

## Organisational readiness to participate in a labelled product service cluster: a structural equation model analysis

### RESEARCH ARTICLE

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### Abstract

In the present competitive environment, organisations must inevitably progress to gain and maintain a long-term competitive advantage. Hence, organisations must embrace organisational readiness for change (ORC), which denotes the level of preparedness of an organisation to adopt a change through deploying new management strategies and new projects. This study evaluated the ORC of 70 Moroccan SMEs involved in the sector of labelled agri-food products to join a future innovative cluster. Three dimensions were employed to measure ORC, namely organisational culture, motivation, and climate. Partial least squares-structural equation modelling (PLS-SEM) was used to examine the impact of ORC dimensions on the perceived benefits for the firm. The findings demonstrate that the human factor appeared to be more favourably disposed to change. Organisational motivation displayed a significantly positive effect on perceived benefits through minimising production costs when working together in innovative projects. Despite this, the impact of organisational climate and culture was insignificant. This shows that the selected firms need more support to adopt new changes through integrating a new service cluster and, cooperating together in innovative projects. Our study may support SMEs, policymakers, and researchers in devising guidelines that promote better practices for the agro-food SMEs to function effectively.

**Keywords:** organisational readiness, small and medium enterprise, labelled products, Morocco, PLS-SEM  
**JEL code:** O22

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## 1. Introduction

The role of small and medium enterprises (SMEs) has been emphasised across developed and developing countries due to their contribution to economic progress (Nyoni and Bonga, 2018). Despite generating employment opportunities, creating wealth, and flourishing the economy, SMEs seem to face several challenges in offering innovation and adding value to the market (Nyathi *et al.*, 2018). Much effort has been made to establish adapted policies that enhance both the ability and the capacity of SMEs worldwide to ascertain regeneration, as well as social and economic progress (Meshram and Rawani, 2019). Significant attention has been given to achieve SME performance through public subsidies, investments and programs, which are required to guarantee growth in firms and sustainability of their activities (Naala, 2016).

Nevertheless, the potential of SMEs is still underestimated in many countries due to firm weaknesses and inconveniences related to market instability, limited external and internal resources, difficulty in gaining credit, limited experience, as well as lack of expertise in administrative and operational management. SMEs are still facing major challenges to reach their goals, especially in emerging economies, where the economic pressure is higher (Blair, 2010). The World Bank (2014) report on world development indicators, for instance, illustrated the paradoxical situation experienced by SMEs in underdeveloped countries, where business creation is in continuous evolution while innovation efforts are scarce.

Due to the significant contribution of SMEs to social and economic progress in developing countries (Dlamini and Schutte, 2020), further understanding of their organisational readiness is crucial to address the root causes of problems related to the organisation culture (Sebastian-Coleman, 2013). Organisational readiness is a form of synchronisation among processes, systems, and employers to measure the preparedness of a company to adopt and implement a major change by deploying new management strategies and new projects in a setting where coordination and communication are key to attain success (Greeff and Ghoshal, 2004). Looking at organisational readiness prior to the change is an integral strategy that hinders problems from popping up during the project phase (Giles, 2015). The assessment of organisational readiness for innovation through joint projects is needed, as long as decisions made by SMEs are affected by their organisational readiness, external pressure, and outcomes (Levy and Powell, 2005).

The main purpose of this study is to assess the relationship between organisational readiness, as measured through three dimensions (organisational culture, climate, and motivation), and perceived benefits of firms producing labelled products in Morocco. ORC is measured by assessing perceived outcomes of a future implementation of a service cluster to start innovative projects among the member companies. To meet the challenges of globalization and international competitiveness, Morocco, a pioneer country in Africa, has focused on improving the content of industrial policies through its industrial emergence and acceleration plan based on innovation and territorial attractiveness (Boustane, 2020). The strategic choices adopted by Morocco during the past decade have placed the country on a path of openness and progress by supporting innovation and economic development and keeping it as a priority. This is in line with the country's strategy to improve its competitive position and create an adequate ecosystem that includes various institutions and companies which can provide innovative solutions (El Mokri, 2016). By developing a solid positioning as a technology producer, the country has attracted numerous international investors. Furthermore, the establishment of an ecosystem supporting the development of technology transfer and innovation has been fostered. One of its objectives is to promote cluster development, which effectively generates collaborations and projects with high R&D content (Amine, 2016). The purpose is to stimulate the development of new ideas and innovative products and services and allow companies in the cluster to compete in the global market (Lachgar and Benmoussa, 2021).

As the world's economy integrates continuously, cluster development is the ideal response to globalization. Creating a cluster can help stimulate local economies by improving the conditions for individuals and businesses. Indeed, forming a cluster can generate a competitive advantage, such as lower prices, better productivity, and faster innovation (Bakala, 2017). By focusing mainly on labelled local products, the cluster

can play a major role in the future positioning, whether in the national market or internationally. Indeed, Morocco is a leader in geographical indications at the African level. According to the study by the African Union (2018), only 10 out of 216 local products are accredited and labelled in 26 African countries, while during the same period, Morocco already had 53 labelled local products. Morocco's favourable positioning and experience can be used to drive the development of the continent's local products.

Thereby, the present study contributes to the literature pertaining to organisational readiness for change (ORC) in three ways. This study is the first of its kind to explore firms producing labelled products in Morocco by evaluating the impact of ORC on firm perceived benefits. Second, it complements the organisational readiness literature, especially in the agro-food sector in general and the sub-sector of labelled products in particular, which received limited attention. Third, this study evaluated organisational capacity by determining aspects that a firm should weigh in to enhance its resources and its ability to implement new policies, programs, and practices. The effect of ORC is assessed through an examination of the firm's production costs, profit margin, and resources enhancement. Fourth, this study assesses the priority factors deemed vital for SMEs that demand improvement. Besides, understanding the results will make it possible to evaluate the progress level of companies while focusing on the points that need to be corrected. In fact, the study determines the predisposition of SMEs involved in labelled products to innovate within a cluster and to distinguish indicators that should be improved to ascertain the continuous growth of companies in a highly competitive environment. Finally, the study highlights dimensions/indicators that are more or less resistant to change (e.g. human factor, working environment and strategies) in order to be helpful to managers seeking to enhance labelled products performance.

## 2. Literature review and hypotheses development

### 2.1 Organisational readiness for change and innovative clusters

Change in management is the core competency of organisations (Pimentel, 2008). Redefining organisational strategies and missions, anticipating customer needs, and preparing for market changes are some integral elements to an effective change management process (By, 2005). This process facilitates a firm to meet its goals, enhance its systems, and improve its work environment (Lines, 2005). The classical change theory initiated by Lewin (1951) upholds that the change agent must go through three phases before it can be embedded into a system. The first phase refers to the unfreezing phase that is characterised by unfreezing of forces to retain its status quo. Next, in the movement phase, appropriate strategies are identified, planned, and executed. Finally, the refreezing phase is marked by stable change and strengthened adaptation effort.

An effective change management process implies a prior organisational readiness to embrace, accept, and adopt a specific plan to alter its present structure, culture, strategy or products (Furxhi and Dollija, 2021). In light of readiness, a firm is evaluated if it is ready to undergo and adopt change and its subsequent outcomes (Mrayyan *et al.*, 2008).

Various dimensions have been determined from the literature as determinants of change that can influence the organizational readiness process. The three key dimensions of organisational readiness are the motivation, culture, and climate within an organisation (Butterfoss *et al.*, 2008; Mrayyan *et al.*, 2008; Scaccia *et al.*, 2015). As defined by Schein (1990), organisational culture refers to the acquired and common beliefs; rules that govern the organisational environment and control employee behaviour; as well as the language and material symbols that exist in an organisation. This definition had been based on a three dimensional approach consisting of assumptions, values, and artefacts. Depending on the deployed organisational change, organisational culture may either dampen or amplify the valence of change (Weiner, 2009). The OCR is supported when the organisational culture weighs in learning, innovation, and risk-taking (Eby *et al.*, 2000; Jones *et al.*, 2005). Based on a comprehensive review of information systems and culture, Leidner and Kayworth (2006) found that organisational culture could affect successful deployment. It is an essential determinant of both identity and capabilities of medium and large enterprises (Mecev and Grubisic, 2020),

which can enable firms to achieve success and ensure business process management (Schmiedel *et al.*, 2014). Organisational climate, on the other hand, is described by Butterfoss *et al.* (2008: 343) as 'the unique mood or personality of an organisation'. Individual perceptions, as well as shared attitudes and feelings in the work environment define organisational climate and can positively or adversely affect the general behaviour of individuals, as it controls some essential factors, namely trust, commitment, support, communication, pressure, equity, and cohesion at workplace (Castro and Martins, 2010; Koys and DeCotiis, 1991). Indeed, organisational climate is a critical linkage that transforms organisational management and resources into actual organisational performance (Hong *et al.*, 2013). Some studies have reported the correlation between climate and organizational outcomes (Barber, 2010; Lucano *et al.*, 2020; Von Treuer *et al.*, 2018; Zohar, 2000), while others have revealed mixed results. Upon assessing the relative importance of various climate dimensions, Schulte *et al.* (2009) found that organisational climate was differentially linked to outcomes. The third dimension – organisational motivation is considered a stimulating element in the perception of incentive or disincentive to implement organisational change. It refers to the belief in change, and then, support for change that contributes to the organisation enhancement (Scaccia *et al.*, 2015).

