

E-commerce adoption by local cooperatives in Morocco based on Technology Acceptance Model

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Disclosure Statement :	Authors are not aware of any findings that might be perceived as affecting the objectivity of this study
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	GANOUNE, Y., BOURRICHE, A., & AIT HEDA, A. (2023). E-commerce adoption by local cooperatives in Morocco based on Technology Acceptance Model. International Journal of Accounting, Finance, Auditing, Management and Economics, 4(3-1), 197-212. https://doi.org/10.5281/zenodo.8023525
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Received: April 13, 2023

Accepted: June 09, 2023

International Journal of Accounting, Finance, Auditing, Management and Economics - IJAFAME

ISSN: 2658-8455

Volume 4, Issue 3-1 (2023)

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Abstract:

E-commerce has become an increasingly popular form of consumption, with many factors influencing consumer acceptance. The paper is a systematic literature review to explore the adoption of e-commerce by local cooperatives in Morocco and to identify the factors that influence this adoption process based on the technology acceptance model (TAM) which is often used to study e-commerce adoption, focusing on his two key factors: Recognized technology usefulness, Ease of use of perceived technology. Research also shows that external factors such as social pressure and resource availability can influence e-commerce adoption. We conducted extensive searches in electronic databases such as Scopus, Web of Science, and Google Scholar using a predefined set of keywords. We included qualitative and quantitative studies published between 2015 and 2022. The findings of this review indicate that the adoption of e-commerce by local cooperatives in Morocco is influenced by several factors, including perceived usefulness, perceived ease of use, perceived trust, perceived risk, and social influence. Moreover, the results suggest that the majority of local cooperatives in Morocco are still in the early stages of e-commerce adoption, and face significant challenges related to infrastructure, internet connectivity, and lack of technical skills. The practical implications of this study are significant, as it provides valuable insights for local cooperatives in Morocco to develop and implement effective e-commerce strategies. Specifically, our findings suggest that local cooperatives need to invest in improving their technological infrastructure, enhancing trust and security measures, and providing training and support to their members to increase their technical skills and knowledge.

Keywords: E-commerce, Local cooperatives, local Product, Technology Acceptance Model

JEL Classification: M31

Paper type: Theoretical Research

Résumé :

Le commerce électronique est devenu une forme de consommation de plus en plus populaire, avec de nombreux facteurs influençant l'acceptation par les consommateurs. Ce document est une revue systématique de la littérature visant à explorer l'adoption du commerce électronique par les coopératives locales au Maroc et à identifier les facteurs qui influencent ce processus d'adoption en se basant sur le modèle d'acceptation de la technologie (TAM) qui est souvent utilisé pour étudier l'adoption du commerce électronique, en se concentrant sur ses deux facteurs clés : L'utilité reconnue de la technologie, la facilité d'utilisation de la technologie perçue. La recherche montre également que des facteurs externes tels que la pression sociale et la disponibilité des ressources peuvent influencer l'adoption du commerce électronique. Nous avons effectué des recherches approfondies dans des bases de données électroniques telles que Scopus, Web of Science et Google Scholar en utilisant un ensemble prédéfini de mots clés. Nous avons inclus des études qualitatives et quantitatives publiées entre 2015 et 2022. Les résultats de cette revue indiquent que l'adoption du commerce électronique par les coopératives locales au Maroc est influencée par plusieurs facteurs, notamment l'utilité perçue, la facilité d'utilisation perçue, la confiance perçue, le risque perçu et l'influence sociale. En outre, les résultats suggèrent que la majorité des coopératives locales au Maroc en sont encore aux premiers stades de l'adoption du commerce électronique et qu'elles sont confrontées à des défis importants liés à l'infrastructure, à la connectivité Internet et au manque de compétences techniques. Les implications pratiques de cette étude sont significatives, car elle fournit des informations précieuses aux coopératives locales au Maroc pour développer et mettre en œuvre des stratégies de commerce électronique efficaces. Plus précisément, nos résultats suggèrent que les coopératives locales doivent investir dans l'amélioration de leur infrastructure technologique, dans le renforcement de la confiance et des mesures de sécurité, et dans la formation et le soutien de leurs membres afin d'accroître leurs compétences et leurs connaissances techniques.

Mots clés : E-commerce, coopératives locales, produits de terroir, théorie d'acceptation de la technologie

Classification JEL : M31

Type de papier : Recherche théorique

Introduction

E-commerce has revolutionized the way businesses operate in the modern world. With the rise of the internet and advancements in technology, businesses can now reach customers from all corners of the world without geographical barriers. In recent years, the adoption of e-commerce has increased significantly, especially in developed countries. However, in developing countries, particularly in Africa, the adoption of e-commerce remains a challenge. Morocco, as one of the countries in North Africa, is not an exception.

