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Leading for Innovation

The impact of leadership on innovation



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The Advanced Institute of Management Research (AIM) develops UK-based world-class management research. AIM seeks to identify ways to enhance the competitiveness of the UK economy and its infrastructure through research into management and organisational performance in both the private and public sectors.

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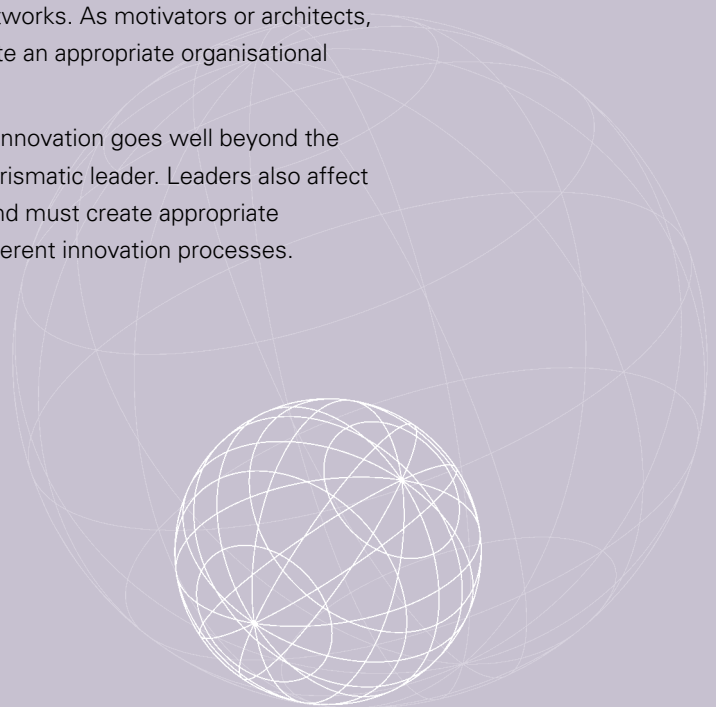
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Research points to a productivity gap between the UK and some of its major competitors such as France, Germany and the US. To close this gap, it is widely accepted that the UK must move towards competing on value and innovation rather than on low costs. So how can the UK boost innovation? How can companies become better and more effective innovators?

A number of factors affect the level of innovation in organisations. One of the most important is leadership. This report is an overview of the findings of a team of AIM management scholars who participated in a Management Research Forum held in collaboration with the Chartered Management Institute to investigate the relationship between leadership and innovation.

Key Findings: Leading for innovation

- **The dual role of leadership:** Broadly speaking, leaders of organisations perform two main roles in relation to innovation. First, they are motivators – they inspire people to transcend the ordinary, and innovate. Second, they are architects in an administrative sense – designing an organisational environment that enables employees to be innovative. It is important to recognise, too, that when we think about leadership and innovation, leadership is not restricted to those at the very top of the organisational pyramid. Leaders are important at all levels in the organisation.
- **Organisational environment affects innovation:** Innovation itself can be seen as having two dimensions. First, the thing that is being innovated – for example, the product, service, process, organisation and/or market. Second, the degree of novelty involved. This can range from incremental innovation – improving an existing product, for instance; to radical – inventing an entirely new one. These two dimensions – type of innovation and degree of novelty – determine which organisational environment is appropriate. An organisational environment consists of a set of structures, systems, culture and recruitment policies. These are coherent and mutually reinforcing.
- **Leaders can create the appropriate innovation environment:** Leaders affect innovation through their use of “innovation enablers” such as leadership systems, organisation design, competencies and networks. As motivators or architects, they use these innovation enablers to create an appropriate organisational environment or context.
- **In summary:** The impact of leadership on innovation goes well beyond the motivating effect of the inspirational or charismatic leader. Leaders also affect innovation through organisational design and must create appropriate organisational environments to suit the different innovation processes.



A number of recent reports have focused on the competitive position of the UK. Their central argument is that the UK is less productive than some of its major competitors. Competing on low costs is not a viable option for the UK in a global economy. What is required, therefore, is a shift in competitive focus. As Professor Michael Porter of Harvard put it “[the UK] needs to change from a location competing on low costs to a location competing on value and innovation.”¹

Integral to this new competitive drive, its advocates argue, is innovation. The UK needs to innovate more – and more effectively. More recent research into how the UK can raise its innovation game has concluded that high performance innovative organisations required, among other things, ‘inspirational leadership’. Thus, the research suggests there is a link between leadership and innovation.