Factors that trigger the firm's readiness for change process when a firm faces certain situations are related to the costs and benefits associated with the change, external requests to force change, and risks of failing to change (Cunningham *et al.*, 2002). Although readiness is an essential factor that dictates successful change deployment (Flaspohler *et al.*, 2012), studies in this area appear to be scarce (Dalton and Gottlieb, 2003; Lim and Antony, 2016), particularly at the organisational level (Weiner, 2009). As noted by Anthony (2014), more empirical investigations are needed to shed light on this topic as the ORC nuances may be misinterpreted easily due to the lack of direction for continuous improvement. Organisational readiness is crucial in bridging the gaps noted among practical implementations, prevention based on evidence, and effective intervention strategies (Scaccia *et al.*, 2015).

According to Mohd *et al.* (2017), organisational readiness is essentially related to communication and trust in management. According to Crnic and Lamberty (1994), the readiness for change can be affected by contextual factors (level of noise), personal factors (motivation), and situational factors (the subject matter). Similarly, Dunphy and Stace (1993) asserted that a firm must look into several features to embrace considerable change, including the communication system, its goals, policies, values, as well as systems and structures. Scaccia *et al.* (2015), distinguished three categories: the organisation's ability to embrace change, the motivation to implement change, as well as the competencies and skills needed to achieve the objectives.

Organisational readiness has attracted interest in the domain of organisational change management (Burnett *et al.*, 2010; Scaccia *et al.*, 2015; Weiner, 2009). Numerous studies have examined OCR by focusing on specific topics, such as the implementation of electronic record system (Kabukye *et al.*, 2020); the logistical and occupational risks for change (Cunningham *et al.*, 2002); motivators and conflict-handling intentions (Mrayyan *et al.*, 2008); motivational readiness, institutional resources, organisational climate, and staff attributes in embracing change (Billsten *et al.*, 2018); technology readiness and organisational performance (Rahnavard *et al.*, 2016); employee readiness for management, trust, and commitment (Samaranayake, 2017); quality practices prior to lean deployment (Inuwa, 2020); planning and management (Ritchie, 2008); serving local indigenous cuisines (Bondzi-Simpson and Ayeh, 2019); as well as digital transformation and innovation (Halpern *et al.*, 2021). Studies have largely focused on the health sector, while limited attention is given to the agro-food industry, e.g. through research on the implementation of halal assurance systems for a good traceability system (Abd Rahman *et al.*, 2017), smart technologies (Facchini *et al.*, 2018), statistical process control (Lim and Antony, 2016), employees' perceived fairness (Xu and Payne, 2016), nutrition-sensitive value chains (Wesana *et al.*, 2018), and nutrition-focused food pantry services (Wetherill *et al.*, 2018).

The significance of readiness has been linked to the successful deployment of creative ideas and innovative strategies in any organisation (Powell *et al.*, 2012; Scaccia *et al.*, 2015). Having a strategic direction and a clear plan allow an organisation to be prepared in deploying new change (Kotnour, 2011) and achieve the desired outcome (Aarons *et al.*, 2011). Organisational culture and motivation, as well as trust management

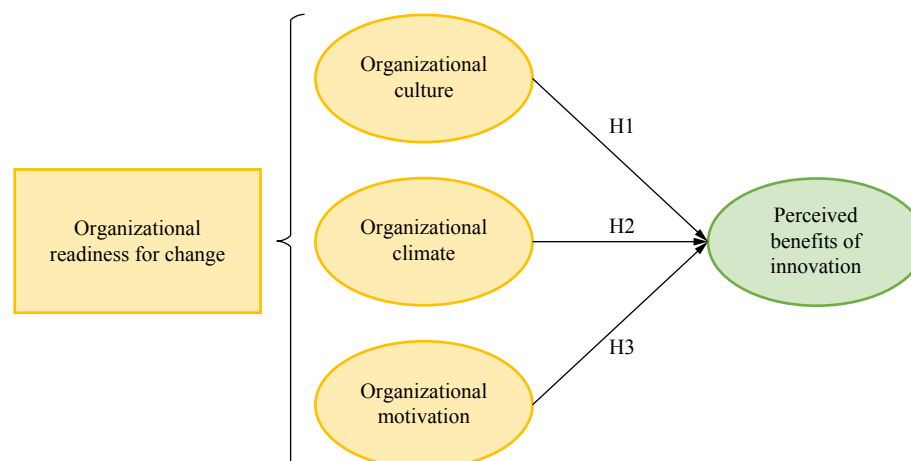
and commitment of staff, are pivotal when a firm wishes to implement new changes, especially when the change requires undertaking innovative projects through working with other firms (competitors) via clusters.

There is considerable discussion regarding the benefits obtained by companies located in an innovative cluster (Bembenek and Kowalska, 2016). Through their key features, clusters can facilitate access to resources, reduce transport costs, provide wider access to the domestic market, and create a challenging environment that enhances motivation (McPhillips, 2020). In fact, companies' proximity enables them to exchange knowledge and insights and increase their innovative strategies. To date, the direct relationship between clusters and innovation has not yet received much attention in the literature (McPhillips, 2020). Few studies have attempted to tackle the complexity of this relationship by focusing on the potential role of clusters. Chesbrough *et al.* (2014) outlined a serious need to increase the understanding of the intra-organizational features of innovation. Castro (2015) identified how cluster innovation-based in setting up networks to facilitate cooperation and knowledge sharing. For instance, Berthinier-Poncet *et al.* (2018) confirm how the innovativeness of member companies can be positively affected by cluster management, particularly on Swedish, French, and German clusters. There is empirical evidence emphasizing the contribution of clusters to stimulate and create an innovative ecosystem and improve cooperation between members (Di Minin and Rossi, 2016; McPhillips, 2020). Through accurate strategies, clusters involving many companies can identify innovative initiatives and capitalise on them so as to create a developed ecosystem.

## 2.2 Conceptual model and hypotheses

In order to empirically assess the associations between firm perceived benefits and ORC (culture, climate, and motivation), three hypotheses were formulated. Figure 1 illustrates the conceptual model and the hypotheses.

- H1:** The organizational culture influences significantly and positively the perceived benefits of the innovation by joining a cluster of labelled products.
- H2:** The organizational climate influences significantly and positively the perceived benefits of the innovation by joining a cluster of labelled products.
- H3:** The organizational motivation influences significantly and positively the perceived benefits of the innovation by joining a cluster of labelled products.



**Figure 1.** Proposed conceptual model.

### 3. Methods

#### 3.1 Data collection and sample

In examining the associations of ORC dimensions with perceived benefits of innovation, agro-food SMEs involved in the sub-sector of labelled products were targeted for sampling. The investigation covered particularly the rural areas where these products are prevalent. Four months in 2020 were spent to investigate the labelled products, which included: 47 protected geographical indications (PGIs); 6 protected designation of origin (PDO); and 2 agricultural label (AL). The labelling of agricultural products was included in the Green Morocco Plan's Pillar II devoted to the betterment of sustainable and supportive agriculture (MAPM-DREF, 2019). This strategy was implemented to promote the quality and origin of products. Since its launch, 66 local products have been labelled throughout Moroccan territory. These include Argan and olive oils, fresh and dried fruits, aromatic plants, and animal products and their derivatives. This process involves identifying and promoting local products and improving the living conditions of the rural communities. It also aims to preserve the environment and promote farming by supporting the development of sustainable farming techniques and products, and developing opportunities for local producers to enter the international market (Lambarraa-Lehnhardt *et al.*, 2021).

Primary data collection involved face-to-face and phone interviews with the owner-manager-president of the SMEs. Apart from asking about the nature of their businesses and their knowledge pertaining to ORC, the respondents were questioned about their perceived benefits of innovation. Out of the 105 contacted SMEs, 70 participated in this study. Considering the number of firms involved in the labelled products sub-sector ( $\approx 250$ ), the sample was deemed to be representative. The guideline prescribed by Wong (2013) was employed to determine the appropriate sample size for partial least squares-structural equation modelling (PLS-SEM). As a result, 65 SMEs would suffice based on the three arrows pointing at the latent variable in the model. Similar output was obtained when statistical power, significance level, and  $R^2$  were employed, as recommended by Hair *et al.* (2016) and Sideridis *et al.* (2014). Based on the recommendations above, the required minimum sample size for this study has been reached.

