stock, 2006: 431).

In addition to the retention and maintenance of knowledge, scholars have also taken a more holistic view of transformative learning. For example, O’Sullivan et al. (2002) note that ‘transformative learning involves experiencing a deep structural shift in the basic premises of thought, feeling, and actions’ (p. 11). While this is a relatively broad view of transformative learning, it does imply the necessity for organisations to challenge the way they think (e.g. their assumptions) and the way they value learning (Argyris and Schon, 1974; Armitage et al., 2008; Wilner et al., 2012; Zundel, 2012), while also taking into account the context and environment in which an organisation operates (Mezirow et al., 2009). Additionally, this broad view can assist organisations to delve into their various business-operating assumptions. Being able to challenge ideas and assumptions can then result in creating an organisational culture which is open, engaging, creative and encouraging of discovery (Argyris, 1990). Furthermore, within these types of environments, individuals can feel free to ‘speak honestly and act with fewer defences [which] can transform an organisation’s ability to innovate and excel’ (Lumpkin and Lichtenstein, 2005: 464).

### *Influence of senior leaders within an organisation*

While it can generally be agreed that the majority of employees in a firm are valuable and contribute to the overall success of a company, it can also be argued that it is the senior leaders who have the most impact on how a firm operates (Edwards et al., 2013; Jansen et al., 2009; Kurland et al., 2010). This is because it is typically the senior leaders who set the direction and are seen to have the ultimate accountability for the success or failure of the company (Kurland et al., 2010). Moreover, while it is not in the scope of this article to discuss the specifics of communication, senior leaders are often seen as the ones who have a large influence on the level and quality of information which is communicated, and how it is disseminated throughout the organisation (Avolio et al., 2004). This is an important aspect because communication underpins how organisational goals and objectives are achieved (both at an individual and organisational level), the organisational culture, and how adaptable an organisation is to changes in their operating environment (Hackman and Johnson, 2009).

While not specifically outlining designations, the scholarly literature generally refers to management at the CEO level, top executives and top-level managers (e.g. General Managers) as senior leaders (Vera and Crossan, 2004), and the two leadership styles of most prominence being transactional and transformational (Bass and Riggio, 2006; Zagorsek et al., 2009). Yet, while the two leadership styles can be viewed as distinct from each other, it does not mean a leader cannot possess the attributes of both leadership styles and, that they cannot be employed simultaneously depending on a particular working environment or situation (Vera and Crossan, 2004; Wright and Pandey, 2010).

### *Transactional leadership*

The transactional style of leadership typically ‘focuses on promoting the individual interests of the leaders and their followers ... by establishing objectives and monitoring and controlling the results’ (Garcia-Morales et al., 2012: 1040). Based upon the model outlined by Bass and Riggio (2006), transactional leadership has three components, though not all have to be exhibited for it to exist. The first component relates to contingent reward leadership in which a leader rewards a follower in exchange for carrying out a task. The second component pertains to active management by exception (AME), which can either be ‘active’ or ‘passive’. AME ‘active’ is when a leader actively

monitors a task to identify any deviances from set standards and takes any necessary corrective action. In contrast, AME 'passive' is when a leader does not actively look for any deviances or mistakes, but if they occur, then takes corrective action to remedy the issue. The third aspect of transactional leadership is associated with passive/avoidant leadership in which a follower experiences an absence or lack of leadership from their leader/manager.

What is interesting about the 'transactional' style of leadership is that it can evoke debate both around its effectiveness with followers, and also the influence it may have on the culture of an organisation. For example, Bhat et al. (2012) state that 'this type of leader [transactional] never creates any motivating or boosting positive environment to gain extraordinary performance or willingness from the followers. Under this leadership style, neither a collective/mutual environment is created, nor are the team interactions fostered' (p. 349). While it can be argued that transactional leaders could potentially reduce levels of innovation and organisational learning (Lee, 2008), there is evidence that transactional leadership (e.g. through setting targets, and rewarding contingent on outcomes) is both positive and necessary to achieve the desired organisational goals and objectives (Vaccaro et al., 2012).

### *Transformational leadership*

Transformational leadership is a 'style of leadership that heightens consciousness of collective interest among the organisation's members and helps them to achieve their collective goals' (Garcia-Morales et al., 2012: 1). As outlined by Bass and Riggio (2006), the transformational leadership style has four components, though not all have to be exhibited for it to exist. The first component relates to charismatic/inspirational leadership in which leaders motivate and inspire others, and provide challenge and meaning to people's work. A vision for the future is promoted, and enthusiasm and optimism is also fostered. The second component pertains to idealised influence where leaders behave and act as role models for others. The third component of transformational leadership is associated with intellectual stimulation where leaders foster an environment in which innovation and creativity is promoted. The leaders encourage the questioning of assumptions and the reframing of problems. Individualised consideration is the fourth component of transformational leadership and relates to paying 'special attention to each individual follower's needs for achievement and growth by acting as a coach or mentor, ... and adapt[ing] to the individual needs of their followers' (Bass and Riggio, 2006: 7).

