Management Science Letters 11 (2021) 441–450

Contents lists available at GrowingScience

Management Science Letters

homepage: www.GrowingScience.com/msl

From the adaptation capacity to pioneering behavior in companies in the main cultural tourist destinations: Divergent effects of the dynamism of the environment

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C H R O N I C L E

Article history:
Received: June 20, 2020
Received in revised format: August 30 2020
Accepted: September 18, 2020
Available online: September 18, 2020

Keywords:
Adaptative capacity
Adaptability
Pioneering orientation
Technological dynamism
Market dynamism
Tourism

A B S T R A C T

The present investigation analyzes how the dynamism of the environment affect the relationship between the capacity of adaptation and the pioneering behavior in the companies of the tourism sector in Peru. The empirical study was carried out in 238 tourist companies located in the cities of Lima, Arequipa and Cuzco considered as a cultural heritage of Perú. Regarding to the results achieved in the study, the proposed model allows detecting a direct, significant effect between the ability to adapt and pioneering behavior, whose relationship is accentuated through market dynamism and technological dynamism, and is weakened by competitive intensity. This work contributes to the existing theory and demonstrates through practical application the linkage of the dimensions of the dynamism of the environment as drivers of adaptive capacity in companies in the cultural tourism sector that are necessary to obtain advantages for a behavior Pioneer in an existing competitive market.

1. Introduction

Currently we are in a situation of interconnectivity and dynamism typical of global trends in modern life, tourism is no stranger to this, becoming an activity that gathers the interest of visitors who are looking for a certain added value, knowledge and type of experience that it is completely associated with cultural tourism. Against this in Peru, tourism is the third most important economic activity, in recent years there has been an increase in per capita spending from $530.00 to $ 1054.00 per tourist, which reflects the great interest to the cultural and heritage attractions of the country in the world. In addition, it contributes 3.8% to the country's gross domestic product (GDP) according to data taken from the Tourist Observatory of Peru (BADATUR OTP n.d.) considering the levels of investment, foreign exchange generation and job creation in all activities related. The recognitions obtained in recent years are part of the evidence of the cultural, historical, folkloric and gastronomic wealth that ensures the sustainability of the quality of the WEF service (Schwab n.d.), which commits the companies studied to assume the responsibility of providing the products and services that allow visitors to have a rewarding experience that ensures the positioning of the cultural tourist destination (Cetin & Bilgihan 2016), showing the significance and development of the sector (Tom Dieck and Jung 2017). In addition, the interest in recognizing one of the pillars raised by the World Tourism Organization (UWTO) that acknowledge the importance of value, diversity and cultural heritage. The literature emphasizes the importance of cultural tourism, as an activity that involves many actions related directly and indirectly to the profitability of companies and the generation of foreign exchange for the country. This situation forces business to offer a service that involves adequate infrastructure, safety, and the design of novel products that guarantee customer satisfaction and requires developing an ability to adapt to permanent changes, raising the question to be solved: How does the ability to adapt influence pioneer behavior in the businesses of the cultural tourism sector?

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doi: 10.5267/j.msl.2020.9.023

Tourism companies have the possibility of assuming constant risks such as being the first to enter the market with new products, which is identified as pioneering behavior, also defined from two lines of research, first focusing on the moment of entry (Robinson and Fornell 1985; Song, Zhao, and Di Benedetto 2013), second identifying the factors that determine and influence the decision to assume the role of first-time entrant in the market, this being a consequence of the dynamic nature of the current environment (García-Villaverde & Ruiz-Ortega, 2007; Garrett et al., 2009; Song et al., 2013). A research has been found that concepts such as "pioneer", "first entrant" or "first mover" (Song, Zhao, & Di Benedetto, 2013) and it is (Lieberman & Montgomery, 1998) who proposed that the "first mover " depends of the moment pf entry to the market. This is why Carpenter and Nakamoto (1989) defines the pioneer as that company that introduces a product before others, (Golder & Tellis, 1993) also provides another definition: "Is the first company to sell in a new product category".