#### 3.2 Measurement of constructs

The data for ORC were gathered by posing questions on each organisational readiness dimension. Based on a five-point Likert scale (1=strongly disagree to 5=strongly agree), respondents were required to indicate how they perceived change in each activity and practice for three indicators, namely organisational climate, organisational culture, and organisational motivation. This part consisted of 12 items that were divided into three subcategories, in order to scale a range of issues associated with organisational readiness. Organisational culture, climate, and motivation were assessed with 4, 3, and 5 items, respectively (Supplementary Table S2). Three business aspects derived from the organisational development theory were used to measure organisational readiness (Butterfoss *et al.*, 2008; Scaccia *et al.*, 2015; Weiner, 2009). As for perceived benefits of innovation for the firm, the respondents were required to indicate their responses based on the five-point Likert scale (1=strongly disagree to 5=strongly agree). The respondents were enquired about the benefits they perceived their firm would accrue if they operated in innovative projects within the framework of a cluster of labelled local products. The items used to measure the indicators were retrieved from Bondzi-Simpson and Ayeh (2019) and were adapted to suit the study context.

#### 3.3 Statistical analysis

The PLS-SEM was employed in this study to test the formulated hypotheses, apart from assessing the predictive correlations among the latent variables, as well as between the construct indicator and the latent variables (Hair *et al.*, 2016; Vinzi *et al.*, 2010). PLS-SEM has become widely used in various disciplines principally due to the nature of the data collected and the sample characteristics (Hair *et al.*, 2014b; McIntosh *et al.*, 2014; Rigdon *et al.*, 2017). In fact, the main purposes of its implementation are related to the facility

of handling many smaller sample sizes than the CB-SEM algorithm. It exhibits better convergence behaviour and strong statistical power degrees even when the models are complex (Henseler, 2010). There is tremendous support for PLS-SEM as a recommended method to perform formative measures when the indicators cause the construct (Hair *et al.*, 2014a). The use of the PLS-SEM algorithm is also less strict when dealing with nonnormal data. The reason behind it is that it automatically transforms the data according to the central limit theorem.

Furthermore, PLS-SEM can be very useful for various studies and fields when it comes to analysing cause-effect relationships (Picot-Coupey, 2014) by handling complex models and data heterogeneity (Hair *et al.*, 2014b). Although it is commonly used, there are limitations to the PLS-SEM model regarding how well the model fits and how consistent the parameter estimates are. Recent research has focused on improving the statistical properties of PLS-SEM to provide consistent and accurate parameters as confirmed by Dijkstra and Henseler (2015). However, The complexity of the model's evaluation makes it challenging to compare it to other models since it has to be done on r-squares of the various dependent and mediating variables (Sander and Lee, 2015).

The advantages of using the PLS-SEM approach are numerous and can be compared to the more commonly used methods. However, neither approach is significantly more robust than the other because the appropriateness of the selection depends on the study's context and purposes (Hair *et al.*, 2014b). Since the PLS is unaffected by issues of model intricacy that SEM does, the PLS-SEM can handle massive amounts of variables which justified its adoption by this study. On top of that, the PLS is suitable to yield estimates even with as low as 30 sample sizes (Hair *et al.*, 2010: 776). This study applied the PLS-SEM by employing the bootstrapping method with 5,000 resamples (Hair *et al.*, 2017).

### 3.4 Descriptive statistics and sample profile

The interviewees' profile and their business attributes are indicated by the sample characteristics. The data came from 70 firms that operate in Morocco with a high proportion of firms concentrated in Drâa-Tafilalt, Fès-Meknès, and Souss-Massa for the abundance of local labelled products in these regions. Almost all the surveyed companies in Morocco have a protected geographical indication (PGI). This percentage is consistent with the rate of the program for the green Morocco Plan, where PGI occupied 81% of labels. Fruits/vegetables, oil, and dates were the major sub-sectors of labelled products sold in Morocco. This result was attributed to the country's variety of microclimates and terroirs. Most local products were produced in regions where intensive cultivation was not allowed. 81% of firms have a solid track record when operating in the national market, while the rest expanded their activities to international markets. Compared to the age of business, 51% of firms have a solid foundation (Supplementary Table S1).

## 4. Results

### 4.1 Measurement model assessment

In order to measure model reliability, confirmatory factor analysis was conducted on ORC dimensions and perceived benefits as latent variables. The measurement involved 15 items using SPSS v.22 (IBM Corp., Armonk, NY, USA). Construct validity was verified using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to determine the proportion of variance, while Bartlett's test of Sphericity was performed to determine the similarity or dissimilarity between identity matrix and correlation matrix. With the total variance explained of 75.3% exceeding 60.0% (Field, 2013) and a correlation matrix different from identity matrix ( $P=0.000$ ), the data validity for this study was confirmed.

The outer model was measured to specify the correlations between the indicator variables and their constructs. This ascertained the reliability and validity of the indicators. This process examined both discriminant and

convergent validity based on the reliability of each indicator. Next, average variance extracted (AVE) was conducted to determine internal consistency and to ensure the model validity (Hair *et al.*, 2013).

Convergent validity denotes the relationship of reflective indicator score with its latent variable score based on AVE, outer loading score, and composite reliability (CR). As tabulated in Table 1, the scores of AVE and outer loading for all indicators exceeded 0.5 (Hair *et al.*, 2017), whereas CR, Cronbach's Alpha, and Rho-A scored above 0.7 for each construct (Henseler *et al.*, 2016).

The variance inflation factors (VIF) were assessed in this study. The VIF value above 10 indicates high multicollinearity among the independent variables (Pallant, 2007).

Discriminant validity can be assessed using Fornell and Larcker Criteria (Fornell and Larcker, 1981), which requires a latent variable to share more difference with the indicators assigned than other latent variables. Next, the square root of AVE is compared to the correlations between the latent variable and other latent variable constructs. The square root of AVEs should exceed the off-diagonal column and row elements to support the discriminant validity of scales (Table 2). Heterotrait-monotrait (HTMT) correlation ratio is an alternative approach that can assess discriminant validity (Henseler *et al.*, 2016). The value of HTMT should be below 0.85 to satisfy the required validity (Table 3).

**Table 1.** Validity and reliability of the measurement model.<sup>1,2</sup>

Constructs	Code	SL	CA	Rho-A	CR	AVE
Organisational culture			0.801	0.817	0.810	0.518
	OC11	0.700				
	OC12	0.796				
	OC13	0.612				
	OC14	0.758				
Organisational climate			0.841	0.845	0.840	0.638
	OCm1	0.717				
	OCm2	0.840				
	OCm3	0.833				
Organisational motivation			0.810	0.842	0.819	0.538
	OM1	0.850				
	OM2	0.833				
	OM3	0.653				
	OM4	0.400*				
	OM5	0.555				
Benefits perceived			0.845	0.851	0.839	0.637
	BP1	0.854				
	BP2	0.665				
	BP3	0.860				

<sup>1</sup> \* items with factor loading less than 0.5.

<sup>2</sup> AVE = average variance extracted; CA = Cronbach's alpha; CR = composite reliability; Rho-A = Spearman rank correlation coefficient; SL = score loading.



**Table 2.** Discriminant validity-Fornell-Larcker criterion.<sup>1,2</sup>

Constructs	OCI	OCm	OM	PB
OCI	<b>0.720</b>			
OCm	0.632	<b>0.799</b>		
OM	0.506	0.683	<b>0.733</b>	
PB	0.144	0.126	0.499	<b>0.798</b>

<sup>1</sup> OCI = organizational culture; OCm = organizational climate; OM = organizational motivation; PB = perceived benefits.

<sup>2</sup> Bold underlines the diagonal score needed to support the discriminant validity of scales.

**Table 3.** Heterotrait-monotrait (HTMT).<sup>1,2</sup>

Constructs	OCI	OCm	OM	PB
OCI				
OCm	0.635			
OM	0.527	0.677		
PB	0.190	0.153	0.498	

<sup>1</sup> Shaded boxes are the standard reporting format for HTMT procedure.

<sup>2</sup> OCI = organizational culture; OCm = organizational climate; OM = organizational motivation; PB = perceived benefits.

#### 4.2 Structural model assessment

The structural model assessment enables assessing the model relevance by determining the coefficient of determination  $R^2$  or the predictive relevance  $Q^2$  after examining the standardised root mean square residual (SRMR) and normed fit index (NFI) to ensure model fit. Both relevance and feasibility of a research model are considered good if  $Q^2 > 0$ . The value of  $R^2$  above 0.10 signifies good explanatory power of the endogenous variables of the model (Hair *et al.*, 2017). In this study, the values of SRMR and NFI were 0.08 and 0.833, respectively, which are acceptable to run the model. Next, the  $R^2$  value of 0.305 exceeded 0.10, as suggested by Falk and Miller (1992). This showed that ORC dimensions as an exogenous variable explained 30.5% of perceived benefits of innovation. To validate the predictive relevance of endogenous variables in the model, the Stone-Geisser  $Q^2$  (Geisser, 1974; Stone, 1974) was determined using the blindfolding method with an exclusion distance of 6 yielded cross-validated redundancy  $Q^2$  values of all endogenous variables (Hair *et al.*, 2013). The  $Q^2$  coefficient below 0.35 revealed medium predictive relevance of the model ( $Q^2 = 0.137$ ). The values showed that the model is feasible to be used, and the hypotheses can be tested.

