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ORIGINAL SCIENTIFIC PAPER

Perceived Technological Innovativeness, Entrepreneurial Proactiveness, and Performance in Established Women-Led Companies



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ABSTRACT

The contribution of women as corporate executives to their companies' entrepreneurial outcomes is significant, as they can often enhance critical aspects of organizational innovativeness and proactiveness. This research investigated the effect of perceived technological innovativeness (PTI) on perceived entrepreneurial proactiveness (PEP) and, subsequently, the effect of PEP on the perceived company performance (PCP) of established firms with females in their top management teams. An examination of a judgmental sample of 83 female executives employed in Greek firms with over €10 million annual turnover showed that PTI had a significant and positive effect on PEP, and subsequently, PEP had a significant and positive effect on PCP. Apart from corroborating existing literature about the positive impact of entrepreneurial proactiveness on company performance, the study indicated that, according to the perceptions of female

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executives, entrepreneurial proactiveness acts as a bridge between technological innovativeness and company performance. Thus, it appeared that when a company is characterized by (or fosters the advancement of) technological innovativeness, it encourages creative thinking and focuses on opportunity identification and exploitation. This proactive approach to technological innovativeness enables the organization to improve its performance by staying ahead of its competitors, adapting to the dynamic environment, anticipating future market trends and exploiting opportunities.

KEYWORDS: *corporate entrepreneurship, technological innovativeness, entrepreneurial proactiveness, company performance, established companies, female executives*

Introduction

In the contemporary and dynamic business environment, the contribution of women, either as individual entrepreneurs or as corporate executives, to innovation and economic growth is significant (Hunt, Layton, & Prince, 2015; Lyngsie & Foss, 2017). However, despite the growing recognition of their contribution, there remains a scarcity of studies examining women executive's perceptions about their companies' entrepreneurial outcomes, as well as female-led businesses in particular. As the international business environment evolves, organizations are faced with perilous strategic and tactical decisions (Livas, Theofanidis, & Karali, 2023). Thus, the ability of companies to innovate and proactively adapt becomes crucial for success. In this context, this study focuses on female executives and their companies, with the purpose of unraveling the relationships between technological innovativeness, entrepreneurial proactiveness, and company performance. Therefore, this research seeks to contribute not only to the academic discourse on entrepreneurship, but also to provide practical insights and inform strategic decision-making.

Existing literature suggests that the inclusion of qualified women in top management teams is positively associated with companies' performance (Krishnan & Park, 2005; Smith, Smith, & Verner, 2006), as it contributes to strategic renewal and innovation (Post, Lokshin, & Boone, 2022). Considering the (often) symbiotic association between innovativeness and entrepreneurial proactiveness (Liu et al., 2017), the present study aims to investigate the interrelationships between technological innovativeness, entrepreneurial proactiveness, and company performance in a targeted

judgmental sample of established companies led by women in top management positions. More specifically, given that the successful market introduction and commercialization of innovative products are contingent upon the extent to which innovative firms have a proactive philosophy (Sandberg, 2002), this research tests the effect of perceived technological innovativeness on perceived entrepreneurial proactiveness and, subsequently, the effect of perceived entrepreneurial proactiveness on perceived company performance.

Literature Review and Hypotheses Development

Women in Top Management Teams

Although several companies appear to have made efforts to increase the number of women in leadership positions, women's representation remains limited (Hideg & Shen, 2019; Hunt, Layton, & Prince, 2015). This phenomenon may contribute to the continuation of workplace segregation practices and misbeliefs about women's performance and abilities (Stainback, Kleiner, & Skaggs, 2016). Apart from popular explanations relating to the glass ceiling phenomenon, the limited representation of women in top management, executive, or leadership teams has been attributed to the existence of implicit quotas (Dezsó, Ross, & Uribe, 2016). This perspective suggests that a company's leadership may only attempt to have a small number of women in executive positions, beyond which they do not actively seek to include more women in organizational leadership (Dezsó et al., 2016). On the occasion that women do reach the executive or top management level, they are likely to be paid less than their male colleagues (Perryman, Fernando & Tripathy, 2016).

