

# The Impact of Social Media and Technology on Empowering Saudi Women Entrepreneurs in National Social Projects: Analytical Research in Accordance to the Saudi 2030 Vision

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**Abstract**— Women entrepreneurs in Saudi society face cultural, technological, and financial obstacles that limit their empowerment in national social projects (NSPs). This study aims to quantify these barriers and examine the moderating role of Technology Management (TM) and social media. A quantitative approach will be used, employing a structured questionnaire distributed among female entrepreneurs in seven Saudi institutions, with data analyzed using SPSS.

Preliminary findings suggest these women encounter cultural challenges (societal perception and gender stereotyping), technological barriers (poor training and lack of female role models), and financial constraints (lack of government funding and program awareness). Social media plays a role in supporting their participation in NSPs under Saudi Vision 2030. Initiatives like the Women Empowerment Program and SDAIA aim to enhance labor-force participation and economic opportunities for women.

This research contributes by identifying and addressing key barriers, supporting the empowerment of Saudi women entrepreneurs, and promoting policy recommendations aligned with Saudi Vision 2030.

**Keywords**— *Social Media, Saudi Women Entrepreneurs, Cultural Obstacles, Technological Obstacles, Financial Obstacles, Technology Management, Social Media, Saudi 2030 Vision.*

## I. INTRODUCTION

Entrepreneurship has become the mainstay of societal development, solving problems, creating jobs, encouraging innovation, and enhancing research [1]. Promoting women's involvement in economic growth has become a priority in national development programs [2]. Technology management (TM) empowers women by integrating innovation and excellence, enabling them to acquire digital skills and address regional concerns [3].

Many female entrepreneurs serve as role models in creativity and problem-solving. However, cultural,

technological, and financial obstacles hinder their success [4]. Overcoming these challenges requires leveraging technology to achieve gender equality [5]. Saudi women entrepreneurs must be better represented in public and private institutions to strengthen leadership inclusivity [6].

TM is critical in driving entrepreneurial creativity, data-driven decision-making, and business-level operations [7]. It supports female entrepreneurs by optimizing scheduling, networking, business strategies, funding, and stakeholder engagement [8]. However, barriers still limit women's advancement in the digital age [9].

Social media platforms have proven their ability to support women entrepreneurs by meeting diverse communication needs [10]. Social media provides resources, economic opportunities, and policy shifts favoring small and medium enterprises [11].

Saudi Vision 2030 aims to empower citizens, diversify the economy, and create an attractive investment environment [12]. Women's entrepreneurial empowerment is crucial, as female labor market participation remains among the lowest globally. Through Vision 2030, policies enhance women's abilities, knowledge, and self-reliance [13]. Progress is evident as Saudi women hold key leadership roles in government and private sectors, breaking barriers in new fields such as the military [14].

Saudi Arabia has recognized entrepreneurship's significance in national social projects (NSPs) and has implemented policies, programs, and educational efforts to support women entrepreneurs. NSPs promote social justice, economic security, education, and balanced services [15]. A dedicated national center for women entrepreneurs was proposed under Vision 2030 to provide training, feasibility studies, and investment guidance. Saudi women have achieved notable progress in entrepreneurship due to rapid economic changes. The National Transformation Program includes 36

objectives aimed at boosting female labor market participation [16].

Despite these efforts, research has not sufficiently explored how TM and social media can help overcome the cultural, technological, and financial barriers limiting Saudi women entrepreneurs. While previous studies have examined women's workforce participation, little attention has been given to the specific mechanisms through which digital transformation and technological innovation contribute to their success in NSPs. Additionally, gaps remain in understanding how social media facilitates women's entrepreneurial growth and economic independence within the Saudi context. This study aims to fill these gaps by examining these barriers, exploring the moderating role of TM in overcoming them, and assessing how social media influences women's entrepreneurial success and integration into NSPs.

Many reasons prompted the researcher to conduct this research, including the continuous development of entrepreneurship and the increased use of social networking sites in Saudi Arabia. There is an urgent need to develop women's entrepreneurship amid economic and cultural challenges under Saudi Vision 2030. Additionally, the rising number of women-owned companies highlights the growing role of female entrepreneurs in the labor market. This study's novelty lies in examining the impact of TM and social media on Saudi women entrepreneurs in NSPs. Achieving gender equality in entrepreneurship could significantly boost the global economy, reinforcing the importance of addressing barriers to women's startup success.

## II. LITERATURE SURVEY

### A. Obstacles Faced by Women Entrepreneurs

Despite the opportunities to encourage women's entry into the labor market and their entrepreneurial work, many challenges hinder their participation, most notably social restrictions that do not encourage women's economic independence [17]. Some also lack technical and financial abilities, making it difficult to enter the business world [18]. Family responsibilities are also factors hindering women's entrepreneurship [19]. Women face the challenge of balancing social impact and financial sustainability, ensuring their projects remain viable while creating positive change [20].