A DTI report published in 2004 underlined the importance of leadership in the innovation equation, suggesting that the most important factor in Britain’s business leadership was ‘inspiration’. In response, the DTI created an Inspired Leaders Index to identify and assess the key leadership behaviours and values that have a significant impact on inspiring followers.

A number of recent reports have focused on the competitive position of the UK. Their central argument is that the UK is less productive than some of its major competitors.

In collaboration with the Chartered Management Institute, AIM set out to explore how existing research might inform and contribute to the creation of the Index. So we set out to explore the relationship between leadership and innovation drawing on existing research and empirical evidence from academics and business. In doing so we asked a number of questions. The most important and fundamental being: How does leadership affect innovation within organisations? But also: What does leadership in the context of innovation mean? Is there such a thing as inspirational leadership for innovation? How does leadership affect the organisational context or environment that fosters innovation? What sort of organisational contexts are necessary to generate innovation?

This led us to develop a ‘Leadership for Innovation Framework’ (*see page 18*).

Our findings challenge a number of assumptions. For example, that inspired leadership is the principal factor in promoting innovation. And that leadership should be viewed in terms of an individual leader. We also discovered some less well known but vitally important roles of leadership – namely its role in setting the appropriate organisational stage for innovation to play out.

Before looking at how leadership and innovation impact on each other it is necessary to consider both leadership and innovation separately, and in a little more detail.

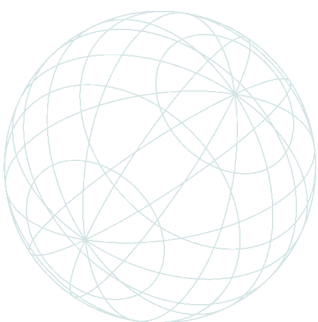
1 Leadership: A review

From existing leadership literature, five leadership theories were identified that merited further investigation:

- i) Trait and style theories;
 - ii) Contingency theories;
 - iii) New leadership theories, including transformational theory;
 - iv) Distributed leadership;
 - v) Structuralist leadership: Leaders as architects.
- i) Trait and style theories:** Trait theory suggests that leaders have certain attributes or qualities that make them effective leaders: they are charismatic or inspiring, for example. It suggests some people are innately better suited to leadership. Critics of trait theory point out that it is difficult to define leadership traits or show how traits interact.



Style theory suggests that it is possible to learn to become an effective leader by studying the behaviours adopted by other effective leaders. Research has focused on two types of leadership behaviour – people-centred and task-centred leadership. Style theory remains fashionable, although critics point out that it largely ignores.



- ii) **Contingency theories:** These theories maintain that different leadership approaches are required for different contexts. Path-goal theory, for example, identifies four situation dependent styles:
- Directive* – task-oriented;
 - Supportive* – empathises with employees and creates a good working environment;
 - Achievement-oriented* – sets high expectations for employees;
 - Participative* – encourages employee input.

(iii) **Transformational and transactional leadership:** A more recent trend in leadership theory is to view leadership in terms of the relationship between follower and leader: for example, leading through ‘the active promotion of values which provide shared meaning about the nature of the organisation’. Such theories still view leadership as a set of behaviours.

One of the best-known ideas in this area is the transactional and transformational leadership model developed by academics Bernard Bass and Bruce Avolio (*see below*)

| | Key factor | Behaviours |
|-----------------------------|-------------------------------------|--|
| Transformational behaviours | Idealised influence | Leaders act as role models, are admired, respected and trusted; consider the needs of others over their own; are consistent in their behaviours; share risks with others and conduct themselves ethically. |
| | Inspirational motivation | Leaders motivate and inspire others by providing meaning and challenge, they rouse team spirit; are enthusiastic and optimistic; communicate expectations and demonstrate commitment to shared visions. |
| | Intellectual stimulation | Leaders encourage innovation and creativity through questioning assumptions and reframing problems. They avoid public criticism. |
| | Individualised consideration | Leaders attend to individual needs for achievement and growth, engage in coaching and mentoring, create new learning opportunities, value diversity and avoid close supervision. |
| Transactional behaviours | Contingent rewards | Leaders provide rewards on the condition that followers conform with performance targets. |
| | Management by exception | Leaders take action when task related activity is not going according to plan. |

Transactional leadership is where the relationship between leader and followers is based on, and limited to, an exchange of value that is of mutual benefit. The leader satisfies followers’ needs in return for compliance and conformity with the leader’s wishes². A salesperson gets a bonus for hitting targets, for example. The exchange might be psychological, political or economic in nature. Transactional leaders operate within the existing culture of the organisation to maintain the status quo³.

