

DESIGNING FOR LEARNING AND INNOVATION AT WORK

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Abstract

In this article we focus on aspects of organisations that they can use to design workplaces in such a way that individual learning and organisational innovation can blossom. Recent studies in this field reported positive associations between organisational characteristics stimulating learning and innovation and performance of the firm. However, it stays unclear which factors are the most prominent facilitators or inhibitors of learning and innovation. This study provides directions for designing the workplace in order to stimulate on-the-job learning by employees, and by this, to organisational innovation. A range of both individual and organisational factors seems to be the building blocks of routes to workplace learning and innovation. Notwithstanding the way an organisation implement these routes and, also, measures the outcomes, it stays clear that designing for learning and innovation is beneficial for organisations in terms of their sustainable competitive advantage. Based on a literature review, we selected the most important organisational aspects to focus on in order to encourage learning and innovation in organisations. Furthermore, we derived from interviews with Dutch managers in what way and in what extent these aspects can be recognised in their organisations. Finally, various ways in which organisations can design the workplace for learning and innovation are discussed and suggestions for possible new directions are given.

1. Introduction

The last decade has been characterised by changes in the business environment in many different aspects. For example, there were changes relating to increasing globalisation, competitive pressure, and individualisation. The need for life-long learning and continuous development of knowledge and skills became more important, that increases organisations' capability to deal with a turbulent environment. In addition to this, organisations need innovative capabilities to be able to react and pro-act to changes in their environment. Small, incremental changes in organisational structures and processes, and the products and services it produces, but also radical renewals of these elements can be used to respond to small to large foreseen and unforeseen changes in the environment of the organisation.

In the more individual oriented research, it is often suggested that individual learning processes contribute to a firm's unique and inimitable competitive advantage in the marketplace and that organisational innovation can emerge from experimentation and learning experiences of organisational employees (Gheradi, Nicolini, and Odella,

1998). In the view of current literature, a firm's innovative force can stem from the special attention to ways an organisation stimulates learning of their employees. It is the aim of this article to provide directions for organisational design aimed at stimulation of on the job learning by employees, and by this, to organisational innovation. The research question addressed is how organisations can design a workplace in such a way that individual learning and organisational innovation can blossom.

The answer to this question will be derived from an analysis of the factors that are mentioned in the literature closely linked to this research topic. From this literature, we selected the most important aspects for organisations to focus on in order to encourage learning and innovation in organisations.

The article is structured as follows. We start with describing the background of our study. This background is used on the idea that the upsurge and interest of current organisations in continuous learning and innovation. After that, individual, organisational and other more general factors are discussed as antecedents of learning and innovation. Finally, various ways in which organisations can design the workplace for learning and innovation are discussed and suggestions for possible new directions are given.

2. Background

Organisations have taken various routes in their attempts to design for learning and innovation of their workforce, including attracting and retaining high potentials and innovative personalities, building knowledge management systems, modifying work design, creating learning networks, or introducing systems that reward learning and innovation (Adair, 1990). And indeed, recent studies in this field reported positive associations between organisational characteristics stimulating learning and innovation on the job and performance of the firm. However, it stays unclear whether this relation holds in the long term. The embeddedness of creativity in an organisational setting affects the likelihood of this (Roffe, 1999).

Organisational learning literature and organisational innovation research has been driven by the desire to answer the seemingly straightforward question: what is it that makes some organisations more learning and innovative than others? Researchers have searched for factors, which help or hinder organisations in their attempts to be learning and innovative organisations. This approach has its roots in sociological and

social anthropological work on the diffusion of knowledge, which seeks to explain how new ideas, products or processes spread through a population (King and Anderson, 2002).

A vast number of different factors have been examined as possible facilitators or inhibitors of learning and innovation. In this article we concentrate on the most relevant antecedents of on the job learning and organisational innovation from an organisational perspective.

Organisations can anticipate on learning and innovation on the individual and the organisational level. There are various routes that can be undertaken by organisations in order to let this happen.

In this study we describe these various routes that organisations could follow in order to enhance learning and innovation in the organisation. Our basic assumption behind these notes is that learning and innovation by individuals is influenced by individual factors as well as organisational factors. The next section addresses these individual and organisational factors as well as other, more general factors. After that, we give some directions for designing organisation in order to stimulate the learning of employees and to enforce the innovativeness of the organisation.