Despite women being more likely to experience financial exclusion (Antonijević, Ljumović, & Ivanović, 2022) and lack certain digital competencies (Ivanović et al., 2021), their inclusion in top management teams has been positively associated with improved financial performance (Hunt, Layton, & Prince, 2015; Perryman, Fernando & Tripathy, 2016) in the long run (Jeong & Harrison, 2017), as well as with better business operations and performance (Moreno-Gómez, Lafuente, & Vaillant, 2018). This positive impact has been attributed to greater employee productivity (Luanglath, Ali, & Mohannak, 2019), collaboration, satisfaction, and loyalty, increased access to the existing talent pool, and improved customer

orientation (Hunt et al., 2015). Although the exact impact of women's inclusion in top management teams is likely to be context-specific (Jeong & Harrison, 2017; Luanglath, Ali, & Mohannak, 2019), empirical evidence suggests that companies lacking women in executive positions are lagging in their industries (Hunt, Layton, & Prince, 2015).

From a corporate entrepreneurship point of view, the inclusion of women in top management teams has been assumed to positively affect company performance by reducing strategic risk-taking (Jeong & Harrison, 2017; Perryman et al., 2016). At the same time, increased gender diversity in companies has been found to boost entrepreneurial outcomes, particularly in terms of enhancing product innovation (Lyngsie & Foss, 2017) and creative problem-solving (Hunt et al., 2015). Thus, the inclusion of women in corporate leadership is likely to introduce new strategic perspectives, augment existing organizational capabilities, and ultimately enhance the entrepreneurial posture of their firms.

Technological Innovativeness, Entrepreneurial Proactiveness, and Company Performance

The concept of companies' entrepreneurial orientation, which is perceived either as unidimensional (Covin & Slevin, 1989) or multidimensional (Lumpkin & Dess, 1996), encompasses several discrete aspects (or dimensions). In both conceptualizations, proactiveness and innovativeness play a key part in the measurement of entrepreneurial orientation (Morris & Paul, 1987) and have been associated with significant positive effects on company performance (Kreiser et al., 2013; Rauch, et al., 2009). However, such effects may be stronger in established companies (Su, Xie & Li, 2011) and are likely to be moderated by environmental factors, especially related to economic and technological developments (Simovic et al., 2024), organizational elements (Kreiser & Davis, 2010; Lumpkin and Dess, 1996; Lumpkin & Dess, 2001; Rauch, et al., 2009), and marketing strategies related to segmentation, targeting and positioning (Theofanidis & Livas, 2007). More specifically, established firms rely heavily on entrepreneurial orientation for the further enhancement of their competitive advantage through opportunity detection (Su, Xie & Li, 2011) and are more likely to develop entrepreneurial orientation if they are already marketing-oriented (Morris & Paul, 1987).

Nevertheless, assuming the multidimensional conceptualization of entrepreneurial orientation, there is scarce empirical evidence considering

the relationships between the dimensions of entrepreneurial orientation. Proactiveness, which is conceptualized as companies' responses to opportunities, has been positively related to company performance (Blesa & Ripollés, 2003; Fadda, 2018), particularly in dynamic environments and during the industry growth stage (Lumpkin & Dess, 2001). To this extent, empirical evidence has also supported the positive effect of entrepreneurial proactiveness on social and firm performance in the context of female entrepreneurship (Muindi & Masurel, 2022). To exploit opportunities, entrepreneurially proactive companies anticipate and respond to future demand (Dess & Lumpkin, 2005; Engelen et al., 2014; Schillo, 2011) by having a better understanding of their markets (Kraus et al., 2012). As a result, such companies are often able to shape their competitive environment (Knight & Cavusgil, 2004), gain competitive advantage, dominate distribution channels, and enjoy considerable brand recognition (Lumpkin & Dess, 2001).