Transformational leadership builds on the idea of charismatic leadership. It is concerned with binding people around a common purpose but goes beyond traditional reward/punishment motivation⁴. Transformational leaders engage and empathise with followers. They facilitate and teach followers, and foster cultures of creative change and growth.

These two types are contrasting but complementary forms of leadership. Both types of leadership can have positive organisational consequences, but suit different types of organisational environments. Transactional leadership is likely to be effective in ‘stable, predictable environments’; while transformational leadership ‘is likely to seek new ways of working, seek opportunities in the face of risk, prefer effective answers to efficient answers, and (is) less likely to support the status quo’.

Transactional leadership is where the relationship between leader and followers is based on, and limited to, an exchange of value that is of mutual benefit.

The effectiveness of these two types of leadership can be measured using the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio which measures the behaviours involved in transformational and transactional leadership.

(iv) Distributed leadership: A recent and more radical leadership theory, dispersed or distributed leadership theory suggests that leadership can be found at all organisational levels and shared among many people at each level. In self managed teams, for example, power is shared between the notional team leader and the followers.

Distributed leadership is relatively unresearched. It may not be applicable in an organisational context where traditional power structures are deeply embedded. If valid, however, it has profound implications for the way we understand leadership in an organisational setting.

(v) Structuralist approach to leadership: Most of the above leadership theories, transactional/transformational, for example, are concerned with leadership as a social psychological process that motivates followers. In other words, they are concerned with the leader's behaviour, and its effect on the followers. But another important approach is to look at leaders in terms of the key administrative tasks they undertake, such as organisational design and distribution of resources⁵.



Peter Senge⁶, for example, argues that the leader's task is to design learning processes. Leaders design the 'social architecture'. They are responsible for the governing ideas underpinning the policies, strategies and structures which guide business decisions and actions and help build a shared vision.

They also act as teachers, coaching, guiding or facilitating people to become more insightful and empowered. Finally, as stewards, they show that they serve the people they lead and hold a personal commitment to the organisation's mission.

Research suggests that this type of leadership role, through creating an organisational context for employees, can be important in creating an innovative environment via attributes such as stretch, flexibility, trust and discipline⁷.

Thus, this structuralist approach emphasises the role of leaders as organisational architects. In section 3, we further describe the roles played by motivational and structuralist leaders in fostering innovation within an organisational context.

Innovation rarely happens spontaneously within a firm. In most cases it has to be made to happen.

2 Dimensions of innovation

In the recent DTI report, innovation is defined as ‘the successful exploitation of new ideas’⁸. For other researchers, innovation refers to ‘change’ and includes the creation and commercialisation of new knowledge. It is also described as the quest for finding new ways of doing things⁹

One way to understand innovation is by considering two of its dimensions. The first dimension is what is being changed – the types of innovation. The main types are product/service, process, organisation and market innovation.

The second dimension is ‘the degree of novelty involved’ – or the extent to which change is perceived¹⁰. This could be incremental change at one end of the spectrum, such as small changes to existing products; or, at the other, radical innovation – such as the disruptive innovations that shake up markets or industries described by Harvard’s Clayton Christensen in his book *The Innovator’s Dilemma*¹¹.

3 Enabling innovation

Innovation rarely happens spontaneously within a firm. In most cases it has to be made to happen. There are several key enablers of innovation: processes, systems and structures; culture and competencies; and networks. Different types of leadership engage with these in different ways.

Research suggests that companies adopting a structured approach to innovation tend to fare better. A formal process alone is not enough to guarantee innovation success. Figure 1 shows a simple five-element model for managing innovation. The implication of the model is that being good in just one area is not enough.

Figure 1: The ‘Pentathlon’ model¹²



As is clear from Figure 1 there are more organisational factors at work. Depending on the nature of the innovation a firm may require an environment which encourages effective team working, speed of action, intense creativity and exploration, even the ability to ‘unlearn’. Leaders should strive to create an environment in which the appropriate innovative behaviour can flourish.