3. Antecedents of learning and innovation

3.1 Individual factors affecting learning and innovation

When trying to explain why in some organisations more learning and innovation takes place than in others, characteristics of people within the organisation are one of the first factors to be considered. Early research into the individual characteristics on learning and innovation that takes place in the organisation focused on personality traits, values and beliefs, experience and knowledge, and so on (King and Anderson, 2002). Today, cognitive and learning behaviour of employees, are frequently mentioned as success factors for organisations in terms of the extent of learning and innovative atmospheres that are created by this (Megginson, 1996; Van der Sluis, 2000).

When it comes to the opportunity to experiment, develop and apply new ideas, the amount of job control that an individual has, seems also to be highly important (Amabile, Conti, Coon Lazenby and Herron, 1996). For example, Unsworth, Wall and

Carter (2002) conducted a survey of health service employees and found that the level of autonomy was closely associated with individual learning and innovation. Furthermore, it appears that autonomy is more strongly related to the implementation of ideas as opposed to the initial generation of ideas (Holman, Epitropaki and Fernie, 2001; Unsworth, 2001). Hierarchical status in the organisation or grade had also been noted as being associated with greater individual development and innovative ideas, possible because status confers greater freedom to make decisions and improved access to resources (Ibarra, 1993, Tierney, Farmer and Graen, 1999). Both the level of job control and grade should have a particularly strong effect on the learning and innovation that takes place on the job by the individual. This process will result in the next step: implementation of ideas in the organisation. Finally, as mentioned earlier, theorists such as Amabile (1988) and Sternberg and Lubart (1996) identify an individual's general motivation and confidence to innovate as a key influence on both their generation (i.e. learning) and implementation (i.e. innovation) of ideas.

3.2 Organisational factors affecting learning and innovation

It is clear that when one considers learning and innovation in organisations, the work environment is a highly important influence in terms of facilitators or inhibitors of learning and creative behaviour on the job (Amabile, 1983, Mumford and Gustafson, 1988). Regarding characteristics of a work context that stimulates learning of employees and enforces the innovativeness of the organisation, several parameters can be taken into account.

First, the climate for learning and innovation of the department, business unit or organisation is important (McCauley, Ruderman, Ohlott and Morrow, 1994). For example, Ekvall and Ryhammer (1999) found that climate and resources exerted the strongest influence on learning and innovative outcomes for university teachers and West and Wallace (1991) showed that team climate for learning and innovation significantly predicted team learning and the innovativeness of health care teams. More specifically, in the work environment, managerial support for learning and innovation is also potentially influential (Williams, 2001). In addition, mentoring and other developmental relationships can have an impact on managerial learning (Godshalk & Sosik, 2003). Tierney, Farmer, and Graen (1999) showed that the quality of leader-member exchange was a significant predictor of employee development and innovation and Axtell *et al.* (2000) found that employees with more supportive

managers were more likely to have their ideas implemented. Recently, Baer and Frese (2003) found that climates for initiative and psychological safety were positively related with process innovations and firm performance. In their study, climate for initiative refers to formal and informal organisational practices and procedures guiding and supporting a proactive, self-starting, and persistent approach toward work. Like climate for learning and innovation, such practices and policies seemed to motivate employees to engage in this form of extrarole behaviour. Similarly, Morrison and Phelps (1999) found that top management support for a general climate for initiative is important for people to show initiative and be creative on the job.

3.3 Career capitalism

Based on the ideas described above, it is suggested that employees with specific personal characteristics who work in environments characterised by favourable climates and management support for learning and innovation, will be more likely to develop and innovate than others. However, Inkson and Arthur (2001) make an important caution. They state that individuals are career capitalists and, therefore, prefer to keep their learning and creative ideas for themselves. This makes that the transfer of personal knowledge to the organisation is not self-evident. This viewpoint, considering the investment that people make in their companies, is less common than to talk about the investment that companies make in their people. But this investment is critical for translating individual learning and innovation to the organisational level. Each employee invests time, energy, skills and relationships into his or her job and company that is worked for. Like financial investors, employees do so in anticipation of accumulating more of what they put in. This suggests that career investments shape the companies in terms of their learning and innovation. However, most employees are energised more by self-interest (including noneconomic self-interest) relating to their own careers than by their companies' interests relating to their survival and growth.