In contrast to transactional leadership, the transformational approach to leadership is often regarded as the one which provides people with a sense of direction, energy and support for the processes of change and organisational learning (Garcia-Morales et al., 2012). This is because leaders/managers who exhibit transformational leadership are typically able to 'inspire trust, loyalty and admiration in followers' (Zagorsek et al., 2009: 148). These heightened levels of employee aspiration and interest can, in turn, lead to a culture within the organisation that embraces the concept and importance of continuous learning and adaptation (Amitay et al., 2005).

### *Integration of transactional and transformational leadership*

Despite there being a substantial body of literature highlighting the difference between transactional and transformational leadership (Bass, 1985; Bryant, 2003; Vaccaro et al., 2012), it is also contended that transformational leadership is built upon a base of transactional leadership (Avolio, 1999), and that the two leadership styles complement each other (Tsai and Su, 2011). For example, a study by Vaccaro et al. (2012) analysing 1000 Dutch firms (from a variety of industries) and their top management teams found that 'leaders who inspire team success and develop trusting and



respecting relationships [do so] based on common goals [and through] management practices, processes or structures' (p. 44).

Another important aspect surrounding both transactional and transformational leadership and organisational learning relates to emotions (Edwards et al., 2013). While the link between emotions and organisational learning are largely absent in the scholarly literature (Antonacopoulou and Gabriel, 2001; Dirkx, 2006), the effects of emotions have been acknowledged as having the potential to have either a positive or negative influence on organisational learning (Dirkx, 2008; Harman, 2011; Vince, 2002). For example, emotions can promote feelings of 'joy and happiness due to business achievements, [and] confidence in skills and knowledge' (Akgun and Keskin, 2012: 96). These feelings can, in turn, result in 'the belief that one's work is meaningful, [which can generate] pride, commitment, empowerment, and energy' (Bierly III et al., 2000: 608). Conversely, emotions can also generate negative side effects such as feelings of 'anger, embarrassment, and feelings [of being] threatened' (Seo, 2003: 9), which can then result in the 'resistance to learning itself' (Dirkx, 2006: 17).

As evident in the existing body of scholarly literature, the ability for organisations to learn and adapt is critical if they wish to remain viable and competitive in the marketplace. In addition, it is generally accepted that the senior leaders have the most impact on how a firm operates. However, there remains limited information surrounding the specific influence of senior leaders and their leadership styles on organisational learning. Therefore, this study investigates the following question: How do senior leaders influence organisational learning?

## Methods and data collection

### *Research approach*

The approach used for this research centred upon a qualitative case study methodology, and investigated the perceptions of non-managerial employees with regards to how they viewed their senior leaders influencing organisational learning. A case study approach was chosen because it typically focuses on capturing the stories of an individual entity (Giddings and Grant, 2002) – whether it be an individual person, group or organisation – in an attempt to 'describe details, offer explanations, and make connections (e.g., early experience and current functioning)' (Kazdin, 2011: 4). Furthermore, a case study approach – 'which investigates a contemporary phenomenon within its real-life context' (Yin, 1994: 9) – is regarded to be suitable for asking questions relating to 'how' and 'why' participants may view something in a particular way (Yin, 1994).

### *Research setting*

The organisation selected for this research was a New Zealand information technology (IT) company. Within the last four years, this IT company expanded its business activities from solely being a distributor of electronic equipment, to operating in the education and retail sectors. As a result of numerous changes in the marketplace and their new business direction, the company underwent a number of major restructures. The value from using this particular company was based upon the fact that most of the organisational senior leaders were recently recruited to increase operational efficiencies and make the organisation more competitive in the New Zealand market. In terms of organisational structure, company documents indicated that the organisation had a flat structure with an acting CEO, eight senior leaders, and 10 direct reports to senior leaders. The organisation had a total of 268 employees in its various divisions.



## *Data collection and analysis*

Using the explorative, exploitative and transformative learning framework, Bass and Riggio's (2006) model of transactional and transformational leadership, and the research question (how do senior leaders influence organisational learning?) as a guide, the following section will briefly outline the research methodology used for collecting and analysing the data. The three-component organisational learning framework and the transactional and transformational leadership model were used because they (and/or similar variances) have been acknowledged to be effective lenses with which to examine the relationship between leadership styles and organisational learning (Bryant, 2003).

Data collected using a case study approach, included in-depth semi-structured interviews, archival documents and blogs. The participants for this research were purposefully selected based on their position within the company as non-managerial employees who directly report to one or more of the company's senior leaders. The seven participants represented 70 percent of the total number of senior leader direct reports. The research recruitment process was through the initial contact with the organisation's General Manager of Human Resources. Using the company contact list, invitation emails were sent to a pool of potential participants who could then respond and/or accept the interview invitation.

Interviews were semi-structured and utilised open-ended questions (see Appendix 1 for a sample of the interview questions) to allow all interviewees to have the same fundamental set and sequencing of interview questions (Bryman and Bell, 2007). Participant responses were recorded digitally to allow for an accurate and thorough recount of what had been said by participants (Bryman and Bell, 2007). Each interview was transcribed within 36 hours in preparation for data analysis.

