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Impact of Innovative Project Management Practices on Projects Performance in Construction Industry

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Abstract: *Technology has reshaped economies around the world. Governments have strictly taken such initiatives that boost technological and innovative ways to stimulate economies. Oman has also shifted its focus on improving technology to strengthen its operations performance and economy. The leadership of Oman (His Majesty Sultan Haitham Bin Tariq) has understood the influence of new technology, and has taken steps to enhance the effectiveness of innovation to improve the Oman economic through the effective implementation of strategic projects in Oman Vision 2040. The objective of this study is to identify the impact of innovative projects management practices and innovative culture on Omani construction projects performance. Quantitative research methodologies with online survey and Smart PLS tool was used to test the relationships between all variables. 297 respondents were collected and analysed. At the end, the specific conclusions developed, to help projects management professionals and policymakers to develop effective strategies to utilize the advanced technologies and innovation to improve the construction projects performance that will help to accelerate the Oman economic growth.*

Keywords: *Projects Performance, Innovative Culture, Projects Management, Construction, Advanced Technologies.*

1. Introduction

1.1 Background

Among several nations, Oman has made considerable efforts to encourage innovation in business. With a population of 5.1 million and USD 63.3 Billion (World bank, 2020), the Sultanate has significant, sustained economic development and excellent political climate since the early 1970s when His Majesty took over the throne. Remarkable global development achievements can be traced to profits from oil and gas exports. Earnings from these two primary natural deposits amount to 51.6% of the country's total GDP (Al Zefeiti, & Mohamad, 2017). Despite these successes, Oman's growth success faces a considerable challenge. In the short term, the nation has been unable to produce good job prospects for its young people, mainly fresh graduates joining the labour market (Al Salmi, 2019).

With depleting oil reserves and demand and dropping oil prices, Oman is currently facing massive budget restrictions and deficits. To resolve this economic problem, the government implemented significant economic reforms. The Sultanate started implementing a strategy to boost economic diversification and growth. Likewise, it is currently aiming to raise non-oil revenue fees and taxes and lower incentives for smaller initiatives (Alshubiri, Tawfik, & Jamil, 2020). Like other knowledge-based societies, Oman has opted to draw on its human resources to pursue socio-economic targets and sustain economic development, prosperity, and global competitiveness. Awareness is assumed to be a key to redefine the complexities of economic growth and global competitiveness by involving innovation and new technologies in improving the organizations performance and productivity.

1.2 Statement of the Research Problem

Despite the increased number of academic researches publications in the innovation and its impact on projects and construction performance field in the last several decades, the performance of the projects has not improved. The Possible causes may be that the innovations, projects management and academia do not integrate with each other (operate in silos).

Projects failures and the problems of projects performance declination trends is increasing nationally and internationally and the projects failure is become the world phenomena (Galvez, 2018; Osman, 2018; Machado, 2015). The outcome of the global survey of project management practitioners carried out by Pulse of Profession (2017) mentioned that 30% of the projects in the world failed to meet the original goals (completion on time and budget) and projects business intent. Statistics have shown that 9.9% of every dollar is lost due to poor project management and $ 99 million is wasted for every $ 1 billion invested (Pulse of the profession, 2018). Oman records the highest incidences of projects and construction delays and cost overruns. For instance, between 2007 and 2010, 40% of projects in Oman experienced delays and cost overruns due to number of internal and external factors (Shaibany, 2015). Some of the public funded projects that have experienced major projects delay and cost overruns include: The new building for Ministry of Education, New Muscat Airport and other projects in the Aviation Industry in Oman, the New Muscat Highway, the Batinah Expressway and the major Rail Delay (EIU, 2016). These projects were at the heart of Oman's ambition and development plan Oman vision 2040 to become a logistics hub for the GCC region. However due to delays and cost overruns, they remain at various stages that are far from completion threatening the realization of the medium-term five-year plans and the long-term blueprint Vision 2040 (Oxford Business Group, 2017)

Over the next 20 years, the GDP contributions from projects-oriented industries are forecasted to reach $ 20.2 trillion (Scientific Insight, 2017). As per the (Trading Economics, 2021) the GDP from Construction in Oman averaged 2886 USD Million from 1998 until 2020, reaching an all-time high of 5941 USD Million in 2016 and a record low of 413 USD Million in 2000 and it is expected to reach 4966 USD Million by the end of 2021 and it is forecasted 5265 USD Million in 2022 and 5476 USD Million in 2023.

