

RESEARCH ARTICLE

The effect of innovation and technology adoption on business creation intentions among non-entrepreneurs in Oman

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Abstract – This study explores the relationship between people's perceptions of innovation and technology adoption and their intentions to start a new venture in Oman, with a specific focus on non-entrepreneurs. It is the first study to use GEM 2023/2024 data from Oman to test how innovation perceptions and social attitudes interact to shape entrepreneurial intentions. A sample of 851 participants was analysed using SPSS (for descriptive and correlational analysis) and SmartPLS 4 (for measurement and structural modelling). The results show that perceptions of innovation positively influence entrepreneurial intentions ($\beta = 0.109$, $p < 0.001$), while social attitudes significantly moderate this relationship ($\beta = 0.069$, $p < 0.05$). The model explains 11.7% of the variance in entrepreneurial intentions ($R^2 = 0.117$). These findings highlight the unique socio-cultural dynamics of Oman, extending entrepreneurial intention theories to underexplored emerging economies.

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1. Introduction

Entrepreneurship is one of the key drivers of economic diversification and innovation, particularly in developing economies seeking to transition from traditional resource-based sectors to more sustainable, knowledge-based sectors (Al-Housani et al., 2023). In this regard, Oman is known for its commitment to supporting an innovation and technology-driven entrepreneurship ecosystem (Al-Abri et al., 2018), as outlined in national policies and economic transformation plans under Oman Vision 2040 (2020). However, the political vision gap regarding entrepreneurial activity among the public, particularly when uninformed potential entrepreneurs lack sufficient understanding of the drivers and structural aspects of entrepreneurial activities, is a major concern. Recent studies have placed greater emphasis on the role of innovation and the adoption of new technologies as facilitators of entrepreneurial activity (Schumpeter, 1934; Autio et al., 2014). These components catalyse not only the possibility of establishing new businesses but also influence how entrepreneurship as a concept is viewed in terms of opportunities and challenges. Amid the abundant access to new technologies and innovation, people are more disposed to embrace the idea of entrepreneurship and pursue it as a career path (Acs et al., 2017). However, the availability of technological infrastructure alone is insufficient and must be complemented by a positive societal attitude and cultural endorsement.

This study analyses the relationship between perception of available technology and innovation with the entrepreneurial intent of non-entrepreneurial adults in Oman. It specifically investigates the role that positive perceptions of entrepreneurship may have on the influence of technology on pursuing new business ventures. The social norms and attitude moderation effects are well articulated in the Theory of Planned Behaviour (Ajzen, 1991), but their empirical application in emerging economies such as Oman is scant. This paper seeks to bridge the gap between adopting new technologies, innovation, and the intention to become an entrepreneur in the context of non-entrepreneurs in Oman. It uses secondary data from Oman's 2023-2024 GEM report to analyse the perception of innovation in business as an emerging technology or a novel business process, and its correlation with the intention to become an entrepreneur. Additionally, the study looks at how societal views and attitudes towards entrepreneurship can moderate the impact of technological innovation perceptions on entrepreneurship decisions. This study contributes to understanding the entrepreneurship context in Oman, a country striving to build a knowledge-based economy. Although the socioeconomic environment in Oman has been studied from an entrepreneurial innovation perspective (Dauletova & Al-Busaidi, 2024; Samuel & Sarprasatha, 2016), little attention has been paid to the interaction of socioeconomic factors and innovation in the Omani context. This study addresses the issue by focusing on non-entrepreneurs—those taking their first steps towards entrepreneurship, illustrating how entrepreneurial potential can be unlocked through ecosystems that encourage innovation and positive societal attitudes. The insight ultimately informs policymakers, educators, and business managers seeking to foster innovation-led entrepreneurship in Oman through effective policy programs. This study also forms the foundation for further research on Oman's innovation ecosystem and the implications of these frameworks for entrepreneurial activities and outcomes.

While prior studies in Oman (Dauletova & Al-Busaidi, 2024; Samuel & Sarprasatha, 2016) have addressed innovation and entrepreneurship, few have empirically tested how perceptions of innovation interact with social attitudes to predict entrepreneurial intentions among non-entrepreneurs. This reflects a theoretical gap, as existing applications of the Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), and Innovation Diffusion Theory (IDT) rarely integrate societal norms as moderators in emerging economies. By testing this interaction, our study contributes novel empirical evidence from Oman, extending entrepreneurial intention theories to underexplored contexts. This research paper is organised as follows: The next section covers the literature review, hypothesis development, and theoretical

framework. It is followed by the research methodology section that explains the data collection techniques, evaluation tools, and methods used for data analysis. The results are comprehensively presented and explained in relation to the existing literature. The paper concludes by outlining the theoretical and practical implications, limitations, and future research directions.

