Creativity and Innovation Management
at Ministry of Public Works and Transports

Thongchanh Kimanivong[*]

Abstract

Ministry of Public Works and Transports is the public organization with the mission to implement new process, products, services and methods of delivery resulting in significant improvements in the efficiency, effectiveness or quality of outcomes. This research paper aimed at firstly investigating how Ministry of Public Works and Transports harness individual creativity and innovation to implement their new process, products, services and methods; and secondly examining how organizational culture promote creativity and innovation. The qualitative research methods was employed by conducting group discussion and in-depth interview among the middle management personnel on how individual creativity contributing to organizational implementation in applying new ideas to better produce outcomes.

In terms of culture promoting creativity and innovation, it was firstly found that the MPWT has strong executive leadership and support, a recognized innovation expert and a number of bottom-up processes. Secondly, philosophy and implementable culture in organizing and putting in place the policies and procedures to facilitate innovation were developed. Thirdly, innovation strategy of MPWT is widely articulated across the ministry. Fourthly, there is creativity and innovation strategies enabling opportunities to enhance innovation capacity within the MPWT. Finally, the intra- and extra-organisational learning at levels within the MPWT to harness creativity and innovation in achieving strategic alignment across the MPWT, clarity around role boundaries, empowerment of staff to take initiatives, collaboration across work units and dissemination of corporate knowledge to be enhanced the innovation dynamics. This includes having good technological infrastructure as a powerful means to generate and spread knowledge.

In managing creativity and innovation, the MPWT has the process described as a 'develop, implement, check and adjust model'.

Keywords: Creativity and Innovation Management, Individual Creativity, Organizational Innovation

Introduction

Creativity practice in the Lao PDR has been created by the National Congress of the Lao People's Revolutionary Party held in every five years, which means that the National Development Plan has been formulated in every 5 years. The creativity development of the government is formulated in accordance with socio-economic changes. The Lao Government had policy on economic reform after the 4th and 5th Party Congress starting from 1986 that is the transition from centrally planned economy to market oriented economy.

The 9th National Congress of Lao People's Democratic Republic has emphasized on 4 breakthrough steps to accelerate development of the landlocked country within next five years. However, the new breakthrough approach is in line with the implementation of Party's

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[*] Ph.D. Student, Faculty of Economics and Business Management, National University of Laos ; Email: thongchanh_k@yahoo.com, thongchanh.kimanivong@gmail.com

Renovation policy adopted in 1986, aiming to bring the country by market oriented economy. The first breakthrough is to relieve the minds of people from old stereotypes, complacency and extremism since it is not possible to copy the certain development model from other countries. The second breakthrough is to develop human resources playing a critical role in socio-economic development in Laos since the country is living under a new era of the intellect based economy with the circumstances of both opportunities and challenges. The third breakthrough is to address administrative procedures and management impeding commercial productivity rates and services in order to provide the integration condition of 2015, ASEAN Economic Community. The final breakthrough is to address poverty as the party agreed to allow the government to offer investment incentives in rural areas.

For the Ministry of Public Works and Transports, the creativity practice is based upon the National Congress of Lao Revolutionary Party: VII, VIII and IX specializing in upgrading available infrastructure to enhance agricultural and industrial production, specifically in transport to integrate with ASEAN region: East-West Economic Corridors, North-West Economic Corridor and North-South Economic Corridors. This strategic planning is also reduce poverty by commercializing agricultural products and market access at all region across the country. By implementing the National Congress of Lao Revolutionary Party to reach the goal in 2015, the Ministry of Public Works and Transports has formulated 4 types of transports: automobile road 76l trta8.37 kilometres covering 80% of the total on land transports. The waterway transport with 3,000 kilometres with 20 quays along the Mekong River with 18% of the total waterway transport. The airline transport covers 2%. There are eleven airports across the country. The final type of transport is railway which is under construction.

As creativity is defined as production of novel and useful ideas, which are different from what has been done before, in any domain considered as generation of new ideas or recombination known elements into something new, providing valuable solutions to a problems (Seferi, 2000) whereas innovation is the sucessful implementation of creative ideas within an organisation. In public sector context, innovation can be defined as the 'creation and implementation of new processes, products, services and methods of delivery resulting in significant enhancement in the efficiency, effectiveness or quality of outcomes. In other words, innovation is the application of new ideas to produce better outcomes (Australian National Audit Office, 2009). In the Ministry of Public Works and Transports (MPWT) practice, this definition is the measurable implementation since the ministry has to follow all of its mission assigned by the Government of the Lao PDR.