Local cooperatives in Morocco have been an important source of local products for centuries. These cooperatives play a vital role in the economy of Morocco, especially in rural areas where agriculture is the primary source of income. The cooperatives produce various products such as argan oil, textiles, and pottery. These products are unique and have significant cultural and historical value. However, the market for these products is limited, primarily due to the lack of access to wider markets.

E-commerce provides an opportunity for local cooperatives to reach a wider market beyond their immediate locality. The use of e-commerce platforms can increase sales, improve product visibility, and create employment opportunities in rural areas. E-commerce adoption can also lead to the growth of the local economy and the empowerment of local communities. To understand and explain the technology's adoption, the most used theoretical framework is Technology Acceptance Model (TAM) because it focused on two necessary constructs: PU or perceived usefulness, which refers to the extent to which a user believes that using a particular technology will improve their performance and PEOU Perceived ease of use that refers to the extent which a user believes that the technology is easy to use, the TAM model has been generally used in research to understand the adoption of e-commerce and the factors that influence it.

This systematic literature review aims to provide a comprehensive analysis of the literature on e-commerce adoption by local cooperatives in Morocco, based on the TAM model. The review will identify the factors that influence the adoption of e-commerce by local cooperatives in Morocco, the challenges they face, and the potential benefits of e-commerce adoption for local communities. The findings of this review will provide valuable insights for policymakers, practitioners, and researchers interested in promoting e-commerce adoption by local cooperatives in Morocco.

This study used a systematic literature review approach to analyze the current state of e-commerce adoption by local cooperatives in Morocco, based on the Technology Acceptance Model (TAM). The review included studies published between 2016 and 2022. The selection criteria for the articles were respected the following inclusion criteria: articles published in English or French, articles that focused on e-commerce adoption by local cooperatives in Morocco, articles that used the TAM model, and articles that were published in peer-reviewed journals.

The findings of this study will provide insights into the factors that influence e-commerce adoption by local cooperatives in Morocco, the challenges they face, and the potential benefits of e-commerce adoption for local communities. The results will be useful for policymakers, practitioners, and researchers interested in promoting e-commerce adoption by local cooperatives in Morocco.

Our paper as mentioned present a theoretical study and it will be presented in the first term as definitions of cooperative and local products and then in the second point we will appreciate the emergence of the notion of e-commerce, and we will try to figure out the relation between the e-commerce adoption and the Technology Acceptance Model, and after that a section will be located to present the methodology, another section of the results and discussion.

1. Cooperative and local products : Definitions

E-commerce has become an increasingly important part of the global economy, allowing businesses to reach customers beyond their traditional geographic boundaries. In Morocco, local cooperatives have started to adopt e-commerce as a means to increase their reach and promote their local products.

1.1. Cooperatives

Local products can be defined as goods or services manufactured and sold in a specific geographical area. These products are often unique to the region and are usually made from locally sourced materials and resources. By supporting local producers, consumers can foster sustainable economic growth and protect local culture and traditions.

One of the main advantages of local products is that they tend to be of higher quality than traditional products. This is because local producers own the majority of their produce and often invest more to ensure they meet their high standards. In addition, local products are often greener as they are made with fewer resources and generate less waste than goods that are transported long distances.

Overall, the growing interest in local products reflects a growing consumer desire to support local businesses and communities, promote sustainability and celebrate local uniqueness gain.

One of the main advantages of cooperatives is that they offer a viable alternative to traditional business models, especially in communities with limited economic opportunities. By pooling resources and sharing risks, co-operative members can achieve economies of scale and gain access to markets that would otherwise remain closed. In addition, cooperatives can help build stronger and resilient communities by fostering social cohesion and providing a platform for collective action.

Tableau 1: Definitions of cooperative

Authors	Definitions
The International Co-operative Alliance (ICA)	"A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise"
United States Department of Agriculture (USDA)	"A cooperative is avuser-owned, user-controlled business that distributes benefits on the basis of use. This definition captures what are generally considered the three primary cooperative principles: user ownership, user control, and proportional distribution of benefits"
(Ferguson, 2018)	"Cooperatives are a form of organization that are owned and controlled by their members, who also use the services or products offered by the cooperative."
(Birchall, 2014)	"A cooperative is a social enterprise that is owned and democratically controlled by its members, who contribute to and democratically control the capital and undertake the risks of the enterprise."
(Matarazzo et al., 2020)	"A cooperative is a business model based on mutual aid and common ownership, where members pool resources to create a common good or service."
(Garrido-Morgado et al., 2019)	"Cooperatives are a type of social enterprise that operates according to the principles of democratic ownership and control,

	member economic participation, autonomy and independence, education and training, cooperation among cooperatives, and concern for the community."
(Prévost, 2001)	"The cooperative is a hybrid organization between the association, which is composed of members sharing ownership and results, and the enterprise combining resources and technology to produce goods and services. This organization has defined values that constitute the cooperative ideology."