2. Literature Review

Recent years have witnessed the emergence of entrepreneurship as a vital component of economic development worldwide. In the context of Oman, entrepreneurship has gained considerable attention as a key driver of economic development, diversification, and job creation (Aggarwal et al., 2024; Miniaoui & Schilirò, 2016). The government, through the Oman Vision 2040, has placed great importance on entrepreneurship by formulating strategies to support its development. Considering the rapid and dynamic changes in the economy, innovation and technology are crucial aspects of entrepreneurship, particularly in fostering entrepreneurial ventures and competitiveness (OECD/Eurostat, 2018; Audretsch et al., 2022). However, most previous studies have focused on large companies or established businesses (Mason & Brown, 2014; Autio et al., 2018) while ignoring the role of innovation and technology as a catalyst for non-entrepreneurs to start a business. The present study aims to examine how non-entrepreneurs' perceptions of innovation and technology motivate their intentions to start a business in Oman. This section presents a literature review of entrepreneurial intentions, perceptions of innovation and technology in the business environment, and social attitudes towards entrepreneurship.

2.1 Entrepreneurial Intentions

Entrepreneurial intentions refer to a mental state that is directed towards starting, managing, and running a new venture (Krueger, Reilly & Carsrud, 2000). This concept also aids individuals in making choices and decisions geared towards achieving success in the future as a result of inner motivation and beliefs (Shahzad et al., 2021). Intention is frequently regarded as being linked to behavioural models like the Theory of Planned Behaviour (TPB), which attempts to predict behavioural intentions from attitudes, subjective norms, and behavioural control aspects (Alsulami et al., 2025). These analytics create a strong basis for predicting the possibility of a person engaging in entrepreneurial activities.

Various psychological and contextual factors can shape entrepreneurial intentions. Key psychological factors include self-motivation, which refers to the inner power of a person to achieve set goals, beat alleged obstacles, and focus even during dire situations (Dhiman, 2017). Self-motivation is a crucial element in supporting entrepreneurial visions and tenacity (Omar et al., 2019). Another pertinent element is networking and interacting with peers who have the same objectives and interests (Zafar et al., 2012). Such networks can contribute not only to the development of entrepreneurial thinking but also to the decision-making process through the interchange of information and the provision of assistance (Lingappa et al., 2020; Narmaditya & Wibowo, 2021). Family support is another critical enabler that offers motivation and resources for entrepreneurially inclined people to deal with obstacles and sustain their endeavours (Hahn et al., 2020). Contextual elements, including education, culture, and socio-economic contexts, also have a major influence on entrepreneurial intentions. For example, entrepreneurs' education provides the means to acquire skills, knowledge, and attitudes for establishing a business (Acharya & Chandra, 2019; Stamboulis & Barlas, 2014). Additionally, the debate of collectivism versus individualism as cultural factors also impacts entrepreneurial activities since they are founded on established values and societal norms (Dheer, 2017; Pinillos & Reyes, 2011).

2.2 Perception of Innovation in the Business Environment

Innovation is instrumental in entrepreneurship, especially in the promotion of business ventures and economic growth. OECD/Eurostat (2005) points out that innovation includes the adoption of new or altered products, services, processes, marketing, and organisational practices. Product innovation is the addition or improvement of features deemed relevant by customers (Cooper, 2019), while process innovation concerns how to make production and deliveries more effective and efficient (Pisano, 1997). These innovations boost operational effectiveness and elicit entrepreneurial intentions through recognition and pursuit of unsatisfied gaps in the market (Damanpour & Gopalakrishnan, 2001). An example of innovation concerning market opportunities was observed by Simmonds (1986), where the invention of a new market or new uses for existing products provides new impetus to pursue business ventures. Differences in innovation among people, especially in the value of enhancement of systems, can also influence their attitude towards becoming entrepreneurs (Verma et al., 2025). People who view innovation as an opportunity and value are more willing to make use of such technologies to start a business.

The way a person views innovation in light of the advancement of new technologies and processes is essential when considering their entrepreneurial intention (Udekwe & Iwu, 2024). There is a substantial body of research that demonstrates the positive relationship between the intention to innovate and starting a new business. For instance, Kim et al. (2018) found entrepreneurial motivation and innovative behaviour to be significantly associated, where innovation inculcates entrepreneurial activities. Correspondingly, Yousef et al. (2021) argued that emerging digital technologies and new processes enhance entrepreneurs' ability to exploit pre-existing opportunities and create new ones because they intend to start new business ventures. Regarding education, Ndofirepi et al. (2018) noted that creativity in technology significantly improves the entrepreneurial intentions of students participating in entrepreneurship programs. Furthermore, Nathani and Dwivedi (2019) confirmed the relationship between innovation and entrepreneurial intentions among participants in Asia from 2012 to 2017.