It is important to analyze the adaptive capacity, which is defined as the company's ability to observe and find opportunities in the environment (Chakravarthy, 1982), this is a process of searching for opportunities and has been analyzed as a component of Dynamic Capacities (Teece and Pisano 1994) which in turn is influenced by technological development, creating the need to adopt it to achieve its competitive advantage and ensure the sustainability of the organization (Oliver & Holzinger 2008). Technological dynamism is an important factor that, arises thanks to the rapid change that is taking place in the environment and consequently, the evolution of technology (Jaworski & Kohli, 1993), other authors add the degree of volatility of change and unpredictability generated by the advance of the environment (Hung & Chou, 2013) for this, the unpredictable rate of change that affects the management of managers to predict future events is considered important (Dess et al., 2012; Lumpkin & Dess, 1996). Furthermore, we develop market dynamism finding that (Deng & Dart, 1994) defines it as a set of interfunctional processes that involve activities that generate rapid changes in their products and services to satisfy the needs of their clients (Cui et al., 2006), this is why is about facing the uncertainty of this dynamic market through a continuous evaluation of strategies applied by the company, which means facing the challenge of using marketing techniques and strategies, to ensure its target audience, permanence and development (Kohli & Jaworski, 1990).

The competitive intensity known as the environment of rivalry existing in the company´s environment is defined as the level of threat, which the company coexists, (De Clercq, Thongpapanl, & Dimov, 2014) it affects the performance and results of the company (Kim and Atuahene-Gima 2010), so the different organizations are struggling to get the same resources and are not focused on directing efforts in another direction, such as searching for new opportunities, new products and new market niches (Auh & Menguc 2005). For this purpose, the main objective is to study how the adaptation capacity through market and technological dynamism is positively and significantly related to pioneering behavior, being weakened by competitive intensity, in companies in the main cultural tourist destinations. The contribution of this research focuses on interpreting the context of the pioneering behavior of these companies through the ability to adapt and the dimensions of the environment identified as technological and market. On the other hand, the relationship between adaptation and pioneering behavior that is negatively affected by competitive intensity in companies in tourist destinations. The results of this research show that both external factors favor the ability to adapt, towards the development of a pioneering behavior in a context of cultural tourism and in light of the scarce literature found as a consequence of previous analyzes in the tourism sector, this research highlights the contribution of the study empirical applied to 253 companies in the cultural tourism sector located in cities considered cultural heritage of Perú. This work is structured from the following sections: introduction, theoretical framework and hypothesis approaches, development of theoretical framework, methodology, discussion of results, conclusions, limitations, and future lines of research.

2. Theoretical Framework

2.1. Pioneering Orientation in cultural tourist destinations

The concept of pioneering guidance can be studied taking into account the factors that allow early entry and which focuses on results. In the case of the first approach, priority is given to the relationships analyzed, identifying factors that affect the moment of entry), other authors focus on the results that are achieved with respect to the moment of entry (Mueller et al. 2012). Also, some studies use concepts such as "pioneer", "first entrant" or "first mover" (Song et al., 2013) and it is (Lieberman & Montgomery, 1998) who wondered if the "first mover" is defined based on its entry into the market, supported by (Carpenter & Nakamoto 1989) that defines pioneer as that company that introduces a product before others, (Golder & Tellis, 1993) provides another definition: "the first company to sell in a new product category". The greatest advantage that a pioneer can get is to become the market leader, achieving higher initial income and being the first to put the product on the market, it will become a unique company, monopolizing the business temporarily (Kaličanin, 2008). Financially, it creates sources of income through patents, copyrights, and use of licenses; commercially, they develop image and market positions by being the first to place the product, achieving customer loyalty through the creation of a database of loyal (Thompson & Strickland 2003). Approaches were found to demonstrate that there is a positive relationship between the time of entry and the results achieved by the company (Szymanski, Troy, & Bharadwaj 1995). (Robinson and Fornell 1985) found that pioneers gain more market share than followers. (Tsai, MacMillan, & Low 1991) found that customer trust and loyalty, hand in hand with brand recognition, is positively related to developing a pioneering strategy. (Zeithaml, 2012) in such a way that it will take time for these competitors to imitate these new products, thus achieving, through the pioneering orientation, entry barriers are created, which will be achieved by taking advantage of the information and the knowledge that is informally shared (Parra-Requena, Ruiz-Ortega, & García-Villaverde 2011).