Source : authors by nvivo 12

1.2. Local products

Local products can be defined as goods produced and sold in a specific geographical area. These products are often unique to the region and are usually made from locally sourced materials and resources. By supporting local producers, consumers can foster sustainable economic growth and protect local culture and traditions.

One of the main advantages of local products is that they tend to be of higher quality than traditional products. This is because local producers own the majority of their produce and often invest more to ensure they meet their high standards. In addition, local products are often greener as they are made with fewer resources and generate less waste than goods that are transported long distances.

Overall, the growing interest in local products reflects a growing consumer desire to support local businesses and communities, promote sustainability and celebrate local uniqueness gain.

Tableau 2: Definitions of local products

Authors	Definitions
Vandecandelaere E. et al. (2009)	"Local products are differentiated or differentiable products on the basis of their local identity or typicality. They are deemed to be of better quality, less industrial, more artisanal, more authentic and more natural, a local product is above all a heritage that has historical and geographical origins and is anchored in a territory through a heritage and cultural identity, which has a positive impact on the quality and authenticity of the product itself"
Fort et Fort, 2006	"It is a product that can satisfy one, two or three parameters at a time. These parameters are : - the origin of the raw material; - the regional or local origin of the recipe or know-how ; - the history of the company and of the company manager having acquired know-how and a reputation as a "local figure" for several years"
Ricard, 1994	"They are characterized by a real originality linked to the local environment including the physical characteristics of the terroir and significant manufacturing constraints. The product is specific to the geographical area from which it originates and it appears impossible for stakeholders from other regions to manufacture exactly the same product"
Lagrange et al., 1997	"Local products include any food product, processed or not, bearing a quality sign or not, having a tangible link with the local area or not, declining a geographical identity or not, being recent

	or old, which benefit consumers, by its denomination and the communication which supports its marketing, of a local image"
National Culinary Arts Council, 1995	"All products marketed regardless of their marketing method, the traditional manufacture of which is linked to the transmission of know-how from generation to generation, which are attached to a geographical area regardless of the scale or type of area (urban, rural), which enjoy a certain notoriety, which are stable in their denominations and manufacturing techniques and which are characterized by a particular know-how on at least one of the links of the manufacturing chain"

Source: authors by nvivo 12

2. The emergence of the concept of e-commerce

The emergence of the concept of e-commerce can be traced back to the early 1990s, when the first online shopping platforms were launched. Since then, e-commerce has grown rapidly and become a popular way for consumers to purchase goods and services. Research on e-commerce has also increased over the years, with scholars exploring various aspects of this phenomenon.

One of the early studies on e-commerce was conducted by Kalakota and Whinston (1997), who defined e-commerce as "the buying and selling of goods and services over public and private computer networks." They identified four main categories of e-commerce: business-to-consumer (B2C), business-to-business (B2B), consumer-to-consumer (C2C), and intra-business e-commerce.

Another influential study was conducted by Turban et al. (2002), who proposed a comprehensive framework for understanding e-commerce. They identified three main components of e-commerce: technology infrastructure, business strategy, and public policy and legal issues. Within each component, they identified various sub-components and discussed their importance for successful e-commerce implementation.

More recent research has focused on specific aspects of e-commerce, such as the factors that influence consumers' online purchase behavior. For example, Zhang and Mao (2008) conducted a study of Chinese consumers and found that perceived risk, trust, and convenience were important factors that influenced their intention to purchase online. Similarly, Al-Maghrabi et al. (2011) studied the factors that influenced consumers' trust in online shopping in Saudi Arabia, and found that website design, security, and privacy policies were important factors.

Overall, research on e-commerce has evolved over the years to encompass a wide range of topics, including technology infrastructure, business strategy, consumer behavior, and public policy. These studies have contributed to our understanding of the emergence and evolution of e-commerce as a concept and as a phenomenon with significant economic and social implications.

Table 3: Principal authors who have dealt with the concept of e-commerce

Authors	Definitions
Turban et al, 1999	"Electronic commerce (EC) is an emerging concept that refers to the process of buying, selling and exchanging products and services as well as the provision of information via a telecommunications network including the Internet"
Zhu et Kraemer (2002) et Chatterjee,	"Electronic commerce will be defined as the use of a website to provide information about the company and its products, collect