These collective findings underscore that a strong perception of innovation as an opportunity motivates individuals to make business decisions that lead to entrepreneurship. Therefore, the following hypothesis is proposed:

H1: The perceptions of innovation and technology positively influence entrepreneurial intentions among non-entrepreneurs in Oman.

2.3 Societal Attitudes Towards Entrepreneurship

Societal attitudes refer to a behaviour pattern, anticipatory set, or tendency predisposition to specific adjustment to designated social situations (LaPiere, 2010). Conditioned responses to social stimuli have been shown to significantly influence individuals' entrepreneurial activity, as they shape how a person perceives, is inspired by, and acts within the social and cultural environment (Thornton et al., 2011). Autio and Wennberg (2010) argued that specific social norms and attitudes can either constrain or motivate entrepreneurship, and their effects can vary significantly across regions. Their research was backed by the Global Entrepreneurship Index and found that social group attitudes could increase participation in entrepreneurship by three times more than individual-level attitudes. This underscores the need for a positive societal attitude in order to promote entrepreneurship.

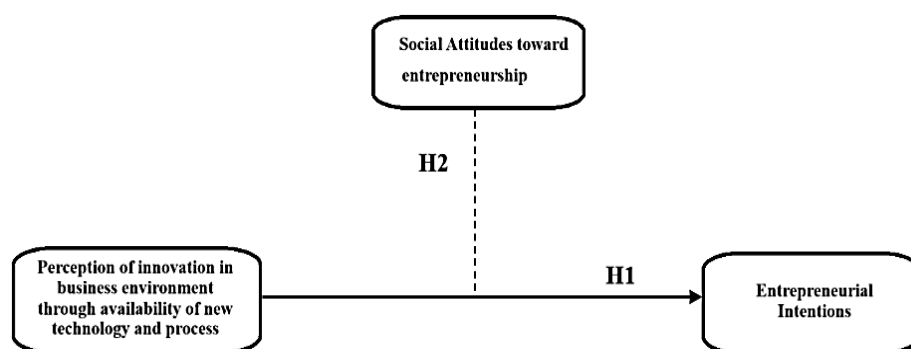
Various studies have shown that public attitudes and perceptions affect the extent of engagement in entrepreneurial activities. Liguori et al. (2020) pointed out that favourable entrepreneurial attitudes have a strong relationship with the intention to engage in entrepreneurship as a career. Soomro and Shah (2015) examined the attitudes of potential entrepreneurs and found a positive interplay between attitudes and entrepreneurial intentions, thereby suggesting the need to construct positive societal attitudes towards entrepreneurship. Similarly, Laguía and Moriano (2021) showed that mass media has a direct effect on people's entrepreneurship intentions, thereby underscoring the need for societal support to promote entrepreneurial activities. Furthermore, Lin, Pena, and Chen (2017) considered perceived opportunities and capabilities as key variables that facilitate the process of establishing new businesses and entrepreneurial intentions. Taken together, these findings reiterate the importance of societal attitudes and perceptions regarding entrepreneurship while determining the readiness of people to seek and exploit entrepreneurial opportunities. Therefore, the following hypothesis is proposed:

H2: Societal attitudes moderate the relationship between perceptions of innovation and technology and entrepreneurial intentions, such that the relationship is stronger when societal attitudes are more favourable.

In Oman, the unique aspects of culture and society bring about numerous advantages and disadvantages regarding entrepreneurship. From the local context, entrepreneurship in Oman has a traditional family and communal value base that reinforces either the supportive or blocking factors depending on the social acceptance of such endeavours. Rantanen and Toikko (2014) draw attention to the fact that cultural values promote or shun entrepreneurial ambitions that primarily target entrepreneurial attitude. Dauletova and Al-Busaidi (2024) examined ways of promoting entrepreneurship in the countryside and found that social attitude in Oman is slowly changing towards entrepreneurship. Regardless of governmental efforts, Omanis' engagement in entrepreneurship activities is relatively low and points towards societal hindrance from participating in such endeavours. Such findings necessitate further investigation.

Figure 1

Theoretical framework



Despite the increasing interest towards entrepreneurship in Oman, there is still a lack of literature regarding entrepreneurial intention among non-entrepreneurs. Existing literature tends to concentrate on established businesses and large corporations rather than investigating additional factors such as people's perceptions of innovation and technology, particularly among non-entrepreneurs. Furthermore, societal and cultural aspects, which are important in influencing entrepreneurship, remain a neglected moderating factor in the Omani context. Understanding the deeply embedded cultural norms and social phenomena surrounding entrepreneurial intentions and behaviours in Oman is also lacking. These issues should be covered because it enables stakeholders to formulate better corrective measures that can enhance the social and cultural factors conducive to entrepreneurship.

