Overcoming Entrepreneurial Barriers: Exploring Technology-Based Solutions for Business Success in the UAE

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ABSTRACT

This study examines the challenges entrepreneurs encounter when starting or managing a business, focusing on common barriers and proposing technology-driven solutions. It utilizes an observational design for quantitative research through surveys distributed to business owners and aspiring entrepreneurs. The findings reveal that various obstacles limit growth, and suggest that technology platforms can offer tools to help entrepreneurs overcome these challenges. The study provides valuable insights into the UAE's growing entrepreneurial ecosystem, highlighting structural issues that impede progress by evaluating initial barriers. A key takeaway is the role of digital technologies, particularly AI and mobile applications, in identifying and addressing these barriers. Although many entrepreneurs have yet to implement technology-based solutions, there is openness to adopting customized tools.

Keywords: Entrepreneurship, Business Barriers, Technology Solutions, Digital Platforms, UAE Startups

1. INTRODUCTION

This study explores the modern challenges that entrepreneurs face when introducing new business ideas and proposes technology-based applications as effective solutions. Entrepreneurs play a crucial role in shaping the UAE's future, making it essential for them to innovate and adapt to changing developments. However, they often encounter barriers such as difficulties in securing funding, facing aggressive competition, finding relevant data, communicating with clients, maintaining quality, limited financial support, and a lack of reliable suppliers. Developing a project to address these barriers would help entrepreneurs launch and grow businesses, ultimately contributing to the UAE's economic development by increasing the number of local companies and fostering their expansion. The UAE's strategic goals include strengthening its position as a hub for global business, supporting the growth of SMEs, and fostering a culture of entrepreneurship. Entrepreneurship, which involves generating new ideas or technologies to improve people's daily lives, is a challenging process. Entrepreneurs often struggle to succeed on their first attempt due to various barriers. This research identifies and categorizes these challenges, offering a mobile application that provides mitigation strategies to help entrepreneurs overcome them. The application aims to support entrepreneurs in introducing new business ideas without encountering significant obstacles. The study highlights the barriers entrepreneurs face and presents a solution that strengthens entrepreneurship practices by offering support through technology. The research is important as it helps to promote technological innovation in the development sector. The UAE's national objectives prioritize entrepreneurship and technological advancement, aligning with the country's goals to improve its economic condition. The UAE has implemented various programs, such as the National Program for Small and Medium Businesses, to support entrepreneurs. These initiatives aim to help businesses grow and thrive, reinforcing the country's focus on innovation, AI, and entrepreneurship. The study's purpose is to explore these barriers and develop a technological solution to help entrepreneurs overcome them.

1. What challenges do entrepreneurs face when starting a new business?
2. What strategies or solutions can mitigate these barriers?

2. LITERATURE REVIEW

Business development plays a critical role in today's world, with various business development theories offering guidelines to enhance a company's performance. This research draws on several theoretical frameworks to deepen understanding of these dynamics. Entrepreneurial Ecosystem theory emphasizes the importance of an entrepreneur's knowledge of both the business and the external environment. It suggests that staying informed about political, legal, technological, and employee welfare factors is crucial for maintaining competitiveness. The theory highlights that understanding the external environment and having access to a supportive government, skilled workforce, and other business elements can help entrepreneurs overcome challenges in the global marketplace. Entrepreneurial Institutional theory focuses on the need for entrepreneurs to align their business operations with established norms and policies. It suggests that ethical principles and business guidelines help entrepreneurs navigate challenges by offering strategic support. Entrepreneurs who fail to align their operations with corporate governance often struggle to maintain smooth business functions. Adopting clear rules and regulations is essential to strengthening business opportunities.