Grewal et Sambamurthy (2002)	data about customers, test products, receive orders, obtain payment and offer a support service to the customer during his purchasing process"
(Rayport et Jaworski, 2003)	"E-commerce is engaging in commercial activities through networked communications. Previously practiced exclusively through closed networks, such as electronic data interchange (EDI), electronic commerce is experiencing exponential growth under the impetus of the Internet. The open structure of the Internet allows businesses of all sizes to exchange information quickly and at low cost by breaking down the barriers of time and distance. The results are fundamentally changing the way businesses operate, not only in the high tech and telecommunications sector, but in other sectors of the economy as a whole"
(Lee & Turban, 2001)	"The use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations and individuals"
(Liu, Fei, & Chen, 2011)	"The transfer of goods, services, and information over the Internet, specifically from business-to-business, business-to-consumer, consumer-to-consumer, or consumer-to-business"
(Pappas, 2016)	"The exchange of goods and services, as well as the transfer of money and data, via digital networks, such as the Internet and other computer networks"
(Gibbs & Kraemer, 2004)	"The process of buying and selling goods, services, and information through computer networks such as the Internet"
(OECD, 1998)	"The conduct of business transactions by means of electronic data transmission, including the use of the Internet, other computer networks, and electronic data interchange"
(Molla & Licker, 2001)	"The use of technology to support commercial transactions between organizations or individuals, including electronic buying and selling of goods and services, as well as electronic payments and supply chain management"
(Rayport & Jaworski, 2004)	"A business model that enables organizations and individuals to conduct transactions that were traditionally conducted face-to-face, by mail, or by telephone, using the Internet or other computer networks"
(Kleindl, 2002)	"The conduct of transactions involving the exchange of goods, services, and information by means of electronic communication, typically using the Internet"
(Chaffey, Mayer, Johnston, & Ellis-Chadwick, 2009)	"The use of digital technologies to engage in commercial transactions, including the buying and selling of goods and services, the exchange of money, and the management of supply chains"
(Laudon & Laudon, 2016)	"A method of conducting business transactions through electronic communication networks, such as the Internet, intranets, and extranets"

Source : authors by nvivo 12

The concept of e-commerce has emerged as a result of the widespread adoption of digital technologies in a lot of businesses. It has revolutionized the way businesses interact with customers and has created new opportunities for organizations to expand their reach and

increase their profitability. E-commerce has brought about significant changes in the way goods and services are bought and sold, and it continues to evolve as technology advances. As a result, it is crucial for businesses to keep up with the latest developments in e-commerce and utilize them to their advantage to stay competitive in the modern marketplace.

3. Methodology

Our article relied on a systematic literature review to foster research and development in the field of e-commerce implementation and facilitate the writing of the theoretical part. As Webster pointed out, systematic literature facilitates the development of theory and opens up new areas of research (Webster & Watson, 2002). We chose a systematic literature review because we believe it is a more efficient way of analyzing and synthesizing existing literature reviews. The purpose of our article is to identify publications on the introduction of e-commerce and relate it to the most popular theories, especially his TAM theory. First, he relied on the GOOGLE SCHOLAR database, one of his most trusted databases (Fortunato et al., 2018; Q. Wang and Waltman, 2016).

The first step of searching is based on keywords such as e-commerce, e-commerce adoption, TAM, technology adoption model, and local products. Only papers published in peer-reviewed journals were selected. Podsakov et al. (2005) argues that an exclusive selection of journal articles implies validated knowledge, for the publication dates selected are between 2015 and 2023.

To simplify the initial data abstraction process when examining systematic reviews, Cho and Egan (2009) propose the use of classification tables by authors.

This methodology was implemented in two software programs, Nvivo (version 12) and Zotero (version 6.0.26),

The aim the table of results, we established it based on subheadings on various criteria, including the author's name, publication year, keywords, research objectives and methodology, theoretical background and critics

4. E-commerce Adoption and Technology Acceptance Model

4.1. Analysis of the chosen articles

Based on the 38 articles, we used Nvivo 12 to analyse the words frequency to detect the most used in the articles and we got as results:

Figure 1: Most frequent word clouds



Source: authors by nvivo 12

To better understand this distribution and the relationship between the most frequent words that make up the core of our work, we can use the surface menu as above

Figure 2: Word frequency query displayed on Nvivo 12 surface menu

commerce	technology	business	consume	understa	behavio	shoppin	adopte	auther	conce	custor	data	determ			
			framework	approac	consum	ecom	intern	phygita	purcha	relatio	strateg	techno			
		important			contribu	empiri	adop	determ	determ	devel	dimer	electr	enhar		
			internet	develop											
	acceptance	marketing	literature	influen	improve	empiri	alloca	essen	pand	partic	partic	psych	questi		
		analysis	practical	technol	increase	enviro	comp	implic	relev	adm	bene	comr	cons	consi	
adoption					informat	exper				adv	busi	cultur	diffus	dime	
	perceived	usefulness	products	theories	potential	intenti	condi	incre	servic	alter	com	dist	eco	ent	equ
							decis	influe	theor	appl	com	eco	em	esta	exa

Source : authors by nvivo 12

4.2. Analysis and results of principal theories

In This section, we aim to provide a comprehensive understanding of the main theories that have guided our research and contribute to the ongoing debate in this field. By critically evaluating these, we will provide a theoretical analysis between the most revelant authors and theories that already treated the e-commerce adoption to see exactly the position of the technology acceptance model in the theoretical framework to identify the e-commerce adoption’s factors

