

The Impact of Online Working on the Operating Costs of Petroleum Development Oman (PDO)

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Abstract

Purpose: The objectives of the study were to evaluate how PDO is adapting to the online work approach, to analyze and identify the operating costs of the company that got affected by switching to an online work approach, to evaluate the impacts of the online work approach on operating costs and to evaluate the effects of online work on financial performance and changes in operating costs.

Design/methodology/approach: The population of the study was the employees of PDO – the managers and the employees of the accounting and finance department especially those who were involved with the financial issues and were responsible for the company’s cost and revenue calculations. The study included 54 samples from the population. The survey was conducted through a questionnaire using a Google Form and the samples were selected on a random sampling technique. Interviews were also conducted. The data collected were analyzed using different data processing methods of data analysis.

Findings: The study revealed that PDO successfully adapted to the transition from traditional working to online working and technology played a key role in doing so. Employees felt benefitted from online working as they were able to manage work-life balance. It was also observed that working online with efficiency reduced the operating costs and increased productivity. It was confirmed the claim that the work-from-home online working benefitted the company significantly in reducing the operating costs.

Research limitations/implications: It was suggested that the employees should be well equipped with modern technological equipment and advanced applications to support the online working conditions. The option should be given to employees to work from home should be made as a part of the work routine work even after the pandemic to maintain the work-life balance.

Social Implications: The study suggested that the management including the project owners and managers must focus and work more on developing a work style that suits the requirements of different work teams in online working.

Originality / Value: This is the first time a study of this kind was carried out to find out the impacts of the pandemic on the operating costs and the financial performance of a company. This is a maiden attempt.

Keywords: Online working, Operating Costs, Work from Home, Petroleum Development Oman, Technology.

Introduction

Governments all over the world have introduced social distancing rules and regulations to protect people from the spreading of the COVID-19. This has to lead the workforce to begin working remotely. Employees all over the world have shifted to work online (work from home) as a result of the COVID-19 pandemic. This pandemic has caused people to make use of the remote work pattern – at least for the time being. This has brought a change in the working style.

Since 2005, working remotely and online has become popular in the United States. 1.8 million employees in the United States worked from home for half of the week. That number rose to 3.9 million by 2015, and it has continued to rise since then (Diener, 2020). With today's level of connection, the difference between a person working in an office and one working from home is almost indistinguishable. Employees can often benefit from this type of work as they can reduce their commuting time and cost. There are benefits and direct advantages associated with remote/online working due to the involvement of unusual competencies. What seems to work in an office environment need not necessarily work in a remote setup.

Employees working online have shown productivity due to self-motivation, self-reliability, and responsibility but not all the activities are suitable to be carried out under the online working category (Al-Siyabi and Dimitriyadi, 2020). This has geared a qualitative leap towards implementing the interactive side of digital Government initiatives. Petroleum Development of Oman (PDO), one of the largest petroleum and natural gas producing companies in Oman is no exception to it.

PDO is the company in charge of producing the majority of the country's crude oil and natural gas. In addition, most importantly, it focuses on achieving distinction, prosperity, and building long-term value both inside and outside Oman. The company aims to follow good neighborly principles and works for a sustainable strategy that considers the environment. PDO has also benefitted from this rapid change and initiated its implementation of online working (remote working) in record time and demonstrated its effectiveness. Employees' transition to work from home was reported to be jarring at first, but a seamless transition to online working.

Operating costs of a company are the costs borne by a company to carry out its business operations and for a manufacturing company like PDO, the operational activities vary besides production. Operating costs highlight the amount of investment that a business would make to raise sales, which is the company's primary target. When a company's operating expenses as a percentage of revenue are higher than that of the competitors, it could mean that the company is less efficient at generating those sales.

A remote working policy is an important component of a successful contingency plan for ensuring organizational stability, efficiency, and job security. Through the introduction of online/remote working technology operational costs could be reduced while improving the capacity of the resources to optimize efficiency, cost-effectiveness, and maintain their core processes over the life cycle. This is one of the primary reasons businesses are significantly increasing their plans in remote hiring as a result of the perceived advantages of operating online. However, this cannot be claimed and applied to field units that are directly involved in production. Irrespective of considering the merits and demerits of online working, the COVID-19 pandemic situation has compelled every company including PDO to move ahead with the cornered situation.