Innovation occurs across the spectrum of Lao government public sectors entities, from policy development to programme delivery, from regulatory approaches to use of technology, from organizational innovation to provision of new or enhanced services. Critically, innovation is a means to an end, not and end in itself. An appreciation of the importance and diversity of innovation, and how to achieve it should be part of the knowledge, skills and behaviours of every public servant or state employees.

It is important to be aware that innovation goes beyond creativity or the generation of new ideas. It is a process, which can be replicated. Innovation can take any number of forms and dimensions. Some innovation will be ground-breaking or transformational in the sense that it represents a substantial departure from the past while other innovation will be more incremental in nature. Innovations can range from organizational enhancements to use of new or emergent technologies. Innovation can occur as a result of top-down, sideway, to bottom-up approaches. It can be instigated by anyone within an organisation or by external influences (Australian National Audit Office, 2009).

Objectives

The first objective is to examine how organizational culture promotes creativity and innovation in MPWT.

The second objective is to investigate how Ministry of Public Works and Transports harness individual creativity and innovation to implement their new process, products, services and methods.

Literature Reviews

Definition and Concepts

Innovation has many forms and dimensions. Therefore, innovation can be defined as its interpretations. Amabile (1996) defined innovation as the successful implementation of creative idea of within an organization; the implementation or transformation of a new idea into a new product or service, or an improvement in organization or process (Abraham & Knight, 2001; Heye, 2006); a process of bringing any new problem solving idea into use; it is the generation, acceptance, and implementation of new ideas, processes, products or services, which can take place in many different domains such as technical or even social aspect (Kanter, 1983); and a means to an end, not an end in itself (Australian National Audit Office, 2009).

To develop better understanding about innovation, it is crucial to recognise the differences between innovation and creativity. Therefore, creativity is as production of novel and useful ideas, different from what has been done before, in any domain (Amabile, 1996); the generation of imaginative new ideas involving a radical newness innovation or solution to a problem, and a radical reformulation of problems (Newell and Shaw, 1962). Creativity is also defined as the integration of existing knowledge in a different approach (Higgins, 1999), the generation of new idea or recombination known elements into something new, providing valuable solution to a problems (Sefertzi, 2000). It is a phenomenon initiated and exhibited at individual level as personality, motivation (Feist, 1999). Creativity also involves in motivation and emotion which is a fundamental feature of human intelligence and grounded in daily capacities: the association of ideas, reminding, perception, analogical thinking, searching a structured problem-space, and reflecting self-criticism (Boden, 1998, Sefertzi, 2000). In organisational creativity 'innovation' is often used and the distinction between creativity and innovation is an important once. The creativity is the ability to produce work both novel and appropriate (Lubart, 1999). However, the measurement of creativity requires a lot of attention, words associated with the definition of creativity, idea, invention and breakthrough while innovation is about the process of developing and implementing a new idea (Vande Ven, et al., 1989).

Creativity and innovation are complementary activities because creativity creates the basis of innovation which in its development raises difficulties that must be solved once again with creativity. It may not be possible to perceive innovation without creative ideas since these are the starting point (European Commission, 1998). Innovation can result when creativity occurs within the right organisational culture. The right organisational culture is one that provides through creativity processes the possibilities for the development of personal and group creativity skills (Sefertzi, 2000).

Moreover, creativity and innovation are considered to be overlapping constructs between two stages of the creative process; both are necessary for successful organisations (Martins & Terblanche, 2003). As asserted, creativity can be seen as the production of novel and useful ideas,

However, innovation, in a public sector context, has been defined as the 'creation and implementation of new processes, products, services and methods of delivery which result in significant improvements in the efficiency, effectiveness or quality of outcomes' (Mulgan et al., 2003). In summary, innovation is the application of new ideas to produce better outcomes.

Innovation occurs the spectrum of Lao Government public sector entities, from policy development to program delivery, from regulatory approaches to use of technology, from organisational innovation to provision of new or enhanced services. An appreciation of the importance and diversity of innovation, and how to achieve it, should be part the knowledge, skills and behaviours of every public servant. Innovation activity in the public sector can be divided into three common streams: shaping policy direction, in which the role of the public sector is to provide objective and reasoned advice, and options to assist the government's decision-making in relation to policies and programmes; implementing policies and programmes, i.e. delivering services to the Lao community efficiently and effectively; and administrative innovations introducing new internal processes and practices to improve productivity or reduce costs.

