



An Empirical Study on SMEs Growth and Sustainability: A Case Study in Oman

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Abstract

Purpose - Small and Medium Enterprises (SMEs) are recognized as a driving force for competitiveness and innovation that plays major role in sustainable development and contributing into the economic growth of Oman. This paper focuses on SMEs growth and sustainability in Oman.

Design/methodology/approach - This research will adopt descriptive, empirical, and exploratory research design as well as mono method approach using quantitative approach of questionnaire.

Findings – First, the findings of this study reveal the important role that SMEDA plays in supporting SMEs growth and sustainability through providing different regional and international platforms that support their businesses. Second, However, Artificial Intelligence is a new concept in the Omani society that still not integrated in most SMEs business. Second, the study revealed that SMEs see Artificial Intelligence (AI) as a significant factor for improving operational efficiency, market identification, and customer engagement that support its growth and sustainability.

Research limitations/implications - Lack of sufficient literature reviews on SMEs growth and sustainability in Oman, since this topic is new, the researcher has not found literatures done in Oman yet especially the impact of adopting artificial intelligence (AI) on SMEs growth. There is a need to conduct further research regarding SMEs growth and sustainability in Oman.

Originality/value – This paper provides insights regarding SMEs growth and sustainability in Oman, as well as an insight regarding challenges faced by those sectors and the role of artificial intelligence (AI) in boosting SMEs growth and sustainability in Oman.

Keywords Artificial Intelligence, Growth Challenges of SMEs, SME, SMEs growth and sustainability

Paper type – Research paper

1. Introduction

Small and Medium Enterprises (SMEs) play a major role in the world economy with 95% of enterprises globally are SMEs businesses. It contributes towards economic growth and development, innovation, employment, and entrepreneurship. It was found that SMEs is generating 60% - 70% employment opportunity in middle- and low-income countries. In Oman, SMEs attracted government attention and plays a major role in Oman vision strategies 2020 and 2040 (Alqassabi, 2020). The strategies focused on developing SMEs sectors to become major player in diversifying the national economy. Omani government promotes the role of SMEs in the economy through launching many initiatives such as providing lots of support, guidance, and training to SME owners to remain competitive and sustain their businesses. However, during the pandemic of COVID '19, 63% of full-time enterprises in Oman which hold Riyada business cards was completely closed during the lockdown period as well as 73% of SMEs got affected by the decision of shutting down the businesses.

In most of the developing economies SMEs contributes significantly to local capital formulation and achieving high levels of capability and productivity. Growth and sustainability have been considered as prerequisite to achieve competitive advantages (Muthuraman et al., 2020) for SMEs in Oman. However, SMEs have not played a crucial and significant role they are expected to play in Oman's development, economic growth, and industrialization due to many challenges and obstacles that hinder their growth and performance to achieve sustainable development. This research aims to identify services provided Omani governments that support SMEs growth and sustainability in Oman, as well as evaluate challenges faced by Omani entrepreneurs of SMEs. In addition to that, to find how SMEs will improve by applying innovative strategies such as the application of Artificial Intelligence (AI) that contributes to SMEs growth and sustainability.

2. Literature Review

2.1. Theoretical framework

Aidoo (2022) defines SMEs growth as an increase in the financial indicators of SMEs. SMEs growth can be reflected in various fields including industrial organizations and strategic management. SMEs growth is critical for its survival. The researcher findings highlighted SMEs the experience growth is less susceptible to failure compared to those do not expand their businesses. Growth can be characterized by increasing the size of the business and generating income. Added value. Growth indicators can be seen through assets, business resources, market share, sales, employment, physical output, and profits. According to SMEs sustainability refers on focusing on three dimensions of pillars which are environmental aspects (Kosasih et al. 2022), social aspects and economic aspects. Where environmental aspects seek to improve human welfare through conserving the source of raw materials used to meet needs. Social aspects provide help and contribute to developing the community. Moreover, economic aspects involve securing short and long-term profitability. Boucher et al. (2022) define Artificial Intelligence as new technologies used to improve business productivity and practices. To automate and improve business process AI was incorporated in technologies such as Robotic Process Automation.