The RBV theory addresses how businesses can sustain their competitive edge in the market. Entrepreneurs often face challenges in maintaining their position due to competition,

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both domestically and internationally. RBV suggests that businesses should assess their capabilities, assets, and experiences to sustain their operations. It also advises businesses on acquiring the necessary resources to establish effective operations in the competitive market. Modern businesses face considerable challenges with technology, customer experience, and market competition. Traditional business models are becoming outdated and require substantial financial investments in employees, infrastructure, and resources. To overcome these challenges, businesses should incorporate digital disruption technologies and modern strategies for growth. The research identifies poor market fit as one of the most common issues entrepreneurs face, which can be mitigated with statistical tools and market knowledge. Entrepreneurs often face various barriers that lead them to discontinue their businesses. Statistics show that around 20% of entrepreneurs abandon their ventures within two years. However, the application proposed in this research uses AI and machine learning technologies to offer practical, situation-based suggestions to entrepreneurs. Additionally, the application allows entrepreneurs to communicate with each other, helping them align their business ideas with current market demands.

This study explores the challenges entrepreneurs face when introducing new business ideas, with a specific focus on the UAE's domestic market. The decision to concentrate on this market is driven by the aim to optimize entrepreneurial capabilities within the UAE, where sustainable development has become a key national priority. This focus aligns with the UAE's development goals, influencing the local market dynamics. The research emphasizes application development as a way to enhance business performance through smart solutions. The proposed application is designed to assist entrepreneurs by helping them manage barriers and stay informed about potential challenges. The study particularly targets small businesses, which often introduce ideas that align with societal norms and address relevant issues, and prioritizes them as the key institutional focus. Many modern entrepreneurs struggle with launching new business ideas, especially those with limited knowledge of the market. This research specifically targets such entrepreneurs, providing solutions to help them overcome both internal and external barriers. Lack of market experience and knowledge often hampers new entrepreneurs, and this study aims to offer them effective strategies to navigate these challenges. Developing new business ideas is essential for organizational growth but can create significant hurdles. According to Sawitri, limited funding is a common challenge, as many entrepreneurs lack the financial resources needed to execute their ideas. Entrepreneurs often seek financial support from banks and investors, but market competition can also be a major obstacle, as it prevents them from reaching potential customers. Product-market misalignment and a lack of market research further complicate business operations. Carson highlights that inexperienced entrepreneurs struggle to make sound decisions, which impacts their ability to address business challenges. Time management and burnout are additional challenges, as entrepreneurs must juggle multiple responsibilities, including product development, customer relations, supply chain management, and performance tracking, making effective time management difficult.

Strategies to overcome barriers

The literature highlights that new businesses often encounter difficulties when introducing their products or services in new markets. To mitigate these challenges, specific strategies are essential. Lerner & Nanda suggest that entrepreneurs should consider venture capital as a source of funding to meet financial requirements. Venture capital can provide the necessary financial resources, especially for small businesses. Along with securing funding, market research is critical for understanding market demand and the level of competition. Bonina emphasizes the importance of digital platforms for expanding networks and accessing international connections. These platforms help entrepreneurs raise capital and provide situation-based suggestions for overcoming challenges. They also enable entrepreneurs to assess the current market conditions and determine if their product aligns with market demands. This research identifies gaps in the understanding of entrepreneurship in the UAE. The literature review reveals that many people in the UAE lack sufficient knowledge about entrepreneurship, which discourages them from pursuing entrepreneurial ventures. Furthermore, new entrepreneurs often lack access to business solutions, and many discontinue their businesses due to poor market knowledge. The review also shows that experienced entrepreneurs leverage market trends to navigate barriers and support new entrepreneurs in entering the market.

3. METHODOLOGY

This study employs an observational design for quantitative research, using surveys to understand the barriers entrepreneurs face. The observational approach is effective for gathering real-world data without altering variables. The research will conduct cross-sectional surveys targeting 150 UAE-based entrepreneurs and startups to evaluate the challenges they encounter. The study aims to quantify obstacles while exploring strategies to overcome them, with a particular focus on digital technology. The participants will include both experienced and new entrepreneurs, selected randomly to offer diverse perspectives. Surveys will be distributed electronically over three weeks, ensuring a representative sample. The primary data collection tool will be an online survey featuring structured questions about common business challenges, such as funding and market issues, as well as strategies to address them. A Likert scale will be used to measure the severity of challenges and the effectiveness of solutions. The survey will also assess the use of technology in business operations, highlighting current trends. Ethical considerations, including GDPR compliance, will be observed to protect participant confidentiality and data integrity. Pre-testing will be conducted to refine the survey and ensure clarity. Responses will be analyzed using graphs to identify patterns and solutions.