The projects failure and shortfalls of projects performance and the resistance of using the new technologies and innovation by projects management professionals from projects stakeholders (Clients, Consultants, Contractors, subcontractors, Vendors) in enhancing the projects performance will have very significant and series impacts on effective implementation of all projects, business and investments opportunities identified in Oman Vision 2040 and in Oman economic growth (Tawafak, 2020; Durrah, 2018; Oyegoke, 2017).

1.3 Research Aim and Objectives

The paper focuses on the impact of innovative projects management on the project's performance as the critical area. The report covers various aspects of corporate management and leadership, particularly the extent to which strategy has contributed to strategic success in the control and effective projects management. Data from multiple sources is utilized to facilitate the empirical analysis of the usefulness of integrating innovative strategies into the models of projects management to improve the capacity of the projects management professionals and practitioners in dealing with the emerging issues and future challenges facing successful implementation of projects management strategies and innovations.

The main objectives of this research are:

1. Identify the roles of the main elements of the innovation value chain (innovation drivers, innovation barriers, innovation enablers, and the benefits of innovation) in project management practices.
2. Identify the impact of Innovative Project Management Practices on Oman's construction project performance.
3. Identify the role of innovative culture to moderate the relationship between innovative project management practices and project performance in Oman's construction industry.
4. To develop the concept, the research framework reflects the relationships between all research variables.

1.4 Research Questions

This study aims to examine the relationship between innovative project management practices and an innovative culture on projects performance within the construction industry in Oman. In light of the problem statement and identified research gaps, the study seeks to address the following research questions:

- What impact does innovative project management practices play in facilitating successful projects performance in Omani construction industry?
- What are the main elements of innovation value chain to the innovation process on projects management in Omani construction industry?
- What moderating role of innovative culture that influence the relationship between innovative project management practices and projects performance in Omani construction industry?

2. Critical Literature Reviews

Innovation is often regarded as critical to achieving strategic advantage. When time-to-market shortens, businesses are more likely to implement new technologies more quickly and successfully. As a result, different schools of thinking have emerged about integrating innovation and new technologies within an organization and its projects performance. In general, the reach of innovation management has widened, with some scholars focusing their ideas on innovation management, systems engineering, and product efficiency (Bibarsov, Khokholova and Okladnikova, 2017). The literature often describes Oman's current economic situation by emphasizing the overall vision and development. Although the Penta model is an important part of innovation and information development, it is not the only one. Innovation is a pervasive and strategic factor in high-tech sectors in industrialized and low-tech emerging or catch-up economies (Zhang, Zheng and Dark, 2018). The role of Electronic Exchange of Health Information (HEI) in Oman's innovation and entrepreneurship and the country's innovative projects management techniques are discussed in details. Finally, the Vision of Oman 2040 addresses the country's aim of economic development and separation from the oil and gas industries and total prosperity and future growth. Finally, the study's empirical foundation is examined.

2.1 Projects performance as key Denominator of Construction industry

Among several nations, Oman has made considerable efforts to encourage innovation in business. With a population of 5.1 million and USD 63.3 Billion (World bank, 2020), the Sultanate has significant, sustained economic development and excellent political climate since the early 1970s when His Majesty took over the throne. Remarkable global development achievements can be traced to profits from oil and gas exports. Earnings from these two primary natural deposits amount to 51.6% of the country's total GDP (Al Shoukri,2020; Al Zefeiti, & Mohamad, 2017). Despite these successes, Oman's growth success faces a considerable challenge. In the short term, the nation has been unable to produce good job prospects for its young people, mainly fresh graduates joining the labour market (Alalawi, 2020; Al Salmi, 2019).