The benefits of innovation are diverse. It is widely recognised that innovation is critical to enhance economic performance, social welfare and environmental sustainability. Innovations can also improve organisational efficiency; provide higher quality and more timely services to citizens; reduce business transaction costs; and provide new methods of operation. Innovation can enable better performance and drive new directions. In other words, Innovations can range from organisational improvements to use of new or emergent technologies. Innovation can occur as a result of top‑down, sideways and bottom‑up approaches. It can be instigated by anyone within an organisation or by external influences (Mulgan, et al., 2003).

Importance of Creativity and Innovation

To bring an idea from concept to market to be recognized for its potential; it must receive funding in an environment of scarce or at least competing resources; and it must overcome potential obstacles such as technology challenges, competitive pressures, and a variety of other obstacles. The process by which this happens is referred to as innovation and it is an important process when talking about creativity in the context of organizations. It would not be a stretch to say that when it comes to organizations, creativity without innovation is of significantly diminished value. The converse is also true: without creative ideas to feed the innovation pipeline so they may be promoted and developed. Innovation is an engine without any fuel. Echoing the two citations above, Amabile et al. (1996) differentiates between creativity and innovation as follows: Creativity can be defined as the production of novel and useful ideas in any domain while innovation can be defined as the successful implementation of creative ideas within an organization". Thus, no innovation is possible without the creative processes marking the front end of the process: identifying important problems and opportunities, gathering information, generating new ideas, and exploring the validity of those ideas" (Amabile, 2004).

Individual Creativity and Innovation

Feist (1999) identified a number of personality traits, both social and non-social, of individuals who were especially creative compared to their peers. Some of those traits include dominance, arrogance, hostility, self-confidence, autonomy, introversion, and independence. These characteristics are likely to be at odds with organizational norms and have the potential to create conflict in the social construct of an organization or workgroup, unless carefully and intentionally managed. Freedom and autonomy. Freedom and autonomy are related to

granting and allowing freedom and autonomy to employees for determining the means by which to achieve a goal (Amabile, 1998), not necessarily autonomy for selecting what goals to go after. "In fact, clearly specified strategic goals often enhance people's creativity" (Amabile, 1998: 82). As discussed above, individuals who stand out in their ability to perform creative acts often value independence and autonomy. An organizational culture that supports autonomy in achieving clearly communicated goals will likely be more successful in terms of creativity and innovation than an organization that does not. An environment of freedom and autonomy is more likely to tap into the intrinsic motivation of its employees, which has been a key factor in promoting creativity in organizations

Creativity is a phenomenon that is initiated and exhibited at the individual level. Variables such as personality (Feist, 1999), motivation (Collins & Amabile, 1999), and expertise (Weisberg, 1999) are related to creativity at the individual level. Certainly environmental factors at the group and organizational levels, including organizational culture and climate, influence these variables and therefore impact individuals' behavior, but the focus of creativity is primarily on the individual. Innovation, on the other hand, operates much more at the group and organizational levels. The focus is more on interrelationships, interactions, and dynamics among actors and components of the organization and its environment. These differences have implications for HRD scholars in how they study creativity and innovation; they may impact the research question, the unit of analysis, and the research design. For HRD practitioners, the differences will impact the way in which they define issues in an organization, assess situations, and develop and implement solutions. Throughout the remainder of this article, the terms "creativity" and "innovation" will be used as defined above as much as possible. However, in reviewing the literature, the terms were used interchangeably and it was difficult to differentiate at times which definition was being used.

Organisational creativity and innovation

Creativity and innovation play an important role in organisations. It is stressed that innovation practices enhance the opportunity for employees to undertake problem-solving, and raise the personal returns to problem-solving with new forms of incentive pay (Shaw, 2003). Farazmand (2004) emphasises that innovation in organisation is the key element to the legitimacy and support systems that innovative ideas can enjoy as a strategic instrument toward capacity building and enhancement in human resource development and management. Therefore, the organisations most likely to gain from innovative practices are those that produce high quality of performance or high complex products (Farazmand, 2004).