The analysis of the inner model was conducted using bootstrapping method with a resample of 5,000 for the significance of the correlation to analyse the correlation between endogenous and exogenous variables. As a result, the hypothesis that denotes the significant effect of organisational motivation on perceived benefits ( $\beta = 0.776$ ,  $t = 3.168$ ,  $P < 0.05$ ) is accepted (see results in Table 4). The effect of organisational culture and climate on perceived benefits appeared to be insignificant; thus the hypotheses are rejected (Supplementary Figure S1).

**Table 4.** Structural estimates (hypotheses testing).<sup>1</sup>

Hypothesis	Prediction	$\beta$	$t$	$P$	Decision
H1	organisational culture $\rightarrow$ perceived benefits of innovation	0.002	0.008	0.994	rejected
H2	organisational climate $\rightarrow$ perceived benefits of innovation	-0.408	1.502	0.134	rejected
H3	organisational motivation $\rightarrow$ perceived benefits of innovation	0.776	3.168	0.002	accepted

<sup>1</sup>  $\beta$  = standardised beta coefficient;  $P$  = probability;  $t$  =  $t$ -statistic.

### 4.3 Importance-performance matrix analysis

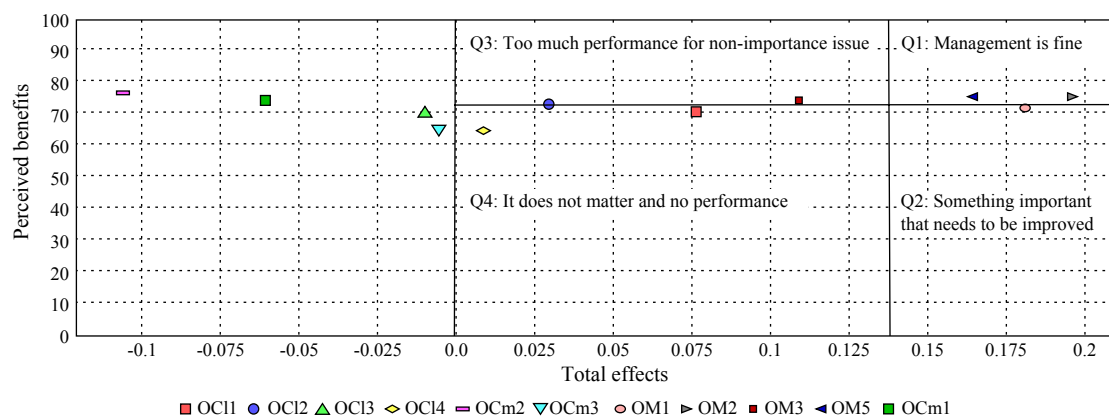
Based on the matrix, this study had determined the importance of the unstandardised total effect of predecessor construct (organisational readiness dimensions) in anticipating the endogenous construct (perceived benefits of innovation) represented on the horizontal and the vertical axes, respectively (Hair *et al.*, 2016: 276, 2018: 105) (Table 5). According to Martilla and James (1977) and Hair *et al.* (2018), four quadrants are created to explain the performance and the perceived importance of the attributes from poor to good using mean values, as tabulated in Figure 2.

Table 5 shows that the perceived benefits were affected directly and highly by organisational motivation. By looking at the total effect values, organisational motivation displayed a relatively high positive importance with the path coefficient of 0.462, whereas organisational climate exhibited lower and negative importance with the path coefficient of -0.144. Path coefficient indicates relative importance, while performance values denote the average scores of latent variables on the scale of 1-100. According to Hair *et al.* (2016), the score of latent variables for the model indicates high performance since it is closer to 100. Figure 2, which tabulates the importance-performance matrix analysis (IPMA) outcomes, shows in detail the distribution of the indicators of each latent variable on the quadrant diagram. The indicators of organisational motivation, in particular, the general motivation of the firm (OM1), the anticipation of outcomes (OM5), and the belief in the added value of innovative projects made with competitors through the cluster (OM2) had been ranked the highest in terms of performance and importance coefficient. The figure also underlines factors that have less importance for the firm and which do not necessitate spending enormous resources to improve them.

**Table 5.** Results of importance-performance matrix analysis at the construct level.<sup>1</sup>

Criterion	Perceived benefits total effect	Performance
Organisational culture	0.107	70.781
Organisational climate	-0.144	75.263
Organisational motivation	0.462	74.122
Mean	0.141	73.389

<sup>1</sup> Total effect values above 0.10 are considered significant (Schloderer *et al.*, 2014).



**Figure 2.** Graphical representation of importance-performance matrix analysis results at the construct level.

## 5. Discussion

This study established the correlations between organisational innovation (culture, climate, and motivation) and perceived benefits of SMEs' innovation producing labelled local products in Morocco. It aims to assess the readiness of these SMEs to innovate within a future cluster at the service of labelled products, as well as to cooperate with others within the framework of innovative projects so as to enhance the performance of the member companies. The hypotheses testing revealed that the significantly positive effect of organisational readiness on perceived benefits of innovation was only noted for motivation, whereas the effect of organisational culture and climate was insignificant.

As for organisational motivation, its effect was expected to be significantly positive as long as the majority of companies declared their predisposition to work together and engage in joint projects. Motivation is a basic factor without which companies cannot move forward in their business. In order to improve their present condition, which is considered unstable, companies producing labelled products highly seek new concepts and approaches to ensure business growth and sustainability. Upon considering the particularity of those products that are generally located in mountainous and oasis areas where agriculture and food processing are the only sources of income, these companies are motivated to adopt change in their business and improve their growth. Notably, these reported outcomes are in line with the literature pertaining to organisational motivation and perceived benefits of innovation, which depicted the positive impact of motivation on performance (Abioro, 2013; Paais and Pattiruhu, 2020). Organisational improvement depends on both managers' motivation and skills. Hence, organisational efficacy should weigh in employer retention and motivation to ascertain productive job delivery, mainly because low motivation can adversely affect effective communication and collaboration and lead to low employee motivation (Jatiningrum, 2020). In fact, highly motivated employees have a sense of belonging, recognition, and achievement, which help them to strive and perform their functions to achieve efficiency (Deressa and Zeru, 2019; Osabiya, 2015). Results obtained revealed that motivation is more prominent than job commitment or satisfaction towards attaining organisational goals (Qi and Wang, 2018) as long as the company can't progress without it, even with significant resources.

Turning to organisational culture and climate, their effect on perceived benefits was weak and insignificant, thus displaying their operating limitations rather than the negligence of these indicators by SMEs. Interestingly, the reported findings in this present study are in disagreement with the literature that underlines a significant link between organisational culture and its outcomes (Bhatti *et al.*, 2020; Kuo and Tsai, 2017; Mecev and Grubisic, 2020). In fact, SMEs producing labelled products do not have a clear vision and mission to define whether the adoption of innovative projects with competitors through a cluster would allow meeting their target market well or whether it will fit into the company's innovative strategy. Since organisational culture is a significant factor that dictates organisational success (Chen *et al.*, 2016), this present study emphasises the shortcomings encountered by the SMEs at the level of strategic management that could lead to an environment of fuzzy culture. When this occurs, the firm will not be able to define its image, will not have a clear vision in relation to the market, and will not be able to assess if any innovative project could improve its target markets and consequently boost its innovation strategy. Interestingly, the reported findings in this present study are in disagreement with the literature that underlines a significant link between organisational culture and its outcomes (Bhatti *et al.*, 2020; Kuo and Tsai, 2017; Mecev and Grubisic, 2020).

On the other hand, the results showed that SMEs producing labelled products face a serious issue related to project management and lack of experience among staff, which would eventually leave these SMEs in doubt about their organisational climate under which these activities can be carried out. Previous literature demonstrated a relationship between climate and turnover intentions (Carr *et al.*, 2003). A positive organisational climate can enhance organisational performance (Lin and Liu, 2016). This is because; development of external networks through collaborative projects, continuous development of skills, the establishment of suitable work environments, and effective leadership would motivate employees to enhance the quality of their services offered to all, which was expected from the innovative projects that will be launched in the

context of a service cluster. Studies have revealed mixed results regarding the correlation between climate and organizational outcomes (Barber, 2010; Lucano *et al.*, 2020; Von Treuer *et al.*, 2018; Zohar, 2000), which confirm the obtained finding and emphasised the complex effect of organizational climate since various factors can affect various organisations, the effect perceived can differ by the deployed model (Hejazi *et al.*, 2016).

This study has extended the use of PLS-SEM by employing IPMA in assessing the priority factors deemed vital for SMEs that demand improvement in order to be useful to managers seeking to enhance labelled products performance. The ability to read and apply the findings plotted in Figure 2 enables the management to enhance the performance of a firm by emphasising high importance (Hock *et al.*, 2010). Besides, understanding the results will make it possible to evaluate the progress level of companies while focusing on the points that need to be corrected. The predictive model proposed in this study revealed that the SMEs were predisposed to have low perceived benefits regarding organisational culture and climate due to non-importance and low performance of the indicators. In fact, company innovation strategy was considered as the least important factor in SMEs producing labelled products, which must be addressed to ascertain future business growth. Indicators related to organisational climate, such as willingness to work with competitors in the cluster or to learn the skills needed to implement innovative projects, recorded negative importance as the SMEs perceived them as insignificant. The application of PLS-SEM and IPMA enabled determining the predisposition of SMEs involved in labelled products to innovate within a cluster based on the results obtained. The interpretation of the results signifies that the indicators should be improved to ascertain the continuous growth of companies in a highly competitive environment where innovation is paramount.