With demand and dropping of oil prices globally and depleting of oil reserves, Oman is currently facing massive budget restrictions and deficits. To resolve this economic problem, the government implemented significant economic reforms. The Sultanate started implementing a strategy to accelerate the diversification of its economic. Likewise, it is currently aiming to raise non-oil revenue fees and taxes and lower incentives for smaller initiatives (Tawfik, 2020; Al Ani, 2019). Like other knowledge-based societies, the Sultanate has opted to draw on its human resources to pursue socio-economic targets and sustain economic development, prosperity, and global competitiveness. Awareness is assumed to be a key to redefine the complexities of economic growth and global competitiveness by breeding new companies and creative goods. World Bank's 2012 Information Economy Index (KEI) ranks Oman 47th among 145 countries in terms of overall readiness to become a knowledge economy (Al Shoukri, 2020; Shamsuzzoha, 2017). The KEI of Oman calculated in four (4) sub-indexes, namely: (1) economic opportunity and structural regime, (2) creativity and technical implementation, (3) education and training, and (4) ICT infrastructure. An information economy is powered by an "efficient innovation system consisting of companies, research centers, universities, think tanks, consultants and other organizations" leveraging global knowledge to develop innovative technical solutions for local and global needs. In 2012, in creativity and information economy indexes, Oman ranked 5.88 and 6.14 out of 10 (Al-Eid, & Shoukri, 2020; AlSiyabi, 2019). With both indexes increasingly rising, Oman must take maximum advantage of its readiness to become an innovative economy while also providing the ability to sustain a significant transformation.

The traditional project management models are known to focus exclusively on the delivery of services. The need to engage in innovation emanated from the need to solve various problems that interfere with the successful execution of the projects. For example, the need to mitigate risk requires the project managers to generate new ideas that facilitate the development of a contingency plan to respond to various risks. Innovation enables the portfolio project managers to develop new project management models that do not only focus on service delivery but also the achievement of the results. The tasks in portfolio project management are increasingly becoming complex than before. As the country continues to embrace digitalization and globalization, new trends in the project management are emerging (Galvez ,2018; Silaparesetti, 2017).

Recognizing the central position of creativity as a catalyst for economic growth, it would be necessary for policymakers to be able to monitor and compare results (Allahar,2019; Al Mekhlafi, 2019). For this reason, innovation indices outside conventional feedback measures, such as the amount of support for research and growth, would be need research and development (R&D). Indicators are expected to help decision-making as a continuous method. An example of a synthetic hand is the Global Innovation Index (GII), established by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), which incorporates some 80 indicators detailing both input and output components of innovation ecology (Alawamleh, 2020; Durrah, 2018). It allows the use of analytical and subjective evidence. Accurate statistics are objectives, such as school enrolment and Internet use; personal data are extracted from polls of the views of corporate and government representatives and executives. It also aims at GII in comparison to the Gross Domestic Product (GDP) per capita (Shamsazzoha, 2020; Al-Mekhlafi, 2019).

Oman is rated 80th on the GII and this is primarily attributed to the sub-optimal performance in the utilization of the climate and properties that are beneficial from an advancement perspective. Although GII rankings should not be used as an actual predictor, care should be made of relative improvements year-on-year that should promote more constructive policy participation (Tawafak, 2020; Osman, 2018). The moderate success of Oman's national innovation framework indicates the need to accelerate its policy reform processes in the immediate future. Regional similarities suggest that Oman needs to build an effective and productive innovation mechanism, including upgrading its innovation infrastructure and environment, to improve its creative outputs. The GII confirms that Oman has ample structural power and that its most significant problem is that its economy is not adequately diversified (Al Eid, 2020; Alam & HUSSEIN, 2019; Osman, 2018).

Oman's innovation mechanism is inherently fragmented; a collaboration between main actors (between academic and business systems, academic and business structures) is unequal and mostly dependent on personal expertise. Most educational organizations are very tiny, and it seems impossible to scale them up. Innovations and creative undertakings are yet to arise to bring about a virtuous clustering process. On the other side, there are quite a variety of favorable characteristics (Noor, 2020; Alam & HUSSEIN, 2019). While not quite revolutionary, the larger Omani firms show an inner dynamism that needs to be exploited. There is a good awareness of the issues in much of the societies involved, in the private community as well as in the academic environment and in government institutions (Alalawi, 2020; Al Badi, 2019; ALSiyabi, 2019). Last but not least, the whole innovation mechanism and its components demonstrate a central internationalization pattern that is a source of dynamism and transformation that Oman is well placed to tap, considering the openness of its economy.