This form of proactive entrepreneurship focuses on the pursuance of opportunities by taking bold - but not too risky - actions, exploiting company assets, and being more active in product innovation (Avlonitis & Salavou, 2007). Thus, the entrepreneurial proactiveness of companies has been assumed to positively affect innovation generation (Craig et al., 2014), the introduction of market-focused and technologically innovative products (Talke, Salomo & Kock, 2011), the performance of new products (Avlonitis & Salavou, 2007), and ultimately companies' performance (Talke et al., 2011).

Existing literature argues that the hypothesized positive association between proactiveness and innovativeness is also prominent in technologically oriented organizational contexts. More specifically, technology-proactive companies have been assumed to be more willing to invest in technological leadership (García-Morales, Ruiz-Moreno, & Llorens-Montes, 2007). Thus, authors have proposed that proactiveness can lead to radical innovation (Covin et al., 2016), and that proactive technological innovations can significantly increase the sales and profits of companies with sufficient resources (Liem, Khuong & Khanh, 2019).

Although the relationship between innovativeness and proactiveness has not been extensively assessed by prior literature, the above argumentation implies that companies' entrepreneurial proactiveness is likely to precede the formulation of innovativeness. However, the opposite may also be true, as an organizational culture of technological

innovativeness may drive companies to develop several aspects of entrepreneurial proactiveness. To fully exploit their innovative culture, technologically innovative companies may have to stay informed about emerging technologies that are relevant to their industries and target markets, adapt quickly to changing market conditions, and foster a mindset of rapid opportunity detection prior to their competitors. To this end, it is plausible that proactiveness may mediate the relationship between technological innovativeness and company performance (Jalali, Abhari & Jaafar, 2022).

In view of the preceding literature review, it can be argued that fostering a technologically innovative organizational culture may contribute to increased proactiveness (Jalali et al., 2022). This is because, in order to ensure the relevance and worth of innovation, companies will have to develop appropriate mechanisms to anticipate and respond swiftly and effectively to changes in their markets. In the case of female-led companies, the presence of women in top management teams has been associated, among others, with heightened innovativeness (Lyngsie & Foss, 2017; Talke et al., 2011). Women leaders may often introduce diverse perspectives and collaborative approaches (Hunt et al., 2015), which can stimulate continuous improvement and innovative initiatives. Lastly, established companies with heightened innovativeness are expected to benefit from a proactive stance (Su et al., 2011), as they will be better able to match their innovation capabilities to market dynamics (Shamaki, Ibrahim & Philemon, 2022). Therefore, in the case of established businesses with women in their top management teams, it is hypothesized that:

H₁: Perceived technological innovativeness positively affects perceived entrepreneurial proactiveness.

H₂: Perceived entrepreneurial proactiveness positively affects perceived company performance.

Research Methods

Study Sample

A judgmental (non-probability) sample of 83 female executives employed in firms with over €10 million annual turnover operating in Greece participated in the study. The rationale for selecting large and established companies was based on the assumption that executives in such

organizations are more likely to be cognizant of strategic and entrepreneurial decisions made, as well as on the expectation that such corporate decisions are more likely to have a substantial impact on domestic economic activity. Overall, the vast majority of the companies included in the study employed over 50 individuals (84.3%) and had an international scope of operations (66.3%). Regarding business sectors, the companies of the sample were predominately industrial (34.9%), commercial (31.3%), and service providers (27.7%). On average, companies were in operation for approximately 43.5 years.

Measurement

Using established measurement scales for the latent constructs of interest, perceived entrepreneurial proactiveness (PEP) was measured with three items (Covin & Slevin, 1989) and perceived company performance (PCP) with five items (Lin & Shih, 2008). The respondents were also asked to indicate their perceptions about the level of their company's technological innovativeness (PTI) using a balanced Likert item (Covin & Slevin, 1989). With respect to the measurement of PTI, the present study employed the sole Likert item from the entrepreneurial orientation scale, which explicitly refers to companies' technological innovativeness [i.e., participants were required to indicate their level of agreement or disagreement on a scale from 1 (very strongly disagree) to 7 (very strongly agree) with the following statement: *'In general, the top managers of my firm favor a strong emphasis on R&D, technological leadership and innovations'*] (Covin & Slevin, 1989), to ensure methodological and conceptual consistency (i.e., the multi-item measurement scale for proactiveness was obtained from the same scale). In line with existing literature and common research practice, the data from this item were deemed to be of interval measurement scale (Brown, 2011; Knapp, 1990).