In conclusion, the human factor is less resistant and more favourably disposed to change, whereas indicators related to climate and culture dimensions reveal that firms need more improvement to easily adopt new changes by integrating a new service cluster and cooperating together to develop innovative projects. In fact, the emergence of innovative projects by firms appears to be influenced by cluster strategies via the access to accurate information and the increasing of organizational trust and therefore value generated (Nestle *et al.*, 2019). Many benefits are considered to accrue to the members operating in the cluster structures. There is no doubt among researchers that innovation is a key facilitator offering to firms the possibility to address gaps and benefit from external skills and resources, and the opportunity to collaborate with each other by strengthening connections to facilitate project adoption (Edler and Yeow, 2016). By ensuring organisational readiness before attempting the adoption of a new idea in the firm, the need for subsequent actions to cope with resistance may be largely avoided (Self and Schraeder, 2009).

## 6. Conclusions, future research and limitations

This study has tried to address the research gaps by analysing the association between ORC and perceived benefits of innovation. The study had looked to this relationship by involving 70 SMEs in the agro-food sector that produced labelled products in Morocco. The assessment had employed both PLS-SEM and IPMA. The study examined the influence of three organizational factors of readiness on the firm's production costs, profit margin, and resources enhancement after joining a future service cluster and working on innovative projects with competitors. A successful growth firm is taking shape. It has employers believing in the added value of innovation with a desire to transfer to the firm staff. These managers support the innovative resolution and anticipate positive outcomes made through the future cluster by offering opportunities for firm development.

From a theoretical perspective, this paper sheds light on the importance of ORC as a preparedness determinant crucial to assess if firms are willing to adopt a change. It complements previous studies by offering new insights to the literature regarding ORC and its influence on the perceived benefits of innovation. This paper reveals that although efforts have recently been made to evaluate the readiness of firms to adopt innovation, it is still insufficiently researched. It emphasises the importance of having organisational motivation, as an ability of change. It points out how it can impact the firm's benefits by improving their internal resources, increasing profit, and offering an adapted environment to innovate.

From a practical perspective, SME managers/owners should use organisational motivation to improve relations between management and workers. It will drive the organization to accept change and adopt it easily. The key to achieving success is setting clear targets, leading with vision, giving autonomy, and encouraging teamwork. By offering tremendous advantages, and creating a comfortable work environment, the firms will enhance their innovative capability, improve quality, and reach higher productivity.

The SME managers/owners should ensure adequate investment in organisational motivation to hinder their present condition and meet their objectives by developing their external resources. Therefore, this study suggests that these SME managers should focus on defining realistic engagement goals, keeping flowing communication, building a positive workplace environment, and encouraging creativity. The aim is to flourish and attain sustainability by strengthening their organisational strategies. These SMEs must boost their organisational motivation to offer a pleasant working environment to their employees, which guarantees continuous progress. It can be achieved by determining and improving willingness among the staff to work with competitors and implement innovative projects. Apart from guaranteeing a continuous motivation needed to work with competitors in the cluster, and ensure proper change deployment.

Being prepared to embrace difficulties coming from change will let firms benefit from the advantages. By working with competitors on an innovative project through a service cluster, firms will boost their external resources by benefitting from other's expertise. It can improve existing processes to increase productivity and wane global cost. Thus, similarities regarding market strategy will push firms to merge their effort to foster their competitive positioning in the marketplace. They can also learn from their previous failures or challenges to build a solid administrative and strategic structure that offers an adequate environment where communication flourishes. These approaches are considered the drivers of sustained growth and profitability for SMEs.

Through organizational motivation, SMEs can develop their innovative attitude and improve productivity, costs, profit margin, and resources. The willingness to work with competitors indicates that employees are ready to improve their knowledge and forge a solid experience. In this vein, managers should promote learning and invest in human resources, allowing employees to improve their skills and expertise to reach the firms' goals (Rodrigues *et al.*, 2021).

Managers can encourage cooperation and partnership to connect with the external network by developing a relationship with private and public sectors to have full access to various resources (Phuangrod *et al.*, 2017). Furthermore, an organization's culture or climate that encourages innovation is essential for cultivating a positive work environment and personal growth. This type of culture involves taking on various risks and developing a collaborative environment (Bayarçelik *et al.*, 2014). Those approaches are necessary for making appropriate decisions and increasing visibility regarding market positioning. By doing so, firms will less resist change and will easily adopt innovative projects.

As for policy direction, this study implies that policymakers need to hold training sessions that highlight the value of ORC in SMEs. It shows how this variable translates into better benefits if the focus is on the firm's creativity and innovation. In policy programs, the relevance of motivation has widely been neglected, as they implicitly suppose that their weakness is related to their limited resources (Moen *et al.*, 2015). Nevertheless, the findings reveal that motivation is crucial for firm development since not all firms desire to grow. In this sense, the effectiveness of policy programs is linked to the right choice of firms to assist. Growth programs should focus on targeting firms that desire to grow but are limited by their resources. These include strengthening the external resources and networks needed to enhance firm capacity.

The government should provide an empowering environment that supports the execution of this strategy by offering the research community the necessary means to study and analyse this situation objectively. This can facilitate the acceptance of new forms of organisation such as clusters to boost the functioning of these companies. The cluster can help the implementation of the EU Council Decision on 'the conclusion

of the Agreement in the form of an exchange of letters between the European Union and the Kingdom of Morocco concerning protection of geographical indications and designations of origin for agricultural products, processed agricultural products, fish and fishery products' (European Commission, 2015). In this perspective, various programs have to be generated to boost SME's innovative climate since they are more prone to external risks due to their fragility and limited control (Asgary *et al.*, 2020). In particular, those centred on developing internal resources to ensure firm stability and allow SMEs to invest in external resources through partnering. It can be done by developing activated innovative attitudes and strategies to enable SMEs to improve their overall performance.

Undeniably, this study has several drawbacks. Its limitation is related to qualitative data measuring perceived benefits of innovation stemming from firm restriction in providing raw data and lack of officially published data. Considering the topic's sensitivity to environmental, socio-cultural, and economic factors, future studies may assess other contexts to ensure the extent to which the outcomes hold across varying countries and regions of labelled products. Conducting similar studies in different countries and different time-periods will allow to generalise our results. Economic and cross-cultural comparisons between companies that produce labelled products in the same category may explain some nuances in corporate behaviour and contribute to shaping firm readiness when variations in organisational readiness may exist among individuals, the company, and a group of organisations within the same community (Scaccia *et al.*, 2015).

Furthermore, delving deeper by assessing firms' motivation is necessary. Factors behind firm motivation and growth should be emphasised to underline those that highly affect motivation. Therefore, future research should consider the connection between motivation and past and future performance. Overlooking this association could lead to incorrect conclusions since the firm's past performance could impact its future development and give more understanding of its level of growth. One particular issue in further studies should be comparing motivated and non-motivated firms to select firms that can systematically and continuously achieve superior results.

## Supplementary material

Supplementary material can be found online at <https://doi.org/10.22434/IFAMR2021.0124>

**Table S1.** Sample characteristics.

**Table S2.** Latent variable indicators.

**Figure S1.** Results of structural model.

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## Questionnaire availability statement

The questionnaire will be made available on request from the corresponding author.

## Conflicts of interest

The authors declare no conflict of interest.