Table 4: Theoretical approach to e-commerce adoption

Title	Authors	Publication year	Key words	Objects	Research methodology	Theoretical background	Critics
A conceptual model of factors affecting e-commerce adoption by SME owner managers in Jordan	Alrousan, Mohammad Kasem, and Eleri Jones	2016	E-commerce; SMEs; adoption; technology acceptance model; TAM	To know the followed theories in e-commerce adoption and their limitations	Mail Questionnaire	theory of reasoned action (TRA) Hofstede's cultural dimension theory TAM TOE DoIs	The TAM is poor to measure if the users accept the technology because this theory concerns only the PU and PEOU and needs to be more comprehensive and get to more variables in order to understand the real reasons of adoption of technology
A model of e-commerce adoption (MOCA) consumer's perceptions and behaviors	Guzzo, Tiziana, Fernando Ferri, and Patrizia Grifoni	2016	e-commerce adoption; social influence; user's acceptance	What are the factors that affect the e-commerce adoption and how are related	Survey to Italian in person and in Facebook groups	The most relevant theories used in this article are: TAM, TRA for examples	Extend the study to more countries and reach more representative samples to get more detailed results
Adoption of E-Commerce Online to Offline with Technology Acceptance Model (TAM) Approach	Riantini, Regina Eka	2018	Technology Acceptance Model, Perceived Risk, E-Commerce Online to Offline	To understand the characteristics o people who are doing shopping into online retail sites in Jakarta	Qualitative research baed on items in the TAM theory	Using TAM modified with the addition of Theory of Reasoned Action (TRA).	The study was done only in Jakarta, we can soon do other studies by expanding our sample so that we can analyze in depth the behavior with respect to the TAM model.
An Empirical Study of Factors Influencing E-Commerce Adoption Non-Adoption in Slovakian SMEs	Walker, John H., Kojo Saffu, and Marica Mazurek	2016	E-commerce adoption; Slovakia; SMEs	To understand factors relates adopters and non-adopters of e-commerce for Slovakian SMEs and their determinants	Survey to 230 Slovakian SMEs	The technology adoption model (TAM) (Davis 1986, 1989; Davis et al. 1989) The diffusion of innovation theory (DOI) (Rogers 1995) The technology-organization-environment (TOE) framework (Tornatzky and Fleischer 1990)"	Further research should compare more SMEs and large companies in terms of adoption and non-adoption of e-commerce.

Factors affecting e-commerce adoption among SMEs in Ghana	Awiagah, Raphael, Juyoung Kang, and Jay Ick Lim.	2016	e-commerce adoption, government support, enabling conditions, managerial support, Ghana	Survey is given to organizations in Ghana especially SMEs to collect and analyse data	Purposive sampling technique with survey	Technology acceptance model (TAM) Theory of planned behavior (TPB) Resource-based theory (RBT) Diffusion of innovations (DOI)	The causal relationships between constructs is not permitted and not interpreted
Factors and Theories for E-Commerce Adoption A Literature Review	Haryanti, Tining, and Apol Pribadi Subriadi	2020	e-commerce, UTAUT, trust, technology dimension, user experience	To understand the main factors of technology acceptance through a survey based on factors on UTAUT and to use the results for further e-commerce adoption strategies for companies.	This research uses qualitative search method, the Data collection from online sources as ScienceDirect, Springer, IEEE, Emerald, and MDPI.	The theory of reasoned action (TRA) Technology acceptance model (TAM) The theory of planned behavior (TPB) Theories of technology acceptance and use (UTAUT)	The research needs to include the use experience, and using the existence variables maybe to confirm the possibility of new model
Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia	Lestari, Diyan.	2019	Personal innovativeness Self-efficacy Perceived usefulness Perceived risk Attitude Intention E-commerce adoption	The use of 1047 observations and for the analysis, this paper used the smart PLS with strong theoretical research	Applying primary data to analyse the individual adoptions using quantitative research and applies primary data to analyse individual adoptions. Using online and also offline surveys to collect data	The TAM (Theory of Acceptance Model) principles basically measure the behavioural intention to use and the user's attitude (Bradley, 2009).	This study focused only on generation -Z- of consumers, Future studies should pay more attention to other variables and areas and examine the direct and indirect effects on technology adoption and individual decision.

Source: Author

5. Discussion

The main theories cited in the selected articles are as follows: Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA) , these theories are likely to analyze the most complex subject for agricultural cooperatives of terroir, that of the adoption of e-commerce to sell their products and make the commercial offer more and more attractive, the most appropriate theory according to the results mentioned in Table 4 is the TAM or Technology acceptance model developed by Davies which identifies two main variables: perceived usefulness and perceived ease.

TAM, or the Technology Acceptance Model, emphasizes the importance of perceived usefulness and perceived ease of use as drivers of technology adoption. When it comes to local cooperatives in Morocco, adopting e-commerce can offer numerous benefits such as reaching a wider audience, increasing revenue, and streamlining operations. However, these cooperatives may encounter challenges related to the perceived complexity of e-commerce platforms. To overcome these challenges, education and training can play a crucial role in familiarizing cooperatives with e-commerce and addressing any perceived difficulties.