Using a thematic analysis approach, participant interview responses were categorised under the three components of explorative, exploitative and transformative learning. Additionally, to identify how the leadership styles of senior leaders influenced learning, participant responses were categorised under Bass and Riggio's (2006) transactional and transformational leadership themes. The analysis of participant responses was based upon Braun and Clarke's (2006) six-stage process of thematic analysis. Key elements of the process included becoming familiar with the data (e.g. during and after transcribing the interviews), generating initial codes, searching and reviewing categories, and defining and naming those categories. Throughout this analysis process, the NVivo 9 software package was used to assist in clustering, removal and renaming of categories. The theming process continued until the categories appeared to handle any new data without making ongoing updates or changes (Dey, 1999). During the analysis process, care was taken to ensure that participant responses maintained their integrity through the coding of whole sentences and phrases (Gomm, 2004).

In addition to the data from participant interviews, secondary sources such as company documents, media releases, news articles, and blog comments were used to complement and provide context to participant responses. While 'blog' comments can add value by offering differing insights and personal opinions, they were used with the knowledge that they are the opinions of individuals (Eriksson and Kovalainen, 2008).

## **Case study findings and discussion**

Based upon the aggregated responses from participant interviews and archival documents, the following section will outline how the senior leaders and their leadership styles influenced the three components of explorative, exploitative and transformative learning.

### *Employees' perceptions regarding senior leader influence on explorative learning*

The explorative learning framework used for this case study was based on the senior leaders' influence on scanning the environment, and the assimilation of information back into the organisation. The predominant leadership style employed by senior leaders throughout explorative learning in this case study related to transformational leadership. This result endorses the findings of Sun and Anderson (2011) who also found that explorative learning was largely influenced by senior leaders employing the transformational style of leadership. In the current study, participants indicated that the transformational style was largely through their managers employing the charismatic/inspirational and idealised influence aspects of transformational leadership.

In terms of influence on scanning the environment for new information, senior leaders were able to have participants emotionally connect with their work. This connection was important in determining how willing participants were to explore for new information. In particular, it was compelling to hear how participants were encouraged to embrace their talents and passions during the explorative process. For example,

**Participant 2:** [The manager] had the belief that you are better off with someone who puts up their hand and wants to do it. Because they are going to want to do it, they were going to drive and do it rather than you saying you look after this. [The manager] would say 'if you enjoy this, run with it. This is your talent. This is your passion'.

While the majority of participants were positive about connecting with the process of scanning for new information, one participant commented that his/her manager built apathy and resistance towards exploring for new information. For example,

**Participant 4:** So generally [the manager] was very impractical, he/she just wanted to give me an objective that I felt I wasn't going to meet. In hindsight, they weren't too onerous. For one, he/she just wanted me to be on the constant lookout for new accounting systems and approaches so we [the organisation] could keep on top of our game. For me, I think it comes down to one major factor working under [the manager]. And that is while I once would go the extra mile and see some of the challenging objectives as an opportunity to grow, now I can't be bothered. I just say it's not in my job description.

As these two participant comments demonstrate, senior leaders have a direct impact on participants' willingness to engage in the exploring process. This supports the findings of Sun and Anderson (2011) on the importance for senior leaders to motivate and encourage people through the explorative process. This finding also ties into Alegre and Chiva's (2008) claim that people (i.e. employees) should be interacting with the external environment, rather than simply being affected by it.

Following on from the scanning of the environment, the second component of explorative learning pertains to the assimilation of new information back into the organisation (Lichtenthaler, 2009). The major influence senior leaders had in assimilating newfound information related to communication. For example, the majority of participants viewed their manager as taking an active role in encouraging people to share any information they had found. This active encouragement was through regular meetings where people could come together and freely share what they were doing, issues they may be encountering and to discuss future plans. As one participant noted,

**Participant 1:** I'll tell you about [the manager] who is the Sales and Product Strategy Manager. Um, a couple of ways. One is where we would have weekly meetings where he/she would get the National Sales Team together and we'll talk about the stuff we are working on. Things like our pipelines, what deals

we've got working, and what new sales initiatives we are doing. As part of that, we would start talking about new technologies that are out there, and what we could look at selling.

Participant responses support the findings of Amitay et al. (2005), in which organisations with transformational leaders (i.e. those who were open and communicative) have heightened levels of employee aspiration and interest. Moreover, this finding is compelling in that it adds to the limited body of literature regarding the assimilation process (Nevis et al., 1995) by highlighting how leaders can encourage bringing information back into the organisation by simply formalising the process.

During the interviews, participants also noted that another key factor surrounding communication was senior leaders' promotion of candour and openness during conversations. This finding illustrates how senior leaders were open to new ideas from others. While this would seem logical, scholars have attributed the variation of senior leader influence on communication and exploring for information based upon particular industry dynamics and operating environments (Weerawardena et al., 2006). Our findings endorse Sun and Anderson's (2011) proposition that it is the specific way in which leaders think and approach issues that can actually override the influence and constraints of a particular industry. This is an important realisation as it, once again, highlights how the leaders of an organisation can influence how adaptable and innovative an organisation can be.