Statement of the Research Problem

After the spread of the coronavirus, COVID19, it was noticed that the Governments, companies, and individuals had been searching for alternatives means to cope up with the situation. One of the alternatives implemented to reduce the spread of the renewable virus was remote working (online working). The online working method was observed by the Government and companies to prevent the spread of coronavirus among their employees. However, the implementation of distance working from home, as a new strategy, had created some difficulties and impacts on the companies. These impacts were positive or negative and had financial and/ or operational effects. PDO is one of the highly prestigious companies in the petroleum field in Oman. It was also affected by the situation due to the COVID19 pandemic. It was observed that operational costs would have been affected directly due to an impact. Therefore, it was decided to explore the impacts of online work on the operational costs in PDO.

Research Questions

In this study, the phenomenon that compels companies to work remotely was considered. Therefore, the following questions were raised during the study:

1. How PDO is adapting to the online work approach?
2. What were the operating costs of the company that got affected by switching to an online work approach?
3. What were the impacts of the online work approach on operating costs?
4. What were the effects of online work approach on financial performance and on changes in operating costs?

Research Objectives

Matching with the above research questions, the study examined the following research objectives which were as follows:

1. To evaluate how PDO is adapting to the online work approach.
2. To analyze and identify the operating costs of the company that got affected by switching to an online work approach.
3. To evaluate the impacts of the online work approach on operating costs.
4. To evaluate the effects of online work on financial performance and changes in operating costs.

Review of Literature

COVID-19 has wreaked havoc on the global economy by creating confusion and catastrophe (Ozimek, 2020). Countries face different trade-offs in their fight against the pandemic and adopt different Cost-benefit trade-offs to face the challenges (Loayza, 2020). Organizations responding to the current COVID-19 crisis will gain a significant competitive edge (Howley, 2020). It is more important than ever to understand the dynamics of work from home (online working) as the work-integrated learning experiences are involved (Fleming and Pretti, 2019). Employees feel comfortable as instead of commuting, they communicate via phone or the internet in online working (Irwin, 2014). Recruiting managers who remotely work performed better than expected (Ozimek, 2020).

Sudden switchover of working patterns might impact disastrously concerning operating disruption (Goodell, 2020). One of the key challenges faced by online working companies is that they could not perform the same way as that they in a shared office room (Malecki, 2020). Technology plays a key role in such switchover to online working as business activities are aided by application and software to support employees to collaborate, strengthen corporate culture, increase revenue, and reduce cost inefficiency (Diener, 2020; Howley, 2020). To reflect remote work strategies in the cost of goods and services the financial returns need to be calculated and costs of the projects should be estimated to identify and minimize the risks of exposure (Brunskill, 2010).

The analysis of a company's operational performance requires an understanding of its operating costs (Berendt et al. 2018; Szinai et al., 2020). Operating costs are important and are used to evaluate a company's cost and inventory control efficiency (Weerasekera, 2015). Leasing office space, paying utility bills, and keeping office premises altogether might overburden the finances, and allowing employees to work online, could help to reduce costs (Diener, 2020). Internal control advantages include not only cost savings but also improved protection by minimizing the number of trips to the facility (Hussainey and Al-Nodel, 2014).

Magun (2019) claimed that a high operating expense ratio affects the financial performance and so proper decision making is a must. Operating expenses measure the organizational cost of delivering the products (Stauffenberg et al., 2003). Operational expenses play a key role in determining the financial position (Muthuraman and Al Mawali, 2021; Muthuraman and Al Nairi, 2021). The focus should be on the efficiency in attaining the expected level of profitability (Brand and Gerschick, 2000). Cost inefficiency will lead to low profitability (Asogwa et al., 2011). Kiaritha et al. (2014) claimed that there should be effective policies in governing the operating cost and will help in yield good financial performance results. Efficiency towards the cost control determines how optimum will be the financial performance of the company (Kinyugo, 2014).

Research Methodology

The researcher must construct a survey that satisfies all of the design's key characteristics (Cronje, 2020). It is also possible that assigning numbers to relatively abstract constructs like personal beliefs can lead them to be too precise (Sarkisian, 2017). Except in the most serious cases, exploratory research decides the original study design, sampling methodology, and data collection method (Mainardes et al., 2010).