4. RESULTS

This section presents the findings of a survey conducted with 128 UAE-based entrepreneurs to identify the barriers they face and the strategies they use to overcome them. The survey gathered demographic data, business status, challenges encountered, and insights on technology use.

Survey participants included a diverse group in terms of gender, age, years in business, and industries. 58.6% of respondents were male, and 41.4% were female. The largest age group was between 26-35 years (39.1%), followed by those aged 18-25 (37.5%). Regarding business experience, 39.8% of participants had been in business for 1-3 years, and 27.3% had been operating for 3-5 years. Various industries were represented, including IT, healthcare, fashion, and hospitality.

Participants identified market competition (38.3%) as the most significant challenge, followed by lack of funding (32.8%) and lack of market knowledge (28.1%). Other challenges included finding skilled employees and dealing with regulatory hurdles. The survey also rated challenges on a scale from 1 (not an issue) to 5 (major issue), with funding, understanding market trends, and navigating regulations being significant concerns.

Most respondents (63.3%) had not used technology-based tools to address business challenges, but 34.4% had used tools like AI or Slack. When asked about the effectiveness of a mobile app in overcoming challenges, 54.7% thought it would be somewhat effective. Respondents suggested that features like market research tools, funding opportunities, networking, and mentorship would be valuable in a technology-based application.

Effective strategies identified by respondents included seeking venture capital (39.8%), networking (37.5%), adopting digital marketing, and partnering with other businesses. Most respondents believed that collaborating with other entrepreneurs through a platform would be helpful in resolving challenges. Respondents were asked to provide suggestions to improve the entrepreneurial ecosystem in the Middle East. Common recommendations included mentorship programs, networking events, government support, and training opportunities. Many emphasized the importance of access to resources and inclusion.

5. DISCUSSION

Challenges Faced by Entrepreneurs

This section identifies the challenges entrepreneurs encounter when starting or running a business, focusing on common barriers and proposing technology-based solutions. It also examines internal and external challenges faced by entrepreneurs during the early stages of their ventures. Entrepreneurs often struggle with introducing new business ideas in the market, particularly in addressing social challenges. According to literature, limited funding is a significant barrier, with many entrepreneurs unable to secure financial resources. This was echoed in primary data, where 32.8% of participants cited lack of funding as the most common barrier. Market competition is another key challenge, with 38.3% of participants identifying it as a major issue. Misalignment between products and market needs is also highlighted, with 28.1% of entrepreneurs struggling due to insufficient market knowledge. While the literature points to a lack of experience and time management as barriers, primary findings identify legal challenges, limited supply access, and a shortage of skilled labor as additional hurdles.

Digital Tools and Technologies

The integration of digital tools is essential for improving business efficiency. Literature suggests that technology-based solutions help businesses gain valuable market insights and secure financial support. Digital platforms enable entrepreneurs to connect with international investors and stay informed about market conditions. However, the primary data shows that many entrepreneurs are underutilizing digital platforms. While 63% use digital platforms to address challenges, only 1.6% leverage AI-based technologies. The research suggests that mobile applications are particularly effective, with 21.9% of participants agreeing that they help overcome entrepreneurial challenges. A market research tool integrated into digital platforms is considered a key feature by survey participants, as it helps businesses analyze external market environments and design effective marketing strategies.

Strategies for Addressing Entrepreneurial Challenges

While digital technology plays a crucial role, various strategies are also needed to address entrepreneurial challenges. Literature suggests the importance of digital marketing and data analytics, but primary data reveals that entrepreneurs prioritize venture capital (34.2%), digital marketing adaptation (21.5%), and networking (32.2%). Many entrepreneurs believe that avoiding venture capital and loans in the early stages can help mitigate future challenges. Furthermore, networking with other entrepreneurs through digital platforms is viewed as essential for maintaining a competitive edge. A significant number of participants (75%) support collaboration with other entrepreneurs, especially through digital platforms, to overcome challenges. Government support programs, technological adoption, and mentorship are also seen as vital to overcoming entrepreneurial hurdles.