Cultural obstacles relate to society's culture, beliefs, and views of women, affecting their ability to take leadership positions [21]. The glass ceiling phenomenon limits women's entrepreneurial access despite their qualifications [22]. Many cease their projects after marriage due to family responsibilities [23],[24]. The idea of women entering entrepreneurship is not widely accepted socially, particularly in the Gulf region [25].

Women entrepreneurs lack family support, reducing financial and psychological assistance [26]. They face twice the effort to establish credibility compared to men [27]. There are not enough female role models, and women are judged

based on past performance rather than potential [2], [28]. Social disparity continues to favor men in economic and legal frameworks [29].

Society's lack of acceptance and restriction of women to specific services negatively impact entrepreneurship [30]. Family obligations and social pressures cause additional challenges [31]. Women are often viewed as incapable of handling entrepreneurial risks, reinforcing stereotypes about traditional female roles [2]. Entrepreneurial culture must encourage women's participation to help societies prosper [32]. Women are often seen as more suited for stable, low-risk jobs than entrepreneurship [33], [34].

Several factors prevent women from succeeding in new projects, including reactionary views on women's work, lack of funding, and lack of skills [35]. There is a gap in entrepreneurship education for women and misalignment between educational outcomes and market demands [36]. Many lack technical, administrative, and financial skills, limiting their ability to develop creative business ideas [37]. Women also have limited access to knowledge and financial opportunities [38].

One of the most common challenges is the scarcity of financial resources. Female entrepreneurs often struggle to secure funding, as they tend to focus on social impact rather than profits [20]. Limited financing and market access create further obstacles [39]. Many women hesitate to enter the sector due to difficulty obtaining financing, complex government regulations, and financial instability [1]. Poor financial planning and inadequate preparation contribute to failures [40]. Cultural and gender biases further prevent women from securing loans or financing [41].

### B. Women Entrepreneurs and Technology Management (TM)

TM is the process of caring for technological techniques that can be used in various operating processes and activities within commercial and industrial institutions, making the company capable of managing its technological resources to improve services, products, and competitiveness [42]. TM includes cloud computing, the Internet of Things, big data, and artificial intelligence. TM and entrepreneurship foster growth, increase productivity, and create employment opportunities [43]. The most important feature of entrepreneurship today is employing technology mechanisms, including robots, modern applications, websites, and electronic platforms [44]. The integration of TM with entrepreneurship has led to new alternatives for implementing services and developing products more efficiently and competitively [45].

Access to technology and digital knowledge, supported by strong family relationships, contributes to women entrepreneurs' professional, economic, and personal opportunities [46]. They also develop power and contribute to social change by communicating with others, exploring alternative ways of working, and building a collective voice [47]. Effective use of TM empowers women individually by enhancing their confidence and career prospects and collectively by improving their advocacy, lobbying, and

networking [48]. However, obstacles and shortcomings hinder women's advancement, denying them many opportunities in the digital age, including entrepreneurship. In addition, the limited technological resources of women-owned companies affect their ability to transform opportunities into value [49].

TM is one of the most critical pillars in building competitive advantages for organizations. The creative ideas presented by women entrepreneurs play a significant role in investing in successful projects due to the competitive advantage gained through creativity [50]. Women entrepreneurs are more likely to adopt digital tools to make their development easier and enhance competitiveness. To stay ahead in the competitive race, they must take steps to develop and produce products efficiently and cost-effectively. TM is the most secure strategic option for institutions facing environmental disturbances [46]. Distinctiveness in goods and services achieved through TM can protect organizations from competitors, creating brand loyalty. Women entrepreneurs who adopt the concept of focus tend to develop high-quality products due to their expertise in the targeted field. Additionally, those who focus on a limited range of products experience a faster technological innovation process [51].

### C. Women Entrepreneurs and Social Media

Social media is essential in educating society about women's participation in creative fields and enhancing awareness of their success stories [10]. Institutions must collaborate to address barriers facing women in entrepreneurship through forums and action plans, fostering economic and social development [52].

Social media networks rapidly attracted millions of users, meeting diverse communication needs [10]. It provides women entrepreneurs access to untapped resources, enhances economic growth, and strengthens social cohesion [53]. It has particularly benefited women in remote areas and vulnerable populations [54]. Additionally, social media has influenced laws and policies supporting small and medium enterprises and expanding financial access [23].

Social media lowers barriers to entry for women in male-dominated fields by providing access to knowledge [55]. It shapes the perception of women entrepreneurs, influencing attitudes and behaviors [36]. Women-owned businesses have rapidly expanded through social media, requiring minimal capital and benefiting from affordable advertising [56], [57]. These platforms help women achieve financial and social independence [58].