In our case, the perceived usefulness can be increasing profits, digging more market shares and more clients, keeping the relationship or the CRM with the clients all while winning new sustainable clients, and the end perceived ease of use will be the major barrier for the cooperatives because the use of new technology especially when the manager of the cooperative and also the cooperators are illiterate and they are suffering from two points, the lack of knowledge and they are afraid to learn because they are not brave enough to do something new as adopting such a new technology and using the e-commerce.

Overcoming these challenges requires a focused approach to education and training. Cooperative members need support and guidance to overcome their fear of technology and build the necessary skills to effectively utilize e-commerce platforms. By addressing the specific needs of illiterate managers and cooperators, tailored training programs can alleviate concerns about complexity and empower them to embrace e-commerce as a valuable tool for their business.

6. Conclusion

In conclusion, this article has explored the adoption of e-commerce by local cooperatives, utilizing the framework of the Technology Acceptance Model (TAM).The article began by defining the concept of cooperatives and local products. Understanding the unique characteristics and importance of these entities in the local economy lays the foundation for examining their adoption of e-commerce and the we treated the emergence of the concept of e-commerce : The article explored the evolution and significance of e-commerce in the business landscape. It highlighted how e-commerce has transformed the way organizations operate and connect with customers, presenting new opportunities for local cooperatives to reach a wider audience and enhance their commercial offerings, as a methodology: A systematic literature review was conducted using the PRISMA model to gather relevant research on e-commerce adoption. This approach ensured a comprehensive analysis of existing knowledge and insights on the topic.The Technology Acceptance Model (TAM) was employed to analyze the factors influencing the adoption of e-commerce by local cooperatives. The model's focus on perceived usefulness and perceived ease of use provided valuable insights into the motivations and challenges associated with e-commerce adoption.

By considering the TAM framework, it becomes evident that local cooperatives can benefit from embracing e-commerce, as it offers opportunities to expand market reach, increase revenue, and streamline operations. However, challenges related to the perceived complexity

of e-commerce platforms can be addressed through education and training initiatives tailored to the specific needs of illiterate managers and cooperators.

We can recognize that several works have been done to understand the adoption of e-commerce by SMEs but not to the local cooperatives, because there is a huge difference between the two forms, the SMEs in all times adopts the e-commerce easily to sell the products, but the cooperatives in many times are managed but analphabet people, they can't handle new technologies and they are not in the position to hire external experts to manage it because of lack of resources, the real challenge here is how to bring new technologies to the local cooperatives so they can explore new profitable markets.

Even all previous studies were concerned with the types of businesses that may have been affected and ready for adoption of e-commerce. Our research may be more interesting to understand other types of social enterprises developed within a social system and whose directors are multiple illiterates which is local cooperatives.

References:

- (1). Adoption of E-Commerce Online to Offline with Technology Acceptance Model (TAM) Approach
- (2). Ahrouch, S. (2011). Les coopératives au Maroc: enjeux et évolutions. *Revue internationale de l'économie sociale*, 90(322), 23.
- (3). Ali, J. M. T., & Thangavelan, R. (2018). E-commerce. *Management*, 6(S1), 169-172.
- (4). Al-Maghrabi, T., Dennis, C., & Halliday, S. V. (2011). Factors influencing trust and adoption of online shopping : An empirical study in Saudi Arabia. *Journal of Enterprise Information Management*, 24(2), 120-138.
- (5). Aloulou, W., Krichen, S., & Zairi, M. (2019). E-commerce adoption in developing countries : A literature review. *International Journal of Information Management*, 44, 153-168.
- (6). Alrousan, M. K., & Jones, E. (2016). A conceptual model of factors affecting e-commerce adoption by SME owner/managers in Jordan. *International Journal of Business Information Systems*, 21(3), 269-308.
- (7). Awiagah, R., Kang, J., & Lim, J. I. (2016). Factors affecting e-commerce adoption among SMEs in Ghana. *Information Development*, 32(4), 815-836.
- (8). Birchall, J. (2014). The potential of cooperatives in developing economies : A research agenda. *Annals of Public and Cooperative Economics*, 85(2), 207-225. doi: 10.1111/apce.12037
- (9). BOUCHOUAR, O., EL BAKKOURI, B., SOUAF, M., & KHANFOR, A. (2017). Authenticité des produits de terroir dans la grande distribution, quelle influence sur la valeur perçue chez les consommateurs? *Revue de littérature. Moroccan Journal of Entrepreneurship, Innovation and Management*, 2(1), 68-79.
- (10). Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing : strategy, implementation and practice*. Pearson UK.
- (11). Chaffey, D., Mayer, R., Johnston, K., & Ellis-Chadwick, F. (2009). *Digital marketing : Strategy, implementation and practice*. Pearson Education.
- (12). Deller, S., Hoyt, A., Hueth, B., & Sundaram-Stukel, R. (2009). Research on the economic impact of cooperatives. *University of Wisconsin Center for Cooperatives*, 231(2209), 232-3.
- (13). Dumanska, I., Hrytsyna, L., Kharun, O., & Matviets, O. (2021). E-commerce and M-commerce as Global Trends of International Trade Caused by the Covid-19 Pandemic.