It must be a climate where intelligent risk taking is encouraged and failure tolerated. As IBM’s Thomas Watson, Sr., once said, the fastest way to succeed ‘is to double your failure rate’.

Creating such a climate for innovation within a firm requires leaders to act both as motivators and organisational architects.

putting it all together

Understanding the relationship between leadership and innovation is a complex business. It involves looking at two of the main types of leadership, how they affect the organisational context, and how they relate to different aspects of innovation. The basic linkages are:

Leadership >> impacts on >> organisational context >> impacts on >> innovation

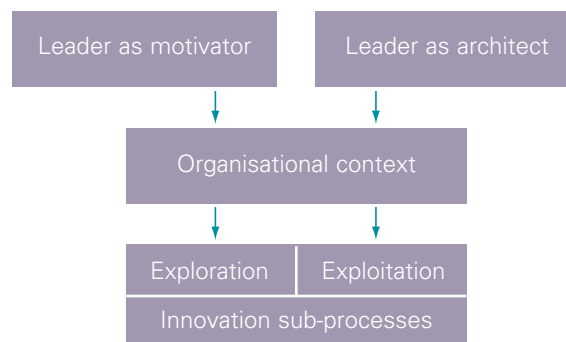
As we noted earlier, current leadership theory supports two distinct but complimentary views of leadership. These are: the leader as motivator and the leader as architect. The key distinction between the two is the difference in emphasis on motivation and administrative coordination, respectively.

For its part innovation can be sub-divided into a number of activities that involve different degrees of novelty. These activities fall within two broad phases of innovation.

The creative or exploration phase is the stage people most commonly associate with innovation. Activities during this phase of the innovation process include product definition, design, and pre-testing. The other phase of innovation is the commercialisation or exploitation of the product or service. Once the basic product or service design is frozen the innovation process moves on to translating the new or modified product or service into a saleable good. This will involve proto-typing, manufacturing and distribution for example.

The creative or exploration phase is the stage people most commonly associate with innovation.

Figure 2: How leadership impacts on innovation



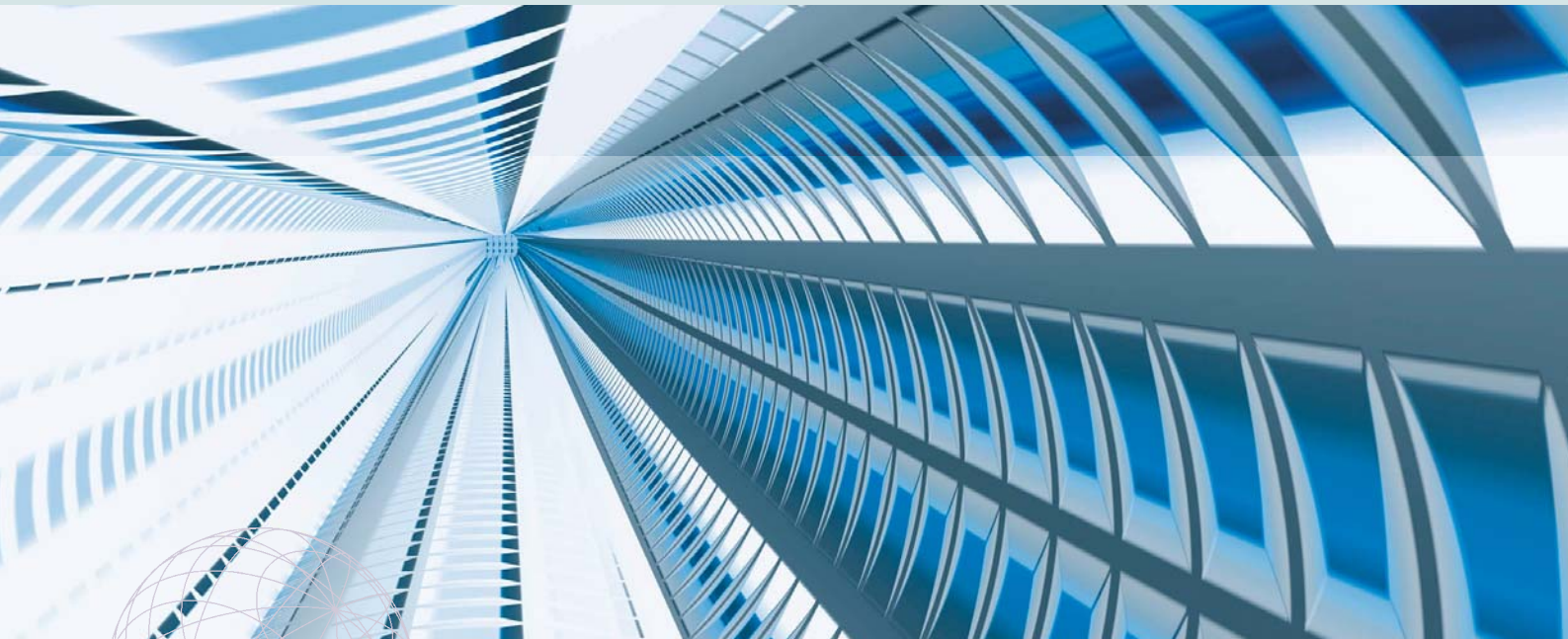
The different sub-processes that make up the innovation process as a whole require different organisational environments or contexts – and therefore different leadership styles.