## References

- Aarons, G.A., M. Hurlburt and S.M. Horwitz. 2011. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health* 38(1): 4-23. <https://doi.org/10.1007/s10488-010-0327-7>
- Abd Rahman, A., H.B. Singhry, M.H. Hanafiah and M. Abdul. 2017. Influence of perceived benefits and traceability system on the readiness for Halal Assurance System implementation among food manufacturers. *Food Control* 73: 1318-1326. <https://doi.org/10.1016/j.foodcont.2016.10.058>
- Abioro, M. 2013. Effect of employee motivation on organizational performance. *Acta de Gerencia Ciencia* 1(3): 17-27.
- African Union. 2018. *Continental strategy for geographical indications in Africa: 2018-2023*. African Union Commission, Department of Rural Economy and Agriculture, Addis Ababa, Ethiopia.
- Amine, R. 2016. 'Les clusters au Maroc: vers l'émergence d'une nouvelle politique industrielle territoriale.' *Marché et Organisations* 26(2): 93-120. <https://doi.org/10.3917/maorg.026.0093>
- Antony, J. 2014. Readiness factors for the Lean Six Sigma journey in the higher education sector. *International Journal of Productivity and Performance Management* 63(2): 257-264. <https://doi.org/10.1108/IJPPM-04-2013-0077>
- Asgary, A., A.I. Ozdemir and H. Özyürek. 2020. 'Small and medium enterprises and global risks: evidence from manufacturing SMEs in Turkey. *International Journal of Disaster Risk Science* 11(1): 59-73. <https://doi.org/10.1007/s13753-020-00247-0>
- Bakala, H. 2017. La politique des clusters au Maroc, quel avantage pour le secteur de textile-habillement. *Revue Interdisciplinaire* 1(3): 1-12.
- Barber, V.A. 2010. *A study of change readiness: factors that influence the readiness of frontline workers towards a nursing home transformational change initiative*. Education Doctoral, St. John Fisher College, New York, NY, USA.
- Bayarçelik, E.B., F. Taşel and S. Apak. 2014. A research on determining innovation factors for SMEs. *Procedia – Social and Behavioral Sciences* 150: 202-211. <https://doi.org/10.1016/j.sbspro.2014.09.032>
- Bembenek, B. and K. Kowalska. 2016. 'SMEs development within industrial clusters – strategic challenge for cluster management. *Modern Management Review* 11(4): 33-50. <https://doi.org/10.7862/rz.2016.mmr.41>
- Berthinier-Poncet, A., S. Grama-Vigouroux and S. Saidi. 2018. Open innovation practices of clustered SMEs: the intermediate role of cluster governance. In: W. Vanhaverbeke, F. Frattini, N. Roijackers and M. Usman (eds.) *Researching open innovation in SMEs*. World Scientific Publishing Co. Pte. Ltd., Singapore, pp. 275-306.
- Bhatti, A., S.U. Rehman and J.B.A.R. Rumman. 2020. Organizational capabilities mediates between organizational culture, entrepreneurial orientation, and organizational performance of SMEs in Pakistan. *Entrepreneurial Business and Economics Review* 8(4): 85-103. <https://doi.org/10.15678/EBER.2020.080405>
- Billsten, J., M. Fridell, R. Holmberg and A. Ivarsson. 2018. Organizational readiness for change (ORC) test used in the implementation of assessment instruments and treatment methods in a Swedish National study. *Journal of Substance Abuse Treatment* 84: 9-16. <https://doi.org/10.1016/j.jsat.2017.10.004>
- Blair, J.P. 2010. Book review: Blakely, E.J. and Leigh, N.G. (2010). *Planning local economic development: theory and practice* (4<sup>th</sup> ed.). Thousand Oaks, CA, Sage, 464 pp. *Economic Development Quarterly* 24(4): 394-395. <https://doi.org/10.1177/0891242410374959>
- Bondzi-Simpson, A. and J. Ayeh. 2019. Assessing hotel readiness to offer local cuisines: a clustering approach. *International Journal of Contemporary Hospitality Management* 31(2): 998-1020.
- Boustane, M. 2020. Le Maroc à l'heure de la clusterisation. *Revue Interdisciplinaire en Sciences de l'Information et de la Communication et Civilisations Etrangères* 4: 1-21. <https://doi.org/10.52497/kairos.477>
- Burnett, S., J. Benn, A. Pinto, A. Parand, S. Iskander and C. Vincent. 2010. Organisational readiness: exploring the preconditions for success in organisation-wide patient safety improvement programmes. *Quality & Safety in Health Care* 19(4): 313-317. <https://doi.org/10.1136/qshc.2008.030759>



- Butterfoss, F.D., M.C. Kegler and V.T. Francisco. 2008. Mobilizing organizations for health promotion: theories of organizational change. In: K. Glanz, K. Viswanath and B. Rimer (eds.) *Health behavior and health education: theory, research, and practice*, 4<sup>th</sup> edition. Jossey-Bass, San Francisco, CA, USA, pp. 335-361.
- By, R.T. 2005. Organizational change management: a critical review. *Journal of Change Management* 5(4): 369-380. <https://doi.org/10.1080/14697010500359250>
- Carr, J., A. Schmidt, J. Ford and R. DeShon. 2003. Climate perceptions matter: a meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *The Journal of Applied Psychology* 88(4): 605-619. <https://doi.org/10.1037/0021-9010.88.4.605>
- Castro, L. 2015. Strategizing across boundaries: revisiting knowledge brokering activities in French innovation clusters. *Journal of Knowledge Management* 19(5): 1048-1068. <https://doi.org/10.1108/JKM-02-2015-0050>
- Castro, M.L. and N. Martins. 2010. The relationship between organisational climate and employee satisfaction in a South African information and technology organisation. *SA Journal of Industrial Psychology* 36(1): 9.
- Chen, X., L. Chen and D. Bajwa. 2016. *Organizational readiness for business intelligence and analytics systems success*. 22<sup>nd</sup> American Conference on Information Systems, San Diego, CA, USA.
- Chesbrough, H., W. Vanhaverbeke and J. West. 2014. *New frontiers in open innovation*. Oxford: Oxford University Press, Oxford, UK. <https://doi.org/10.1093/acprof:oso/9780199682461.001.0001>
- Crnic, K. and G. Lamberty. 1994. Reconsidering School Readiness: Conceptual and Applied Perspectives. *Early Education and Development* 5(2): 91-105. [https://doi.org/10.1207/s15566935eed0502\\_2](https://doi.org/10.1207/s15566935eed0502_2)
- Cunningham, C., C. Woodward, H. Shannon, J. MacIntosh, B. Lendrum, D. Rosenbloom and J. Brown. 2002. Readiness for organizational change: a longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology* 75(4): 377-392. <https://doi.org/10.1348/096317902321119637>
- Dalton, C.C. and L.N. Gottlieb. 2003. The concept of readiness to change. *Journal of Advanced Nursing* 42(2): 108-117. <https://doi.org/10.1046/j.1365-2648.2003.02593.x>
- Deressa, A.T. and G. Zeru. 2019. Work motivation and its effects on organizational performance: the case of nurses in Hawassa public and private hospitals: mixed method study approach. *BMC Research Notes* 12(1): 213. <https://doi.org/10.1186/s13104-019-4255-7>
- Di Minin, A. and M. Rossi. 2016. Open innovation and clusters: why geographical proximity matters. In: K. Gretschmann and S. Schepers (eds.) *Revolutionising EU innovation policy*. Palgrave Macmillan, London, UK, pp. 79-95. [https://doi.org/10.1057/978-1-137-55554-0\\_4](https://doi.org/10.1057/978-1-137-55554-0_4)
- Dijkstra, T.K. and J. Henseler. 2015. Consistent partial least squares path modeling. *MIS Quarterly* 39(2): 297-316. <https://doi.org/10.25300/MISQ/2015/39.2.02>
- Dlamini, B. and D. Schutte. 2020. An overview of the historical development of small and medium enterprises in Zimbabwe. *Small Enterprise Research* 27(3): 1-17. <https://doi.org/10.1080/13215906.2020.1835704>
- Dunphy, D.C. and D. Stace. 1993. The strategic management of corporate change. *Human Relations* 46: 905-920.
- Eby, L.T., D.M. Adams, J.E.A. Russell and S.H. Gaby. 2000. Perceptions of organizational readiness for change: factors related to employees' reactions to the implementation of team-based selling. *Human Relations* 53(3): 419-442. <https://doi.org/10.1177/0018726700533006>
- Edler, J. and J. Yeow. 2016. Connecting demand and supply: the role of intermediation in public procurement of innovation. *Research Policy* 45(2): 414-426. <https://doi.org/10.1016/j.respol.2015.10.010>
- El Mokri, K. 2016. *La stratégie industrielle 2014-2020 du Maroc et ses implications potentielles sur le processus de transformation structurelle*. Policy Center for the New South, Rabat, Morocco.
- European Commission. 2015. *Memorandum: agreement between the European Union and the Kingdom of Morocco concerning protection of geographical indications and designations of origin for agricultural products, processed agricultural products, fish and fishery products*. EC, Brussels, Belgium.
- Facchini, F., S. Digiesi, G. Mossa and G. Mummolo. 2018. *Evaluating the I4.0 transformation readiness of agri-food companies: from factories to 'smart' factories.* 13<sup>th</sup> Summer School 'Francesco Turco' – Industrial Systems Engineering, Palermo, Italy.