Furthermore, despite the association of survey-based research with the threat of self-report (or response) bias, based on the characteristics of the participants and the nature of the present study, it is valid to assume that such risks are significantly minimized. Respondents were recognized professionals employed in already established organizations and knowledgeable in the topics of interest. Thus, they were deemed to be less likely to unintentionally provide wrong evaluations of their companies' PTI, PEP and PCP, as well as to intentionally conceal their true evaluations to gain approval by making themselves or their companies appear in a certain

way (e.g., socially desirable, or professionally distinguished). Lastly, the study did not demonstrate common method bias as the single factor extracted with the application of Harman's single factor test (Podsakoff *et al.*, 2003) accounted for approximately 44,36% of data variance.

In view of the above, a confirmatory factor analysis performed with IBM AMOS software (v.24) on PEP and PCP (Table 1), indicated an excellent model fit as per the relevant literature (Hair *et al.*, 2014). The measurement model also demonstrated satisfactory levels of measurement reliability / internal consistency (Cronbach's α for both constructs > 0.7), convergent validity (AVE values > 0.5) and discriminant validity (AVE $>$ MSV).

Table 1: Measurement model properties (CFA)

Constructs (Items)	Standardized Loadings (β)	Internal Consistency	AVE	MSV
Perceived Company Performance (PCP)		0.93	0.74	0.09
(PCP1) Profitability in relation to competitors	0.88	-	-	-
(PCP2) Sales increase in relation to competitors	0.87	-	-	-
(PCP3) Market share increase in relation to competitors	0.91	-	-	-
(PCP4) Return on investment in relation to competitors	0.77	-	-	-
(PCP5) Overall company performance in relation to competitors	0.86	-	-	-
Perceived Entrepreneurial Proactiveness (PEP)		0.85	0.68	0.09
(PEP1) In dealing with its competitors, my firm typically initiates actions to which competitors then respond	0.67	-	-	-
(PEP2) In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.	0.93	-	-	-
(PEP3) In general, the top managers of my firm have a strong tendency to be ahead of other competitors in introducing novel ideas or products	0.84	-	-	-

Notes: (1) CFA Fit statistics: $CMIN/DF = 1.140$, $p = 0.307$, $CFI = 0.995$, $TLI = 0.992$, $RMSEA = 0.041$, $PCLOSE = 0.520$, $SRMR = 0.045$; (2) Internal consistency was estimated with Cronbach's α ; (3) AVE and MSV stand for Average Variance Extracted and Maximum Shared Variance respectively and they were used as measures of convergent and discriminant validity.

Source: Authors

Data Analysis

Univariate and Bivariate Analysis

After confirming the proposed factorial structure, the study proceeded to estimate the descriptive parameters (Table 2) and bivariate correlations (Table 3) among the variables of interest. The female executives indicated that their companies were above average in terms of PTI (mean value = 5.17 on a scale from 1-7), PEP (mean value = 4.93 on a scale from 1-7), and PCP (mean value = 5.17 on a scale from 1-7). Considering that the absolute z-value of skewness and kurtosis was below 3.29, it was assumed that the distribution of PTI, PEP and PCP was approximating the normal distribution (Kim, 2013).

Table 2: Descriptive parameters

Parameters	PTI	PEP	PCP
Mean	5.17	4.93	5.17
Median	5.00	5.00	5.40
Mode	7.00	5.33	6.00
Std. Deviation	1.61	1.12	1.12
Skewness	-0.66	-0.50	-0.43
SE of Skewness	0.26	0.26	0.26
z-Skewness	-2.50	-1.92	-1.65
Kurtosis	-0.46	0.80	-0.10
SE of Kurtosis	0.52	0.52	0.52
z-Kurtosis	-0.88	0.33	-2.60

Notes: (1) $n = 83$; (2) All variables were measured on a 7-point scale; (3) One-sample *t*-tests for PTI, PEP and PCP indicated that the mean values were statistically significantly higher than the midpoint of the measurement scale employed (i.e., 4).