The framework developed in this study strives to fill these gaps by assessing the effect of innovation and technology on the intention to engage in entrepreneurship, with social attitudes being the moderating variable. It emphasises the

impact of innovation and advanced technology on people's perceptions and their attitudes towards entrepreneurship. This ultimately aligns with the goals of Oman's Vision 2040 towards economic diversification and innovation-driven growth.

2.4 Theoretical Background

Although the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory (IDT) highlight important aspects of technology adoption, this study primarily draws on the Theory of Planned Behaviour (TPB) (Ajzen, 1991) as its theoretical foundation. TPB comprehensively explains how attitudes, subjective norms, and perceived behavioural control shape intentions. TAM and IDT are referenced only to support constructs related to perceptions of innovation and technology adoption but are not treated as separate theoretical pillars. This avoids fragmented theory-building and ensures theoretical consistency. Accordingly, the conceptual framework is grounded in TPB, with societal attitudes modelled as a moderator in line with Ajzen's proposition that subjective norms influence behavioural intentions as shown in Figure 1.

3. Methodology

This study employed an inferential quantitative research design to investigate the relationship between perceptions of innovation and entrepreneurial intentions among non-entrepreneurs in Oman. The conceptual model was proposed based on a thorough review of the existing literature, combined with the Global Entrepreneurship Monitor (GEM) database for the year 2023/2024. GEM collates and publishes annual assessments of countries' entrepreneurship activities across various dimensions, including new business creations, use of technology, new processes, and the perception of entrepreneurship within societies. The secondary data used in this research were obtained using GEM's Adult Population Survey (APS), which is one of the key tools for assessing individual-level attitudes and behaviours towards entrepreneurial action. The survey was conducted in Oman, involving a sample of 2,000 individuals between the ages of 18 and 64 years to conform with the GEM standard. However, respondents were filtered to include only those who met the scope of innovation and the adoption of new technologies and processes using the GEM data set. The filtering process yielded 851 participants for subsequent analysis.

The data collection process entailed a structured quantitative approach employing questionnaires and structured interviews. All data were analysed quantitatively via SPSS and SmartPLS4 using several statistical techniques, including descriptive statistics and hypothesis testing, to facilitate accurate and reliable interpretation of results. The measurements of the study variables are detailed in Table 1. Although regression in SPSS can test simple linear relationships, this study employed Partial Least Squares Structural Equation Modelling (PLS-SEM) on SmartPLS 4 since the proposed model involves latent constructs (perceptions, attitudes, intentions) with multiple indicators, moderation testing, and the need for reliability and validity assessments. PLS is particularly suitable for exploratory studies with modest R^2 values (Hair et al., 2017) and small to medium sample sizes. To ensure robustness, SPSS descriptive statistics and correlations were also conducted in parallel.

Table 1

Research variables measurements

Variables	Codes & Description
Independent Variable	
Perception of Innovation (new product/technology, new process)	New product [TEANEWPROD] New process [TEANEWPROC]
Dependent Variable	
Entrepreneurial Intentions	[FUTSUP]
Moderating Variable	
Social Attitude	Good Career choice [NBGOOD23] High Status [NBSTAT23] Media Attention [NBMEDI23] Ease of Starting a Business [EASYST23] Opportunities [OPPORT23] Capability [SUSKIL23]

4. Results

This part describes the empirical results obtained through the descriptive analysis in SPSS and SmartPLS4. The data were gathered from the Oman GEM Report 2023-2024 and carefully tested to assess if the proposed model's measurement and structural aspects could be refuted or validated. The analysis included evaluation of construct reliability and validity and subsequent hypothesis testing to measure the direct and moderating impacts of perception of innovation technology adoption and societal attitudes on entrepreneurial intention. The outcomes offer empirical insights on the relative influence and meaningfulness of the hypothesised correlation in the proposed conceptual model.

4.1 Demographic Data

Table 2 presents the demographic profile of the respondents (N = 851). The sample was balanced in gender distribution (47.6% male, 52.4% female), mainly belonged to the 18–34 age group (59.3%), held a university degree (44.4%), and were employed (46.4%). This diversity provides a broad representation of Oman’s non-entrepreneurial population.

Table 2

Demography of respondents

		Frequency	Percent
Gender			
Valid	Female	446	52.4
	Male	405	47.6
	Total	851	100.0
Age Group			
Valid	18-34	505	59.3
	35-44	180	21.2
	45-54	101	11.9
	55+	65	7.6
	Total	851	100.0
Education			
Valid	Diploma	148	17.4
	High School	206	24.2
	Postgraduate	119	14.0
	University Degree	378	44.4
	Total	851	100.0
Employment Status			
Valid	Employed	395	46.4
	Other	59	6.9
	Self-Employed	94	11.0
	Student	121	14.2
	Unemployed	182	21.4
	Total	851	100.0