## Employee perceptions regarding senior leader influence on exploitative learning

The exploitative learning framework employed in this case study was based upon the conversion and application of knowledge. Senior leader influence on exploitative learning primarily related to transactional leadership, and was based around monitoring and control. This finding supports Sun and Anderson's (2011) study where the 'top management's focus at this stage of the learning process was to ensure successful implementation ... [with]in the organisation' (p.43).

When related to the conversion of knowledge into something of value, many participants expressed that the accountability placed on them from their managers was important in the exploitative learning process. What was interesting about the participant responses was that participants were not only held accountable to their manager, but also their peers. As one participant noted,

**Participant 7:** His/her influence was also about getting all of those different partners [from different departments] in a room. As part of that though, we became not only accountable to our manager, but to also the people we are working with. Also, because we were now accountable to our peers, it built a level of trust in that we didn't want to let the others down.

This finding does not support the position held by Bhat et al. (2012) that the transactional approach (pertaining to accountability) would mean that not only motivation or willingness of participants would suffer, but 'neither a collective/mutual environment is created, nor ... team interactions fostered' (p. 349). In contrast, the findings support Nonaka and Takeuchi (1995) around the importance of both the context (e.g. the coming together of departments) and an active effort to convert the knowledge into something of value. Moreover, this finding also partially answers Sharif's (2008) question around the conversion process pertaining to 'where and when does information [convert] into knowledge, and what ... supports it?' (p. 10). In this study, participant responses highlight the importance of accountability for 'supporting' the conversion process.

In terms of the application of knowledge, participant responses indicated that their managers' active monitoring of tasks and processes was positive for them and the organisation as a whole.

In particular, participants commented on how their manager influenced organisational learning through the setting, monitoring and reinforcement of performance outcomes. For example,

**Participant 5:** Yeah, so I guess it's about reinforcement. So [the manager] would talk about reinforcing something in lots of different places. Like it will come up in your one on ones [as part of the regular setting of goals and objectives], and they will come up in your overall plans and goals.

As a result of the active monitoring, participants commented that they were then able to have a clear vision of the future, and an awareness of the goals and objectives needed to meet that 'vision'. One reason for this finding may have related to the active participation employees had in the creation of their own goals and objectives. This conclusion would support the findings of Kim and Lee (2011) who note that employees are more likely to be driven towards goals if they have been set, clearly defined and mutually agreed upon.

In contrast to the positive experience of the majority of respondents, one participant voiced a negative sentiment that the type of monitoring and control exhibited by their manager actually fostered negative attitudes and behaviours. For example, there was an opposition towards applying new knowledge, the creation of employee dependency and a lack of accountability. This was especially apparent when in his/her opinion, the pressure and additional workload meant that they decided to handover the making of various decisions to their manager. For example,

**Participant 4:** So sometimes I would go to [the manager] and say 'this is what I have got on my plate at the moment. You tell me what the priorities are'. And then [the manager] would tell me what is more important. It's easier for me to do it this way. I once prioritised my workload, but because of my manager being unresponsive around communicating what work is out there and timeframes, I don't really bother anymore.

While some scholars argue that providing new work and allowing people to become independent can potentially empower and 'stretch' people (Goodnight, 2004), the influence this particular manager had was on reducing the desire or willingness for the participant to 'think' for himself or herself. This finding supports the views of Morhart (2009) who advocates that actively managing people can result in 'compliant' employees, and the results of Lee (2008) who argues that a 'monitor and control' approach to transactional leadership can potentially reduce levels of innovation and organisational learning.

## Employee perceptions regarding senior leader influence on transformative learning

The transformative learning framework employed for this case study was based around the embedding of knowledge within the organisation, the reactivation of knowledge for future use and the willingness to challenge and test ideas and assumptions. Consistent with the findings of Sun and Anderson (2011), this aspect of organisational learning – while being categorised under exploitative learning – was associated with senior leaders primarily employing a transformational leadership approach. In particular, senior leaders generally promoted the testing and challenging of accepted organisational norms and employees' ideas/thoughts around business practices. The managers' willingness to 'test' and 'challenge' ideas and assumptions, in turn, played a profound role in the way the participants themselves questioned current processes. For example,

**Participant 6:** So I have had a lot of this traditional work, and have been aware that this is how the mechanics work of what we do. And [the manager] has been great to say 'well no, let's challenge that, and let's challenge this. Let's challenge the things that have been sacred to the business'.

**Participant 3:** The change in approach to learning was about moving from a reactive mind-set to more of a proactive mind-set. So rather than primarily reacting to events, they are more proactive in not only anticipating the future, but also examining why things happen.