Entrepreneurship attracts tech-savvy women in the Middle East, yet social networks influence their involvement, often requiring family encouragement [11], [59]. Social media helps overcome these challenges by improving access to resources and networks [60]. Integrating social media into women's entrepreneurship enhances financial stability, industry status, and entrepreneurial habits [61].

### D. Women Entrepreneurs in Saudi Arabia

Governments worldwide are increasingly concerned with unemployment and its economic impact [62]. In the Gulf region, the workforce absorption capacity is only 5% [63]. The government sector alone cannot accommodate all job seekers, necessitating private sector involvement, particularly for women [64]. Saudi Arabia actively seeks to empower women while addressing cultural barriers [65]. Women's participation in the Saudi labor market rose from 20.5% in 2019 to 33.6% in 2022, achieving the highest global growth rate [66]. Saudi Vision 2030 aims to increase this percentage from 22% to 30% [12]. Saudi Arabia is recognized among the top five nations in reducing the gender pay gap, reflecting efforts to improve women's economic and social status [67].

Saudi Arabia's transformation emphasizes developing human resources and achieving social development [68]. Vision 2030 prioritizes increasing women's labor market participation [69]. Economic indicators highlight the need to integrate women into entrepreneurship, given the increasing number of female job seekers and the economic benefits of their participation [1]. Expanding women's entrepreneurship amid economic challenges will enhance employment opportunities [70]. Women's empowerment in business strengthens small and medium-sized enterprises through technology integration and skill development programs [71].

The government aims to foster a strong ecosystem for women entrepreneurs [72]. This involves enacting regulations, organizing conferences, and addressing entrepreneurial challenges [70]. Exhibitions are vital in marketing women's products, catering to Saudi consumer interest in unique goods [73]. Women's charitable associations address social and economic concerns, operating as independent entities or branches within government-supervised organizations [6]. The Saudi government continues supporting women's entrepreneurship through financing, training, consulting, and awareness programs [74].

Economic and regulatory reforms have increased Saudi women's presence in the job market [75]. This has motivated many to pursue entrepreneurship [76]. By 2017, Saudi women comprised 39% of all women entrepreneurs, and in 2018, they owned 98,853 commercially registered companies. The Saudi Arabian Monetary Agency (SAMA) reports that the number of Saudi women in the private sector has tripled to 216,000 since 2010. To digitize their businesses and expand through social media, women entrepreneurs need access to essential technological resources [77].

### E. A Proposed Theoretical Framework

This research proposes a theoretical framework based on gender theory, the technology theory of entrepreneurship, the theory of network society, and media system dependency theory to examine the participation of Saudi women entrepreneurs in social media. The framework aims to understand key relationships that lead to their empowerment by addressing cultural, technological, and financial obstacles,

along with the moderating roles of TM and social media as shown in Figure 1.

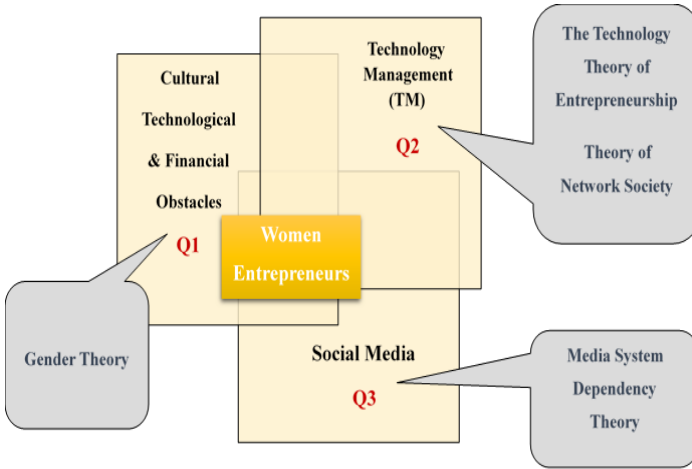


Fig. 1: The Proposed Theoretical Framework.

Gender theory explores societal expectations that shape gender roles, often limiting women's access to financial resources and leadership positions [78]. The technology theory of entrepreneurship highlights how digital transformation supports business operations and skill development [79]. The theory of network society describes how digital connectivity influences business processes, particularly for women in emerging markets [80]. Media system dependency theory examines how social media networks shape entrepreneurial strategies and resource accessibility [81]. These theories provide the foundation for analyzing the factors influencing Saudi women entrepreneurs' success in social media and business environments.

### III. RESEARCH PLAN

This study adopts a descriptive analytical approach to examine the relationship between TM and women's entrepreneurship, particularly in how online platforms empower Saudi women entrepreneurs. The quantitative method is selected for its ability to generate statistically valid conclusions, ensuring accurate data analysis through measurable variables [82],[83]. The questionnaire is the primary data collection tool, as it is efficient, allows broad subject coverage, and is widely used in social research [84].