The population of the study was the employees of PDO – the managers and the employees of the accounting and finance department especially those who were involved with the financial issues and were responsible for the company's cost and revenue calculations. The total population of the accounting department was around 100. If the population is less than 500, it is sufficient to test 50% of the population (Ruane, 2010). Therefore, the study included 54 samples from the population. The survey was conducted through a questionnaire using a Google Form and a random sampling technique was applied to choose the samples. Individual responses to survey questions were collected. Further, the interview was also conducted as the qualitative research provides detailed information to understand the situation (Gomes, 2016). The data collected were analyzed using different data processing methods of data analysis.

Reliability Validity and Testing

A well-constructed survey questionnaire will minimize the unexpected errors and increase the reliability and validity of responses (Peytchev, 2019). Thus, the Cronbach Alpha test was conducted and the result was as follows:

Table 1 Reliability Analysis Results

Items	10
Sum of Variance	5.257
Sum of Score Variance	15.664
Cronbach Alpha	0.738

Cronbach alpha score is 0.738. A value between .70 and .93 is preferred.

Findings

Table 2 Online working

Statements	SD	D	N	A	SA
Online work is better than the usual work	4 7.5%	10 18.5%	20 37.0%	10 18.5%	10 18.5%

Table 2 shows that most of the respondents (37%) agreed that online work is better than the usual work. This means that they prefer working remotely over regular work. 37 % were neither agreed nor disagreed. This is because the employees at the accounting department of Petroleum Development Oman do not differentiate their work except the usual work, whether workplace or working remotely. 37% of the respondents agreed that online work is better than the usual work. and 26% disagreed that online work is better than the usual work.

Table 3 Operating Costs when Switching on to Online Work

Statement	Yes	No
Are operating costs of the company affected when switching to an online work policy?	42 77.8%	12 22.2%

Table 3 indicated that the majority of the respondents (77.8%) said that operating costs are affected by the online work approach, which means that the company’s costs are affected when switching to remote work. 22.2% of the respondents said that operating costs are not affected by online work. As per Berendt et al. (2018), a remote work policy is an important component of a successful contingency plan is a part of national law, rules, and regulations.

Table 4 Technology

Statements	SD	D	N	A	SA
Technology and modern technologies have helped the transition to online work	7 13.0%	0 0%	11 20.4%	21 38.9%	15 27.8%

Online work is an optional solution to continuing the work of the company rather than stopping the work all of a sudden. and through responses that technology represents a major role in the company’s taking a remote work policy through cloud services, communications, artificial intelligence technologies, visual communication software, file-sharing platforms, and virtual private networks. Table 4 shows that most of the respondents (65.7%) agreed that technology and modern technologies have helped the transition to online work. 20.4% of the respondents neither agreed nor disagreed while 13.0% disagreed on that.

Ignoring future workplace trends and being hesitant to integrate technology in the office might offer a significant edge to the competitors which might have a detrimental impact on the morale of the employees, income, and create a bad image to the company (Howley, 2020).

Table 5 Level of Average operating costs during online work

Level of Average operating costs	Frequency	%
Low	6	11.1
Medium	35	64.8
High	13	24.1

Table 5 shows the level of average operating costs during online work. Most of the respondents (64.8%) reported that level of average operating costs. 24.1 % of the respondents reported that the level of average operating costs is high while only 11.1 % of the respondents claimed that the level of average operating costs is low. Through the responses, it was concluded that the average operating costs of the company were average when switched to remote work as against the assumption that the cost will be low due to the reduction of several costs and obligations.

The online work advantages include not only cost savings but also improved protection by minimizing the number of trips to the facility, whether it is a substation for power transmission or storage or a substation for a renewable energy station. Data centers, other businesses, or transit charging points Smart, and decreasing the number of trips to the site increases the operator's efficiency and decreases risk, resulting in a decrease in the prices of the services provided (Hussainey and Al-Nodel, 2014).

Table 6 Financial Performance of Increased Operating Costs

Financial performance affected by a decrease in operating costs	Frequency	%
Yes	46	85.2
No	8	14.8

Table 6 indicated that the majority of the respondents (85.2%) confirmed that the financial performance got affected due to the decrease in operating costs while only 14.8% of the respondents disagreed that the financial performance was not affected. Therefore, it was concluded that the financial performance of the company was affected by a decrease in operating costs.

The financial performance helps to understand the financial statements as well as help in conducting the analysis, comparison, follow-up of the economic and financial conditions of the company (Berendt et al., 2018).