In the creative phase, for example, the organisation must allow creative input from diverse sources; it must tolerate ambiguity and facilitate unstructured communication¹³. For the commercialisation phase to be timely and efficient, the organisation must enable cooperation and coordination across organisational units such as R&D, manufacturing, and marketing.

Earlier, we looked at two dimensions of innovations. Now we can consider how the types of leadership relate to these innovation dimensions. So we can see how leadership relates to the degree of novelty in the innovation – incremental or radical. And we can do this for innovation at both the product/process/service level, and at the organisational and market level.

Table 1:
The Effects of Leadership on Innovation at the Product/Service/Process Level

| | Incremental innovation | Radical innovation |
|---------------------------------------|---|---|
| 'Motivational' aspects of leadership | Balance between transformational and transactional leadership | Emphasis on transformational leadership |
| 'Structuralist' aspects of leadership | Emphasis on structure, systems, processes | Emphasis on values, norms, beliefs, informal networks |



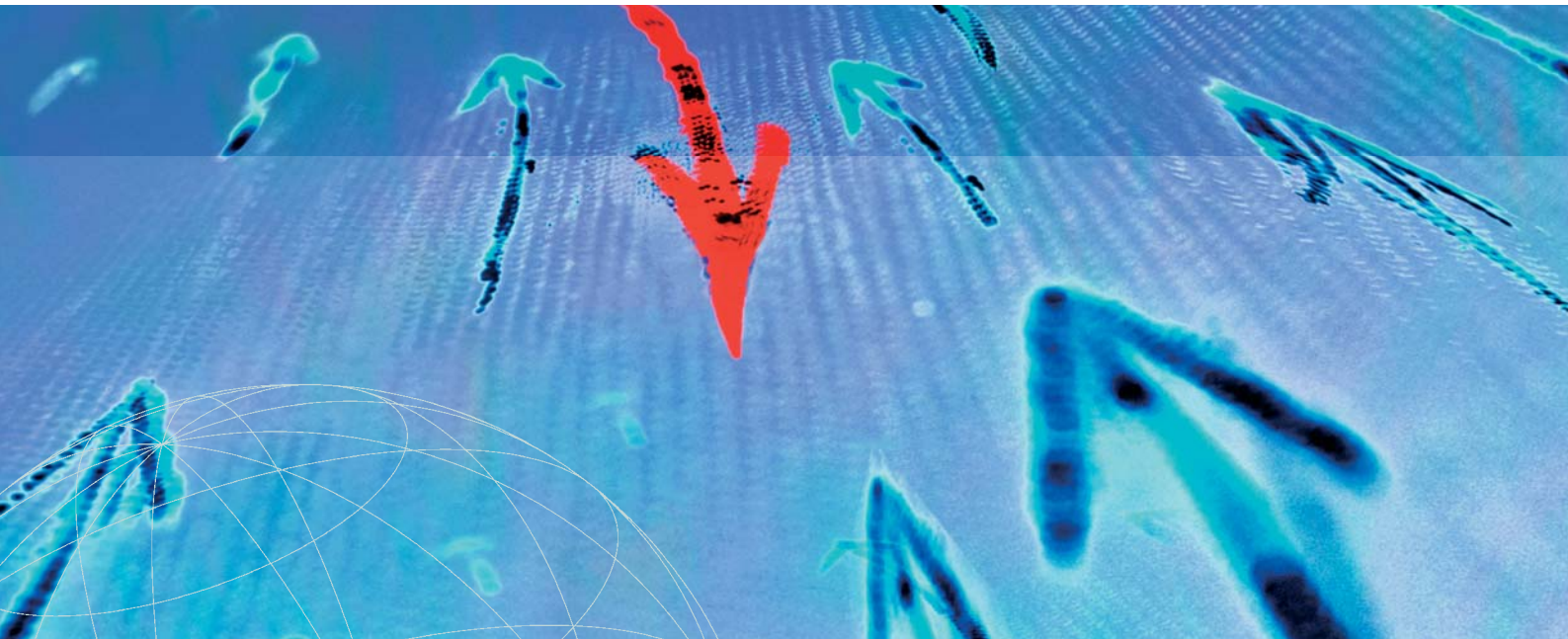
The Leadership Challenge

So, we can see that the leadership challenge varies with different stages of innovation. At the product/process/service level, the leadership challenge is to create the right organisational context for the particular stage of the innovation process. In the early creative phase, an organisational environment that supports experimentation and rich communication is required. At the motivational level of leadership transformational leadership is the best fit. Research shows this type of leadership to be highly effective in conditions of uncertainty and ambiguity¹⁴. At a structural level, acting as organisational architect, the kind of leadership that places an emphasis on factors that enable the more creative aspects of innovation such as values, norms, beliefs, and informal networks is appropriate.

Once out of the exploration phase and into exploitation via refinement, scaling up and commercialisation, the requirements change. At this stage, an organisational environment that favours accountability and a more formal structure is appropriate. This means leadership styles that favour transactional behaviour at the motivational level. At a structural level the kind of leadership that emphasises the factors that favour the commercialisation aspects of innovation such as structure, systems and process is required.