4.2 Descriptive Analysis

A detailed analysis of correlations between the constructs was done using descriptive statistics, including mean (M), standard deviation (SD), and correlation significance test. The results obtained from the dataset (N = 851) showed that respondents generally had high entrepreneurial intention (M = 4.68, SD = 0.872). They also demonstrated strong perceptions of innovation for new product development (M = 4.39) and new process implementation (M = 4.33), both low in variability. Furthermore, the socio-attitude indicators had strong potential for moderating variables and denoted very positive outlooks towards entrepreneurship. The respondents considered entrepreneurship to be a favourable career choice (M = 4.63), a high-status occupation (M = 4.57), and something that receives extensive media coverage (M = 4.53). The highest mean was recorded for the discipline of ease in starting a business (M = 4.83), suggesting strong confidence in the ecosystem. Collectively, the data indicate that socially supportive surroundings can positively influence perceptions towards innovation and entrepreneurship.

Table 3

Descriptive analysis

Variables	N	Mean	Std. Deviation
NBGOOD56	851	4.63	.737
NBSTAT56	851	4.57	.727
NBMEDI56	851	4.53	.761
EASYSY56	851	4.83	.826
FUTSUP56	851	4.68	.872
TEANEWPROD	851	4.39	.577
TEANEWPROC	851	4.33	.534
Valid N (listwise)	851		

The correlation results in Table 2 illustrate that entrepreneurial intention (FUTSUP56) had a positive and significant correlation with perception of innovation, including new product development (TEANEWPROD; $r = .133$, $p < .01$) and new process implementation (TEANEWPROC; $r = .144$, $p < .01$). This suggests that individuals who perceive new

ventures as innovative tend to express stronger entrepreneurial intentions. FUTSUP56 had significant positive correlations with social attitude indicators, such as viewing entrepreneurship as a good career (NBGOOD56; $r = .135$, $p < .01$), high social value (NBSTAT56; $r = .205$, $p < .01$), and media value (NBMEI56; $r = .163$, $p < .01$). It demonstrates the impact of social attitude towards entrepreneurial activities. Furthermore, ease of starting a business (EASYS56; $r = .098$, $p < .01$), opportunity recognition (OPPORT56; $r = .266$, $p < .01$), and entrepreneurial skills (SUSKIL56; $r = .282$, $p < .01$) contributed significantly and positively to entrepreneurial intention as contributors of personal enabling circumstances and geared competencies. Among the innovation variables, a particularly strong correlation was observed between TEANEWPROD and TEANEWPROC ($r = .571$, $p < .01$), suggesting that individuals who report innovating in product development often engage in innovative processes. These findings affirm the hypothesis that perceptions of innovation, positive asocial behaviour, and relevant competencies extensively focus on entrepreneurial intention.

4.3 SmartPLS4

This study also used PLS-SEM in SmartPLS 4 to examine the structural relationships among the research variables. This method is widely used in exploratory studies and in models with challenging latent variables (do Nascimento & da Silva Macedo, 2016; Wong, 2013). The analysis entailed assessing the measurement model to confirm the reliability and validity of the constructs and the structural model to test the hypothesised relationships among the variables. It offers valuable insights on the design of the measurement instruments prior to interpreting the path coefficients and model fit. This approach defends interpreting path coefficients and model fit by ensuring the reliability of the intermediate measurement instruments (Hair et al., 2017).

4.3.1 Measurement model assessment

Figure 2 shows that all factor loadings exceeded the 0.7 threshold, thus meeting the reliability and validity criteria of the constructs, except for EASYS56 (0.603), NBGOOD56 (0.685), and NBMEI56 (0.685). Therefore, both EASYS56 (0.603) and NBGOOD56 (0.556) were eliminated because they were considered problematic, while NBMEI56 (0.685) was retained since it remained within the acceptable range. Figure 3 illustrates that all factor loadings had significant and meaningful loadings, where all items were within or close to the accepted threshold of 0.7. Although the factor loading for NBMEI56(0.695) was less than 0.7, it was deemed at the accepted level.

Table 5 presents the reliability results and the convergent validity indicators for both PI and SA. All values surpassed the 0.7 threshold suggested by the Cronbach's alpha standards and composite reliability metrics. Also, convergent validity was confirmed because the AVE values for both constructs surpassed 0.5. Table 6 shows the results of constructs' discriminant validity obtained using the Heterotrait-Monotrait (HTMT) ratio. All constructs achieved values less than 0.85, indicating sufficient discriminant validity.