It is further argued that improving the creative performance of an organisation's employees is essential to its accomplishing competitive advantages. This happens when employees perform creatively they suggest novel and useful products, ideas or procedure that provide an organisation with important material for subsequent development and possible implementation (Oldham & Cummings, 1996). Also, what important for organisations to consider is the form of creativity that needs be encouraged, since this could depend on their business strategy. If, however, an organisation is pursuing a 'cost reduction strategy' and cutting back to its core activities, the organisation may want creative input from staff central on efficiency and cost-effective improvements. This may sound pretty obvious, but it is clear that the organisation continues to find the successful alignment of creativity initiatives with business strategy difficult (Drewery, 2003).

With respect to innovation in organisations, it is pointed out that prioritisation of investment for innovation needs central coordination and a good understanding of the whole business direction. It is noted that where innovation includes market products, the pressure for innovation to be fast, good quality and low risk implies that organisations have to be

careful when selecting which ideas they are going to pursue, as they may need to invest significantly in development and testing (Drewery, 2003). In order to gain the innovations that the organisations require and, as this business-to-business interaction is growing, the speed, cost and quality of innovation in the external market are often better than can be guaranteed in-house (Rigby & Zook, 2002). Whereas, it is emphasised what is important is the organisation's ability to identify what innovation is needed and where it is able to purchase this innovation in the most cost-effective way (Drewery, 2003). This further asserts that constant liaison between creative and innovative functions (the design and development) and the front line is vital, particularly to examine details of the internal or external customer needs as to ensure that their needs are being met, and to ensure staff 'buy in' to the innovation process. Thus, good knowledge and information process are required to support the link between the creative and innovative sections of the organisation (Martensen & Dahlgaard, 1999).

Organisational culture and climate influenced creativity at the individual level (Tesluk et al., 1997). There are five dimensions of organizational climate influencing creativity, including goal emphasis, means emphasis, reward orientation, task support, and socio-emotional support. Goal emphasis is "the extent that goals for creativity and innovation and the standards for achieving those goals are made known to employees" (Tesluk et al.,1997). When it is clearly communicated in an organization that creativity and innovation are valued goals, there is a greater likelihood that individuals will engage in more creative behavior (Tesluk et al., 1997). Clarity about goals frees up employees to focus their attention on solving problems and generating ideas rather than spending time and energy on trying to determine what goals should receive focus. Means emphasis is "the extent that the methods and procedures for creativity and innovation are conveyed to employees" (Tesluk et al., 1997). If management is able to convey through its actions and words that it values challenging existing norms, active risk taking, sharing of information, and open debate, employees are more likely to engage in those behaviors. Reward orientation is "the extent that rewards and evaluations are allocated on the basis of creativity and innovative results" (Tesluk et al., 1997). The acknowledged sensitivity here is to ensure that the reward and recognition system encourages or enables intrinsic motivation, or equally doesn't impede intrinsic motivation by focusing too much on extrinsic rewards. Task support is "the extent that employees believe that they are being supported by allocations of the time, funding, equipment, materials, and services necessary to function creatively and to implement new ideas, projects and solutions" (Tesluk et al., 1997). Task support may be thought of simply as the organization providing the tools and resources for employees to carry out the work of creativity and innovation. For example, it would be difficult for a scientist to test a new hypothesis without the proper lab equipment or without the time to conduct experiments. Finally, socio-emotional support is "the extent that employees believe that the work environment provides the interpersonal support necessary to feel free to function creatively" (Tesluk et al.,1997). When employees perceive that an organization has their welfare and best interest in mind, when an environment of open debate and discussion is in place, and when trust exists among employees, especially with management, employees can feel more open to take risks and put forth creative ideas.

Research Methodology

The qualitative research methods were employed by conducting group discussion and in-depth interview among the middle management personnel on how individual creativity contributing to organizational implementation in applying new ideas to better produce

outcomes. The content analysis was employed to interpret all transcribing data into understandable text.

Findings and Discussion

Culture for Creativity and Innovation

It was found that culture of innovation and continuous improvement of the MPWT has developed a business innovation strategy with the assistance of strong executive leadership and support, a recognised innovation expert and a number of bottom‑up processes including organizing a wide range of activities throughout the MPWT in the forms of network, forum, discussion board, team meetings. This included organising an 'Innovation Week' with a wide range of activities throughout the organisation, including a video DVD, discussion boards, networks and team meetings.