The managers' active encouragement around the testing and challenging of assumptions appears to allay some of the concerns around change being 'forced' upon others (Cable and Furst, 2008), and that change is often inherently feared (Cao et al., 2011). This finding illustrates how senior leaders within the organisation have shifted away from a reactionary operating mode, and towards being able to analyse the systemic and underlying issues associated with business operations and assumptions. This apparent shift in thinking also illustrates how senior leaders are now learning both externally and internally. That is, the organisation was once in a favourable monopolistic position, and operated in a market which remained relatively static over a long period of time. Having a relatively static operating environment, in turn, created a level of complacency within the organisation. As time passed, and while the organisation was largely unwilling to change, its market and operating environment had begun to change rapidly. As a result, company financial statements showed a decline in revenue and overall profits. Moving forward, it appears that both learning and adapting to the changes in the external environments have now influenced the organisation's willingness to challenge and test operating assumptions. This shift in thinking has also translated into increased revenue and profits.

This finding relating to the change of thinking as a result in changes in the operating environment is also interesting because it has acted as a catalyst for transformation within the organisation. This supports the proposition by O'Sullivan et al. (2002) that for transformative learning to occur, there needs to be a deep structural shift in the basic premises of thought, feeling and actions throughout the organisation.

### **Employee perceptions regarding senior leader influence on organisational learning with the combination of transactional and transformational leadership**

Based upon participant comments, it can be noted that while there are subtle differences between transactional and transformational leadership, the reality is that the two styles are not mutually exclusive. This is because transformational leadership was seen to be built upon a base of transactional leadership (Avolio, 1999), and that the two leadership styles exhibited by participants' managers actually complemented each other (Tsai and Su, 2011). One illustration of the combination relates to the active/constant monitoring and control of participant tasks (transactional leadership) being built upon with inspiration and trust (transformational leadership). For example, participants often commented during interviews that their managers would take an active and supporting role while trying to achieve various organisational goals and objectives. This supporting role not only gave guidance, but also allowed trust to be built between participants and their managers. This finding complements Vaccaro et al.'s (2012) research illustrating that in the setting of goals and maintenance of management practices, leaders were able to provide inspiration and to develop relationships built upon trust and respect.

Another key area in which both the transactional and transformational leadership styles impacted all three components of learning was in relation to emotions. While participants emphasised the role of emotions during explorative learning, it was also evident that emotions had a significant impact on the participants' motivation and willingness to engage in the overall learning process. This finding supports the sentiment within the scholarly literature advocating that emotions do, in reality, play a significant role in facilitating or hindering people's

willingness to engage in the learning process (Bierly III et al., 2000; Harman, 2011; Vince, 2002; Yoeli and Berkovich, 2010).

## Conclusion

The topic of organisational learning has been studied for over 30 years (Foil and Lyles, 1985), and with the rapidly increasing speed of change in the marketplace, interest in this topic will become increasingly pertinent in the years to come. The purpose of this study was to investigate how senior leaders influence organisational learning and to highlight the theoretical and practical implications emerging from this research. By employing the explorative, exploitative and transformative learning framework (Lichtenthaler, 2009), and Bass and Riggio's (2006) model of transactional and transformational leadership, the findings have shown how senior leaders directly influence organisational learning. In particular, we demonstrated how senior leaders influence the connection (e.g. emotional connections) participants have with the learning process, and the association of the transactional and transformational leadership styles with the explorative, exploitative and transformative learning components.

The first component of learning we analysed was in relation to explorative learning. The primary ways in which leaders influenced the exploration and assimilation of information were through transformational leadership approaches such as building emotional connections to the learning process, the fostering of relationships and the opening of communication channels. What is compelling about the current findings is the influence of participants' managers in fostering an environment of communication and collaboration throughout the organisation which, in turn, influenced participants' openness towards exploring and sharing information.

The second component of learning analysed was in relation to exploitative learning. Participant comments illustrated that, unlike the use of transformational leadership in explorative learning, transactional leadership through managers' monitoring and control was the primary influence for the application of knowledge. In addition to the 'monitor and control' approach, participants also acknowledged that their managers' support played a key influence in how they achieved their various goals and objectives.

The third component of learning analysed was in relation to transformative learning. It was shown that the senior leaders' transformational leadership style had a major influence on fostering an environment where the testing and challenging of assumptions was encouraged. The managers' willingness to challenge existing business assumptions was shown to have both a 'cultural' and 'financial' impact on the organisation's business operations.

## Limitations and theoretical implications for future research

While the current study has addressed some key limitations within the existing body of organisational learning literature, it does have its own limitations, and therefore, presents some potential avenues for future research. Although this study, involving an IT organisation, has complemented recent research from Sun and Anderson (2011) regarding the apparel manufacturing industry, there still remain opportunities to expand similar research to other industries. In addition, as these two similar case studies have gone through a rigorous process around the refinement of questions, future research could use the same or a similar set of questions. By employing the existing participant protocol questions, a key limitation surrounding the difficulty associated with extrapolating and generalising interview findings to a wider population (Bryman and Buchanan, 2009) could be mitigated. Furthermore, as this study has expanded the transformative learning component to include the challenging and testing of assumptions not typically included in the majority of



organisational learning studies (e.g. regarding absorptive capacity), there is an opportunity to research this aspect further.

