

Reducing Obstacles for Small and Medium Enterprises Via Digitalisation: Albania's Case

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ABSTRACT: Within the framework of modern economic science, scientists are increasingly focusing on the role of small and medium-sized enterprises. This is determined by the many benefits they provide for the country's development. Digitalisation is one of the opportunities that can make these structures function more efficiently. Therefore, an assessment of its possibilities for different countries is still relevant. The assessment was made for Albania in the research. The research aims to show the level of digitalisation of small and medium-sized enterprises in the country, as well as to provide recommendations for future policy development in this area. The main research methods used in the study were analysis, forecasting, abstraction. The study describes the role of small and medium-sized enterprises in Albania's economic development and the importance of digitalisation in facilitating their growth. The study also surveyed more than 100 enterprises and based on selected statistics, described the relationship between marketing budget, years of existence and use of social media. The study also focused on the benefits of digital technologies for organisations, such as the automation of internal processes, and improved communication between the company and potential buyers (target audience). The study provides recommendations for further policymaking in small and medium-sized enterprise (SME) development based on the identified weaknesses of SME development in Albania. This study contributes new knowledge to the field of entrepreneurship development in countries, small and medium-sized companies. In addition, it provides a better understanding of the peculiarities of the Albanian economy.

Keywords: Entrepreneurship, Macroeconomics, Modern Economic Science, Digitalisation, Finance.

I. INTRODUCTION

Entrepreneurship is a crucial component of a country's development. It is the engine of economic growth. Without it, the functioning of the state in modern conditions is impossible. Today, however, scholars have begun to pay much more attention to the role played by small and medium-sized enterprises (SMEs) in the functioning of the country. They not only become the basis for innovation, but also have a direct impact on job creation, raising living standards, increasing the country's prosperity, and reducing income inequality [1]. One of the key advantages of SMEs is their flexibility and ability to innovate. They can quickly adapt to changing market conditions and introduce new ideas and technologies. This contributes to the development of new economic sectors, the creation of innovative products and services, and the maintenance of technological progress. In addition, they play an important role in ensuring regional development. All of these and other benefits are described in more detail in the study below. Given the benefits that the state can derive from small and medium-sized enterprises, it is also becoming important to find opportunities to improve their development. One of them is digitalisation, which is essentially the process of introducing and using the latest technologies and innovations in various fields of activity [2]. Its essence lies in the transformation of analogue processes, data, and services into a digital format, which allows them to be processed, stored, and transmitted faster, more efficiently and conveniently.

Based on theory and previous research, the authors hypothesize that:



- H1: The level of digital technology adoption among small and medium-sized enterprises (SMEs) in Albania is relatively low compared to the potential benefits offered by digitalization.
- H2: There is no significant correlation between an SME's size or marketing budget and its level
 of digital technology adoption (specifically in terms of social media usage).
- H3: Younger companies (those in operation for 1-10 years) show a higher tendency to increase their social media presence compared to older companies (more than 10 years old).
- H4: The main barriers to digitalization for Albanian SMEs are limited access to finance, low levels of professionalism, difficulties in hiring qualified staff, and lack of economies of scale.
- H5: Despite the relatively low level of digitalization, Albanian SMEs are generally ready and willing to move towards digital transformation, but current state policies and infrastructure are not sufficiently supporting this transition.

The main problem that this research aims to address is the lack of comprehensive understanding regarding the current state of digitalization among small and medium-sized enterprises (SMEs) in Albania. While SMEs play a crucial role in the country's economic development, contributing significantly to job creation, innovation, and productivity growth, there is limited knowledge about the extent to which these enterprises have adopted and integrated digital technologies into their operations. The existing literature lacks a focused assessment of the digitalization landscape, the factors influencing the adoption of digital technologies, and the specific challenges and opportunities faced by Albanian SMEs in their digital transformation journey. By addressing this research problem, the study seeks to provide insights that can guide policymaking and initiatives aimed at promoting and facilitating the digitalization of SMEs in Albania, ultimately enhancing their competitiveness and fostering sustainable economic growth.

The study primarily examined the utilization of social media platforms for marketing campaigns, the existence of a website, and the implementation of digital technologies for automating internal processes and enhancing communication with customers. However, it failed to explore more sophisticated digital strategies such as e-commerce, data analytics, robotics, and process automation. The motivation behind this study stems from the recognition of the pivotal role that SMEs play in a country's economic development. SMEs contribute significantly to job creation, innovation, and productivity growth, particularly in the domestic market. However, to maintain their competitiveness and foster sustainable growth, it is crucial for these enterprises to embrace digital transformation. Digitalization offers numerous benefits, including streamlined internal processes, enhanced customer communication, expanded marketing reach, and increased operational efficiency.

The research aims to describe the current state of SME digitalization in Albania. This will not only provide advice for further activities in this area but will also allow other countries to use it when building their innovation policies. The primary aim of this study is to assess the current state of digitalization among small and medium-sized enterprises (SMEs) in Albania. The research aims to provide a comprehensive understanding of the extent to which Albanian SMEs have adopted and integrated digital technologies into their operations. The primary objectives of this study are:

- To evaluate the level of digital technology adoption and utilization among small and mediumsized enterprises in Albania, with a particular focus on their engagement with social media, website development, and automation of internal processes.
- To analyses the relationship between various factors, such as marketing budget, years of
 operation, and company size, and the extent of digital technology implementation within SMEs,
 identifying potential correlations or patterns.
- To provide recommendations for future policymaking and initiatives aimed at promoting and facilitating the digitalization of SMEs in Albania, based on the identified strengths, weaknesses, and opportunities in the current landscape.