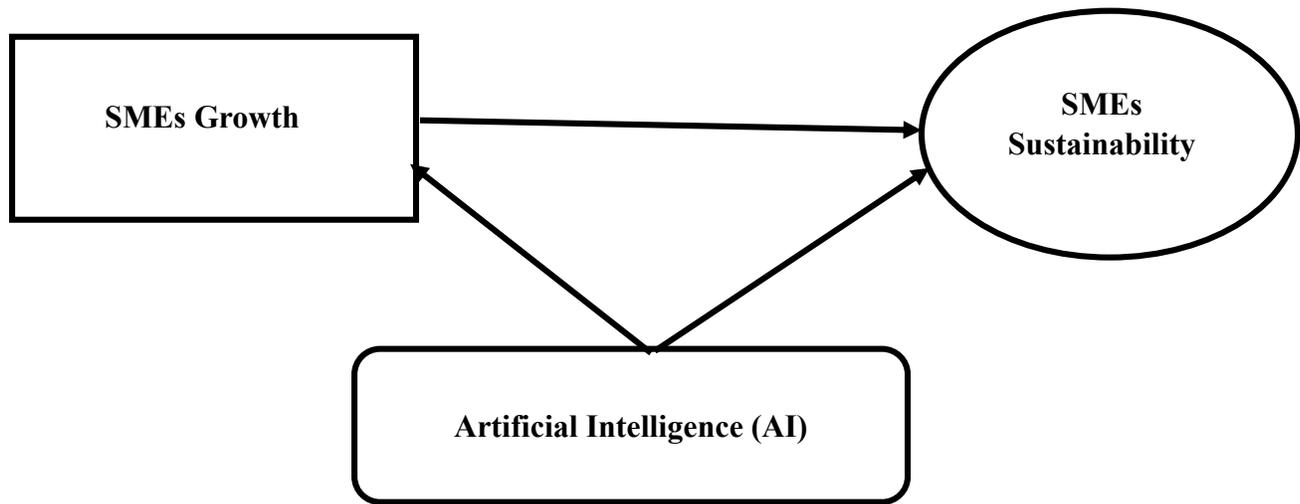


Figure 1: Theoretical Framework on SMEs Growth and Sustainability

Figure 1 shows the relationships between variables which includes SMEs growth, Artificial Intelligence and SMEs sustainability. Several studies have been conducted regarding the relationship between SMEs growth and SMEs sustainability, Shahrazad (2021) stated the there is a significant positive relationship between SMEs growth and SMEs sustainability where growth practices that involves financial and operational practices can be adopted to develop green SMEs. It focuses on SMEs that align their business practices with having the idea of sustainability and greenness through producing and selling green services and products. On the other hand, Hernandez et al. (2023) found that there is a significant positive relationship between adopting Artificial intelligence (AI) on both SMEs growth and sustainability.

2.2. Growth and sustainability of SMEs: global perspective

Small and Medium Enterprises contributes significantly to the country's economic growth in Ethiopia. According to the United Nation Industrial Development Organization Ethiopian government focusing on the growth of SMEs due to its major role that plays in job creation (Abdissa et al., 2022). Nevertheless, there are some challenges that contributes directly or indirectly in harming the growth of SMEs such as corruption and political instability. In addition, SMEs growth and sustainability in European Union depends into competitiveness and the growth of regional economic (Okolo et al., 2023), therefore, regional economies are exposed to the risks associated technological and globalisation changes.

In addition, a study conducted by Bruce et al. (2022) reflects that social media has a positive effect on the growth and sustainability of SMEs in Ghana. The researcher agrees with Bruce et al. (2022) findings because in the current time social media plays critical role in making SMEs creative

through tailoring marketing campaigns toward increasing their subsequent profitability and their market share as well as their target customer that contributes to achieving SMEs' growth and sustainability. Moreover, social media creates an opportunity for SMEs to connect with their customer and make them sustainable. However, SMEs sustainability can be limited to the availability of physical resources and money.

2.3. Growth and sustainability of SMEs: local perspective

As the ease of doing business in Oman is high and support from the government Oman considered as highly fertile land for SMEs growth. SMEs in Oman contributes to achieving high levels of productivity and capability through bringing local capital formation and sustainable domestic. SMEs sustainability reflects businesses development practices (Abdulwahab, 2023) that provides new opportunities for innovative corporate activities. SMEs growth and sustainability demonstrate a positive impact on economic, social and environmental benefits. Unlike big companies, SMEs can enjoy a lot of privileges such small investment required for this sector which makes them less vulnerable to risks.