- Falk, R. and N. Miller. 1992. *A primer for soft modeling*. The University of Akron Press, Akron, OH, USA.
- Field, A. 2013. *Discovering statistics using SPSS*. SAGE, London, UK.
- Flaspohler, P., C. Meehan, M. Maras and K. Keller. 2012. Ready, willing and able: developing a support system to promote implementation of school-based prevention programs. *American Journal of Community Psychology* 50(3-4): 428-444. <https://doi.org/10.1007/s10464-012-9520-z>
- Fornell, C. and D.F. Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1): 39-50. <https://doi.org/10.1177/002224378101800104>
- Furxhi, G. and E. Dollija. 2021. An analysis of factors that impact the change management process. *Technology Transfer: Innovative Solutions in Social Sciences and Humanities* 18-20. <https://doi.org/10.21303/2613-5647.2021.001674>
- Geisser, S. 1974. A predictive approach to the random effect model. *Biometrika* 61(1): 101-107. <https://doi.org/10.1093/biomet/61.1.101>
- Giles, W. 2015. From project to operations: planning to avoid problems. In: T.H. Payne (ed.) *Practical guide to clinical computing systems*, 2<sup>nd</sup> edition. Academic Press, Oxford, UK, pp. 83-97. <https://doi.org/10.1016/B978-0-12-420217-7.00006-7>
- Greeff, G. and R. Ghoshal. 2004. Change management. In: *Practical e-manufacturing and supply chain management*. Newnes, Oxford, UK, pp. 378-402. <https://doi.org/10.1016/B978-075066272-7/50018-X>
- Hair, J.F., R.E. Anderson, B.J. Babin and W.C. Black. 2010. *Multivariate data analysis: a global perspective*, 7<sup>th</sup> edition. Pearson Education, Upper Saddle River, NJ, USA.
- Hair, J., G.T.M. Hult, C. Ringle and M. Sarstedt. 2014. *A primer on partial least squares structural equation modeling*. SAGE Publications, Inc., Thousand Oaks, CA, USA.
- Hair, J., G.T.M. Hult, C. Ringle and M. Sarstedt. 2016. *A primer on partial least squares structural equation modeling*. SAGE Publications, Inc., Thousand Oaks, CA, USA.
- Hair, J.F., G.T.M. Hult, C. Ringle and M. Sarstedt. 2017. *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage Publications, Los Angeles, CA, USA.
- Hair, J., C. Ringle and M. Sarstedt. 2013. Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. *Long Range Planning* 46(1-2): 1-12. <https://doi.org/10.1016/j.lrp.2013.08.016>
- Hair, J.F., M. Sarstedt, L. Hopkins and V.G. Kuppelwieser. 2014. Partial least squares structural equation modeling (PLS-SEM). *European Business Review* 26(2): 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J.F., M. Sarstedt and R.M. Ringle. 2018. *Advanced issues in partial least squares structural equation modeling*. SAGE Publications, Thousand Oaks, CA, USA.
- Halpern, N., D. Mwesumo, P. Suau-Sanchez, T. Budd and S. Bråthen. 2021. Ready for digital transformation? The effect of organisational readiness, innovation, airport size and ownership on digital change at airports. *Journal of Air Transport Management* 90: 101949. <https://doi.org/10.1016/j.jairtraman.2020.101949>
- Hejazi, A., N. Abdolvand and S. Rajaei-Harandi. 2016. Assessing the organizational readiness for implementing bi systems. *International Journal of Information Technology Convergence and Services* 6(1): 13-22. <https://doi.org/10.5121/ijitcs.2016.6102>
- Henseler, J. 2010. On the convergence of the partial least squares path modeling algorithm. *Computational Statistics* 25(1): 107-120. <https://doi.org/10.1007/s00180-009-0164-x>
- Henseler, J., G. Hubona and P. Ray. 2016. Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems* 116(1): 2-20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Hock, C., C. Ringle and M. Sarstedt. 2010. Management of multi-purpose stadiums: importance and performance measurement of service interfaces. *IJSTM* 14(2): 188-207. <https://doi.org/10.1504/IJSTM.2010.034327>
- Hong, Y., H. Liao, J. Hu and K. Jiang. 2013. Missing link in the service profit chain: a meta-analytic review of the antecedents, consequences, and moderators of service climate. *The Journal of Applied Psychology* 98(2): 237-267. <https://doi.org/10.1037/a0031666>

- Inuwa, M. 2020. Lean readiness factors and organizational readiness for change in manufacturing smes: the role of organizational culture. *Critical Review* 7(5): 56-67. <https://doi.org/10.31838/jcr.07.05.10>
- Jatiningrum, C. 2020. The mediating of organizational commitment on work motivation and lecturer performance: the four-dimensional model of organizational commitment. *Revista TURISMO: Estudos e Práticas* 4: 1-13.
- Jones, R., N. Jimmieson and A. Griffiths. 2005. The impact of organizational culture and reshaping capabilities on change implementation success: the mediating role of readiness for change. *Journal of Management Studies* 42(2): 361-386. <https://doi.org/10.1111/j.1467-6486.2005.00500.x>
- Kabukye, J.K., N. De Keizer and R. Cornet. 2020. Assessment of organizational readiness to implement an electronic health record system in a low-resource settings cancer hospital: a cross-sectional survey. *PLoS ONE* 15(6): e0234711-e0234711. <https://doi.org/10.1371/journal.pone.0234711>
- Kotnour, T. 2011. An emerging theory of enterprise transformations. *Journal of Enterprise Transformation* 1(1): 48-70. <https://doi.org/10.1080/19488289.2010.550669>
- Koys, D.J. and T.A. DeCotiis. 1991. Inductive measures of psychological climate. *Human Relations* 44(3): 265-285. <https://doi.org/10.1177/001872679104400304>
- Kuo, T. and G.Y. Tsai. 2017. The effects of employee perceived organisational culture on performance: the moderating effects of management maturity. *Total Quality Management & Business Excellence* 30(3-4): 267-283. <https://doi.org/10.1080/14783363.2017.1302327>
- Lachgar, T.N. and M. Benmoussa. 2021. Gouvernance des clusters et performance commerciale des entreprises membres dans le contexte marocain: role du leadership et de la confiance. *Revue Internationale du Marketing et Management Stratégique* 2(2): 1-22. <https://doi.org/10.5281/zenodo.3873498>
- Lambarraa-Lehnhardt, F., R. Ihle and H. Elyoubi. 2021. How successful is origin labeling in a developing country context? Moroccan consumers' preferences toward local products. *Sustainability* 13(15): 8433.
- Leidner, D. and T. Kayworth. 2006. Review: a review of culture in information systems research: toward a theory of information technology culture conflict. *MIS Quarterly* 30(2): 357-399. <https://doi.org/10.2307/25148735>
- Levy, M. and P. Powell. 2005. Exploring e-business in SMEs. In: M. Levy and P. Powell (eds.) *Strategies for growth in SMEs*. Butterworth-Heinemann, Oxford, UK, pp. 317-338. <https://doi.org/10.1016/B978-075066351-9/50021-8>
- Lewin, K. 1951. *Field theory of social science*. Harper & Brothers, New York, NY, USA.
- Lim, S.A.H. and J. Antony. 2016. Statistical process control readiness in the food industry: development of a self-assessment tool. *Trends in Food Science & Technology* 58: 133-139. <https://doi.org/10.1016/j.tifs.2016.10.025>
- Lin, Y.-T. and N.-C. Liu. 2016. High performance work systems and organizational service performance: the roles of different organizational climates. *International Journal of Hospitality Management* 55: 118-128. <https://doi.org/10.1016/j.ijhm.2016.04.005>
- Lines, R. 2005. The structure and function of attitudes toward organizational change. *Human Resource Development Review* 4(1): 8-32. <https://doi.org/10.1177/1534484304273818>
- Lucano, C.M.P., S.T. Munoz, E.M. Rojas, S.C. Quintana and T.S. Santillan. 2020. Organizational climate and work performance in workers of the Bagua Grande health microgrid in Peru. *Revista de la Universidad del Zulia* 11(31): 71-85. <https://doi.org/10.46925/rdluz.31.06>
- Ministère de l'Agriculture et de la Pêche Maritime, du Développement Rural et des Eaux et Forêts (MAPM-DREF). 2019. *Produits agricoles labellisés au Maroc*. MAPM-DREF, Morocco.
- Martilla, J.A. and J.C. James. 1977. Importance-performance analysis. *Journal of Marketing* 41(1): 77-79. <https://doi.org/10.2307/1250495>
- McIntosh, C.N., J.R. Edwards and J. Antonakis. 2014. Reflections on partial least squares path modeling. *Organizational Research Methods* 17(2): 210-251. <https://doi.org/10.1177/1094428114529165>
- McPhillips, M. 2020. Innovation by proxy – clusters as ecosystems facilitating open innovation. *Journal of Entrepreneurship, Management and Innovation* 16(3): 101-128. <https://doi.org/10.7341/20201634>
- Mecev, D. and D. Grubisic. 2020. Organizational culture and company performance: a competing values perspective in the context of the Croatian ICT sector. *Ekonomika Misao I Praksa-Economic Thought and Practice* 29(2): 327-345. <https://doi.org/10.17818/emip/2020/2.1>