Strategic Recommendations

To overcome the challenges they face, entrepreneurs should incorporate advanced digital tools and strategies. Cloud storage, online accounting, and customer management software can streamline operations. AI-driven technologies should be used to enhance customer service, providing personalized support and improving customer relations. FinTech platforms, rather than angel investors, are recommended for sourcing initial investments, as they connect entrepreneurs with international investors seeking opportunities.

Hypothesis Testing

The research includes three hypotheses: positive, negative, and null. Results indicate strong support for the positive hypothesis: "The technology-based application has the potential to overcome business barriers and provide solutions." While the negative hypothesis (that funding and market knowledge are the main challenges) holds some truth, it does not fully account for the range of challenges faced by entrepreneurs, so it is not considered central to the study. The null hypothesis, which suggested that the application would not have a positive impact, is rejected based on the positive outcomes observed in the research.

6. CONCLUSION AND RECOMMENDATIONS

Entrepreneurship involves numerous challenges that need to be addressed to facilitate smoother business operations. This study aimed to explore the common barriers faced by entrepreneurs when starting or running a business and to propose technology-based solutions, particularly AI tools, to help overcome these barriers. The research used a survey distributed to individuals in various business fields, including those running or planning to start a business. The survey aimed to identify the challenges entrepreneurs face and gather opinions on the effectiveness of technology in addressing these issues.

The survey revealed that entrepreneurs often face challenges such as market competition and lack of funding, with a significant portion of participants experiencing difficulties in scaling their operations due to these issues. Additionally, many entrepreneurs have not yet utilized digital tools, though there is a growing openness to using technology-based solutions, such as mobile applications for business management. Participants also emphasized the importance of features like market research tools and networking opportunities in digital applications.

Implications

The findings have significant implications for the entrepreneurial ecosystem, especially in the UAE, where entrepreneurship plays a vital role in economic growth. The study reveals that digital technologies, particularly AI-powered tools, can help identify and address barriers to entrepreneurship. However, many entrepreneurs have yet to adopt these tools, highlighting an opportunity for innovation in digital platforms designed for entrepreneurs. These platforms could offer features such as funding access, market research analytics, mentorship, and networking opportunities, which would enhance entrepreneurs' chances of success.

The research also highlights the importance of collaboration between private and public stakeholders to improve support for entrepreneurs. Government entities, educational institutions, and business organizations can play a crucial role by providing resources such as funding, regulatory guidance, and mentorship programs. The study suggests that fostering a culture of collaboration and innovation will lead to greater entrepreneurial success and contribute to the UAE's national development goals.

Recommendations

Based on the findings, several recommendations are made for improving support for entrepreneurs in the UAE. These include the development of web-based and mobile applications that provide features such as funding access, market research tools, mentorship services, and legal guidance. Additionally, more accessible funding options, including venture capital grants and low-interest loans, should be made available, with a focus on inclusivity and outreach to underrepresented entrepreneurs. Mentorship and educational programs on business planning and financial literacy are also essential for helping entrepreneurs overcome market challenges. Furthermore, simplifying legal and regulatory processes and offering dedicated support units would make it easier for entrepreneurs to navigate these barriers.

Limitations

While this study provides valuable insights, it has several limitations. The sample size of 128 respondents, although sufficient for exploratory research, may not fully represent all entrepreneurial sectors, such as advanced manufacturing or agriculture. Additionally, the survey data may be biased due to socially desirable responses or selective memory from participants. The research also lacked qualitative data, which could have provided deeper insights into the personal motivations and challenges entrepreneurs face. Moreover, the study did not pilot or develop the digital application proposed, so its real-world effectiveness could not be evaluated.

The study's focus on entrepreneurs in the UAE limits its applicability to other regions, where challenges may differ due to varying legal frameworks, economic conditions, and cultural factors. A longitudinal approach, as well as qualitative methods like interviews or focus groups, could offer more in-depth understanding of the evolving challenges faced by entrepreneurs. Overall, this research contributes to the understanding of entrepreneurship barriers and the potential role of digital solutions in addressing them. Future studies should explore these limitations by using broader samples, longitudinal data collection, and pilot testing of digital tools to assess their practical impact.

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