2.2 Factors influencing to innovation and projects performance

The main aim of this research objective is to identify the best innovative practices (Internal Organisation innovative capabilities and culture, External Organisation innovative work environment, organisational innovation strategic management plan and organisational innovation stakeholder management) that required to be integrated with the best applications of projects management in order to improve the projects management performance in Oman. Jones (2017) has pointed out that the innovation value chain elements (drivers, enablers, barriers and benefits) act wistfully and give significant opportunities to handle the challenges. The more an organisation is able to apply the effective innovative practices the more it can expect to get the benefits in return. Identification of the effective innovative practices and policies can actually lead to higher benefits and success of the organisation as a whole.

Table1: Innovation Value Chain elements

Innovation Drivers						
Time Reductions	Cost Reduction	Quality Enhancement	Rivalry	Customers & Clients Requirements & Satisfactions	Increase Productivity & Efficiency	Fast Technological Development Progress
Innovation Enablers						
leadership	Appreciation, Rewards & Incentives system	Firms Innovative environment & culture	Customers & Clients involvement	Top management Support	Work knowledge & experience	Development & Learning
Innovation Barriers						
Innovation Commercialisation risk	Limited Financial Resources	Economic Conditions	Poor Projects management performance	Time pressure & deadline	Poor stakeholders management	Lack of interest in innovation from clients
Poor projects planning & Cost control	Availability of required workforce skills & competences	Lack of appreciation, reword & incentives	Availability of high technology of construction equipment & materials	Lack of government support	Inappropriate regulations & laws	Lack of collaboration due to competition
Innovation Impacts						
Improving Customers Satisfaction	Improving Competitive Advantage	Profit Increase	Improving stakeholder engagement	Enhance working conditions & Staff motivation	Increase Organisation performance	Increase Organisation flexibility to changes

Source: (Hussein, 2021)

By demonstrating the benefits of innovation in various areas, the significance of innovations may be explained. Innovation is, for example, extremely essential from a consumer perspective for having high quality and improved goods and services that imply a greater way of life. Where In enterprises, innovation is the key to sustained expansion, growth and tremendous profit. In addition, workers need innovation to have high wages for new and exciting occupations (Alraja, Hussein and Ahmed, 2021). The key objectives of innovation in the global economy are productivity and prosperity for everyone. Innovation plays a fundamental part in industry and economic growth. Many research studies have shown that innovation is important in many international marketplaces for competitiveness. Customers nowadays are looking for newest, better quality and cheaper costs, that is, the most innovative goods and services. Innovation helps firms grow profits and stabilise profits (Chou, 2018).

The different projects management approaches maintain a strategic integration with the different knowledge areas (Oeij et al., 2017). Proper strategic and stakeholder management paves way for integration process which helps in projects plan development and execution process, and does have a role in the integration change control process. Better scope management helps in projects planning, defining and scope verification process (Mohan, 2017). Proper time management, cost management, human resource management help the overall projects management and innovation process. Proper quality management planning, quality assurance and quality control functionally help in attaining better operational advantages (Marchuk et al., 2017). Also, projects management and innovation planning include proper communication management planning, risk assessment, analysis and mitigation planning, procurement management planning and stakeholder management planning process. Strategic approaches technically help in better handling the projects measures and can provide a better environment for the organization's growth process.

2.3 Research Hypothesis and Research conceptual framework

The overarching question upon which the study is based on is 'what the impact does innovation plays in facilitating successful projects in Omani construction industry. The paper hypothesizes that innovation may not contribute to strategic success in offering strategic control as well as promoting efficiency in the implementation of projects in Omani construction industry. The study strives to dig deep into the role of innovation in ensuring effective project management by exploring the current trends as well as reviewing the existing literatures on the same.

H1: There is a positive role for the main elements of the innovation value chain (innovation drivers, innovation barriers, innovation enablers, and the benefits of innovation) in project management practices.

H2: There is a positive relationship between the innovative project management practices and the performance of projects in Oman's construction industry.

H3: The innovative culture moderating relationship between the innovative project management practices and the project performance in Oman's construction industry.

Therefore, the conceptual model that mentioned in Figure 02 explains that the performance of construction projects depends on the assistance of innovative culture that supports innovation in project management practices.