Source: Authors

To assess the bivariate relationships, the study estimated Pearson's correlation coefficient (r) for each pair of variables. The bivariate correlations indicated that PEP was significantly positively correlated with PTI ($r = 0.32$, $p = 0.004$) and PCP ($r = 0.30$, $p = 0.005$), albeit the relationships were of medium intensity. Nevertheless, PTI was insignificantly associated with PCP ($r = 0.15$, $p = 0.176$).

Table 3: Bivariate correlations' matrix (Pearson's r)

		PTI	PEP	PCP
PTI	r	1		
	p	-		
PEP	r	0.32	1	
	p	0.004	-	
PCP	r	0.15	0.30	1
	p	0.176	0.005	-

Note: $n = 83$.

Source: Authors

Structural Equation Model

Despite its relatively small sample size, the present study employed Covariance Based – Structural Equation Modelling (CB – SEM). The preference shown by existing literature in Partial Least Squares SEM over CB-SEM in studies with smaller sample sizes is primarily based on the former's increased statistical power, ability to obtain meaningful solutions, particularly in the case of examining complex theoretical models, and tendency to retain more indicator items in its solutions (Hair et al., 2017). However, the present research examined a rather simple research model (i.e., with two latent factors and 9 manifest variables) and achieving a satisfactory model fit, did not require the deletion of any indicators. Thus, measurement and structural validity did not appear to have been compromised (Table 1 and Table 4). Overall, considering the proposed model's simplicity (i.e., it involved the estimation of 10 parameters, including latent to indicator variable relationships) and that the ratio of observations per parameter in the present study (i.e., 8.3) exceeded the minimum sample size requirements suggested in the relevant literature

(Jackson, 2003; Kline, 2023), the application of CB-SEM was not deemed problematic.

The structural equation model (Figure 1 and Table 4) had an excellent model fit (Hair et al., 2014) and showed that PTI had a significant and positive effect on PEP (standardized $\beta=0.33$) and PEP had a significant and positive effect on PCP (standardized $\beta=0.30$). Based on the above, it appeared that, according to female executives' perceptions, higher levels of PTI led to higher levels of PEP, providing support to H₁. Subsequently, higher levels of PEP were associated with higher PCP, and thus H₂ was also supported. Regarding the predictive properties of the structural model, 10.6% of the variance in PEP was explained by PTI, while 8.7% of the variance in PCP was explained by PEP. Both of these relatively low percentages indicated that there were additional factors affecting PEP and PCP that were not included in the model.

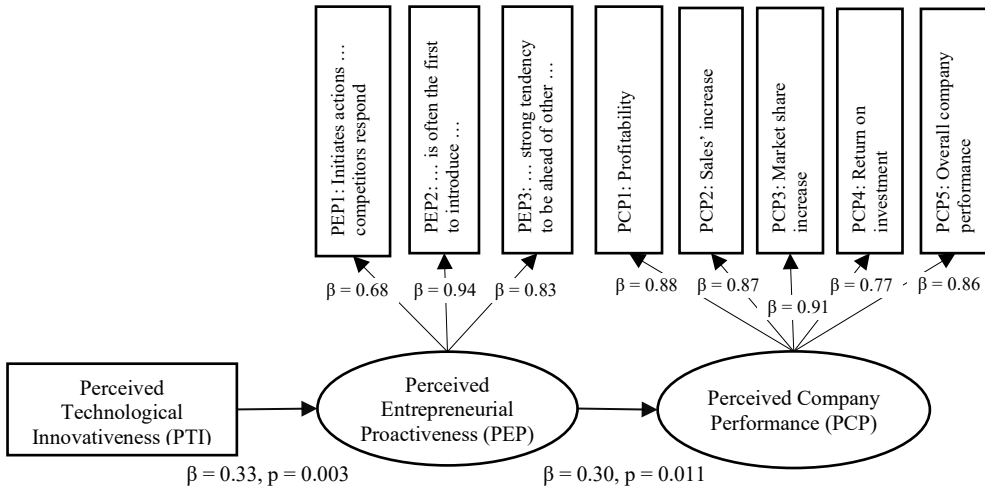
Table 4: Regression weights of the structural model