2.2. Ability to adapt in companies of cultural tourist destinations

For the present investigation we will focus on the capacity of adaptation defined as the ability of the company to identify opportunities that are in the environment trying to take advantage of them to enhance the characteristics of the company (Wang & Ahmed 2007), becoming a way to achieve improvements, making the company more competitive and giving the opportunity to place new products and services on the market (Tuominen, Rajala, & Möller 2004). In addition, it is important that managers develop the ability to adapt, generating responses in a timely manner that allow the company to maintain balance in the face of change (Teece & Pisano 1994). The literature shows that the development of adaptive skills is closely related to learning capacity, which identifies two types: the individual and internal, referring to the way in which each individual uses their abilities to internalize their own knowledge and so the company becomes collective and is identified by organizational learning, focusing on the environment of customers, competitors and institutional networks (Bierly 1995). Oktemgil and Greenley (1997) argue that there are three characteristics that can be identified in adaptability: the response or reaction of the organization to the opportunities presented by the market, the marketing activities that are carried out to respond to such situations and the time to take the first two steps (Chakravarthy 1982; Miles et al. 1978). Although it is argued that developing adaptive capacity can be extremely expensive (McKee, Varadarajan, & Pride 1989). Adaptive capacity has been studied showing that it helps to take advantage of the potential of social capital to transform it into a pioneering orientation (Zhang and Wu 2013). Furthermore, settings in developing countries such as Peru, adaptability is presented as a mediator between business alignment and agility (De la Gala & Arredondo, 2019). According to the aforementioned, the adaptation that companies must assume regarding the cultural resources of a city requires that it adapt to the tourist dynamic without losing the authenticity that characterizes the studied regions.

2.3. Determining role of technological dynamism in adaptive capacity

Various studies identify the dynamism of the environment made up of two dimensions: technological and market, which facilitate or neutralize the pioneering orientation (Suarez and Lanzolla 2007), taking into account this concept it is argued that the dynamism of the environment is directly related to a constant entry flow and exit in the industry, in addition with a high rate of changes in the behavior of demand, the strategies of competitors and technological advances (Boyd, Dess & Rasheed 1993; García-villaverde et al. 2020). In the literature is found the definition of technological dynamism as the range of unpredictable changes in the environment of a company and the effect of the ability of managers to predict future related events, taking into account the impact and response of the company (Lumpkin and Dess 2001). Some of the characteristics identified in the technological dynamism generate a shortening of the life cycles of products, an increase in new articles introduced to the market by competitors (Atuahene-Gima, Li, and De Luca 2006), in that same line it creates a new attitude based on innovation, in addition to seeking new, more efficient and effective opportunities (Rosenbusch, Rauch, & Bausch 2013). Some important studies found that the accelerated change in technology is recognized as a result of the growth of companies, considering how much of that technology it is capable of assimilating and / or using, as a determining factor identified by the size of the company, there is also a trend towards innovation when more technology is applied. Furthermore, technological diversification provides companies with the opportunity to enter different markets, to improve the functionality of existing products, (De la Gala, Zirena, and Arredondo 2020) confirming the positive effects on organizational results. Companies that have resources and technological capacity tend to be more innovative in the decision about being a pioneer or follower (Robinson & Fornell 1985). Technological dynamism has also been investigated by moderating innovation, as a result of companies that perform in an environment with intense technological development, that tend to make greater efforts to innovate products that allow them to compete in the market and with a greater propensity to innovate (Yu et al., 2016). In this regard, in cultural tourist companies, it is found that in environments of high technological dynamism, the ability to adapt to pioneering behavior is promoted because they are able to explore new opportunities and anticipate market entry.

2.4. Determining role of market dynamism in adaptive capacity

The dynamism of the market can be defined as the changes in the needs and expectations that consumers reflect (Pavlovich, 2014), based on this, various studies have collected arguments that integrate concepts on consumer behavior, technology management strategies and development of economy (Suarez & Lanzolla 2007), resulting in the market being segmented, adopting certain regulations that guarantee the safety of the actions of companies and stakeholders (Agarwal, Sarkar, and Echambadi 2002) also adding the performance of competitors such as Important element that stimulates the market and that is very difficult to predict (Wu & Nguyen 2019). Augusto and Coelho (2009) explore the relationship between market dynamism and the development of new products, the results indicate that this is moderated by innovative capacity, competitive strength and environmental forces. The pace of market growth has an impact on consumer preference, it was shown that the company's ability to avoid shortages of resources will depend on the way these resources are managed (Suarez & Lanzolla 2007). As tourism is such a dynamic environment, it is important to collect information on the new expectations of consumers, so that companies can adapt and make their way through the development of this capacity, promoting pioneering behavior in companies of cultural tourist destinations.