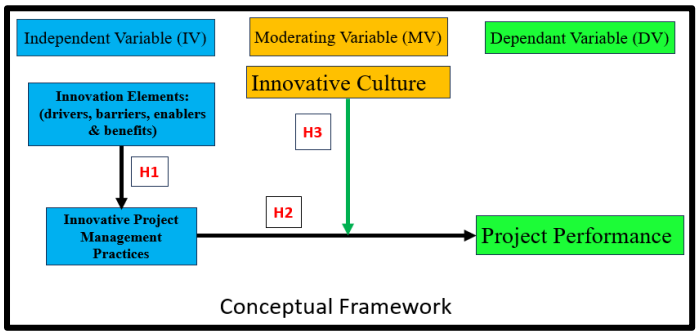

Figure 1. The Conceptual Framework of the Research was developed by the Author.

3. Research Methodology

This research used descriptive research designs and adopted a pragmatic philosophy because it is initiated by a problem of Impact of Innovative project management practices and innovative culture to projects performance in Omani Construction industry. This research adopted a deductive approach. The study utilized quantitative data, which collected from both the primary and secondary sources to measure the hypotheses set for this research purposes. The Secondary data mainly consisting of innovations factors impacting the projects performance obtained using a critical review of the existing bodies of literatures on the related topic. The primary data collected using online questionnaires survey that distributed to the project's construction management practitioners from all project's stockholders (Clients, Contractors, Consultants) working in Oman. To ensure that collected information is from knowledgeable people, the study used purposive sampling method to identify the population sample. The research used stratified random sampling method to calculate the size of sample and identify the participants of the study from the targeted population. The study used GPower statistical tool for multiple regression analysis, it was estimated that at least 278 valid responses would be required to provide sufficient statistical power (95% confidence level, 5% margin of error). Then the collected data was analyzed by using partial least squares structural equation modeling with SmartPLS and SPSS tools to identify the findings of the study and thereafter the recommendations of the study was formulated.

4. Data Analysis and findings

First, the validity of the responses was established using Cronbach's alpha to check the internal consistency (Leech, Barrett & Morgan, 2014). Cronbach's alpha was 0.924, indicating excellent internal consistency and justifying aggregation of items into composite scores for subsequent analyses (Leech et al., 2014). Further, descriptive analyses were computed to describe the respondent characteristics and the key study variables; correlation and multiple regression analyses were then conducted to examine the hypothesized relationships between the innovation factors (IVs) and the project performance measures (DVs).

4.1 Factor Analysis

The correlation matrix presented in Table 2 shows the relationship strength among the variables, which is 0.973. Table 3 shows KMO and Bartlett's test illustrating sampling adequacy, which is .500, and a sig value of .000, which is

less than 0.05. In addition, the communalities show the extraction that specifies initials as 1.000 and extraction as 0.986, as shown in Table 4. Lastly, Table 5 shows the eigenvalue that shows number of extracted factors whose sum must be equal to the number of items that are based on factor analysis. The total initial eigenvalue is 1.973 and 0.027 simultaneously for the two components.

Table 2: Correlation Matrix

Correlation Matrix			
		Innovative Project Management Practices	Project Performance
Correlation	Innovative Project Management Practices	1.000	.973
	Project Performance	.973	1.000

Table 3: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	1452.353
	df	1
	Sig.	.000

Table 4: Communalities

Communalities		
	Initial	Extraction
Innovative Project Management Practices	1.000	.986
Project Performance	1.000	.986
Extraction Method: Principal Component Analysis.		

Table 5: Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.973	98.632	98.632	1.973	98.632	98.632
2	.027	1.368	100.000			
Extraction Method: Principal Component Analysis.						

4.2 Regression Analysis

The following regression analysis has the dependent variable as project performance and the independent variable as Innovative project management practices (Kumari & Yadav, 2018). The model summary shows an R2 of 0.973, which is high and shows a high ratio of correlation. The value of R-squared reflects the variation of independent variables on the dependent variable. The table shows that innovative project management practices have explained 94% of the project's performance, which is very large. Table 07 depicts an analysis of variance and elaborates on the significant value of .000. The table explains that the p value is less than 0.005 and depicts that the researcher rejects the null hypothesis. Also, it narrates the impact of innovative project management practices on Project Performance. Lastly, Table 08 shows the coefficient summary showing the beta value and significance value. The Beta value is 0.973, which is positive and reflects that an increase in the variable could increase innovative project management practices. Moreover, the sig value is .000, showing an effect of innovative project management practices on Project Performance.