A second limitation of this study relates to the underlying view of who a senior leader is, and his or her role in an organisation. While we have built upon the progress within the transformational leadership literature, there is still an underlying belief that people and work are to be 'managed'. With the advent of the Internet and the increasing role of social media, groups and networks are often formed and operated independent of many of the typical management influences and boundaries (Collins, 2010). Therefore, future research could build upon this current study by further exploring the role leadership styles play in transformative learning as a potential pathway towards fostering organisational forms that are viable in the face of current societal, environmental, economic and cultural contexts.

## Practical implications

The first practical implication provides a caution against the idea of viewing one leadership style (i.e. transactional or transformational) as superior to another, but rather, encourages seeing them as both valid and necessary approaches for organisational learning. While it is recommended that the selection of a particular leadership style should be based upon a particular context or situation, the findings from the current research (cf. Sun and Anderson, 2011) would suggest that people who are in a position to lead others could apply a certain leadership approach depending on the particular aspects of organisational learning. For example, senior leaders were shown to apply transformational leadership during explorative learning, a transactional leadership approach with exploitative learning, and a transformational leadership approach with transformative learning.

The second practical implication is a call to be willing to challenge existing business assumptions. The findings from this study illustrated how there were issues around senior leaders being content with the existing operating environment, and the potential to become complacent with past successes. This combination led to both a reactive learning environment and a decline in overall revenue and profit as the external market changed. Despite a perception that change and testing of ideas can be inherently feared (Cao et al., 2011), fostering an environment where being open to ideas and the challenging of assumptions can, in turn, promote learning and innovation. Moreover, supporting Sun and Anderson's (2011) study within the apparel manufacturing industry, the current findings illustrate that it is not necessarily the particular industry in which an organisation operates that has the greatest influence on organisational learning, but rather, it may be the senior leaders' willingness to engage in the learning process.

The third implication relates to the emotional connections people have in the organisational learning process. While there is limited research on the topic of emotions and organisational learning (Antonacopoulou and Gabriel, 2001), the findings from this study illustrate the importance of having people 'emotionally' connected with the learning process. This is because while people can become motivated and engaged, they can conversely become uninterested and unwilling to participate in the process. As the current findings have illustrated, the emotional component can, and does have a flow-on effect on a company's performance and ability to remain viable in the marketplace.

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## References

- Akgun A and Keskin H (2012) Organizational emotional memory. *Management Decision* 50(1): 95–114.
- Alegre J and Chiva R (2008) Assessing the impact of organizational learning capability on product innovation performance: An empirical test. *Technovation* 28(6): 315–326.
- Amitay M, Popper M and Lipshitz R (2005) Leadership styles and organizational learning in community clinics. *The Learning Organization* 12(1): 57–70.
- Antonacopoulou EP and Gabriel Y (2001) Emotion, learning and organizational change: Towards an integration of psychoanalytic and other perspectives. *Journal of Organizational Change Management* 14(5): 435–451.
- Argyris C (1990) *Overcoming Organizational Defenses: Facilitating Organizational Learning*. Upper Saddle River, NJ: Prentice Hall.
- Argyris C and Schon DA (1974) *Theory in Practice: Increasing Professional Effectiveness*. San Francisco, CA: Jossey-Bass.
- Armitage D, Marschke M and Plummer R (2008) Adaptive co-management and the paradox of learning. *Global Environmental Change* 18(1): 86–98.
- Avolio BJ (1999) *Full Leadership Development*. Thousand Oaks, CA: SAGE.
- Avolio BJ, Zhu W, Koh W, et al. (2004) Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior* 25(8): 951–968.
- Bass BM (1985) Leadership: Good, better, best. *Organizational Dynamics* 13(3): 26–40.
- Bass BM and Riggio RE (2006) *Transformational Leadership*. 2nd edn. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bess KD, Perkins DD and McCown DL (2010) Testing a measure of organizational learning capacity and readiness for transformational change in human services. *Journal of Prevention and Intervention in the Community* 39(1): 35–49.
- Bhat A, Verma N, Rangnekar S, et al. (2012) Leadership style and team processes as predictors of organisational learning. *Team Performance Management* 18(7): 347–369.
- Bierly III P, Kessler E and Christensen E (2000) Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management* 13(6): 595–618.
- Braun V and Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2): 77–101.
- Bryant SE (2003) The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership & Organizational Studies* 9(4): 32–44.
- Bryman A and Bell E (2007) *Business Research Methods*. 2nd edn. Oxford: Oxford University Press.
- Bryman A and Buchanan DA (eds) (2009) *The SAGE Handbook of Organizational Research Methods*. London: SAGE.
- Bui HTM and Baruch Y (2011) Learning organizations in higher education: An empirical evaluation within an international context. *Management Learning* 43(5): 515–544.
- Cable DM and Furst SA (2008) Employee resistance to organizational change: Managerial influence tactics and leader-member exchange. *Journal of Applied Psychology* 93(2): 453–462.
- Cao HH, Han B, Hirshleifer D, et al. (2011) Fear of the unknown: Familiarity and economic decisions. *Review of Finance* 15(1): 173–206.
- Cohen WM and Levinthal DA (1990) Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 35(1): 128–152.
- Collins R (2010) *Leadership in a Wiki World: Leveraging Collective Knowledge to Make the Leap to extraordinary Performance*. Indianapolis, IN: Dog Ear Publishing.
- Crossan MM, Maurer CC and White RE (2011) Reflections on the 2009 AMR decade award: Do we have a theory of organizational learning? *Academy of Management Review* 36(3): 446–460.
- Danneels E (2002) The dynamics of product innovation and firm competences. *Strategic Management Journal* 23(12): 1095–1121.
- Dey I (1999) *Grounding Grounded Theory: Guidelines for Qualitative Inquiry*. San Diego, CA: Academic Press.