2.5. Competitive intensity

The literature found defines competitive intensity as the degree of competition that exists in the environment in which the company operates (Jaworski & Kohli, 1993), the degree of rivalry that makes consumers perceive that they can demand more

from organizations because it has more alternatives, in addition to being more demanding and having more sophisticated expectations, therefore they will be more pressured to meet the demands of their clients (Appiah-adu 1997; Wetzel, Hammerschmidt, and Zablah 2014), and will face the need to offer better costs and lower prices, probably to the detriment of their profitability (Miller 1983), which leads companies to seek new strategies to face the strong dynamism of the market, finding proposals in this regard such as redesign, component replacement and value management (De la Gala et al. 2020).

Some authors argue that when there is highly competitive intensity, managers focus on the problems generated by competitors and leave out key elements related to customers. On the contrary, it is important to provide due attention and manage to involve their consumers by creating commitment and loyalty, in turn it seeks to develop novel strategies that face changing circumstances (Chu et al. 2018), including adaptation of the organizational structure required to changing customer preferences. The reality of companies in cultural tourist destinations face great competition from small entrepreneurs who do not make their companies progress because they are focused on the actions of the competition and getting visitors, without focusing on offering quality services that guarantee potential clients, neglecting the development of external factors (market dynamism and technology) necessary to promote the ability to adapt to pioneering behavior in the tourism sector.

H1: Adaptive capacity positively and significantly influences pioneering behavior in tourism companies.

H2: Adaptive capacity and competitive intensity positively and significantly influence pioneering behavior and market and technological dynamism do not influence pioneering behavior.

H3 Market dynamism and technology through adaptive capacity positively and significantly influence pioneering behavior

H4: Competitive intensity weakens the positive and significant relationship of adaptive capacity in pioneering behavior.

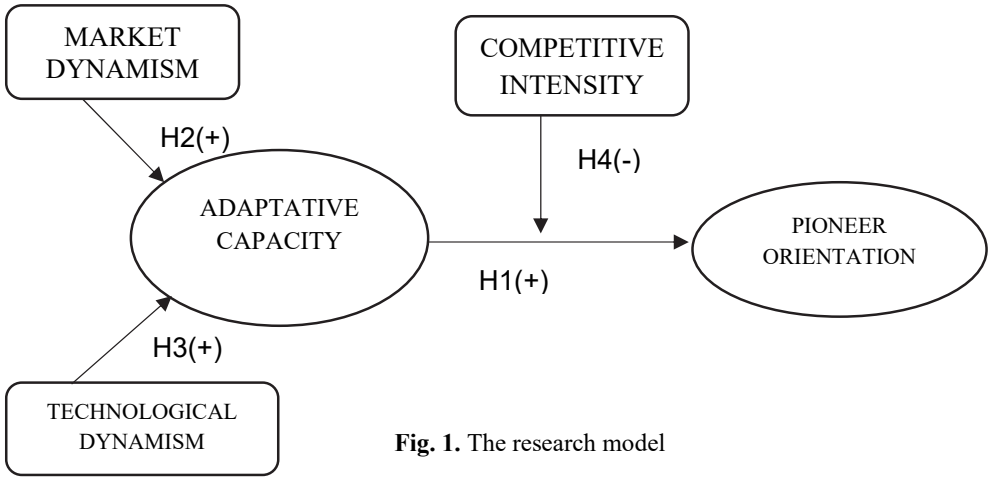

Fig. 1. The research model

3. Methodology

3.1. Population and sample

To carry out this research, a population of 3,131 companies from the tourism sector registered as formal companies in the Superintendency of Tax Administration (SUNAT) was taken, of which a sample of 238 companies from the tourism sector located in the cities of Arequipa, Lima was and Cusco (Which have been recognized as a World Heritage Site in Peru) which identify activities are restaurants, hotels, travel agencies and tourist guides that have been offering their services to 4.4 million tourists who arrived in Perú in 2018, generating income that benefited companies of around 4895 million dollars, according to publications by the Ministry of Foreign Trade and Tourism of Peru (MINCETUR). The sample taken had the following characteristics: travel and tourism agencies, lodging, restaurants, bars, museums and tourist places. Likewise, there was a response rate of 27.42, the same that has a representativeness of the sample for an effect size of 0.15, an error α 0.05 with a statistical power of 0.95, according to (Erdfelder et al., 2009).