Given this kind of psychological contracts between current employees and employers, organisations should be managed in a way that learning and innovation are generated, stimulated, and implemented. In line with these notions, it can be suggested that the organisational arrangements as mentioned in the next section can be taken into account when designing workplaces for learning and innovation.

4. Workplace design for learning and innovation

Unfortunately, not enough research has occurred in understanding what the best way is to enhance learning and innovation in organisations. The sociological and behavioural theories that guided the leading function of management practice for production organisations have become inapplicable in the current knowledge era where employees can be described as career capitalist (as mentioned in 3.3) and knowledge employees. Available management theory does not provide specific techniques that are developed specifically to design for learning and innovation in organisations. Although a lot is coming out at developing an understanding on the sociology and psychology behind sharing knowledge and the transfer of learning, there is a substantial gap between the theory and what is applicable to these employees working in an innovation environment. Nevertheless, there are some characteristics of the workplace that are mentioned in the current literature to be stimulating for learning and innovation in the workplace. These are discussed below.

Symbiotic leadership

Amar made an attempt to fill that void in the area of leading (Amar, 2001). He observed from his studies that successful innovation was achieved by creating an environment of symbiosis in which they help their employees set mutually beneficial ambitions, and provide each one a forum to achieve them. This style of leadership is called symbiotic leadership and suits the needs of knowledge workers knowing that innovation is not something that could be get from the employees as a matter of course.

Managers in all organisations can use symbiotic leadership practices and techniques to create innovative work environments. This way, the managers will give knowledge workers an environment that allows the best emanation of their creativity. Because leadership, organisational culture, learning and innovation are strongly related, these concepts should not be studied separately. In much of the research on mentoring by managers is the central role of a supporting organisational culture in the stimulation of learning and initiative. Dovey (1997) states that to create a learning organisation, managers with executive power should be oriented towards attaining an organisational culture/climate that endorses the vision of leadership and encourages collaborative learning together with greater power sharing. Honey and Mumford (1992) outlined four key activities which managers need to undertake in order to develop a supportive

learning climate within an organisation: Showing role modelling behaviors; Providing learning opportunities; Building learning into organisational processes; and, Acting as a learning champion. This literature suggests that the interplay between leadership and organisational culture is an important factor in stimulating learning on the workplace and that managers should shift from concurrent control to meta control (Hales, 1993). The role of managers is becoming more and more important, since line managers of many organisations are increasingly held responsible for learning and innovation. Therefore, more studies on learning and innovation are needed that include leadership roles and organisational culture. The practical relevance of these studies is that they indicate what managers should do in order to stimulate learning and innovation in organisations.

Is there also a path to sustainable growth via learning? To date, there are very few examples of enduring engagement in learning and profound large-scale transformation; not many succeed in diffusing individual learning throughout the organisation (Senge *et al.*, 1999).

Project teams

Building communities of reflective practitioners may be a way to meet the challenge of diffusion of learning, and projects may serve as practice fields for developing learning capabilities and cultivating effective habits of reflective practice that cross the boundaries of the specific project and project team (Ayas and Zeniuk, 2001).

Raelin (2001) argues that reflection is fundamental to learning and that it provides a basis for future action. Projects may serve as the ideal setting for developing inquiry skills that enable us to better understand our assumptions and the consequences of our actions. For this purpose, project-based learning is about using projects as vehicles for creating such a context: setting that stage for reflective practices and inquiry at all levels within the organisation, to reveal deeper aspiration and construct shared understanding. It is about acquiring habits of reflective practice in the project environment to benefit the individual, the organisation and society. The essence, therefore, is the context that projects may or may not provide for double-loop learning and building communities of reflective practitioners. Ayas and Zeniuk explored how learning in projects can be made more meaningful, relevant and enduring with a focus on reflective practices that increase the “quality of learning” in projects (Ayas and Zeniuk, 2001). They mention the use of various organisational learning tools (e.g., the

ladder of inference, left-hand column, system archetypes), dialogue, story-telling, and individual or group exercises for team building, team learning and leadership development as reflective practices that increase the quality of learning in projects by individuals.

The question is how project-based learning could balance the emphasis on the specific task at hand on the short-term and the benefits of a project for the longer term in terms of career development. If project leaders are solely evaluated on their short-term performance, i.e. performing within time and budget constraints, this naturally makes the investment required for learning and reflection a very low priority for them in the first place. Project leaders should be aware of this conflict and therefore emphasis the delicate balance between short-term and long-term goals of the projects. This will increase the learning effects of the project in terms of organisational effectiveness and individual learning and development.