Table 6: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

Model Summary				
1	.973a	.946	.946	3.18431
a. Predictors: (Constant), project performance				

Table 7: ANOVA Summary

ANOVA [a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88511.599	1	88511.599	8729.123	.000[b]
	Residual	5049.623	236	10.140		
	Total	93561.222	237			
a. Dependent Variable: Project Performance.						
b. Predictors: (Constant), innovative project management practices						

Table 8: Coefficients Summary

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.251	.894		1.401	.162
	innovative project management practices	1.075	.012	.973	93.430	.000
a. Dependent Variable: Project Performance.						

4.3 Correlation Analysis

Table 09 reflects the correlation among the independent variables, including innovation value chain elements, innovative project management practices, with the moderating variable, innovative culture, and the dependent variable is project performance. The high correlation is .928 for innovative project management practices with innovative culture, while the lowest is .785 for innovative project management practices with project performance. The sig value of all the variables is .000 except Innovative culture, which is .466, more than 0.005, and the researcher cannot reject the null hypothesis.

Table 9: Correlation Testing

Correlation	Innovation Value Chain	Innovative Project Management Practices	Innovative Culture	Project Performance
Innovation Value chain	1	0.898	0.915	0.811
Innovative Project management Practices	0.898	1	0,928	0.785
Innovative Culture	0.915	0.928	1	0.924
Project Performance	0.811	0,785	0.924	1

5. Discussion

The Sultanate of Oman has adopted a plan called Oman vision 2040 to overcome the challenges regarding economic sustainability and growth, to keep pace with the changing global environment, to build confidence in all social, economic, and developmental relations, and to generate opportunities for enhancing economic growth. To achieve these objectives and for the successful implementation of the Oman vision 2040, innovation is highly important in executing the projects effectively. In the increasingly changing environment, innovation is widely regarded as one of the most significant resources for attaining competitive advantage and executing the projects sustainably as innovation leads to products and processes improvements, allows public and private orginsations to grow more quickly, makes continuous advances that increase the survival of projects and are more efficient and profitable. It is notable that the firms that continuously innovate significantly contribute to the economic growth and prosperity in the country Shamsuzzoha. (2020). The countries like Japan, the USA, and other European countries invested in innovation and

research, and development and have climbed the ladder of economic development. Like these countries, Oman also needs to invest in innovation to accelerate economic growth. As Galvez, (2018) say, innovation is a complicated process linked to changes in processes and productions function in which organizations attempt to gain and build upon their distinguishing technological expertise. This is understood as a group of resources a firms holds and how innovation can transform these resources. Early studies classified innovation into five types that were new production processes, new products, new markets, new materials and resources, and new organizational forms. Other types of innovations are managerial innovations, marketing innovations, and organizational innovations. The technological innovations that consist of process and product innovations have a significant impact on the firms' performance in Oman as there are many organizations from government and private sectors in the Sultanate that can enhance their productivity through innovative processes.

The findings of the study showed a positive impact of innovation on project performance towards successful implementation. With respect to the one of the main objective of the study i.e. to identify the main elements of innovation value chain (innovation drivers, innovation barriers, innovation enablers and the benefits of innovation) to the innovation on projects performance in Omani construction industry, it has been found that a positive relation between the main elements of innovation value chain and projects performance is present. Also the other main objective of this study is to identify the best innovative practices: (Internal Organization innovative capabilities and culture, External Organization innovative work environment, organizational innovation strategic management plan and organizational innovation stakeholder management) that required to be integrated with the best applications of projects management in order to improve the projects management performance in Oman. The study has found that the application of innovation in firms and industries requires certain drivers, which are the factors that create the need for organizations to innovate. The findings of this study suggest that the main drivers behind innovation are cost reduction, time reduction, quality improvement, sustainable competitive advantage, and actively responding to client and customer needs. Other drivers identified are improving the organization's productivity and efficiency, business continuity and growth, responding to local and global market changes, and competition in the high technological development. These factors are significant for companies to prosper and earn revenues that is in turn beneficial for the country as the industry has a significant role in the economic growth of any country.