Figure 2

Factor loading

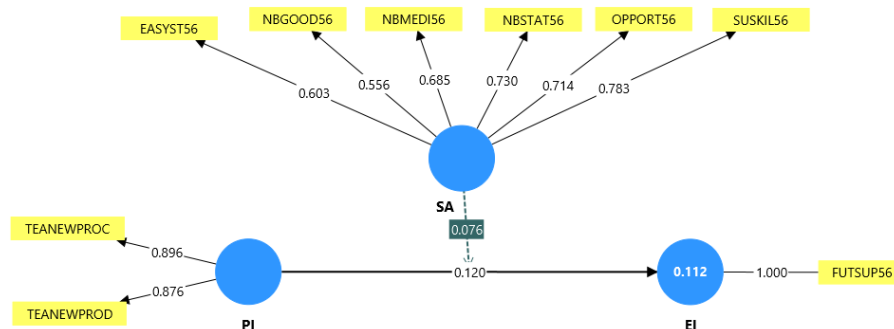


Figure 3

Factor loading - after item elimination

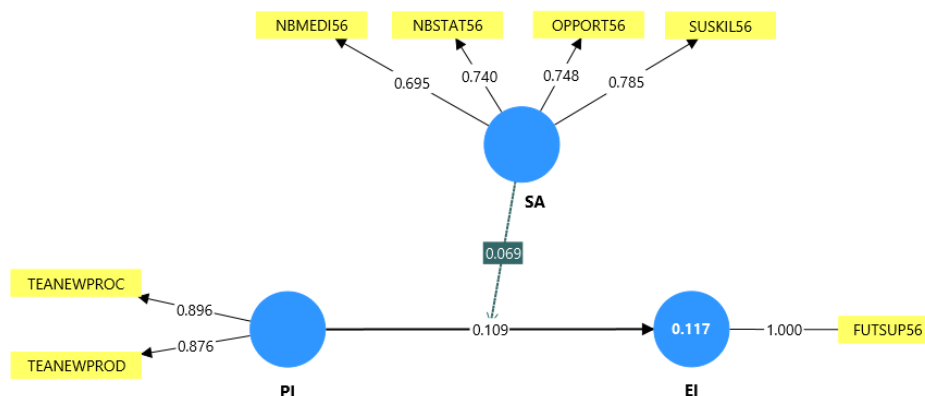


Table 4
Correlations

		NBGOOD56	NBSTAT56	NBMEDI56	EASYST56	FUTSUP56	TEANEWPROD	TEANEWPROC	OPPORT56	SUSKIL56
NBGOOD56	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	851								
NBSTAT56	Pearson Correlation	.343**	1							
	Sig. (2-tailed)	.000								
	N	851	851							
NBMEDI56	Pearson Correlation	.335**	.470**	1						
	Sig. (2-tailed)	.000	.000							
	N	851	851	851						
EASYST56	Pearson Correlation	.318**	.358**	.307**	1					
	Sig. (2-tailed)	.000	.000	.000						
	N	851	851	851	851					
FUTSUP56	Pearson Correlation	.135**	.205**	.163**	.098**	1				
	Sig. (2-tailed)	.000	.000	.000	.004					
	N	851	851	851	851	851				
TEANEWPROD	Pearson Correlation	-.070*	.050	.002	.007	.133**	1			
	Sig. (2-tailed)	.042	.146	.954	.844	.000				
	N	851	851	851	851	851	851			
TEANEWPROC	Pearson Correlation	.032	.119**	.097**	.046	.144**	.571**	1		
	Sig. (2-tailed)	.346	.000	.005	.182	.000	.000			
	N	851	851	851	851	851	851	851		
OPPORT56	Pearson Correlation	.208**	.389**	.376**	.348**	.266**	.190**	.272**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	N	851	851	851	851	851	851	851	851	
SUSKIL56	Pearson Correlation	.358**	.431**	.416**	.456**	.282**	.028	.066	.375**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.412	.055	.000	
	N	851	851	851	851	851	851	851	851	851

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5
Reliability and contingent validity

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
PI	0.727	0.730	0.880	0.785
SA	0.735	0.750	0.831	0.552

Table 6
Discriminant validity - Heterotrait-Monotrait ratio

	EI	PI	SA
EI			
PI	0.183		
SA	0.358	0.213	
SA x PI	0.069	0.074	0.070

Table 7
Discriminant Validity - Fornell-Larcker Criterion

	EI	PI	SA
EI	1.000		
PI	0.156	0.886	
SA	0.319	0.167	0.743

The Fornell-Larcker criterion results in Table 7 demonstrate that discriminant validity was established between Entrepreneurial Intention (EI), Perception of Innovation (PI), and Social Attitude (SA). The square root of AVE (diagonal values) for each construct exceeded its correlation values (off-diagonal values) with other constructs. Specifically, EI's square root AVE of 1.000 exceeded its correlations with PI (0.156) and SA (0.319). For PI, the square root AVE of 0.886 exceeded its correlations with SA. This demonstrates that each construct was measured independently and embodied a distinct concept within the boundaries of the model. Table 8 illustrates the Variance Inflation Factor (VIF) values. Based on the model's collinearity statistics, multicollinearity does not appear to be a problem, as all VIF values are well below the accepted threshold of 5. The VIF values from 1.000 to 1.484 indicate that the predictor variables are independent of one another to a reasonable degree, which enhances the reliability of the regression estimates in the structural model. Table 9 shows the R-square value. The R-square value of 0.117 denotes that about 11.7% of changes in Entrepreneurial Intention (EI) are influenced by the variables and their interactions (moderating) outlined in the model. The adjusted R-square of 0.114 indicates the model's explanatory power is similar after a reasonable number of predictors are added, suggesting a modest but meaningful fit.