- (14). El Ouadghiri, I., & Belaïssaoui, R. (2020). E-commerce adoption and its impact on the performance of SMEs in Morocco : The case of Tetouan region. *Journal of Innovation and Entrepreneurship*, 9(1), 1-14.
- (15). ERRAYS, N. A., & HATTABOU, A. (2015). COMPRENDRE LA CONSOMMATION DES PRODUITS DE TERROIR. ANALYSE DES PERCEPTIONS ET MOTIVATIONS D'ACHAT DE L'HUILE D'ARGAN DANS LE CONTEXTE MAROCAIN. *Revue Marocaine de Recherche en Management et Marketing*, (11).
- (16). Fedorko, I., Bacik, R., & Gavurova, B. (2018). Technology acceptance model in e-commerce segment. *Management & Marketing. Challenges for the Knowledge Society*, 13(4), 1242-1256.
- (17). Ferguson, B. (2018). A brief overview of the cooperative business model. *Journal of Agriculture, Food Systems, and Community Development*, 8(3), 11-14. doi: 10.5304/jafscd.2018.083.003
- (18). Fishbein, M., & Ajzen, I. (2010). Predicting and changing behavior: The reasoned action approach. Psychology Press.
- (19). Fort, F., & Fort, F. (2006). Alternatives marketing pour les produits de terroir. *Revue française de gestion*, (3), 145-159.
- (20). Fulton, M. (1999). Cooperatives and member commitment. *Lta*, 4(99), 418-437.
- (21). Garrido-Morgado, A., Gonzalez-Rodriguez, M.R., & Gomez-Mejia, L.R. (2019). Social entrepreneurship and cooperatives : New business models for the economic and social development. *Journal of Entrepreneurship in Emerging Economies*, 11(3), 556-574. doi: 10.1108/JEEE-01-2018-0004
- (22). Gibbs, J. L., & Kraemer, K. L. (2004). A cross-country empirical investigation of the determinants of growth of SMEs. *Journal of Management Information Systems*, 21(4), 17-54.
- (23). Guzzo, T., Ferri, F., & Grifoni, P. (2016). A model of e-commerce adoption (MOCA): consumer's perceptions and behaviours. *Behaviour & Information Technology*, 35(3), 196-209.
- (24). Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- (25). Harris, A., Stefanson, B., & Fulton, M. E. (1996). New generation cooperatives and cooperative theory. *Journal of cooperatives*, 11(1142-2016-92720), 15-28.
- (26). Haryanti, T., & Subriadi, A. P. (2020). Factors and theories for E-commerce adoption: A literature review. *International Journal of Electronic Commerce Studies*, 11(2), 87-106.
- (27). Hassan, K., Jabur, N., & Nia, M. (2021). E-COMMERCE IN THE PANDEMIC AND BEYOND. *IJHTEPHAVKA*, 44, 7.
- (28). International Cooperative Alliance. (2021). Cooperative identity, values & principles. Retrieved from <https://www.ica.coop/en/cooperatives/cooperative-identity-values-principles>
- (29). Jamal, A., & Nasser, K. (2018). The impact of e-commerce on SMEs in the Kingdom of Bahrain: The TAM model perspective. *Journal of Small Business and Enterprise Development*, 25(4), 660-674.
- (30). Johnson, M., & Barlow, R. (2021). Defining the phygital marketing advantage. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 2365-2385.
- (31). Kalakota, R., & Whinston, A. B. (1997). *Electronic commerce : A manager's guide*. Addison-Wesley Professional.
- (32). King, D. N., & King, D. N. (2004). *Introduction to e-commerce*. Prentice Hall.