3.2. Analysis procedure and techniques

The questionnaire was applied in a personalized way to the managers of the cultural tourism companies, once the information was collected, the tabulation and analysis were carried out, using the partial least squares technique (Partial Least Squares) widely used in social science research (Chin 1998). This was carried out in three moments: In the first, a descriptive analysis of the study population was carried out, in the second, an analysis of the measurement model was made, and then the structural model was worked on (Hair et al., 2017). In addition, the evaluation of structural equation models using partial least squares implies that it is carried out by analyzing two models, the first called the measurement model where the reliability and validity

of the research constructs is evaluated, and the second known model as structural where the direct and indirect relationships of the proposed theoretical model are evaluated.

4. Results

4.1. Descriptive results

Performing the descriptive analysis of the main control variables, we have that the companies have an average age of 12.70 years, with 12.89 workers and the sales generated by foreign tourism is 66.49%, as can be seen in the following table.

Table 1
Descriptive analysis of the main control variables

Descriptive Statistics	Age	Workers	% Sales
Valid	238	238	238
Missing	0	0	0
Mean	12.70	12.89	66.49
Std. Deviation	11.96	11.86	20.56
Minimum	1.00	4.00	5.00
Maximum	93.00	75.00	100.00

Source: Prepared by the authors

4.2. Measurement model evaluation

The evaluation of a measurement model in Partial Least Squares (PLS) is intended to assess the reliability and validity of the constructs studied in the research. Regarding Reliability, it has been estimated in its internal consistency of the constructs analyzed using the composite reliability (Fornell & Larcker 1981) and the Rho of (Dijkstra and Henseler 2015), with the following results, all the variables under study, they exceeded the acceptance level of >0.7, as can be seen in Table 2. Regarding the convergent validity of the constructs, these were assessed using the extracted mean variance (AVE), observing that all the constructs have values 0.5 and in the case of discriminant validity, it was analyzed using the criterion of (Fornell & Larcker 1981) and Hetero Trait Mono Trait (HTMT), (Henseler, Ringle & Sarstedt 2014) finding that the diagonal values are higher for both the upper rows in the case of HTMT and lower for the criterion of (Fornell & Larcker 1981). The following table shows what was commented in the previous paragraphs.

Table 2
Analysis of reliability, convergent and discriminant validity of the constructs

	Reliability Internal Consistency		Convergent Validity	Discriminant Validity (Forner y Larcker Criterium and HTMT)				
	RHO Dijkstra	Composite reliability	AVE	Adaptability	Competitive Intensity	Market Dynamism	Pioneering Orientation	Technological Dynamism
	>0,7	>0,7	>0,5					
Adaptability	0.778	0.869	0.688	**0.830**	0.54	0.512	0.6	0.565
Competitive Intensity	0.786	0.865	0.681	0.429	**0.825**	0.208	0.628	0.356
Market Dynamism	0.755	0.839	0.636	0.379	0.162	**0.798**	0.237	0.806
Pioneering Orientation	0.887	0.927	0.810	0.502	0.534	0.196	**0.900**	0.361[1]
Technological Dynamism	0.705	0.785	0.564	0.428	0.224	0.525	0.279	**0.751**

Note: Values in italic and bolds diagonally down correspond to the convergent validity analysis of Forner and Larcker, values above this diagonal correspond to the analysis Hetero –trait-monotrait, Henseler, Ringle and Sarsted, (2015). Source: Prepared by the authors

4.3. Evaluation of the structural model

4.3.1 Structural model 1: Influence of adaptive capacity on pioneering behavior.

The model values the direct positive and significant relationship of adaptive capacity in pioneering behavior, in this regard the following results are observed, first there is a positive and significant relationship between adaptive capacity and pioneering behavior with a path coefficient of 0.494 ****, the level of explanation of the highest model since it has a coefficient of determination of R2 = 0.267 ****, that is, the ability to adapt explains 26.7% of the pioneering behavior in this model, in addition to the SRMR, which analyzes the global goodness of fit is 0.062, lower than that suggested by (Hu and Bentler 1998), with these results hypothesis 1 is accepted: The ability to adapt influences pioneering behavior in tourism companies directly and significantly Cultural in Peru. This can be seen in the summary Table 7

Table 7 shows the values of the direct effect of adaptive capacity on pioneering behavior, with their path coefficients and confidence interval.