Table 8
Collinearity statistics (VIF)

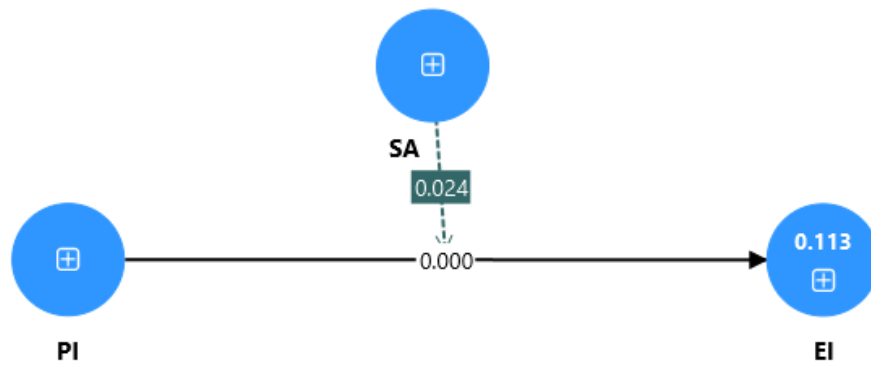
	VIF
FUTSUP56	1
NBMEDI56	1.431
NBSTAT56	1.462
OPPORT56	1.3
SUSKIL56	1.377
TEANWPROC	1.484
TEANWPROD	1.484
SA x PI	1

Table 9
R-Square

	R-square	R-square Adjusted
EI	0.117	0.114

Figure 4

Structural model assessment



4.3.2 Structural model assessment

Figure 4 shows the structural model including the hypothesised relationship between variables, namely perception of innovation (PI), entrepreneurial intention (EI), and social attitudes (SA). It indicates a broadly effective and positive relationship that contributes to achieving the research objectives. Table 10 presents the hypothesis testing results. The hypothesis regarding the direct relationship between PI and EI was accepted ($p < 0.001$, $B = 0.109$). Moreover, the hypothesis concerning the moderating effect of social attitudes on the relationship between PI and EI was accepted ($p < 0.046$, $B = 0.069$), indicating that SA has a significant influence on this relationship. The findings demonstrate that people's perceptions of innovation and technology, especially regarding new products and processes, are positively significant regarding entrepreneurial intention. This aligns with the previous studies reporting that innovation drives entrepreneurial intentions (Autio et al., 2018; Audretsch et al., 2022). It further affirms the claim that innovation is a catalyst to entrepreneurship across the Asian region and the distinct association of innovation with entrepreneurial intention (Nathani & Dwivedi, 2019). Social attitudes were found to have a significant impact on the relationship between people's perceptions of innovation and technology and entrepreneurial intentions. Positive attitudes towards entrepreneurship indicate that social attitudes possess a good influence on entrepreneurial intention, as well as being a good career choice, a social status indicator, and appearing on television. This is consistent with Mason and Brown (2014), who found that sociocultural support enhances the entrepreneurial ecosystem. Moreover, opportunity identification and perceived skills were identified as moderately strong predictors, thus underscoring control and subjective norms asserted by the Theory of Planned Behaviour (Ajzen, 1991). The R-square metric of 0.117 cannot be ignored as it portrays a modest percentage of variance explained by the model in entrepreneurial intention. However, perceptions of innovation and social attitudes supportive of innovation remain critical to foster entrepreneurial activity in transitioning economies. Strengthening discriminant validity while assuring the absence of multicollinearity makes these conclusions more robust.

Table 10

Hypotheses testing - Path Coefficient, Mean, SD, P-Value

		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	P values	Decision
H1	PI -> EI	0.109	0.109	0.032	0.001	Supported
H2	SA x PI -> EI	0.069	0.069	0.035	0.046	Supported

5. Discussion

The results confirm that perceptions of innovation significantly influence entrepreneurial intentions, with social attitudes acting as a positive moderator. However, the R^2 value of 0.117 indicates that innovation perceptions and social attitudes explain only part of entrepreneurial intentions, suggesting that other factors—such as access to finance, government policies, and education—also play important roles. Interestingly, respondents reported very high scores for “ease of starting a business” ($M = 4.83$). This may reflect optimism or the influence of government promotion campaigns, rather than the actual complexity of business registration in Oman. Such discrepancies highlight the importance of distinguishing perceived from actual ease of entrepreneurship. Compared to existing studies in Western and Asian contexts, the Omani socio-cultural environment—family-based decision-making, collectivist values, and Vision 2040's state-led entrepreneurship initiatives—provides a unique context where societal attitudes strongly shape innovation-driven entrepreneurial intentions.