Table 7 Financial Returns / Cost reduction

Statements	SD	D	N	A	SA	χ^2	P-value
Continue to work online, financial returns can be determined and costs can be reduced	1 1.9%	4 7.4%	28 51.9%	18 33.3%	3 5.6%	51.000	.000

Table 7 shows that the p-value is less than 0.05. Therefore, the choices of the respondents proved to be true. i.e. only 38.9 % of the respondents agreed that continuing to work online financial returns could be determined and costs could be reduced while the majority of the respondents (51.9%) stayed neutral. They neither agreed nor disagreed.

Cost Savings: Employees working from home were beneficial to the company's bottom line. When a team is divided, companies save money on operational expenses like rent and office furniture, resulting in lower overhead. This is similar to the finding by Soroui (2021) who stated that the workers could save \$22,000 a year per remote worker, even though their whole workforce was not fully remote.

Summary of the Interview Results

Questions	Answers
1. What is the difference between operating costs in normal work and online work, that is, do you increase or decrease costs?	Working online has significantly reduced operating expenses. Paperwork Consumption was reduced to 0% in some of the departments thereby saved around 50,000 USD every month. Further, water and electricity consumption was reduced to half.
2. What were the costs required by the company to switch onto online working?	The company might incur unplanned operating costs – providing computers and related accessories to all the employees. In addition time and effort to install the company’s systems and these devices.
3. What were the operating costs involved in the occurrence of risks and stopping online working later?	When the employees return to normal work (to offices), the company needs to return all the devices and accessories to avoid misuse. Further, the routine normal involves the use of paper costs, usage of water and electricity, and other related expenses.
4. What are the challenges faced by the company during online working, and its impact on financial performances?	Working online affected some employees negatively, as they are less motivated to do their work, which in turn affected the work in terms of quality and delayed delivery, and thus affected the performance of the company on the whole.
5. Any other challenges?	Some of the employees have not adhered to the rules and regulations in using, the devices provided to them.

Conclusion

PDO was depending upon innovation, modern technologies such as artificial intelligence, evidence analysis, systems development, cybersecurity, and deploying in employment contracts, especially for the talented ones who come from outside the country. Due to online working, these costs are eliminated.

Although the transition from traditional working to online working was challenging, PDO successfully adapted to this and was constantly seeking unique and innovative ways and means for the same. It was observed that technology played a key role in the process of transmission, especially in enabling the employees who were working online to stay in touch. Employees feel benefitted from online working as they got to work with flexibility in working timings which enabled them to fit their personal and family obligations. It was reported that online working helped them to achieve a better balance between their personal and professional life i.e. work-life balance. For this reason, the management including the project owners and managers must focus and work more on developing a work style that suits the requirements of different work teams in online working.

Technology had a significant influence on online working. Ignoring workplace trends and being hesitant to integrate technology might offer the rivals a significant edge. This might have a detrimental impact on employee morale, income, and create a bad image of the company (Howley, 2020).

It was also observed that working online with efficiency reduced the operating costs and increased productivity. It was reported that the reduction in costs including office expenses – supplies, furniture, fixtures, and business-related (domestic or international) travel expenses and commuting allowances got reduced, which confirmed the claim that the work-from-home online working benefitted the company significantly in reducing the operating costs.

Recommendations

The following recommendations were made based on the above findings:

- Management should focus on developing a work style that suits the requirements of online working so that the employees will be satisfied through maintaining proper work-life balance.
- Necessary and sufficient support for online work should be provided to all the employees who are working from home. For example, providing necessary computers and their accessories to all employees, installing company systems in the devices, and also increasing employee bonuses.
- Creating a conducive and healthy work environment is a must.

- The option should be given to employees to work from home should be made as a part of the work routine, even it is for a short period. It will make the employees feel a comfortable work environment with job satisfaction and the employees will be to maintain the work-life balance.
- Employees should be well equipped with modern technological equipment and advanced applications to support the online working conditions. Improvements and upgradation should be made regularly and the employees should be given training on such upgradation.
- For example, applications and technologies for working from home should be effectively managed such as cloud or remote access to the company server, as these technologies will enhance productivity.
- The highest security standards and processes should be implemented to prevent the leaking of any sensitive information, and provide a high degree of security so that confidentiality related to the business and clientele is maintained.
- The company should have proper databases as they are the safe data containers that efficiently save and store the data to safeguard and reorganize it, making them indispensable in huge corporations and institutions.
- Regular and timely backup of data and reports should be taken to avoid internet problems such as connection failures or data piracy or hacking, etc.

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