- Dirkx JM (2006) Engaging emotions in adult learning: A jungian perspective on emotion and transformative learning. *New Directions for Adult and Continuing Education* 2006(109): 15–26.
- Dirkx JM (2008) The meaning and role of emotions in adult learning. *New Directions for Adult and Continuing Education* 2008(120): 7–18.
- Edwards G, Elliott C, Iszatt-White M, et al. (2013) Critical and alternative approaches to leadership learning and development. *Management Learning* 44(1): 3–10.
- Elenkov DS, Judge W and Wright P (2005) Strategic leadership and executive innovation influence: An international multi-cluster comparative study. *Strategic Management Journal* 26(7): 665–682.
- Eriksson P and Kovalainen A (2008) *Qualitative Methods in Business Research*. London: SAGE.
- Eva KW (2011) On the relationship between problem-solving skills and professional practice. In: Kanes C (ed.) *Elaborating Professionalism: Studies in Practice and Theory*. Dordrecht: Springer, vol. 5, 17–34.
- Flores LG, Zheng W, Rau D, et al. (2012) Organizational learning: Subprocess identification, construct validation, and an empirical test of cultural antecedents. *Journal of Management* 38(2): 640–667.
- Foil CM and Lyles M (1985) Organizational learning. *Academy of Management Review* 10(4): 803–813.
- Garcia-Morales VJ, Jimenez-Barriónuevo MM and Gutierrez-Gutierrez L (2012) Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research* 65(7): 1040–1050.
- Garud R and Nayyar PR (1994) Transformative capacity: Continual structuring by intertemporal technology transfer. *Strategic Management Journal* 15(5): 365–385.
- Giddings LS and Grant BM (2002) Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse* 13(1): 10–28.
- Gomm R (2004) *Social Research Methodology: A Critical Introduction*. New York: Palgrave Macmillan.
- Goodnight R (2004) Laissez-faire leadership. *The Economic Journal* 98(392): 820–823.
- Grobler A, Grubner A and Milling PM (2006) Organisational adaptation processes to external complexity. *International Journal of Operations & Production Management* 26(3): 254–281.
- Gutierrez LJG, Bustinza OF and Molina VB (2011) Six sigma, absorptive capacity and organisational learning orientation. *International Journal of Production Research* 50(3): 661–675.
- Hackman MZ and Johnson CE (2009) *Leadership: A Communication Perspective*. 5th edn. Long Grove, IL: Waveland Press.
- Harman K (2011) Everyday learning in a public sector workplace: The embodiment of managerial discourses. *Management Learning* 43(3): 275–289.
- Herstatt C, Schwarz D and Verworn B (2009) Changing workforce demographics: Strategies derived from the resource-based view of HRM. *International Journal of Human Resources Development and Management* 9(2–3): 149–161.
- Jansen JJP, Vera D and Crossan M (2009) Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *The Leadership Quarterly* 20(1): 5–18.
- Kazdin AE (2011) *Single-Case Research Designs: Methods for Clinical and Applied Settings*. 2nd edn. New York: Oxford University Press.
- Kim J-G and Lee S-Y (2011) Effects of transformational and transactional leadership on employees' creative behaviour: Mediating effects of work motivation and job satisfaction. *Asian Journal of Technology Innovation* 19(2): 233–247.
- Kurland H, Peretz H and Hertz-Lazarowitz R (2010) Leadership style and organizational learning: The mediate effect of school vision. *Journal of Educational Administration* 48(1): 7–30.
- Lane PJ, Koka BR and Pathak S (2006) The reification of absorptive capacity: A critical review and rejuvenation of the construct. *Academy of Management Review* 31(4): 833–863.
- Lee J (2008) Effects of leadership and leader-member exchange on innovativeness. *Journal of Managerial Psychology* 23(6): 670–687.
- Lenox M and King A (2004) Prospects for developing absorptive capacity through internal information provision. *Strategic Management Journal* 25(4): 331–345.
- Lichtenthaler U (2009) Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Academy of Management Journal* 52(4): 822–846.