It was also found that the middle management personnel together with top-management personnel set the MPWT philosophy and implementable culture in organizing and putting in place the policies and procedures to facilitate innovation as to flourish and be sustained in the context of a culture encouraging, recognizing and rewarding new ideas and giving authority to translate such creative ideas into practices. Apart from this the MPWT also promotes learning from the experiences in a positive way and avoid the 'blame game' as it is critical to celebrate success in reinforcing an innovation culture in case not reaching the MPWT's objectives or mistakes were made.

The innovation strategy of MPWT is clearly articulated, readily understandable and relevant to all levels within the MPWT so that it seemed to generate innovation inside and outside the organization which innovation policies supports by making polices dealing with intellectual property.

There is a strategy in recruiting, training and developing staff, which enable opportunities to enhance innovation capacity within an organization including an analysis of future skills needed against the existing skills base in which resources might be best directed. The MPWT also has formed training to participate in networks and communities of practice through on-the-job exposure and mentoring including staff exchange at all levels.

It was finally found that there was intra and extra-organisational learning at all levels within the MPWT, which implies that the organization has top-down, horizontal and bottom-up dimensions in harnessing creativity and innovation in achieving strategic alignment across the MPWT, clarity around role boundaries, empowerment of staff to take initiatives, collaboration across work units and dissemination of corporate knowledge to be enhanced the innovation dynamic. The MPWT effectively did by drawing on the knowledge and experiences of staff closest to the work face who best understand their jobs and the opportunities for improvement since the MPWT felt that incremental innovation can be driven by bottom-up processes while dissemination of ideas can occur very effectively through horizontal as well as vertical networks. Internally, the MPWT has good technological infrastructure as a powerful means to generate and spread knowledge.

MPWT Innovation Model Implementation

As public sector, the MPWT manages creativity and innovation, by using the process described as a 'develop, implement, check and adjust model'.

'Develop' phase is to develop options and solutions' phase of the innovation process in order to develop new approaches to old problems and solutions to new and emerging issues as a core function of a dynamic and forward-looking public service. This phase is to

clearly identify assumptions and their sensitivity to change; engaging with citizens, clients and other stakeholders; and obtaining proof of concept through trials or pilots.

'Implement' phase consists of implementation strategies dealing with the practical steps needed to translate new ideas and approaches into on-the-ground outcomes, which can reflect the features and expectations associated with the initiative.

'Check' phases is to measure the success of innovations which can provide the basis on which judgments can be made about efficiency, effectiveness and appropriateness of a new process, product, service or method of delivery.

'Adjust' phase is a dynamic process involving people learning from experiences, disseminating the lessons learnt and absorbing and anticipating new developments. The critical part of this phase is to minimize the risks including scanning the environment, disseminating the lessons learned, and considering future data needs.

Discussion

As public organization, the MPWT harnesses creativity and implements innovation by formalized the creativity and innovation model into the policy. The implementation of such model is not consistent throughout the MPWT. The best practice of creativity and innovation shall be identified and widely disseminated in the MPWT.

Conclusion

The culture of the MPWT has greatly support individual and organizational creativity and innovation since it firstly has strong executive leadership and support, a recognized innovation expert and a number of bottom-up processes. Secondly, philosophy and implementable culture in organizing and putting in place the policies and procedures to facilitate innovation were developed. Thirdly, innovation strategy of MPWT is widely articulated across the ministry. Fourthly, there is creativity and innovation strategies enabling opportunities to enhance innovation capacity within the MPWT. Finally, the intra- and extra-organisational learning at levels within the MPWT to harness creativity and innovation in achieving strategic alignment across the MPWT, clarity around role boundaries, empowerment of staff to take initiatives, collaboration across work units and dissemination of corporate knowledge to be enhanced the innovation dynamics. This includes having good technological infrastructure as a powerful means to generate and spread knowledge.

In managing creativity and innovation, the MPWT has the process described as a 'develop, implement, check and adjust model'.

Recommendation

Since the creativity and innovation model is not consistent across the MPWT, it is critical to firstly formalised the model and widely disseminate it across the MPWT. Although there is strongly executive leadership and support, it should not be ignored that the contribution of MPWT staff at all levels shall be good root of creativity and innovation practice in MPWT society.

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