Outcome Variable	Predictor Variable	Estimate (b)	S.E.	C.R.	p-value	Standardized Estimate (β)	Squared Multiple Correlations
PEP	← PTI	0.25	0.085	2.955	p = 0.003	0.33	10.6%
PCP	← PEP	0.23	0.092	2.532	p = 0.011	0.30	8.7%
PCP1	← PCP	1.22	0.143	8.537	p < 0.001	0.88	-
PCP2	← PCP	1.14	0.127	9.026	p < 0.001	0.87	-
PCP3	← PCP	1.17	0.131	8.952	p < 0.001	0.91	-
PCP4	← PCP	1.00			p < 0.001	0.77	-
PCP5	← PCP	1.06	0.103	10.31	p < 0.001	0.86	-
PEP1	← PEP	0.70	0.105	6.727	p < 0.001	0.68	-
PEP2	← PEP	1.00			p < 0.001	0.94	-
PEP3	← PEP	0.81	0.094	8.58	p < 0.001	0.83	-

Notes: (1) $n = 83$; (2) Model fit statistics: $CMIN/DF = 1.032$, $p = 0.418$, $CFI = 0.998$, $TLI = 0.998$, $RMSEA = 0.020$, $PCLOSE = 0.668$, $SRMR = 0.049$.

Source: Authors

Figure 1: Structural model



Source: Authors

Discussion

Apart from corroborating existing literature about the positive impact of entrepreneurial proactiveness on company performance (Blesa & Ripollés, 2003; Fadda, 2018; Lumpkin & Dess, 2001), the study has several implications regarding the relationship between technological innovativeness and entrepreneurial proactiveness in established and female-led companies. According to female executives' perspectives, when a company is characterized by (or fosters the advancement of) technological innovativeness, it encourages its members to develop creative thinking and focus on opportunity identification. Thus, this proactive approach to technological innovativeness enables the organization to stay ahead of its competitors, adapt to the dynamic environment, exploit opportunities by anticipating future trends, and ultimately, improve its company performance. In other words, and seemingly contrary to the majority of existing literature (Covin et al., 2016; Garcia-Morales et al., 2007; Liem et al., 2019), it appears that the beneficial effects of technological innovativeness on company performance are realized through entrepreneurial proactiveness (Jalali et al., 2022).

These findings may be subject to several interpretations. The establishment of a culture of technological innovativeness, as well as the presence of innovative individuals in companies, may operate as a catalyst for organizational change and improvement in terms of developing a proactive organizational posture (i.e., H_1 of the present study). Subsequently, entrepreneurial proactiveness plays a crucial role in translating innovative ideas into actionable initiatives that impact company performance (i.e. H_2 of the present study). When organizations are entrepreneurially proactive, they are more likely to be market-oriented and, therefore, have a better understanding of customers' needs and preferences. As per the existing literature, this is particularly relevant in companies that are established (Morris & Paul, 1987) and include women in their top management teams (Hunt, Layton, & Prince, 2015), such as those in the present study. Consequently, the innovations being generated are more likely to be relevant and responsive to market demands and lead to better performance outcomes for the business. Essentially, entrepreneurial proactiveness appears to function as a bridge between technological innovativeness and company performance, ensuring that innovative initiatives are effectively translated into products that meet or exceed customer expectations, enhance the organization's competitive position, and ultimately contribute to improved company performance. The abovementioned perspective indicates the importance of not only generating innovative ideas, but also proactively ensuring that these innovations are relevant to market requirements, the latter being a crucial aspect of achieving success in several business contexts.