- Lopez SP, Peon JMM and Ordas CJV (2005) Organizational learning as a determining factor in business performance. *Learning Organization* 12(3): 227–245.
- Lumpkin GT and Lichtenstein BB (2005) The role of organizational learning in the opportunity-recognition process. *Entrepreneurship Theory and Practice* 29(4): 451–472.
- March JG (1991) Exploration and exploitation in organizational learning. *Organization Science* 2(1): 71–87.
- Marsh SJ and Stock GN (2006) Creating dynamic capability: The role of intertemporal integration, knowledge retention, and interpretation. *Journal of Product Innovation Management* 23(5): 422–436.
- Mezirow J, Taylor EW and Associates (2009) *Transformative Learning in Practice: Insights from Community, Workplace, and Higher Education*. San Francisco, CA: Jossey-Bass.
- Morhart FM (2009) Brand-specific leadership: Turning employees into brand champions. *Journal of Marketing* 73(5): 122–142.
- Myers MD (2009) *Qualitative Research in Business & Management*. London: SAGE.
- Nevis EC, Dibella AJ and Gould JM (1995) Understanding organizations as learning systems. *Sloan Management Review* 36(2): 73–85.
- Nonaka I and Takeuchi H (1995) *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
- Ortenblad A (2001) On differences between organizational learning and learning organization. *Learning Organization* 8(3): 125–133.
- O'Sullivan E, Morrell A and O'Connor MA (eds) (2002) *Expanding the Boundaries of Transformative Learning: Essays on Theory and Praxis*. New York: Palgrave Macmillan.
- Seo M-G (2003) Overcoming emotional barriers, political obstacles, and control imperatives in the action-science approach to individual and organizational learning. *Academy of Management Learning & Education* 2(1): 7–21.
- Sharif AM (2008) Information, knowledge and the context of interaction. Proceedings of the *European and Mediterranean Conference on Information Systems*, Dubai, UAE, 25–26 May.
- Sun P and Anderson MH (2011) The combined influence of top and middle management leadership styles on absorptive capacity. *Management Learning* 43(1) 25–51.
- Tsai C-T and Su C-S (2011) Leadership, job satisfaction and service-oriented organizational citizenship behaviors in flight attendants. *African Journal of Business Management* 5(5): 1915–1926.
- Uhl-Bien M and Marion R (2009) Complexity leadership in bureaucratic forms of organizing: A meso model. *The Leadership Quarterly* 20(4): 631–650.
- Uhl-Bien M, Marion R and McKelvey B (2007) Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly* 18(4): 298–318.
- Ulrich D, Von Glinow MA and Jick T (1993) High-impact learning: Building and diffusing learning capability. *Organizational Dynamics* 22(2): 52–66.
- Vaccaro IG, Jansen JJP, Van Den Bosch FAJ, et al. (2012) Management innovation and leadership: The moderating role of organizational size. *Journal of Management Studies* 49(1): 28–51.
- Vera D and Crossan M (2004) Strategic leadership and organizational learning. *Academy of Management Review* 29(2): 222–240.
- Vince R (2002) The impact of emotion on organizational learning. *Human Resource Development International* 5(1): 37–85.
- Weerawardena J, O'Cass A and Julian C (2006) Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. *Journal of Business Research* 59(1): 37–45.
- Wilner KB, Wiber M, Charles A, et al. (2012) Transformative learning for better resource management: The role of critical reflection. *Journal of Environmental Planning and Management* 55(10): 1331–1347.
- Wright BE and Pandey SK (2010) Transformational leadership in the public sector: Does structure matter? *Journal of Public Administration Research and Theory* 20(1): 75–89.
- Yin RK (1994) *Case Study Research: Design and Methods*. 2nd edn. Thousand Oaks, CA: SAGE.
- Yoeli R and Berkovich I (2010) From personal ethos to organizational vision: Narratives of visionary educational leaders. *Journal of Educational Administration* 48(4): 451–467.

- Yukl G (2009) Leading organizational learning: Reflections on theory and research. *The Leadership Quarterly* 20(1): 49–53.
- Zagorsek H, Dimovski V and Skerlavaj M (2009) Transactional and transformational leadership impacts on organizational learning. *Journal for East European Management Studies* 14(2): 144–165.
- Zahra SA and George G (2002) Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review* 27(2): 185–203.
- Zundel M (2012) Walking to learn: Rethinking reflection for management learning. *Management Learning* 44(2): 109–126.

## Appendix I

### Sample interview questions

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#### Explorative learning

*Question 1:* How does your manager influence the way you scan the environment for new information (e.g. for new technologies, market trends and industry information)?

*Question 2:* How does your manager influence and/or manage the way new information is sourced and brought back into the organisation for future use?

#### Exploitative learning

*Question 3:* What influence does your manager have on the application of new knowledge into the organisation?

*Question 4:* How does your manager influence the conversion of newly acquired knowledge into something of value (e.g. products, services, systems, processes)?

#### Transformative learning

*Question 5:* How does your manager influence the way knowledge is embedded into the organisation (e.g. into organisational structures, routines, practices, values, beliefs)?

*Question 6:* Can you give an example of when your manager has used existing knowledge to take advantage of potential business opportunities?

*Question 7:* Can you give an example of when your manager encouraged you or your peers to question traditional methods of doing things and to look for new approaches that could potentially be more effective? This could include a time when your manager challenged you or your peers to think differently about something that may have worked in the past, but now may be working against business success?

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