Table 2: The Effects of Leadership on Innovation at the Organisational Level

| Balancing innovation processes of varying degrees of novelty ('ambidexterity') | |
|--|---|
| 'Motivational' aspects of leadership | Emphasis on transformational leadership to achieve 'ambidexterity' |
| 'Structuralist' aspects of leadership | Emphasis on organisation design (structural separation and integration, creating contextual ambidexterity through systems and culture, building external and internal networks) |



If we take innovation at an organisational level then the leadership challenge is one of maintaining and integrating two conflicting organisational contexts. Successful organisations balance a steady stream of incremental innovations against the occasional radical innovation – an organisational balancing act often referred to as ambidexterity. Leaders must create and maintain organisational contexts that emphasise incremental as well as radical forms of innovation.

Welcome to the MadHouse: Leading innovation at AXA insurance¹⁵

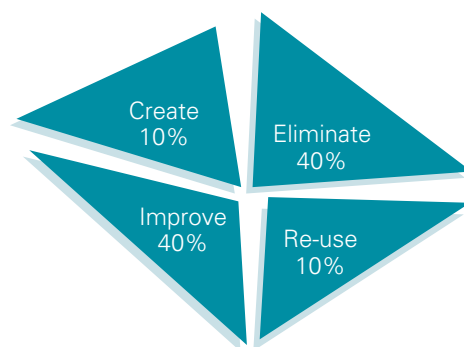
In 1999, John O’Neil became CEO of AXA Insurance, Ireland, the leading motor and household insurer in Ireland. He set about making innovation a central part of the company’s strategy. To do so he used his influence both as a motivational leader and as an organisational architect.

- On a structural level he created an innovation department, and appointed an innovation manager. He charged the department with the responsibility ‘to raise the innovative capability of the organisation through staff involvement and shared knowledge’.

O’Neil also developed and implemented a number of innovation initiatives. With the help of the innovation department, he introduced the ‘MadHouse’ initiative. The MadHouse is a highly successful team-based innovation programme that brings seven employees together from across different grades and functions to work together, brainstorm, select and develop customer-focused innovation proposals. These ideas are presented as business cases to a team of assessors. The selected ideas are then passed on to a Project team for implementation.

- On a motivational level, he addressed the issue of what innovation meant at AXA. The company developed the Innovation Quadrant (see Figure 3 below). This formed part of the communication strategy helping to promote the understanding and meaning of innovation among staff.