On the other hand, regression analysis showed that the Beta value is 0.973 that is positive and reflects that increase in the variable could increase in successful implementation. Moreover, the sig value is .000 showing that there is an effect of innovation on successful implementation of project. The Pearson Correlation is 0.973 that shows strong relationship among the dependent and independent variables.

Innovation and its related technologies when implemented in organizations and industries can yield numerous benefits such as improving projects planning and execution, reducing the time of completion, improving projects cost estimation and completing projects effectively within the allocated budget. Other impacts on projects performance can be delivering projects with predicted quality, meeting customer expectations, and reducing the future costs of damages and losses. By implementing innovations and projects management effectively in all businesses, investments, and projects, it would be possible to achieve objectives related to economic diversifications and growth that are mentioned on the Oman Vision 2040 long term blueprint development plan. (Al-Nabhani et al., 2015) For improving the economic sustainability and growth in the Sultanate, it is important to increase return on investment, through economic diversifications in all sectors, by providing more businesses opportunities to Omani Small and Medium Enterprises, and by providing training and job opportunities to Omani nationals.

The findings implicates that innovation has vital and positive impact on projects performance, particularly on successful implementation of Oman Vision 2040. It also shows that there are certain factors such as incentives, motivation, time, leadership and work environment that fosters innovation practices. Likewise, there are certain inhibitors such as work load, deadlines and much more that destructs innovation. The findings also imply certain best practices that could foster innovation within the Oman Vision. A supportive work environment, quality leadership,

organizational climate and culture including other factors work in correspondence to progress innovation and boost projects performance.

6. Conclusions and Implications

In conclusion, Oman cannot afford to lose out on this new technology revolution. Oman will require Science, Technology, and Innovation (STI) policies that are suited for its growth stage. This would include pushing cutting-edge technology while also redoubling efforts to fully use current technologies in order to diversify their economies and improve established industries. Oman has the opportunity to become more involved in the development and adoption of frontier technologies. However, Oman must prepare its people and businesses for a period of fast transformation.A balanced strategy to creating a strong industrial foundation and fostering frontier technologies in the twenty-first century will be required to realise the 2040 Goal Agenda and its worldwide vision of people-centered, inclusive, and sustainable societies. Oman and other nations that are devloping seek to encourage and promote the creation of new businesses and services that create employment and wealth and human development.

Number of research works have been conducted in the past years discussing how Oman has been short to achieve the promised covetous objectives of the previous long term development plan Oman Vision 2020, analyses the areas of pitfall and addresses what lessons should be learnt from its challenges, almost none of them have highlighted the future pathway. Since the need of becoming a diversified economy has become a time of need and by 2040 this need would functionally intensify in nature, studying on this particular area (Effectiveness of Innovation to improve the Projects Performance, Oman Vision 2040 and Oman Economic Growth) to determine the loopholes and the way they can be bridged seems to have become quite important (Jitpaiboon et al., 2019).

Essentially, this research study actually tries to act as a forerunner of all the future studies those are going to specifically emphasise on how application of the effective project management policies plays the effective role in the comprehensive improvment of a project performance. Further, this study would also focus on the importance of the innovative culture and the way it can prove to be functionally effective for the strategic development process. The role of the various stakeholder in Oman Vision 2040 are also going to be dynamically analysed to understand the future innovative capabilities of Oman (Melo et al., 2020).

This is the first study in identifying the impact of Innovation and high technologies on the Projects performance which lead to oman economic growth. By recommending mitigation measures for the identified factors of innovation, the study contributes significantly to the performance of the Omani projects and construction management and increase the economic growth in the Sultanate of Oman.

The research contributes to the widening of the existing body of knowledge concerning the role of innovative project management practices and innovative culture in improving the projects performance and in addressing various challenges in the Omani projects management and construction industry. The research contributes to the existing literatures and empirical studies in terms of the addition of new information.

The study increases the capacity of the policymakers and projects management professionals and practitioners to deal with both the current and future challenges facing the projects innovation in improving the Omani construction projects performance. The policymakers and projects management professionals and practitioners can use the results of this study to formulate strong policies and strategies that will lead to greater effectiveness of the project management strategies as well as exploring innovative and high technology solutions to improve the construction industry perfromance and economy of Oman during the world economic crises such as collapse of oil prices, and find proper innovative and high technology solutions to the challenges hindering successful projects performance management in Oman.

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