Challenging work environment

Work-related characteristics are mentioned as factors that stimulate learning and innovation. This follows from the fact that job components like a high level of responsibility, new tasks in case of a transitions, working in teams, and obstacles like lacking support from top management or financial capital force employees to be creative in doing their job which enhances learning and innovation (McCauley, Ruderman, Ohlott, and Morrow, 1994; Van der Sluis, 2000). Innovation depends on employees who are motivated to contribute to learning and innovative processes in the organisation. The design of jobs, work context, job challenges and career paths can increase the learning and innovative behaviour of employees (Nadler and Tushman, 1988). In general, managers acknowledge the importance of organisational culture for stimulating learning and innovation. For example, Mishra (2001) reported that managers continuously attempt to create a learning culture within organisations to enable them to adapt to the current business environment. Also, many authors have stressed that workplace learning and innovation is related the ‘quality’ of work environment. Pool (2000) found that a supportive organisational culture is strongly related to the level of learning and innovation. In his study, the essential parts of a challenging and supportive work environment were open communication, trust, innovation providing challenging work, and cohesion among employees. So, according to that study innovation leads to innovation!

Formal linking mechanisms

In managing for learning and innovation, organisations must develop internal linking mechanisms, which are bridges that connect disparate functions in the organisation and encourage collaboration and problem solving. Linking mechanisms that can be used, are: joint problem solving teams or matrix organisations, committees and task forces, project managers and formal meetings (Nadler and Tushman, 1988; Handyside and Light, 1998). The idea behind these mechanisms is that learning and innovation is created by combining different types of knowledge and skills of individuals from different disciplines and departments. Besides, external links with organisations outside the core organisation can stimulate learning and innovation in the workplace. Examples of such external linking mechanisms are: venture capital, joint ventures, licensing, acquisition, internal venturing, network organisations, and independent business units (Teece, 1986; Nadler and Tushman, 1988).

Culture/climate

Organisations with strong egalitarian cultures create a set of norms, symbols, and beliefs that encourage learning and innovation in organisations. This kind of culture facilitates continuous improvement and adaptation at all levels (James, 2003). Tolerating the use of reflective practices may be a first step in setting the stage for the evolution of a work environment that is conducive to learning. Such a work environment can be called the learning culture or learning climate (Van der Sluis, 2002). According to Shrivastava, an organisation's culture is revealed through artefacts, like myths and sagas, language systems and metaphors; and symbols and rituals. He pointed out that existing cultural artefacts have a major impact on strategy formulation and should therefore be taken into account in the strategy formulation process. For example, he observes that existing success stories told within a company and organisational statements of cultural values often serve to constrain the boundaries within which strategy is formulated. This is readily seen with companies that focus on quality. They find it difficult to be flexible and/or innovative, thus constraining their options in a time of rapidly changing environments, where flexibility and innovation is critical. We agree with the statement of Higgins and McAllaster (2000) that not only do cultural artefacts impact strategy formulation; they impact strategic execution as well. Alignment of strategy and cultural artefacts is

critical to success. In a few words, once you change strategy, you must change your cultural artefacts so that they match your new strategy. If you want innovation, you must have cultural artefacts that support innovation. Based on these ideas, Higgins and McAllaster mention the following five types of artefacts to achieve strategic success through innovation.

1. Aligning corporate myths and sages with the new strategy
2. Aligning language systems and metaphors with the new strategy
3. Aligning new symbols, ceremonies and rituals with the new strategy
4. Aligning identifiable value systems and behavioural norms with the new strategy
5. Aligning the physical surroundings found in the culture with the new strategy

According to the authors, there is clear evidence that changing cultural artefacts, or creating them for the first time, made a significant difference in strategic performance. In comprehensive case studies they saw how firms can use all five types of cultural artefacts to bring about innovation. Aligning cultural artefacts with a new strategy based on innovation cannot guarantee strategic success, but doing so takes an organisation a long way toward successful strategy implementation using innovation as a focus.

