

The Strategic Management Process for Innovation Activities of HAYA Water, Oman

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ABSTRACT

The main objective of this research is to investigate and explore the entrepreneurship and innovation in the Sultanate of Oman, taking the example of selected organisation that operates its business in the country, Haya Water, and explore the different innovation strategies which are essential for business growth and sustainability. The research study is based on the information gathered from previously published journals for the literature review and information through direct interview with employees in the company for the innovation strategy that is implemented in the company. The strategic management process for innovation activities that are driven by certain internal and external forces of Haya Water Oman will be explored as well in this research study. This will discuss the forces that initiate the innovation and entrepreneurship in this organisation, with the key factors for successful creation and implementation of innovation process within the organisation. It will also cover some discussions on the limitation that delay the progress and development of innovation with recommended mitigation actions to overcome these challenges.

Keywords: entrepreneurship and innovation, innovation, strategic management process, forces that initiate innovation, factors for successful innovation process

INTRODUCTION

Haya Water is the brand name of Oman Wastewater Services Company (OWSC), which is a member of the Nama Group (Nama Holding), the leading reference in utility services excellence in the Sultanate of Oman. The company was established in December 2004 to build, own and operate a world class waste water system in the Muscat Governorate. In 2011, the Company has expanded its operation to cover all of Oman except Salalah which has already private company by taking over all waste water facilities from the Ministry of regional municipalities with a concession agreement with the Government of the Sultanate of Oman (taking Water Reuse Haya Across Oman 2021).

Khaliq *et al.* (2016) has stated that, the collection of wastewater system and treatment technology that has been adopted by the company, has secured the reuse of the wastewater for other industrial purposes such as agriculture, parks, golf courses and cooling systems. In

addition, the company has produced fertilizer through the composting factory in Al Amerat area, by recycling the sludge that generates from the treatment of wastewater and use it for agricultural activities. The use of advanced technology in the sewer treatment plants and the composting unit that owned by Haya Water, have resulted in high quality products that meets the provincial environmental standards.

Being a utility services supply company, Haya water has been extensively interacting with residences across the country and provide the best services to the community. The company's mission is to serve the society by converting the wastewater into environmental friendly products, and establish a strategy that enhance the innovativeness and creativity within the workplace that encourages all employees and stakeholders to work in a collaborative manner to achieve the company's goals and objectives.

DEGREE OF INNOVATIVENESS

Through the Taqdeer scheme that has been initiated in Haya water, all employees are encouraged to come up with innovated and creative ideas, that lead to better performance, cost reduction, customer satisfaction, and elimination or introduction of processes that enhances the performance, and implement these through their work. Committee has been setup to have a monthly review of the innovations and creativity of the employees on their tasks and accordingly, they will be awarded a recognition allowance.

According to Ruvio *et al.* (2013), organization cannot have a dominate position in the market with a competitive advantage without having a sufficient innovation capability. The successful use of resources, knowledge, technology, decision-making process, and the methods of transferring the new ideas into innovated values represent the company's degree of innovativeness. The level of innovativeness in an organization can be measured according to different dimensions as described by Ruvio *et al.* (2013):

- **Number of innovations:** It could be attributed to the number of innovations adopted by the organization, which lead to the creation of new products or services that distinguish the company's business from other competitors.
- **Creativity:** the organization's focus in generating new idea is the creativity of individuals working in a team within the organization, the successful transformation and implementation of these new ideas into new product, services, or processes, is the innovativeness capability of the organization.
- **Innovation culture:** Openness to new idea addressees the organizational members willingness to adopt innovations, the organization's culture toward the recognition of the need of new innovated ideas encourages individuals to be creative in their work tasks, hence it represent the level of organizational innovativeness.
- **Future Vision:** Companies that have the orientation of exploring the new opportunities using their past experience and new knowledge that enhanced their competitive advantage, have the potentials of being innovative organizations.
- **Pro-activeness:** Pro-activeness refers to the ability of organization in hunt for business opportunities. Emphasis on initiating activities and being a pro-active is one of the stages of innovated organization process. Managers who are pro-active in highlighting the need for changes to accommodate the company's objectives and goals, are more likely to drive the innovativeness behavior of the organization.

- **Research and Development:** the level of innovativeness of any organization can be measured as well by the amount of researches conducted to promote the business and the implementations of the outcome.

With the above stated dimensions that forms the degree of innovativeness of an organization, Haya Water being a utility service provider with limited products, is considered to have an incremental innovation process that have a continues change to the procedures, and quality of services to attain the best customer satisfaction and operation efficiency. The company's leadership behavior encourages all members to be creative and initiate innovative ideas that enhances the company's business success. In addition, Haya Water has contributed in many research studies in association with different local and international institutions that deals with the re-use of wastewater and the best practices in the world.