4.3.2 Structural model 2: Influence of adaptive capacity, dynamism of the environment: Competitive rivalry, market dynamism and technological dynamism in pioneering behavior

This model evaluates the direct positive and significant relationship of the ability to adapt, the competitive rivalry of the sector, market dynamism and technological dynamism in pioneering behavior. The model results show an increase in the level of explanation with a determination coefficient of R2 = 0.406 ****, however, the path coefficients of market and technological dynamism are not significant. Furthermore, the global adjustment of the model is SRMR = 0.072, lower than the acceptance level of 0.08 suggested by (Hu and Bentler 1998). Regarding the hypothesis proposed in the theoretical model, we have to comment that It is partially accepted because the results do not show direct significant relationships between market and technological dynamism with pioneering behavior when path coefficients of -0.047 and 0.070 respectively are observed. On the other hand, adaptability and pioneering behavior if they have direct, positive and significant relationships when showing "t" values of 4,333 **** and 60.24 **** respectively, this part of the hypothesis is accepted. This can be seen in the following table and in Table 7 comparative summary of the models.

Table 4
Analysis of the direct relationship model of adaptive capacity, market and technological dynamism and competitive rivalry

Mediation	Direct Effect	95% Confidence Interval of the Direct Effect	"t" Value	Significance (p < 0.05)	Condition
Adaptability→ Pioneer behavior	0.310	(0.169 --- 0.450)	4.333	0.000	Significant
Technological dynamism→ Pioneer behavior	0.070	(-0.066 --- 0.202)	1.049	0.294	Insignificant
Market Dynamism → Pioneer behavior	-0.047	(-0.216 --- 0.075)	0.654	0.513	Insignificant
Competitive Intensity → Pioneer behavior	0.392	(-0.256 --- -0.514)	6.024	0.000	Significant

Source: Prepared by the authors

4.3.3 Structural model 3: Mediation of market and technological dynamism in pioneering behavior through adaptive capacity

The model shows the mediation that market dynamism and technology have in pioneering behavior through adaptive capacity, globally an R2 = 0.239 **** is observed, with a low level of explanation, however, it is finds that market and technological dynamism have positive and significant mediations with 0.171 *** and 0.092 ** respectively, in addition, the model globally has an SRMR of 0.068, lower than the acceptance level of 0.08 suggested by (Hu and Bentler 1998). The hypothesis of this model proposes a significant indirect relationship, of market and technological dynamism in pioneering behavior through the ability to adapt, this hypothesis is accepted as they have "t" values of 2,359 ** and 3,739 **** corresponding. However, a decrease in the determination coefficient is observed, which implies that this mediation does not increase the level of explanation that these variables have as a whole. The results previously exposed can be found in the following table and in Table 7 comparative summary of the models under study:

Table 5
Analysis of the market and technological dynamism mediation model in pioneering behavior through adaptive capacity

Mediation	Direct Effect	95% Confidence Interval of the Direct Effect	"t" Value	Significance (p< 0.05)	Condition
Adaptability → Pioneer Behavior	0.469	(0.314 ---0.604)	6.223	0.000	Significant
Technological dynamism → Pioneer behavior	0.080	(-0.085 --- 0.240)	0.965	0.335	No Significant
Market Dynamism → Pioneer behavior	-0.052	(-0.230 --- 0.100)	0.625	0.532	No Significant
	Indirect Effect	95% Confidence Interval of the Direct Effect	"t" Value	Significance (p< 0.05)	Condition
Technological dynamism → Adaptability → Pioneer behavior	0.171	(0.091 --- 0.274)	3.739	0.000	M indirect (Full)
Market dynamism → Adaptability → Pioneer behavior	0.092	(0.024 --- 0.178)	2.359	0.018	M indirect (Full)

Source: Prepared by the authors

4.3.4 Structural model 4: Moderation of competitive intensity between adaptive capacity and pioneering behavior and mediation of market and technological dynamisms in pioneering behavior through adaptive capacity

This model proposes an analysis of direct and indirect relationships, which explain at a higher level, the pioneering behavior based on the ability to adapt directly and competitive rivalry, market dynamism and technology indirectly. The global results show an important coefficient of determination of 0.431 ****, the best being the SRMR global adjustment index is 0.071 value lower than the acceptance level of 0.08 suggested by (Hu & Bentler 1998). The direct relationships of the model show positive and significant values in the relationship of adaptability and competitive rivalry with respect to pioneering behavior with values of 0.2550 **** and 0.3870 ****, correspondingly. In contrast, the relations of market and technological dynamism are not significant with values path -0.045 and 0.048 and "t" 0.634 and 0.683, respectively. The moderation analysis of the competitive intensity in the direct relation of the adaptive capacity in the pioneering behavior is significant and negative, this implies that the competitive intensity dissuades the pioneering behavior of the entrepreneurs of the tourism sector under study. By having a path coefficient of -0.133 and a value "t" 3,272 ***. On the other hand, the mediation analysis of the model where the market and technological dynamism in the pioneering behavior are given through the ability to adapt is positive and significant, having path coefficients of 0.050 ** and 0.093 *** respectively and In the same way, they present "t" values of