The questionnaire consists of five main sections: personal information, obstacles faced by women entrepreneurs (cultural, technological, and financial), TM (strategy, innovations, and operations), social media (positive and negative effects), and women's entrepreneurial empowerment. A 5-point Likert scale is employed to provide clarity and reliability in responses [85].

The study population includes female entrepreneurs from governmental, private, and civil society institutions such as the Small and Medium Enterprises General Authority "Monsha'at" and the Saudi Business Women Association, as shown in Table 1. The simple random sampling method ensures fair

representation [86], with a target sample size of 288 based on Krejcie and Morgan's sampling table [87]. The questionnaire will be distributed via SurveyMonkey, with an expected response rate of 85%-95%.

TABLE 1: RESEARCH POPULATION AND SAMPLE

Institution Name	Total Population	Minimum Sample Size
Monsha'at	334	80
Saudi Entrepreneurship Association	388	96
Riaditapp	55	16
9/10ths	36	12
Saudi Business Women Association	161	38
The Aljanob Women's Organization	109	26
Arweqah Company	71	20
<b>Total</b>	<b>1154</b>	<b>288</b>

To ensure validity and reliability, the Cronbach alpha equation will measure internal consistency, while confirmatory factor analysis (CFA), KMO, and Bartlett's test will verify construct validity [88]. The researcher will conduct a pilot study with 30 female entrepreneurs to refine the questionnaire before full distribution [89].

The conceptual framework in Figure 2 illustrates the relationships between the study variables. The obstacles faced by Saudi women entrepreneurs (cultural, technological, and financial) are the independent variables, while TM and social media serve as moderating variables. The dependent variable is women's entrepreneurial empowerment in NSPs.

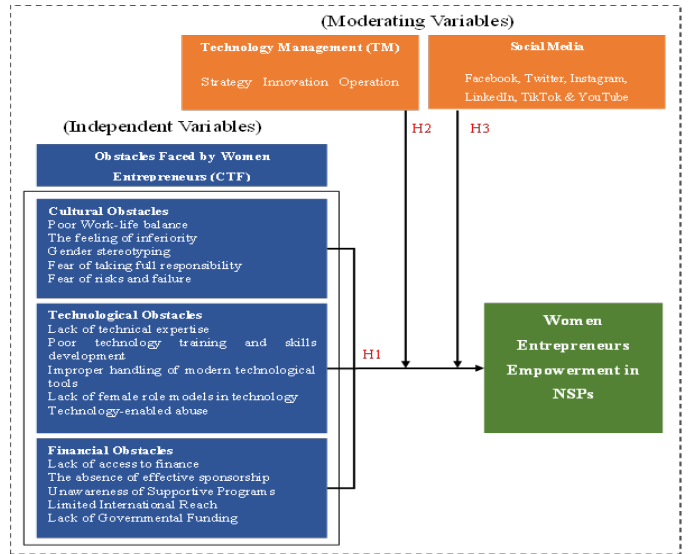


Fig. 2: The Proposed Conceptual Framework.

This study hypothesizes that cultural, technological, and financial obstacles significantly impact the empowerment of Saudi women entrepreneurs in NSPs. Additionally, it examines whether TM and social media moderate this relationship.

The SPSS statistical package will be used for data analysis, including descriptive statistics, t-tests, ANOVA, and correlation analysis to test hypotheses and validate findings [90]. Ethical considerations, including data privacy, participant consent, and adherence to IRB guidelines, will be strictly followed.

This research is subject to limitations, including the exclusive use of quantitative methods and potential difficulties in participant recruitment. However, efforts will be made to mitigate these challenges through effective sampling strategies and rigorous data validation.

#### IV. CONCLUSION

This study concluded that women's empowerment enhances their ability to overcome cultural, technological, and financial obstacles in NSPs, fostering creativity and business growth. It highlights the impact of social media in supporting Saudi women entrepreneurs, enabling them to develop skills that contribute to national progress. The increasing global participation of women in entrepreneurship has significantly influenced economic and societal advancement, with social media playing a key role in this transformation. Additionally, Saudi Vision 2030 is crucial in empowering female entrepreneurs through programs that promote workforce participation, talent development, and leadership opportunities. Women entrepreneurs anticipate further opportunities in NSPs, aligning with the vision's objectives. TM fosters technological creativity by enabling Saudi women entrepreneurs to leverage knowledge, skills, and expertise in national projects. It also allows them to become role models, inspiring others through digital platforms such as social media, websites, and blogs, while supporting sustainable expansion and social justice efforts. These conclusions are based on the literature review but may evolve due to the rapid transformation of Saudi Arabia, particularly in women's entrepreneurship and technological advancements.

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