Figure 3 – The four elements of the quadrant are:



- Create new customer-focused opportunities (radical innovations)
- Improve existing products, services and processes (incremental innovations)
- Eliminate non-value adding activities (process or cost-reduction innovations)
- Re-use AXA Global success stories (me-too innovations)

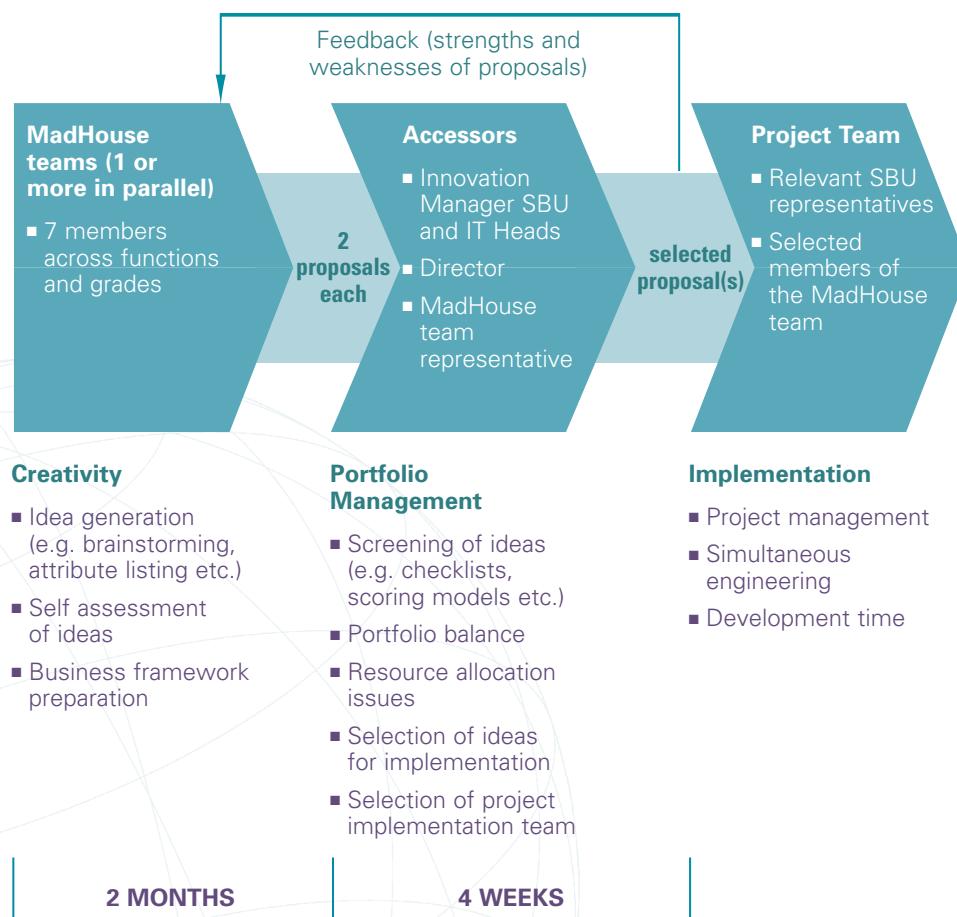
Note the balance between radical and incremental innovation.

The Quadrant is then used to audit the company’s innovation performance. Innovation efforts can be re-focused or sustained depending on what the outcome is in comparison to the company strategy.

The success of the innovation programme at AXA Insurance, Ireland, shows how O’Neil’s motivational and structuralist leadership behaviours interact to deliver innovation (Figures 3, 4). He created a common goal for innovation, inspired his followers to buy into this goal and designed a process for delivering different types of innovation in the organisation.

The organisation has been transformed from a traditional non-innovative insurance company into one where innovation thrives. The structure of the innovation process is shown in Figure 4.

Figure 4: The AXA Innovation Process¹⁶



Our research shows that there is a complex relationship between leadership and innovation. Leaders can impact on innovation as motivators, and as organisational architects. As motivators they might act as transformational or transactional leaders, for example. As organisational architects they create the organisational context or environment within which innovation takes place.

Implications for practitioners

Organisations face a number of leadership challenges when promoting innovation:

- Organisations must understand that leaders can impact on innovation through the dual roles of motivator and organisational architect. And that they do so by creating the appropriate organisational context or setting within the organisation.
- They must recognise and develop the appropriate types of leadership for the different stages of the innovation process. For instance, transformational leadership skills may be more useful in early-stage innovation, such as during exploration, while transactional leadership skills are essential during commercialisation.
- The selection, support, evaluation, motivation and development of leaders will therefore depend on the innovation stage they are responsible for.