1,972 and 3,003 above the acceptance level, which makes it clear that there is a level of mediation in the model, which has an indirect mediation characteristic. We present Table 6 that shows the exposed model, in addition it is also found in table 7 comparative summary of the models

Table 6
Analysis of the moderation model of competitive rivalry between adaptive capacity and pioneering behavior and mediation of market and technological dynamisms in pioneering behavior through adaptive capacity.

Moderation Mediation Model Dependent Variable: Pioneer behavior					
Mediation	Direct Effect	95% Confidence Interval of the Direct Effect	"t" Value	Significance ($p < 0.05$)	Condition
Adaptability→ Pioneer behavior	0.225	(0.119 --- 0.396)	3.5560	0.000	Significant
Technological dynamism → Pioneer behavior	0.0480	(-0.093 --- 0.179)	0.6830	0.4950	NO Significant
Market Dynamism → Pioneer behavior	-0.0450	(-0.196 --- 0.082)	0.6340	0.5260	NO Significant
Competitive Intensity → Pioneer behavior	0.3870	(-0.256 --- -0.499)	6.1700	0.000	Significant
	Indirect Effect	95% Confidence Interval of the Indirect Effect	"t" Value	Significance ($p < 0.05$)	Condition
Technological dynamism →Adaptability → Pioneer behavior	0.093	(0.013 --- 0.115)	3.003	0.003	M Indirect (Full)
Market Dynamism → Adaptability → Pioneer behavior	0.050	(0.043 --- 0.170)	1.972	0.049	M Indirect (Full)
Moderation	Indirect Effect	95% Confidence Interval of the Indirect Effect	"t" Value	Significance ($p < 0.05$)	Condition
Competitive Intensity/ Adaptation→ Pioneer behavior	-0.1330	(-0.222 --- -0.062)	3.272	0.001	Moderation

Source: Prepared by the authors

In summary, we can comment that of the four models evaluated, the fourth structural model of mediated moderation is the one that registers a higher level of explanation, having an R^2 of 0.431 *** with a global adjustment level SRMR of 0.071, this has important implications both theoretical and practical in the management of the variables studied, the same ones that will be analyzed in the following section.

Table 7
Comparative analysis of the research models

	Model 1	Model 2 Directs H2	Model 3 Mediation H3	Model 4 Moderation Mediation H4
Adaptability	0.494****	0.310****	0.469****	0.255****
Technological dynamism		0.070	0.080	0.048
Market dynamism		-0.047	-0.052	-0.045
Competitive intensity		0.392****		0.387****
Mediation: Technological dynamism → Adaptability → Pioneer behavior			0.171****	0.093***
Mediation: Market dynamism → Adaptability → Pioneer behavior			0.092**	0.050**
Moderation: Competitive intensity↓ Adaptability → Product Redesign				-0.133***
Age	-0.142	-0.132**	-0.147****	-0.145**
Size	0.108	0.136**	0.112**	0.165***
R^2	0.267****	0.406****	0.239****	0.431****
SRMR	0.062	0.072	0.068	0.071

Source: Prepared by the authors

4. Discussion of results

This paper analyzes how the market dynamism, technology and competitive intensity, have divergent effects on the influence of the ability to adapt on the pioneering behavior of companies in cultural tourist destinations in Peru. First, the study suggests the existence of a positive and significant relationship between adaptive capacity and pioneering behavior, in accordance with studies carried out on the influence of resources and capacities on pioneering behavior applied to companies in the technology sector (García-Villaverde et al., 2012), being the ability to adapt part of these dynamic capacities, the same behavior is expected. In addition, it contributes to the little development of the existing literature, the result of applied research in the tourism sector, determining that the pioneering behavior depends fundamentally on the resources and capacities of the companies and that they are also conditioned by environmental factors (Pedro Manuel García-Villaverde and Ruiz-Ortega 2011; Zachary et al. 2015). As stated in the hypotheses, market dynamism and technological dynamism through adaptive capacity improve pioneering behavior and this mediation is total, that is, both dynamics do not directly affect pioneering behavior, they only do so through adaptive capacity. This is in line with the work of (García Villaverde & Ruiz Ortega, 2007) where the influence of market and technology conditions on entry time is analyzed, finding a positive direct relationship that is not more significant. It follows that, thanks to market conditions and technological development, companies in the tourism sector can find new opportunities that allow them to adapt their work systems to the new requirements they impose. On the other hand, the results achieved in the research show a contrasting effect of competitive intensity on the relationship of adaptive capacity with pioneering behavior, weakening this relationship, this due to the fact that in circumstances in which entrepreneurs in the sector