To overcome challenges SMEs may counter in their project and to improve SMEs business practices the government provides general and specialized consultation which can be done through a Consulting Department imitative or via direct request from the beneficiary. Moreover, the government helps SMEs in marketing and promoting their products and services through organizing events and shows for SMEs to participate in it (SMEDA, 2023). As well as these events will provide an opportunity for SMEs to find partnership, develop their marketing skills and gain qualification. The service helps in establishing corporate identity that supports start-ups and SME. In addition, the government provides SMEs project business development and support services to ensure the continuity of the project, in addition, to presenting ideas, exports and activities that aim to improve and expand the project and increase profit through strategic partnership with private and government companies.

Recent studies have highlighted the importance of government support programs in promoting SMEs growth and sustainability. According to a study done by Kamilah and Kassim (2021) found that government support such as in the form of tax incentive, grants and subsidies had a significant positive impact on SMEs profitability and growth. Another study done by Olugbola and Adengua (2021) found that financial aspects in terms of providing much needed capital to fund SMEs development and growth positively affects SMEs sustainability. The researcher agrees with those studies because the researcher believes that with the help of governments financial support it will helps SME promoting their businesses and have significant contribution on economic growth as well as expanding its operation globally.

2.4. Growth challenges faced by SMEs: global perspective

Small and Medium Enterprises (SMEs) all over the globe are currently facing several barriers while trying to grow and sustain their businesses. Based on a study conducted in Asia reveals four major reasons that hinder the growth of SMEs in Asia that include insufficient use of information technology, lack of finance, low level of R&D expenditure and lack of comprehensive database. Like other developing countries according Ambad *et al.*, (2020) it was found that major barriers of growth faced Malaysia's SMEs are financial constraints, human resources issues, lack of creativity and innovation, problem with supplier and poor marketing strategy. In the same vein, India's SMEs facing several challenges associated with growth such as lack of suitable technology, absence of

adequate and timely financial aid, non-availability of skilled manpower and ineffective marketing, due to limited resources. Furthermore, an article was written by Khaerani et al. (2023) identifies that lack of information, experience, competence, capital, and awareness are some difficulties that hinders SMEs growth and sustainability through decreasing SMEs opportunity to enter international market.

2.5. Growth challenges faced by SMEs: local perspectives

Similarly in Oman SMEs faced several growth challenges Ramachandran and Yahmadi (2019) highlighted in their study in the article “Challenges Faced by SMEs in Oman” that major SMEs growth challenges in Oman are lack of market knowledge and information, lack of adequate finance, complicated procedures and delay in loan disbursement, lack of market knowledge and information, lack of basic business knowledge, reluctant in using modern technology and limited network, experience, and expertise.

A recent study conducted by Alqassabi (2020) revealed that government support in form of providing limited funding to SMEs in Oman in comparison with large firm plays huge role in hindering SMEs growth. The authors emphasise on the important of having appropriate access to finance, keeping base with technology chances, having good knowledge of business culture.

However, according to Jaffer and Matriano (2021) the researcher highlighted the positive impact of Covid 19 pandemic brought on SMEs in Oman in post Covid 19 era. Although Covid 19 hit badly SMEs in Oman that could not survive the pandemic and shutdown their businesses, on the other side the pandemic was a great opportunity that open the door for SMEs to be innovative during post Covid-19 to minimize the negative effect that the pandemic caused to SMEs. For example, some SMEs shifted to use drones to sterilize roadways in Muscat to restrict the spread of the virus effectively. Some SMEs introduced their customer remote sensing technology as well as introduced them to innovative e-payment with various payment method.

2.6. The role of artificial intelligence (AI) in SMEs growth and sustainability: global perspectives

Drydakis (2022) on his research reveals that the application of AI associated with reducing SMEs’ business risks caused by Covid 19 pandemic. It was found that SMEs across the globe who implemented AI to facilities HR activities, offer cash flow forecasting and target consumer online minimized its business risk that caused by Covid 19. Another research was done, and the finding shows that AI helps SMEs to leverage technology move to speed to pivot their business operations, boost business risks, meet new demand, boost SMEs efficiency towards its growth and sustainability in Philippines (Sunday & Vera, 2018; Garbellano & Da Veiga, 2019).