- Meshram, S. and A. Rawani. 2019. Analyzing success factors of small and medium enterprises (SMEs): a study in Indian context. In: K. Shanker, R. Shankar and R. Sindhvani (eds.) *Advances in industrial and production engineering*. Springer, Singapore, pp. 843-851. [https://doi.org/10.1007/978-981-13-6412-9\\_78](https://doi.org/10.1007/978-981-13-6412-9_78)
- Moen, Ø., A. Heggseth and O. Lome. 2015. The positive effect of motivation and international orientation on SME growth. *Journal of Small Business Management* 54(2): 659-678. <https://doi.org/10.1111/jsbm.12163>
- Mohd, A., I. Syuhaida, W.M.R. Wan and W.M. Hussaini. 2017. Trust in management, communication and organisational commitment: factors influencing readiness for change management in organisation. In: *Proceedings of the 2<sup>nd</sup> International Conference on Applied Science and Technology 2017 (ICAST'17)*. AIP Publishing, Melville, NY, USA.
- Mrayyan, M.T., R. Modallal, K. Awamreh, M. Atoum, M. Abdullah and S. Suliman. 2008. Readiness of organizations for change, motivation and conflict-handling intentions: senior nursing students' perceptions. *Nurse Education in Practice* 8(2): 120-128. <https://doi.org/10.1016/j.nepr.2007.04.001>
- Naala, M.N.I. 2016. *Moderating and mediating roles of human capital and competitive advantage on entrepreneurial orientation, social network and performance of SMEs in Nigeria*. PhD-thesis, School of Business Management, Universiti Utara, Malaysia.
- Nestle, V., F. Taübe, S. Heidenreich and M. Bogers. 2019. Establishing open innovation culture in cluster initiatives: the role of trust and information asymmetry. *Technological Forecasting and Social Change* 146: 563-572. <https://doi.org/10.1016/j.techfore.2018.06.022>
- Nyathi, K., T. Nyoni, M. Nyoni and B. Wellington Garikai. 2018. The role of accounting information in the success of small & medium enterprises (SMEs) in Zimbabwe: a case of Harare. *Journal of Business and Management* 1(1): 1-15.
- Nyoni, T. and W.G. Bonga. 2018. Anatomy of the small & medium enterprises (SMEs) critical success factors (CSFs) in Zimbabwe: introducing the 3E model. *Journal of Business & Management* 1(2): 1-18.
- Osabiya, B. 2015. The effect of employees motivation on organizational performance. *Journal of Public Administration and Policy Research* 7(4): 62-75. <https://doi.org/10.5897/JAPR2014.0300>
- Paaais, M. and J.R. Pattiruhu. 2020. Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *Journal of Asian Finance Economics and Business* 7(8): 577-588. <https://doi.org/10.13106/jafeb.2020.vol7.no8.577>
- Pallant, J. 2007. *SPSS survival manual*, 3<sup>rd</sup> edition. McGrath Hill, New York, NY, USA.
- Phuangrod, K., S. Lerkiatbundit and S. Aujiraponpan. 2017. Factor affecting innovativeness of small and medium enterprises in the five southern border provinces. *Kasetsart Journal of Social Sciences* 38(3): 204-211. <https://doi.org/10.1016/j.kjss.2016.07.008>
- Picot-Coupey, K. 2014. The use of PLS-SEM in marketing research: advantages, limits and recommendations for rigorous applications. *8<sup>th</sup> International Symposium on PLS and Related Methods (PLS'14)*. 26-28 May 2014. Paris, France.
- Pimentel, J.R.C. 2008. *Person-environment fit and readiness for change: exploring the moderating role of leader-member exchange and perceived organizational support*. PhD-dissertation, University of Tennessee. Knoxville, TN, USA.
- Powell, B.J., J.C. McMillen, E.K. Proctor, C.R. Carpenter, R.T. Griffey, A.C. Bunger, J.E. Glass and J.L. York. 2012. A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review* 69(2): 123-157. <https://doi.org/10.1177/1077558711430690>
- Qi, F.H. and W.J. Wang. 2018. Employee involvement, public service motivation, and perceived organizational performance: testing a new model. *International Review of Administrative Sciences* 84(4): 746-764. <https://doi.org/10.1177/0020852316662531>
- Rahnavard, F., D. Davoud, F. Abbaspour and B. Farzinmehr. 2016. The effect of technology readiness on organizational performance through technology acceptance. *Journal of Management and Development Process* 29(1): 99-118.
- Rigdon, E.E., M. Sarstedt and C.M. Ringle. 2017. On comparing results from CB-SEM and PLS-SEM: five perspectives and five recommendations. *Marketing ZFP – Journal of Research and Management* 39(3): 4-16.



- Ritchie, B. 2008. Tourism disaster planning and management: from response and recovery to reduction and readiness. *Current Issues in Tourism* 11(4): 315-348. <https://doi.org/10.1080/13683500802140372>
- Rodrigues, M., M. Franco, R. Silva and C. Oliveira. 2021. Success factors of SMEs: empirical study guided by dynamic capabilities and resources-based view. *Sustainability* 13(21): 12301.
- Samaranayake, S. 2017. Employee readiness for organizational change: a case study in an export oriented manufacturing firm in Sri Lanka. *Eurasian Journal of Business and Economics* 10(20): 1-16. <https://doi.org/10.17015/ejbe.2017.020.01>
- Sander, T. and T.P. Lee. 2015. The advantages and disadvantages of SmartPLS software. In: *Conference: New Challenges of Economic and Business Development*. University of Latvia, Riga, Latvia.
- Scaccia, J.P., B.S. Cook, A. Lamont, A. Wandersman, J. Castellow, J. Katz and R.S. Beidas. 2015. A practical implementation science heuristic for organizational readiness: R=MC<sup>2</sup>. *Journal of Community Psychology* 43(4): 484-501. <https://doi.org/10.1002/jcop.21698>
- Schein, E.H. 1990. Organizational culture. *American Psychologist* 45(2): 109-119. <https://doi.org/10.1037/0003-066X.45.2.109>
- Schloderer, M.P., M. Sarstedt and C.M. Ringle. 2014. The relevance of reputation in the nonprofit sector: the moderating effect of socio-demographic characteristics. *International Journal of Nonprofit and Voluntary Sector Marketing* 19(2): 110-126. <https://doi.org/10.1002/nvsm.1491>
- Schmiedel, T., J. Vom Brocke and J. Recker. 2014. Development and validation of an instrument to measure organizational cultures' support of business process management. *Information & Management* 51(1): 43-56. <https://doi.org/10.1016/j.im.2013.08.005>
- Schulte, M., C. Ostroff, S. Shmulyian and A. Kinicki. 2009. Organizational climate configurations: relationships to collective attitudes, customer satisfaction, and financial performance. *The Journal of Applied Psychology* 94(3): 618-634. <https://doi.org/10.1037/a0014365>
- Sebastian-Coleman, L. 2013. Directives for data quality strategy. In: L. Sebastian-Coleman (ed.) *Measuring data quality for ongoing improvement*. Morgan Kaufmann, Boston, MA, USA, pp. 173-192. <https://doi.org/10.1016/B978-0-12-397033-6.00014-6>
- Self, D. and M. Schraeder. 2009. Enhancing the success of organizational change: matching readiness strategies with sources of resistance. *Leadership and Organization Development Journal* 30(2): 167-182. <https://doi.org/10.1108/01437730910935765>
- Sideridis, G., P. Simos, A. Papanicolaou and J. Fletcher. 2014. Using structural equation modeling to assess functional connectivity in the brain: power and sample size considerations. *Educational and Psychological Measurement* 74(5): 733-758. <https://doi.org/10.1177/0013164414525397>
- Stone, M. 1974. Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B* 36(2): 111-147.
- Vinzi, V.E., W.W. Chin, J. Henseler and H. Wang. 2010. PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement. In: V.E. Vinzi, W.W. Chin, J. Henseler and H. Wang (eds.) *Handbook of partial least squares: concepts, methods and applications*. Springer, Berlin, Heidelberg, Germany, 47-82. [https://doi.org/10.1007/978-3-540-32827-8\\_1](https://doi.org/10.1007/978-3-540-32827-8_1)
- Von Treuer, K., G. Karantzas, M. McCabe, D. Mellor, A. Konis, T.E. Davison and D. O'Connor. 2018. Organizational factors associated with readiness for change in residential aged care settings. *BMC Health Services Research* 18(1): 77. <https://doi.org/10.1186/s12913-018-2832-4>
- Weiner, B.J. 2009. A theory of organizational readiness for change. *Implementation Science* 4(1): 67. <https://doi.org/10.1186/1748-5908-4-67>
- Wesana, J., H. De Steur, M.K. Dora, E. Mutenyo, L. Muyama and X. Gellynck. 2018. Towards nutrition sensitive agriculture. Actor readiness to reduce food and nutrient losses or wastes along the dairy value chain in Uganda. *Journal of Cleaner Production* 182: 46-56. <https://doi.org/10.1016/j.jclepro.2018.02.021>
- Wetherill, M., M. Williams, K. White, J. Li, J. Vidrine and D. Vidrine. 2018. Food pantries as partners in population health: assessing organizational and personnel readiness for delivering nutrition-focused charitable food assistance. *Journal of Hunger & Environmental Nutrition* 14: 1-20. <https://doi.org/10.1080/19320248.2018.1512931>

- Wong, K. 2013. Partial least square structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin* 24(1): 1-32.
- World Bank. 2014. *World development indicators 2014*. World Bank, Washington, DC, USA. <https://doi.org/10.1596/978-1-4648-0163-1>
- Xu, X.V. and S. Payne. 2016. Individual difference predictors of perceived change fairness. *Journal of Managerial Psychology* 31(2): 420-433. <https://doi.org/10.1108/JMP-02-2014-0061>
- Zohar, D. 2000. A group-level model of safety climate: testing the effect of group climate on microaccidents in manufacturing jobs. *The Journal of Applied Psychology* 85(4): 587-596. <https://doi.org/10.1037/0021-9010.85.4.587>