The study's originality (value) is multifold. The specific focus on the perceptions of female executives is significant, as it sheds light on a segment of the workforce that has been historically underrepresented in entrepreneurial ventures (Rocha & Van Praag, 2020) and corporate leadership positions (Hideg & Shen, 2019). Furthermore, the study's emphasis on established companies with women in their top management teams allows for insights into how technological innovativeness, entrepreneurial proactiveness, and company performance interplay in analogous corporate settings. The positive effect of technological innovativeness on entrepreneurial proactiveness highlights the positive role that technological innovativeness plays in fostering a proactive entrepreneurial mindset within the corporate environment.

This research provides support to the potentially beneficial outcomes of gender diversity in top management and leadership positions (Krishnan & Park, 2005; Smith, Smith, & Verner, 2006), particularly in business sectors, where technological innovation and proactive action are critical success factors. Companies managed by women demonstrate remarkable ingenuity and initiative, defying conventional gender norms. However, certain obstacles continue, such as enduring gender prejudices, which call for the consideration of business owners to create a welcoming and encouraging entrepreneurial environment that promotes the success of female managers. Business organizations are advised to foster a culture of technological innovativeness and entrepreneurial proactiveness to promote growth and enhance their overall economic performance in the long term. The above can be achieved by encouraging cooperation amongst various teams and departments, which will help to exchange knowledge and ideas, resulting in more creative solutions. Managers ought to dismantle organizational silos and provide chances for employees with different backgrounds to collaborate on innovative projects. It is crucial to provide employees with continual opportunities for learning and growth. In this direction, managers should fund training initiatives that develop technical proficiency, encourage an entrepreneurial spirit, and strengthen the organization's capacity for innovation. The cultivation of an entrepreneurial mindset among managers and employees, which (1) encourages experimentation, adoption of new technologies (such as artificial intelligence, automation and digitalization), research and development; (2) rewards employees who exhibit entrepreneurial proactiveness; (3) takes calculated risks and responds to market trends and emerging customer needs, is a critical success factor that all modern companies should aim at. This is particularly important in the face of rapid technological developments, growing uncertainty, changing entrepreneurial contexts, and dynamic markets.

Conclusion

Overall, this study concludes that the successful integration of technological innovativeness and entrepreneurial proactiveness promotes growth and flexibility in dynamic marketplaces, significantly improving a firm's overall performance. The empirical findings offer vital insights to scholars, business practitioners, and policymakers as firms navigate an unprecedented era of technological developments (especially in artificial

intelligence and digital transformation of businesses) and changing entrepreneurial environments. Going forward, promoting sustainable growth and competitiveness in established businesses will require a comprehensive knowledge of the complex relationships between technological innovativeness, entrepreneurial proactiveness, and firm performance. Technological innovativeness and entrepreneurial proactiveness support each other, creating a positive feedback loop in which the benefits of each are amplified. This symbiotic relationship is especially important given the speed at which technology is developing, as organizations need to not only adapt to change, but also take the lead in determining how their sectors will develop in the future. In a corporate environment that is constantly changing, companies that strategically use technology innovation to foster entrepreneurial proactiveness will be better able to manage uncertainty, seize new opportunities, and enjoy long-term success. Furthermore, entrepreneurial proactiveness emerges as a catalyst for improved company performance by identifying opportunities, navigating challenges, taking well-calculated risks, and cultivating a culture of innovation and adaptability. In a constantly shifting marketplace, companies that actively promote and encourage entrepreneurial proactiveness are likely to prosper, not only by attaining short-term victories, but also by setting the basis for enduring and robust long-term performance.

Nonetheless, the limitations of the present research provide fruitful opportunities for further research in this area. Despite the inherent difficulty in finding established companies with female executives in their top management teams, future research efforts could attempt to study larger samples across various sociocultural contexts to enhance the external validity of findings and allow comparisons. Future studies may also assess the proposed model against companies with diverse characteristics (e.g., established vs. new, small vs medium vs large, and female-led vs. male-led) and include additional variables in their analyses (i.e., latent and indicators).

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