In addition, a study was done by Mancheva (2021) on his article “European Union Regulatory Framework on Artificial Intelligence SMEs” stated that the application of AI in European Union SMEs brings more positive impact effects than negative. Where the findings of this study emphasize the applicability of AI to most industrial SMEs activities in the European Union. It contributes in improve and ease SMEs business conditions, trigger a new product revolution, bringing change to the internal value chain of the company, enables SMEs to change their practices and business models that can scaleup potential and reflect on increasing productivity. Furthermore, the application of AI will help workers to up-grade and reorganize by free workers from low value-added tasks. The authors also emphasize the increasing application of AI on SMEs sector in the future.

2.7. The role of artificial intelligence (AI) in SMEs growth and sustainability: local perspectives

Similarly in Oman, the government in Oman with the alignment with Oman Vision 2040 emphasises on the safe application of Artificial Intelligence (AI), advance technology and innovation in all sectors including SMEs in Oman. The focuses are on having ethical, fair and safe use of AI application. Reviewing and updating policies and laws according to stimulate the adoption of AI. According to Hernandez et al. (2023) recently some SMEs in Oman have growing appreciation of innovative technologies that supports business growth and sustainability. For instance, in order to provide efficient payment collection system for SMEs that involved retail and service activity mobile payments have been adopted (Das et al. 2020). Likewise, in order to improve customer experience and to target customer segments social media is eventually utilized in SMEs. Thus, SMEs in Oman continues to grow through utilizing technologies that result in environmental sustainability and economic prosperity.

However, due to the development and deployment of AI systems based on several studies done by researcher the results highlighted the significant challenges raised of implementation AI on SMEs businesses that need to be addressed in order to ensure the ethical and responsible use of AI. Those challenges include lack of transparency AI in decision making, loss of jobs because of automation (Crockett et al., 2023), and the need for responsible data management (Floridi et al., 2021). Moreso, the concern is that AI can perpetuate existing economic and social inequalities. Likewise, present challenges that are associated with using AI on SMEs involve integration of AI in sustainability goals, cyberthreats, infrastructure and financial support.

3. Research Design and Method

According to Marlow (2023) “the procedures of collecting, analyzing, interpreting and reporting data in research studies”, is known as research design. Where it focuses on setting the procedures on the required data, the method used to collect and analyze the data, and how it’s going to answer the research questions. Research design can be descriptive, exploratory, and empirical. Descriptive research design is the attempt to determine, identify or describe what is rather than why or how something has happened (Ansari et al., 2022). It is popular with the non-quantified topic where it is used to describe various aspects of the phenomenon. Exploratory research design is a study that seeks to address a phenomenon or answer a question (Abbasi et al., 2022) where the researcher cannot determine all the influences on the entity. It is also known as the inductive method where it seeks to identify general principles to explain observations and data. The more exploratory look at the topic is more beneficial. Furthermore, Empirical research design involves the application of experience and observation to a research question rather than theory only (Asenahabi, 2019). Empirical research involves systematic collection and analysis of data. It is used in research that involves original collection of data as well as in qualitative research.

This research adopts descriptive, exploratory, and empirical research design. It’s descriptive because it aims to describe the behavior and the characteristics of Small and Medium Enterprises growth and sustainability in Oman. It helps in describing, explaining, and validating research findings. It is considered as an effective method to gain information that can be used to develop proposed associations and hypotheses. In addition, exploratory design is suitable for this research because seeks to learn as much as possible between SMEs growth and SMEs sustainability. It is also unique because the data collected in the field from SMEs registered under SMEs development Authority, where the data will be organized in a way that has not been done before. Moreover, this

research considered as empirical study because it bases on collecting evidence form SEMs in Oman regarding their growth and sustainability as well as growth challenges related to their businesses where it's associated with conducting surveys.

3.1. Data gathering

Questionnaire is a tool used mostly to collect quantitative data through a list of questions distributed to the respondents asking them about their opinions, experiences, values, past behaviours, and attitudes (Ahuja, 2022). It is a suitable method used to collect data at large scale. It ensures that the respondents will provide honest and unbiased answers due to anonymity and confidentiality of protecting the respondent's personal information the questionnaire provide. The questionnaires were distributed to 175 respondents as the minimum sample size based on the total population 14,895. In addition, Google Form was used to prepare the survey questionnaire and was distributed through a link via emails and WhatsApp. It included a mixed of open-ended, multiple-choice questions, Yes/No questions, and close-ended questions.