IN-COUNTRY VALUE ADDITION (ICV)

Al Ruqaishi (2016) has defined the In-Country Value as the total spent in-country by companies whether they are local or international having contracts in Oman, the (ICV) represent the amount spent by these companies in developing the local business, contribute in the employment and training of local people, and stimulate a productivity in the national economy. The aim of the ICV is to explore the local capabilities and resources that can be used to accelerate the national economy, and develop local communities.

Oman (ICV) Policy

The ICV in Oman was initially introduced in 2013 by the Omani government for the Oil and Gas sector then gradually was developed to cover all industrial sectors, to enhance the socio-economic development of the country and utilizing the local resources to trigger the economic growth and sustainable development, which includes employment of Omanis and creating jobs, using local investment for value-added opportunities, and development of local manufacturing facilities for goods to enhance domestic productivity (Shezawi and Khan 2018). In return, this is intended to encourage individuals to start their business with the support of this scheme and generates more entrepreneurs and new small and medium enterprises.

Oman (ICV) has four pillars that the government is focusing in, to be part of the economy's development programme, as well in the community. These pillars are the capital investment, local development, procurements of goods, and human resource, the main objectives is to maximize the local procurements of goods, increase the local investments on projects, identify and train local talented people, retain investment locally in order to enhance the economic growth and community development.

Haya Water has adopted strategy that contributes to the ICV scheme, by creating a Project Management office (PMO) that designs and implement the best approaches to achieve maximum benefits to the local vendors, suppliers, sub-contractors, and initiation of new entrepreneurs and SME's that will have the priority in awarding jobs from the company. Vendor registration platform that enables local entrepreneurs to benefit from the training programmes established by the company in the strategic business management, skill development and financial control knowledge.

Improvements for better benefits

Although the government has emphasis on the ICV importance to the economy and social development in the country, and many companies are heavily involved in development and implementation of their own ICV plans, there are still some improvements to be considered such as:

- More research on the market requirement for imported goods and materials, especially in the construction industry where these goods can be manufactured locally and retain added value to the country.
- All companies involved in the scheme are following their own strategy and plans for the implementation of ICV, and no mechanism to adjudge their performance. Few companies has published their plans and achievements in the ICV.
- A clear definition shall be furnished to distinguish between the activities of corporate social responsibility (CSR) and the ICV objectives in the evaluation and classification of companies.
- The ICV in Oman was initiated in the year of 2013, to have a minimum of 10 % of the contracts of procurement for local SME's companies. The percentage shall be evaluated regularly with the increase of local productive companies.

STRATEGIC FORCES THAT INITIATE ENTREPRENEURSHIP AND INNOVATION ACTIVITIES IN HAYA WATER

Innovation is driven by different internal and external forces that forms the necessity for adoption of new innovated ideas to sustain a position in the competitive market, the internal forces are the entrepreneurship, business objectives, and nature of innovation in the company. The external factors includes the market demand, competition, technological changes and government regulations (Chen 2017).

Entrepreneurship: In innovation activities, the entrepreneurs within the organization are the drivers of innovation processes, they are the initiators of the innovation activities, decision-making bodies, their inspiration, knowledge and experience is the force behind innovation in the company. Employees of the organization with the characteristics of innovation capability will enhance the innovativeness level of the company.

Business objectives: The main objective of the company is to have a continuity and sustainable business growth with competitive advantage in the market, this can only be achieved with continuous learning and innovation in their product and services. The company's objectives is demonstrated by its employee's activeness to promote innovation activities.

Existing innovation culture: Company with innovation culture that motivates individuals to create ideas and implement changes have a potential of active innovation development forces to drive the company competitiveness in the market.

Competition forces: Due to the rapidly changing business environment and increase in the competition domestically and internationally, the survival of any company's business is through continues development and innovation. Therefore, the market competition is the biggest external force that drives the firm's need for innovation.

Market demand: The direction of innovation is always driven by the scale of social demand, the customers requires new technology, new product or services that forces the companies to continue research for new ideas, development of business models to suit the increasing demand and have a competitive advantage in the market.

Technology development: The rapid change in the technology around the world, drives the companies to invent new technology in their products and services provided for their customers.

Government intervention and regulations: The government strategy to uplift the economic growth and diversification of income resources have a significant positive effect on the innovation environment. The support of innovation and entrepreneurship has attracted the companies to participate in the development of the innovation activities. The formalization of new regulations and law that gives government incentives to successful organization in the innovation and entrepreneurship has also drives the innovation in the country.

GOVERNMENT SUPPORT TO INNOVATION

The Omani government initiated different support programmes which, in collaboration with national and international institutes to develop and improve the entrepreneurial and innovational activities in the Sultanate of Oman. According to Times of Oman (2021), the national innovation strategy has driven the development of effective system for the sustainable economic and social development in the country. The government innovation support initiatives can be summarized as following:

The Research Council (TRC): There are various innovation initiatives that has been developed and introduced by the TRC, for example the introduction of the Oman Chamber of Commerce's industrial award. The award has generated great competition in the Omani industry with innovated ideas and promoted the innovation environment in the industry.