Structure

Today's cutting-edge products and services raise the competitive bar as they become the basis for customers' expectations tomorrow. And yet, there is no shortage of companies (both existing and new) attempting to capitalise on the latest technologies and customer demand trends to become the behemoths of their respective industries. Lei and Slocum (2002) highlights some of the most important organisational issues confronting firms as they deal with their competitive landscape. They examine how some firms across a variety of different industries are successfully utilising the forces of change to create new sources of competitive advantage. They suggest that many corporate searches and responses to the new fast-changing competitive environment grew out as alliances, mergers and acquisitions. Within the firm, each stage of the traditionally defined value-adding process –including R&D, operations, marketing, finance, call centres, and even human resource management- now involves a high level of co-ordination and interaction with partners outside the firm. Often, suppliers can provide the same value-adding activity at significantly lower cost or with a faster turnaround time. Vertical integration to build economies of scale may no longer be

viable competitive strategy, particularly in those industries exposed to frequent and radical change.

Vertical integration is no substitute for fast learning and innovation. It is becoming increasingly difficult for any given firm to master every value-adding activity in-house. With technology itself rapidly becoming a commodity that can be readily imitated, many firms are beginning to focus and concentrate their innovation efforts. At the same time, however, they are forming closer relationships among a vast array of partners to capture brand equity and consumer awareness in the “market space” and the conventional “marketplace”. Building relationships to foster innovation has become more important than maintaining control through vertical integration, particularly when fast-changing customer needs are driving product development. As firms continue to co-operate with one another, it is important that each member of an expanding alliance relationship contributes and learns from another. Skills and insights developed from one set of products/services may be directly applicable to others. Thus, alliance partners need to ensure that they are capable of continuous learning, not only from one another, but also from their own internal efforts. A constant balance of mutual learning and contribution helps to keep the alliance relationships stable, and to promote risk sharing when working together to develop future innovations.

The issue of learning is especially salient for firms in those industries where knowledge work, substitute products, and rising information intensity are simultaneously interacting to redefine industry structure and the underlying bases of value creation. In industries characterised by accelerating rates of change, (especially with greater force and frequency), firms must remain sensitive for new types of competitors and customer needs. Moreover, these are likely to be the same industries whereby firms’ traditional organisational structures and approaches to value creation will undergo the most significant metamorphosis. As each firm develops its own unique approach to renew its competitive advantage, a key task facing senior management will be to foster a willingness by managers at all levels in the organisation to call into question their firm’s strategies and practices as new developments occur in the environment.

Structures in case of partnerships and consortia can be based on both formal and informal modes of interaction (Carayannis, Alexander, and Ioannidis, 2000).

Employment contracts

Storey, Quintas, Taylor, and Fowle (2002) examined the relationships between the increasing use of various forms of 'flexible employment contracts' and the incidence of product and process innovations. One body of literature on product and process innovation suggests that it is dependent on attracting, building and nurturing key capabilities. Part of this argument is that employees will be prepared to contribute discretionary effort and to carry the risks involved in innovations only if they have a sense of security in their employment.

In the face of two decades or more of outsourcing, an increased use of temporary contracts and of part-time working, questions arise about the consequences of such departures from the secure employment contract for the achievement of product and process innovations. In other words, there is the issue concerning how the capacity to innovate is managed under these looser employment conditions.

The economics and business strategy literatures reveal considerable disagreement about the nature of the association between employment relationships and innovative capability. For example, there are models of firm strategy which emphasise the need to build and sustain committed and capable human resources (e.g., Newton, 1998). By implication, erosion of these conditions through the use of short-term, temporary and part-time employment contracts might be expected to undermine the capability of an organisation to innovate in its product and service offerings as well as in terms of superior processes even though the organisation may gain some short-term cost advantages through such contingent contracts. Then, it might be expected that a human resource strategy which emphasises secure, long-term and high-commitment-based employment policies would be more conducive to innovation, whereas 'looser' employment contracts, such as fixed-term contracts and the use of agency labour, would be damaging to innovative performance. Extensive use of part-time contracts might also be judged as problematical from this perspective.

But, on the other hand, others have argued that these looser employment relationships could, in fact, be beneficial for innovation (Adams and Brock, 1986). This hypothesis stems from two different logics. One is that diverse contracting practices enable and allow constantly renewing inflows of fresh ideas. The other is that flexible employment policies exert a discipline upon labour, which counteracts complacency and rigidity. Both logics tend to celebrate the benefits of exposure to free markets and

they implicitly, if not indeed explicitly, offer a critique of internal labour market arrangements.

From the study of Storey *et al.* (2002) suggested that there was some evidence to support the view that secure employment and high commitment management are important for innovation but further analysis found that the linkages between types of employment contracting and innovation were rather more complicated in practice. To a large degree, flexible working was found to be a consequence rather than a driver of innovation.