4. Data analysis

<i>Gender</i>	<i>Responses</i>	<i>Percentage</i>
<i>Male</i>	121	67.60%
<i>Female</i>	58	32.40%
<i>Total</i>	179	100%

Table 1: Gender of the Respondents

Table 1 displays the gender distribution of 179 survey participants in Oman's Small and Medium Enterprises (SMEs) sector. Of the participants, 67.6% identified as male and 32.4% identified as female. The gender disparity observed in the SME landscape highlights the predominance of males in the surveyed population. The table presents a concise summary of the gender demographics, providing insights into the representation of genders among the respondents. This information serves as a basis for conducting further gender-related analyses in the context of SME growth and sustainability in Oman.

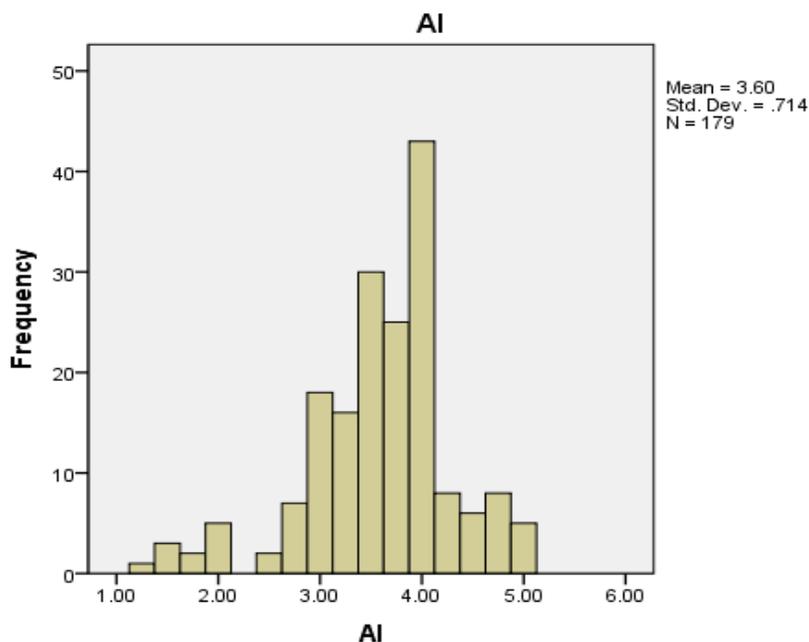


Figure 1: Histogram Analysis of Adopting AI

Figure 1 illustrates the distribution of responses regarding the adoption of Artificial Intelligence (AI) among surveyed SMEs in Oman. The x-axis represents the scale of AI adoption, ranging from 1.00 (strongly disagree) to 5.00 (strongly agree). The y-axis shows the frequency or number of respondents in each adoption level. The histogram exhibits a discernible pattern. Most SMEs' responses are concentrated in the middle range of the adoption scale, specifically between 3.25 and 4.00. A considerable number of SMEs view the adoption of AI as having a positive impact on their growth prospects. A small proportion of respondents strongly disagree with AI's potential benefits, indicating a lack of skepticism. At the higher end of the scale (strongly agree), there is a lower number of responses, suggesting cautious optimism rather than widespread unanimous agreement. The histogram demonstrates that the surveyed SMEs generally have a positive perception of AI's potential for growth. This is especially evident in their belief that AI can be beneficial for social media marketing and market identification. The distribution of responses indicates that there is a general agreement among participants that AI has the potential to enhance growth (Kosasih et al. 2022). However, there is not unanimous consensus that it is a comprehensive solution in all aspects.

5. Findings

The study of the services supplied by Oman's SMEs generated important findings. According to the report, the government provides a variety of assistance measures targeted at supporting SME development. Financial aid, training programs, technical support, and reduced administrative support are all part of these services. The results are in line with the literature study, which stressed the importance of government assistance in promoting SME growth. This alignment

emphasizes the significance of such services in fostering an environment that allows SMEs to flourish and contribute to economic success.

A careful examination of the issues encountered by entrepreneurs in Oman revealed a plethora of impediments to SME growth and sustainability. Notably, bureaucratic complications and time-consuming administrative processes surfaced as significant impediments. These results are consistent with previous research, emphasizing the bureaucratic barriers that SMEs confront. Furthermore, the research recognized budgetary restrictions, poor network connectivity, and competitiveness as significant hurdles. These findings highlight the need for focused actions to remove these barriers and promote a supportive entrepreneurial environment.