5.1 Theoretical Implications

This study advances the theoretical understanding of entrepreneurship in several ways. First, it extends the literature on entrepreneurial intentions by empirically demonstrating the positive relationship between non-entrepreneurs' perceptions of innovation—through new product and process development—and their intentions to engage in entrepreneurial activities, specifically within the context of an emerging economy. Second, it contributes to the theory by identifying the

moderating role of social attitudes, highlighting how societal perceptions influence the strength of the link between innovation and entrepreneurial intentions. Finally, by applying and validating this framework in the Omani context using GEM data, the study enriches the cross-cultural and contextual dimensions of entrepreneurial intention theories, thus providing evidence from a region that is underrepresented in the existing literature.

5.2 Practical Implications

This study presents practical recommendations that can benefit various stakeholders, including educational institutions and ministries. Professionals and decision-makers can use the findings to develop training programs and incentives that provide entrepreneurship support in Oman. The findings also demonstrate the importance of promoting innovation access and education for non-entrepreneurs to develop positive perceptions towards developments. The government should establish programs that showcase modern technologies while providing operational support and innovation training to startups to build their positive attitudes towards entrepreneurship. Social attitudes should also be strengthened through cultural and social support initiatives since they view entrepreneurship as desirable and can encourage business startups to pay attention to entrepreneurial activities. Additionally, the government must develop nationwide educational programs and promotional initiatives that can promote entrepreneurship as a positive social status, especially to young people at the beginning of their careers. The strong social influence maintains that strategic cultural shift towards supportive entrepreneurial values will maximise innovation-based entrepreneurial activity development. Omani entrepreneurship should introduce nurturing elements such as mentorship support and innovation-centric programs to boost overall impact.

5.3 Limitations and Future Directions

The research highlights several limitations that might have affected the quality of data and results, alongside suggested recommendations for future research directions. First, the use of secondary data from Global Entrepreneurship Monitor (GEM) might not be as current and accurate as primary data, such as surveys and interviews. Therefore, future studies are recommended to utilise primary data. Second, this study focused mainly on non-entrepreneurs in Oman and examined how their perceptions of advanced innovations and new technologies influence their entrepreneurial intentions, with a moderate impact of societal attitudes. However, the study did not address other groups, such as enhancing the perceptions and views of current entrepreneurs or youth to help them become more innovative and creative. Future studies could expand the sample to include these other groups. Finally, this study used a cross-sectional research design and examined the effects over a specific period. Future studies could adopt a longitudinal approach by tracking and observing the effects over a longer period, which could provide more accurate results and include a larger population. Future research is essential to broaden the scope of inquiry and obtain more comprehensive results.

6. Conclusions

This study explored the relationship between the innovation perception of adults in Oman with their social attitudes and entrepreneurial intentions using Global Entrepreneurship Monitor (GEM) data. The results suggest that the perception of innovative activities, such as new product and process development, and the positive attitude of society are strong determinants of the intention to engage in entrepreneurship. It further demonstrates the moderating effect of social attitudes, indicating that a culture that is supportive of innovation tends to strengthen the innovation-entrepreneurship motivation relationship. The findings reveal important aspects of existing research, including the Theory of Planned Behaviour and more contemporary work highlighting the role of innovation and societal support on entrepreneurship intention. Moreover, this study contributes to the literature by focusing on innovation, social context, and heightened entrepreneurial intention, particularly in emerging economies. Such findings are useful for policy, educational agendas, and entrepreneurship that support institutions seeking to develop an innovation-based entrepreneurial ecosystem.

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Declaration of Competing Interests

The authors declare no conflicts of interest.

CRedit Authorship Contribution Statement

Fatma Yousuf Ahmed Al-Mujaini: Conceptualisation; Methodology; Validation; Analysis; Data curation; Investigation; Visualisation; Writing - original draft

Bushra Nasser Mohammed Al-Khatiri: Investigation; Writing - review & editing

Naema Mohammed Albimani: Methodology; Validation; Writing - review & editing

Availability of Data and Materials

The data supporting this study's findings are available on request from the corresponding author.

Ethics Declarations

This study did not involve human or animal participants, nor did it require ethical approval.

Generative Artificial Intelligence Declarations

The authors claim that artificially intelligent-assisted technologies in the form of generative AI were not used to generate content, ideas, or theories. AI is only used to enhance readability and refine the language. This was used with extreme human control and oversight. The authors take full responsibility for reviewing and approving the content.

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