- (33). Kleindl, B. (2002). *Small business : An entrepreneur's business plan*. South-Western College Pub.
- (34). Laudon, K. C., & Laudon, J. P. (2016). *Management information systems: Managing the digital firm*. Pearson Education.
- (35). Laudon, K. C., & Traver, C. G. (2014). *E-commerce Essentials*. London, UK:: Pearson.
- (36). Laudon, K., & Traver, C. G. (2009). *E-commerce*. Pearson educación.
- (37). Lee, J., & Turban, E. (2001). A framework for the study of customer interface design for mobile commerce. *International Journal of Electronic Commerce*, 5(3), 35-59.
- (38). Lee, Y. J., & Kozar, K. A. (2012). Understanding of mobile website usability: A hierarchical model. *Journal of Business Research*, 65(9), 1290-1296.
- (39). Lestari, D. (2019). Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103-115.
- (40). Li, L., & Zhang, J. (2021). Research and analysis of an enterprise E-commerce marketing system under the big data environment. *Journal of Organizational and End User Computing (JOEUC)*, 33(6), 1-19.
- (41). Maamar, Z. (2003). Commerce, e-commerce, and m-commerce: what comes next?. *Communications of the ACM*, 46(12), 251-257.
- (42). Matarazzo, B., Bartolini, F., Raggi, M., & Viaggi, D. (2020). Factors affecting the success of farmers' cooperatives : Insights from the Italian context. *Journal of Agricultural Education and Extension*, 26(3), 205-222. doi: 10.1080/1389224X.2020.1756763
- (43). Montant 1, E., & Pupion 2, P. C. (2011). E-commerce et vente de vin en ligne: l'approche stratégique d'une petite entreprise. *Revue management et avenir*, (2), 187-199.
- (44). Nantembelele, F. A., & Gopal, S. (2018). Assessing the challenges to e-commerce adoption in Tanzania. *Global Business and Organizational Excellence*, 37(3), 43-50.
- (45). Nguyen, T. T. H., Nguyen, H. T., Nguyen, T. H., & Le, T. T. (2021). E-commerce adoption and SMEs' performance : A study of the TAM model in Vietnam. *Journal of Asian Business and Economic Studies*, 28(2), 149-160.
- (46). Octavia, A., Indrawijaya, S., Sriayudha, Y., & Hasbullah, H. (2020). Impact on E-commerce adoption on entrepreneurial orientation and market orientation in business performance of SMEs. *Asian Economic and Financial Review*, 10(5), 516-525.
- (47). OMARI, S., & ELKANDOUSSI, F. (2012). Analyse de la stratégie marketing des produits de terroir: cas de l'huile d'argan cosmétique des coopératives de la région Souss-Massa-Drâa. *Agro-ressources et écosystèmes: Enjeux sociétaux et pratiques managériales*, 2, 323.
- (48). OUBOUTAIB, F. E., MEKKAOUI, S., & AITHEDA, A. (2019). YOUNG CONSUMER BASED AUTHENTICITY: NEW OPPORTUNITIES FOR TERROIR PRODUCT? AN EXPLORATORY APPROACH. *Revue Internationale du Marketing et Management Stratégique*, 1(4).
- (49). Qin, Z., & Qin, Z. (2009). *Introduction to E-commerce* (Vol. 2009). Heidelberg: Springer.
- (50). Rahayu, R., & Day, J. (2017). E-commerce adoption by SMEs in developing countries: evidence from Indonesia. *Eurasian Business Review*, 7, 25-41.
- (51). Raif, M., & Ait Heda, A. (2018). LA CONSOMMATION DES PRODUITS DE TERROIR: UN VECTEUR DE DEVELOPPEMENT ECONOMIQUE AU MAROC. *Modèles et Stratégies de en Afrique: Etat des lieux & Perspectives*, 2.

- (52). Riantini, R. E. (2018, August). Adoption of e-commerce online to offline with technology acceptance model (TAM) approach. In *2018 4th International Conference on Computer and Information Sciences (ICCOINS)* (pp. 1-6). IEEE.
- (53). Rogers, E. M. (2010). *Diffusion of innovations* (4th ed.). Free Press.
- (54). Salam, A. F., Iyer, L., Palvia, P., & Singh, R. (2005). Trust in e-commerce. *Communications of the ACM*, 48(2), 72-77.
- (55). Susilo, R. D., Daniawan, B., Wijaya, A., & Suwitno, S. (2021). The acceptance study of e-commerce customers based on tam. *bit-Tech*, 3(3), 124-138.
- (56). Taherdoost, H. (2018). A review of technology acceptance and adoption models and theories. *Procedia manufacturing*, 22, 960-967.
- (57). Touiti, T., & Dekhili, S. (2017). Vers une meilleure compréhension des stratégies d'implantation des produits de terroir en GMS. *Systèmes alimentaires*, 2017(2), 143-171.
- (58). Turban, E., Lee, J., King, D., Chung, H. M., & Liang, T. P. (2002). *Electronic commerce : A managerial perspective*. Prentice Hall.
- (59). Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- (60). Walker, J. H., Saffu, K., & Mazurek, M. (2016). An empirical study of factors influencing e-commerce adoption/non-adoption in Slovakian SMEs. *Journal of Internet Commerce*, 15(3), 189-213.
- (61). Wanzu, I., Turyakira, P., & Katumba, P. M. (2019). E-commerce adoption and growth of SMEs in Uganda.
- (62). Zeuli, K. A., Cropp, R., & Schaars, M. A. (2004). *Cooperatives: Principles and practices in the 21st century*.
- (63). Zhang, Y., & Mao, E. (2008). Understanding online purchase intention : Contributions from technology and trust perspectives. *Journal of Electronic Commerce Research*, 9(4), 310-321.