The investigation of development methods used by SMEs in Oman indicated their proactive attempts to stay sustainable in the face of growth challenges, with AI adoption appearing as a key facilitator. According to the data, SMEs see AI as a catalyst for improving operational efficiency, market identification, and customer engagement. These findings are consistent with the literature's focus on AI's ability to transform corporate processes. The research also underlined the necessity for personalized AI solutions as well as skill development in order to fully realize the technology's promise.

6. Conclusion

The results emphasized a variety of support strategies, such as financial aid, training programs, technical help, and improved administrative procedures. These services are consistent with the Authority's commitment to fostering SMEs and with literature that emphasizes the need of government assistance in encouraging SME growth. The conclusion emphasizes the need of creating an enabling environment via specialized services that meet the different demands of SMEs. Moreover, the results highlighted significant hurdles such as cumbersome bureaucratic processes, budgetary limits, restricted network connectivity, and competitive pressures. These difficulties reflect those identified in the literature, emphasizing the necessity for focused actions to remove roadblocks to SME growth. The conclusion emphasizes the need of regulatory changes and supporting measures in strengthening SMEs' resilience to these difficulties.

According to the findings of the survey, SMEs are actively exploring methods to stay viable while adopting AI as a revolutionary tool. The results show the perspective of artificial intelligence (AI) as a driver of operational efficiency, market identification, and consumer engagement. These findings are consistent with research that advocates for strategic approaches and technology integration to manage the changing corporate environment. The conclusion underlines AI's potential to catalyze SME growth and sustainability and suggests a strategic strategy for its implementation.

The conclusions, based on actual data and literature, recommend a multifaceted strategy. The ideas place a premium on reducing bureaucratic procedures, increasing financial assistance, encouraging entrepreneurship, and cultivating constructive ties between the government and the private sector. Furthermore, strategic AI integration appears as a disruptive road ahead, improving operational capabilities and market responsiveness. To drive SME growth and sustainability, the conclusion emphasizes the necessity of coordinating regulations, promoting teamwork, and embracing technology improvements.

Recommendations can be as follows:

This study, which addressed particular research goals, gave useful insights on the growth and sustainability of Small and Medium Enterprises (SMEs) in Oman. Based on the results and in accordance with the literature, the following suggestions are made to improve the SME ecosystem in Oman:

1. To meet the changing demands of SMEs, the government should continue to diversify its support offerings. This involves providing tailored training programs that target certain industries and skill shortages, allowing entrepreneurs to acquire capabilities that are market driven. Create a simplified online platform for quick access to administrative procedures and government services. SMEs may save time and costs by digitizing application processes and approvals, establishing a business-friendly atmosphere.
2. Collaborate with key stakeholders to minimize red tape and streamline bureaucratic procedures. This might include forming a task force committed to identifying and eliminating administrative bottlenecks, resulting in a business-friendly climate. Launch programs that provide financial incentives, such as interest-free loans and grants, to help SMEs overcome financial restraints. These incentives may assist in reducing the risk of acquiring finance and encourage businesses to pursue growth prospects.
3. Create tailored training programs to educate SME owners on the advantages and realities of AI adoption. To guarantee that SMEs can successfully exploit AI's potential, such programs should prioritize talent development, data management, and AI integration. Encourage cooperation between SMEs and technology suppliers to make AI solutions more easily implemented. Government-backed collaborations may provide SMEs with low-cost access to AI technology, allowing them to improve operational efficiency and competitiveness.
4. Create a knowledge-sharing and cooperation platform between the SMEs Development Authority and the business sector. This joint effort may make it easier to co-create policies, programs, and solutions that address the particular difficulties and possibilities that SMEs confront. Launch initiatives that encourage a culture of entrepreneurship and creativity, especially among young people. Oman can develop the next generation of creative SME leaders by including entrepreneurship education into school curriculum and establishing mentoring programs.

Incorporating these ideas will help to achieve the study goals while also aligning with the larger aim of building a strong SME sector in Oman. Oman can build an environment favorable to long-term SME growth, economic diversification, and overall national development by tackling difficulties, improving support services, embracing technology improvements, and encouraging entrepreneurship.

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