The development of the Oman National Strategy for ICT sector: This strategy is led by the Ministry of Technology and Communication, with the objective of establishing a global competitive ICT sector, empower the society digitally through the effective use of ICT, and encourage innovation and competitiveness through ICT in major economic sectors.

Financial support for entrepreneurship and innovation: The government has initiated many programmes that aim to support the creation of SME's for the entrepreneurs to start up their business with innovated ideas. For example the Al Raffed funding scheme, and the training programmes from PDO for new entrepreneurs.

Shell Intilaaqah: Oman Shell (Corporate relation and In-Country Value), has designed a programme that aligns with the company's social investment and Oman Vision 2040, this programme is a training programme that objectives is to inspire the company's partners and entrepreneurs and empowering the Omani business and entrepreneurs working in the field of sustainability and renewable energy, by hosting local and regional experts to enrich the programme with their practical experience and knowledge, (Times of Oman 2021).

STEPS IN THE STRATEGIC ENTREPRENEURSHIP AND INNOVATION PROCESS OF HAYA WATER

To derive the business growth, Haya water has adopted certain steps in the strategic entrepreneurship and innovation process that are aligned with the company's corporate strategy for its core business. Innovation strategy as defined by Elkins (2021) refers to the innovation mission and detailed plan that forms the guide to create new value to the company. It includes policies, structure, and vision to drive future organisational growth and competitive advantage achievement.

The main innovation process steps that are considered effective as a road map for innovation success are described as follows (Five Stages of Innovation 2019):

Finding the Idea: The need for change as derived from the competition, market demand, process development, and increase of performance are the inspiration for innovation. The key starting step of innovation is finding the right idea that can be implemented. There are two approaches in generating ideas, either it's a pro-active approach that the company is looking for new idea based on the company's strategy which involves idea generation campaign; or barnstorming to resolve some issues or develop an existing product or services. The other approach is driven by the market demand, or technology changes that the company has to keep in updating their processes.

Preparation: In this step, the market research is conducted for the best practices, information gathering, resource allocation, market condition, product demand, and designing of the innovation framework.

Development of Innovation: This step consists of the preparation of the innovative product or services that derived from the first two steps. It is important in this step to test the result and allow for iteration if necessary.

Marketing for the product: After finalizing the desired product or services that have the required characteristics, marketing strategies are implemented to bring the product to the market and spread it up to promote it as new product. This stage also involves monitoring of the feedback of the new product or service; with continuous evaluation and development as required.

Lessons learned collection: This is the final stage where learning outcome from the previous innovation processes are collected and used for future innovation. Even if the previous product or process innovation failed, it will form as a foundation for future innovation development.

Key Success Factors on Entrepreneurship and Innovation Process of Haya Water

With the increased challenges that companies are facing in the introduction and implementation of strategic innovation process, and the requirement for an efficient system that serves the company's objectives and goals; according to Eschberger (2021), there are certain factors that have to be considered by the organization for successful introduction and implementation of innovation.

Management Commitment to Innovation: Management support for innovation process is one of the most critical factor for any organization in the successful innovation management. Commitment of all leadership management in the company, is an essential element in the successful introduction and implementation of innovation, in which, time, efforts, and budget has to be secured.

Strategic Orientation: To have a clear pathway in the innovation process that are aligned with the company's objectives and goals, strategic orientation of innovation activities shall be defined. The innovation strategy shall be clear to everyone involved in the development of the innovation process on the basis of future trend, available opportunities, risks and challenges that may come across the process, in order to have the right decision on the priority of innovation projects that contributes to the organizational corporate strategy.

Clear Responsibilities: Innovation process requires involvement of many functional areas and employees within the company, it is an interdisciplinary process that all members have to work in a collaboration manner, therefore, a clear responsibilities shall be defined for all participants in the innovation process. Deliverables from each member contributed to the innovation project shall be well understood.

Innovation Culture in the Workplace: In order to have a positive innovation culture within the organization, which is different from the operational structure that is based on routine and productivity, company must develop different attitude and values in the workplace that promotes the innovation. For example, openness to accept new changes and ideas, thinking out of the box, taking risk, and continues development environment, are the pillars for innovation culture. To build an innovation culture, companies must have the initiatives to raise employees awareness of the importance of innovation for the competitive advantage of the company, incentive schemes to encourage them to promote innovation, and empowering the employees to participate in innovations.

Change Management Process: Introduction and implementation of innovation always requires changes in the organization's process, structure, or strategies, therefore, change management is an external attribute to the successful innovation process. Management and employees' willingness and acceptance of continues change in the company is a key success factor that facilitates the innovation success.