operate cultural tourism, focus on maintaining their competitive position in the market, losing interest in creating new products that capture the attention of their clients as proposed (Chu et al. 2018) and confirmed by (González-Benito et al., 2014). The objectives proposed in the research have been achieved and can be seen in section 4 of this study, thus achieving the mediating role of the ability to adapt between market and technological dynamisms with pioneering behavior. Along the same lines, it has been possible to understand how competitive intensity moderates said relationship in a negative way. In short, the dynamism of the market, technology and competitive intensity have various roles, characterizing clients with expectations looking for opportunities and novel experiences, hoping to access services through applications and virtual platforms, identifying a large offer of tourist products, this conglomerate of Variables affect the ability to adapt to search for new markets, identifying pioneering behavior in companies in the cultural tourism sector in Perú.

5. Conclusions and implications

The main contribution of this research is to empirically demonstrate that adaptive capacity influences pioneering behavior through market and technological dynamism and is weakened by competitive intensity in companies in the cultural tourism sector, contributing to the development of the literature that to date it is extremely scarce in the context of tourism, contributing to the identification of determinants to achieve pioneering behavior in the organization. Regarding the practical implications, it is possible to make some proposals to the entrepreneurs of the tourism sector companies as a consequence of the results achieved in the structural model. Regarding the ability to adapt, it is proposed that managers promote the development of this ability (Oktemgil and Greenley 1997) that allows the company to face the current demands that the tourism market will present in current circumstances as a consequence of the pandemic that all countries face. of the world. It is undeniable that the main concern of the tourism sector should focus on the new way of offering the service, taking into account the opportunities offered by the market in terms of market dynamism, which should be analyzed through changes in the purchasing and consumption habits of the tourists, identified tastes, needs and security demands in response to what we lived in times when we faced COVID-19, on the other hand, the use of technological tools that force a digital transformation must be involved, identifying the use of social networks, Applications and blogs as simple mechanisms to reach customers, but which will require some specialization in workers identifying a total adaptation to technological environments, without which it would be impossible to survive (UNWTO - World Tourism Organization 2020). For example, offering a new way to plan a trip with well-designed sales protocols that can include up to a virtual preview, so that the company can develop competitive advantages (MINCETUR - Ministerio de Comercio Exterior y Turismo and PromPeru 2020). Along the same lines, pioneering behavior is considered a fundamental element in the management of business in the tourism sector, especially in developing countries such as Peru, these businesses will have to manage their ability to adapt as a priority, given on the recent pandemic events caused by Covid-19 (PhocusWright, List, and May 2020), it is necessary to mention that the data of the present investigation was collected between the months of January and February of the year 2020, just before the appearance of this virus in Peru, this phenomenon will require managers of tourist establishments to assume the challenge of being first entrants in the market, since the return to the new normality, and the need to reactivate the sector puts entrepreneurs facing a very difficult scenario. expectant and fundamental for the survival and development of these companies in the tourism sector that have been hit hard globally. Several limitations are recognized that may affect the generalization of the results to a current situation, firstly, it is a cross-sectional study, a longitudinal study not having been applied due to time limitations, however, the proposed objectives were achieved, demonstrating the hypotheses proposed. Second, bias is assumed in the results obtained by the individualized perceptions of the managers of the surveyed companies, however, they reflect the management style applied in the organizations. Another factor that can be considered as a limitation is the scarce literature related to the variables studied in cultural tourism contexts, less at the regional level. As new lines of work, we propose the fact that there is probably an opening of cultural tourism at the national level for each country, and then move on to regional and then global contexts. Likewise, work will be required to analyze new factors that affect the dynamics of the environment.

Acknowledgements

This research is the result of a project promoted with the Universidad Nacional de San Agustin de Arequipa, under grant number N°IBACS-03-2020-UNSA, to whom we are grateful for the support. Also, the authors wish to thank the anonymous reviewers for constructive comments on earlier version of this paper.

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