Leaders can impact on innovation as motivators, and as organisational architects.

- Leaders must create the appropriate organisational context to support innovation. This involves understanding organisational design options that can foster both radical innovation and incremental innovation and obtain the right balance between the two. This is sometimes referred to as an ambidextrous organisation¹⁷.

The conventional idea of leadership is that of the inspirational leader exhorting and inspiring followers to achieve some common purpose.

Implications for policymakers

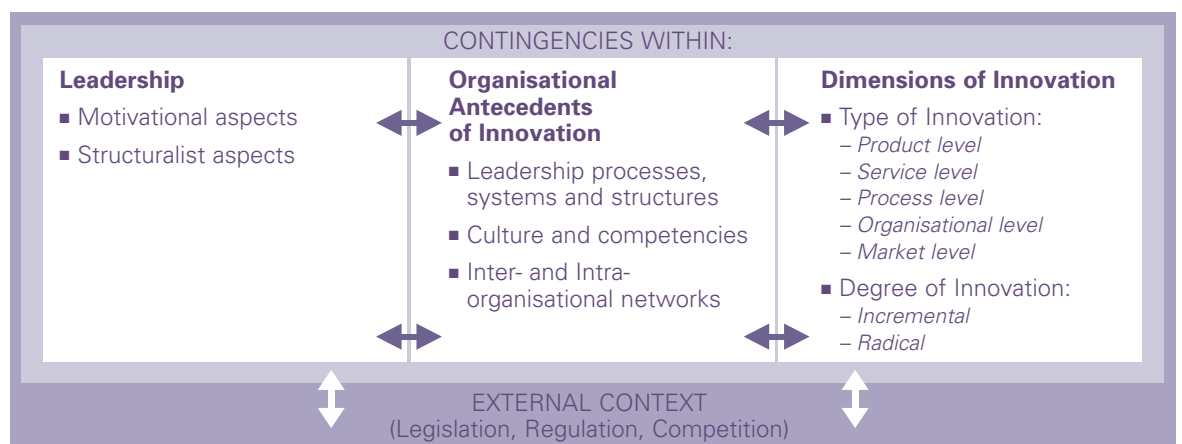
The DTI is committed to developing an Inspirational Leadership Index (ILI). Our research has a number of implications.

- In preparing the Inspirational Leadership Index, it is important to consider multiple facets of leadership, namely the motivational and structuralist approaches, we outline in this report.
- The Inspirational Leadership Index should draw on some well-established measurements of the motivational aspects of leadership – in particular the Multifactor Leadership Questionnaire (MLQ).
- The design of the Inspirational Leadership Index should have a practical element and be complementary with steps towards providing appropriate leadership training.
- It is important to recognise the important role of ambidextrous organisational forms in facilitating different leadership approaches at different stages of the innovation process and at different levels of the organisation.

Implications for researchers

- This report proposes a framework that links leadership to innovation outcomes through innovation enablers (see Figure 5 below). Further research is required into the issue of innovation enablers as well as innovation barriers. This will enable us to identify the processes and actions most appropriate for leaders to influence the innovation performance of their firms through organisational context.
- Further investigation into the complex relationship between leadership approaches and stages of innovation is required.
- The potentially significant concept of distributed leadership needs to be adequately researched.

Figure 5: The ‘Leadership for Innovation’ Conceptual Framework



The Leadership for Innovation Framework

The conventional idea of leadership is that of the inspirational leader exhorting and inspiring followers to achieve some common purpose. Our research suggests that leadership is far more complex than this outdated notion. Leadership is multifaceted as is its effect on innovation. This conceptual framework reflects the complex interaction between leadership, the organisational context, and innovation.

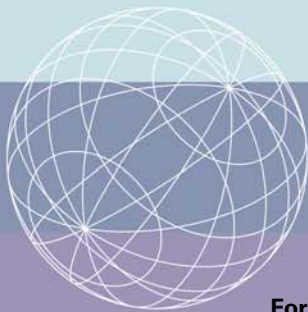
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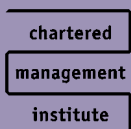
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