Integration of all Employees: Employees must be aligned towards the company's requirements for innovation and changes. This can be achieved through building an innovation environment within the workplace, motivate employees to create new innovative ideas, and encourage all to participate actively in the innovation process.

Cooperation of all Team Members: Innovation process requires an effective team working together to achieve a common target, therefore, cooperation among all of the team members is an essential factor in the implementation of innovations. Company must emphasize on the corporate shared goals and objectives that all employees shall provide their best efforts to achieve.

FACTORS THAT IMPEDE THE PROGRESS AND SUCCESS OF INNOVATION PROCESS

The changing business environment and highly competitive market makes innovation more challenging for companies. The factors preventing the innovation introduction and implementation could be internal within the organizational control and external factors within the business environment. Bigliardi and Galati (2016) has identified a number of factors that impede the progress and success of innovations in companies:

Economic and Financial Barriers: Implementing innovation is always linked to financial requirements, budget has to be allocated for the changes that associated with the innovation implementation activities. In some cases, innovative idea get rejected due to unavailability of funds, market condition, economy slowdown, and high cost involved in the innovation process.

Existing Collaboration Mechanism in the Company: The organization's work environment that is lack of effective team collaboration, innovation inspiration by top management, defined innovation process, is likely to have limited innovation in their organization. These factors play a significant role in the success and progress of innovation activities.

Managerial Competency: The managerial competency is critical to the success in implementing innovation process in a company. Managers with low competency in the innovation process may hinder the success and progress of the creation and implementation of new innovative changes required for competitive advantage objective.

Limited Resources within the Company: Innovation creation and implementation required a cooperation and inputs from different functional areas and employees in the company. Inadequate resources will have a negative impact on the progress and success of innovation development.

Communication Gap and Flow of Information: Communication gap and flow of information can construct a barrier to the innovation success and progress. Lack of clear directions in terms of organizational goals and targets, and the required deliverables from each employee involved in the innovation process will have a significant obstacles to the success of innovation.

MITIGATION MEASURES FOR BETTER PERFORMANCE AND ACHIEVEMENT OF INNOVATION PROCESS

Based on the above discussed factors that prevent the progress and success of innovation process in the company, the following are recommended for better performance and achievement of the desired innovation objectives that meets the company's corporate goals.

Adoption of Innovation Approach: With the budget constraint on innovation creation and implementation, adoption of open innovation is recommended for organization with limited financial resources for innovation process. This approach is built in collaboration between internal and external sources of knowledge and experience that will be used for the creation of new ideas that would serve the company's strategic innovation objectives.

Building the Innovation Culture: Building a constructive innovation culture that encourages, motivates, and inspires all employees to create innovative ideas that enhance the company's

competitive advantage in the market and resolves the current issues that are driven by the external factors.

Conducive Structure to Innovation: Organizational structure shall be tailored to accommodate innovation process and support required changes for better innovation implementation.

Enhanced Communication flows: To overcome the communication gap, information shall be allowed to flow freely up and down and across the functional areas within the organization.

Planned Innovation Competencies: Training to employees from all levels on the innovation competencies required for successful innovation strategy.

CONCLUSIONS AND RECOMMENDATIONS

This study has analyzed the innovation and entrepreneurship environment in Haya Water. This is a mandatory requirement for business sustainability and growth. The company's innovation strategy that is aligned with the corporate business strategy has created an environment in the workplace for the innovation and entrepreneurship activities. The decision making process and structure, the management commitment to innovation has facilitated the creation of new ideas that were transferred to a valuable addition to the services provided to their customers.

The importance of having an innovation culture has classified the degree of innovativeness that the company is maintaining in order to encourage its employees and stakeholders to contribute to the company's development process. With the government support through various types of motivation activities and the introduction of ICV, the national economic growth is expected to meet its innovation and entrepreneurial objectives.

Innovation management strategy within the company has delivered a considerable innovative activities and changes that contributes to the organizational objectives, and enhanced the quality of services to customers. Innovation is a dynamic process that requires continuous review and development, therefore, obstacles that impede the progress and success of innovation shall be always kept under investigation. The following are some recommendations for better implementation of innovation in the company:

Introduction of innovation competency measures in the annual review of the performance, and allocate recognition programmes that encourage individual to be creative in their work tasks and introducing new ideas that enhance the company's productivity, customer satisfaction, process minimization, and cost reduction with improved quality.

Innovation strategy should be an essential part of the core business strategy as innovation culture forms part of the daily thoughts and problem solving activities of the company.

Creating free space in the daily routine works for employees to enhance their creativity inputs in the development of innovations.

Company management structure and decision-making hierarchy should be developed to promote innovative environment in the workplace.

Delegation of authority to the sectional heads to take decision on the requirements for changes within their department that will contribute to the overall organisational growth objectives.

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