Discussion

In this article we discussed aspects of organisations that can be used to design workplaces in such a way that individual learning and organisational innovation can blossom. Recent studies in this field reported positive associations between organisational characteristics stimulating learning and innovation and performance of the firm. However, it stays unclear which factors are the most prominent facilitators or inhibitors of learning and innovation.

At the heart of this theme lies the upsurge and interest of current organisation in continuous learning and development. Firms can only survive and prosper to the extent that they are able to change as fast or faster than the rate at which their industry is changing. Moreover, firms must balance their organisation designs to promote the kind of innovation, experimentation, and thinking that will encourage self-renewal and reinvention. One of the biggest conundrums facing established firms is that as they become larger and more successful over time, they tend to implement practices and organisational structures that promote stability at the cost of innovation. At the same time however, this quest for greater internal stability and control sharply delimits a manager's ability to learn and bring in the kinds of new insights, skills, and the "out-of-the-box" ways of thinking that promote change.

This study provides directions for designing the workplace in order to stimulate on-the-job learning by employees, and by this, to organisational innovation. A range of both individual and organisational factors seem to be the building blocks of routes to workplace learning and innovation. Notwithstanding the way an organisation implement these routes and, also, measures the outcomes, it stays clear that designing for learning and innovation is beneficial for organisations in terms of their sustainable competitive advantage. In a nutshell, the kernel of corporate survival means learning

how to innovate as quickly as the new entrant, while assimilating new technologies within the established firm's infrastructure, brand(s), or existing economies of scale.

It is however also possible that learning and innovation come from buy-ins. Intel, for example, has investigated aggressively in learning and innovating new forms of chip architectures that have already enabled the firm to secure major contracts with digital cell phone (Ericsson, Nokia) and other companies. And, it has also acquired a host of different companies, such as Dialogic, Level One Communications, with emerging technologies that will accelerate Intel's internal innovation efforts. Intel believes that by acquiring these firms in their infancy, it can pre-empt the rise of new competitors from penetrating its existing core business.

Another possibility to stimulate learning and innovation is the use of computer mediated communication. This way of organisational communication seem to lower the resistance to change and therefore to increase the level of learning and innovation in the workplace. Communication methods that can be thought of are E-mail, Internet Relay Chat (IRC), Multi user domain, object oriented (MOO), and Forum. IRC or chatting is a synchronous activity. Two or more participants have to be online at the same time in order to make this possible. Multi user domain (MUD), object oriented (MOO) is a form of communication originally developed for gamers (Dungeon's and Dragons to be precise). In a MOO people have an avatar (picture) in a "world". They can walk around and click on objects to retrieve data from the object. They can also communicate with other participants. On a forum communication can take place both asynchronous and synchronous. When it is taking place asynchronous, someone posts a message on the forum, and others are able to read it and respond to it. When someone else is online at the same time, it is possible to react to it immediately in which case this can take the form of a chat session. On a forum someone can be relatively high, since here it is also possible to sign in under a pseudonym, same as for the chat. The information posted is both written and visual. In contrast to e-mail one has influence over the position of the picture in relation to the text.

We discussed the changing employment relationship between employers and employees, i.e. psychological contracts. The implications of this for those who survive the effects of restructuring, downsizing and reorganisation are likely to be little more comfortable than those who do not (Hiltrop, 1995). Yet, more than ever, the organisation needs the employees' commitment in order to succeed and, indeed, to

innovate! The pressure is to do things better, faster, and cheaper and people have to know what they are expected to do in order to achieve these objectives.

In our analyses we also addressed the leadership style. Many researchers have examined the effect of leadership and management style on aspects of the psychological contract. Related to this, Lawler and Mohrman (1989) suggest that employees will only be motivated to learn and innovate if they are allowed to share in the risks as well as in the rewards. Their concept of Total Employee Involvement (TEI) calls for sharing important information, sharing management authority, delegating responsibility for performance management, and allocating rewards based on corporate success. This could also be a strong approach for workplace learning and innovation.

The push towards project teams and cross-functional teamwork can be seen as a very important development that enhances commitment to organisational objectives. Such teams increase individual learning and skills, provide more rapid feedback, and overall enhance employees' personal and professional development. All these dynamics will stimulate the transfer of learning and implementation of ideas into innovation.

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