II. LITERATURE REVIEW

Many scholars have been involved in assessing the development of entrepreneurship in Albania [3]. As such, M. Musabelliu [4] assessed the development of science and new technologies in the country, drawing attention to the problems that exist in this area. The role of foreign direct investment in the country was studied by S. Hobbs et al. [5], pointing to their role in trade and economic growth in general. In addition, scholars are also devoted to the growth of entrepreneurship in the country. For example, B. Ahmetaj et al.



[6] studied the problem of women's entrepreneurship in the country. They point out the problem of the lack of activity on the part of women in terms of doing business and suggest opportunities for their more active involvement in these processes. More attention was paid to the development of small and medium-sized enterprises by S. Domi et al. [7]. They described the relationship between customer orientation (CO), innovation and performance of Albanian tourism SMEs. Thus, they show that the involvement of innovations, in general, has a positive impact on the development of SMEs, allowing them to meet the needs of consumers more effectively. The researchers drew attention to the existence of significant difficulties in terms of lending to SMEs, the brutality of the local banking sector, and low financial literacy.

The use of digital technologies has become especially relevant since the COVID-19 crisis [8-10]. The reason for this is that digital tools such as email, chats, video conferencing and collaborative work platforms facilitate communication and collaboration within the team and with clients, which has become significantly limited in the face of the bans imposed by authorities in different countries at the beginning of the pandemic [11-12]. Creating opportunities for fast communication both within the firm and for clients can significantly improve the efficiency of all companies. In the current environment, the use of artificial intelligence (AI) is also becoming even more relevant. Although its implementation is not widespread, and it is not known for certain how companies will use this technology. For example, AI can increase the company's ability to automate internal processes. For example, it can be used to unify communication with customers before they start communicating with operators to a certain level. In addition, this technology allows for much more efficient analysis of large amounts of data and concludes it. AI can provide analytical tools and models that help in strategic and operational decision-making, which can increase their effectiveness [13-14]. This technology can also help to optimize some other processes within companies that may be specialized and specific to it, such as optimizing logistics routes, resource allocation, or work schedules.

The role of SMEs in the development of the country was described by D. Morina and P. Gashi [15]. The authors note that the role of SMEs in the economy is crucial, as they contribute to the creation of wealth, jobs, and sustainable economic growth. They demonstrate and substantiate these conclusions using statistical data from Kosovo. In addition, they point out that to promote SME development, it is crucial to create a favorable and attractive business environment. This includes removing investment barriers, simplifying administrative procedures, and improving governance. It is worth noting that all these characteristics are indeed very important to ensure the effective development of SMEs in a country. In this study, however, the assessment was based on a different indicator, namely digitalization and innovation; however, these variables also need to be further studied to form a more detailed picture of the development of SMEs in Albania. The role of SMEs in the development of the country is also studied by H. Herr and Z.M. Nettekoven [16]. The authors note that the SME sector plays a crucial role in employment and economic development around the world, especially if these SMEs are as Schumpeter described them in his works, namely innovative, productive, and able to adapt quickly to new environmental conditions. Scientists believe that governments should create a common vision with society to ensure the effective future development of small and medium-sized enterprises; provide a single direction of development and compensate for existing problems in the industry with government programmes. There are many opportunities for this: attracting foreign direct investment (FDI), infrastructure investments, strengthening trade union associations [17-19]. Nevertheless, scholars do not mention in their work the possibilities for improving the state of SME development through digital technologies.

While previous studies have explored the role of SMEs in economic development, foreign direct investment, entrepreneurship, and technological adoption in Albania, there appears to be a lack of focused research on the current state of digitalization among Albanian SMEs and its potential effects on their performance and efficiency. By conducting this study, the authors aim to fill this gap by providing a comprehensive understanding of the digitalization landscape among Albanian SMEs, identifying the drivers and barriers to digital adoption, and offering recommendations to facilitate their digital transformation.



III. MATERIAL AND METHOD

1. DATA COLLECTION

The study utilized a comprehensive analytical methodology to investigate the effects of digitalization on SMEs in Albania. Primary data was collected through a survey of 111 small and medium-sized enterprises (SMEs) across various industries in Albania. A combined sampling approach involving stratified random sampling and cluster sampling was employed to ensure adequate representation of different business sectors, company sizes, and geographical regions.

The sample was drawn from the target population of registered SMEs operating in Albania that met the following criteria: a) employed between 10-250 people, b) had been in operation for at least 1 year, and c) represented sectors like manufacturing, services, retail, tourism etc. Businesses were stratified based on sector and size, and a random sample was selected from each stratum proportionate to their population size. Additionally, cluster sampling was used to oversample SMEs from major industrial hubs in the country.

Data was collected through a structured questionnaire that combined close-ended items measured on Likert scales and open-ended questions. The questionnaire was developed based on an extensive literature review and input from subject matter experts. It covered various aspects including company demographics, digital technology adoption (website, social media, process automation), perceived benefits, challenges faced, and impact on performance metrics.

The key variables were operationalized as follows:

- Digital Technology Adoption: A composite measure based on multiple items capturing website status, number of social media platforms used, automation level of internal processes etc.
- Company Performance: Measured through self-reported indicators like revenue growth, productivity, customer satisfaction etc.

The survey was administered both online and through in-person interviews with business owners/managers. Several steps were taken to enhance data quality and mitigate potential biases, such as pilot testing the questionnaire, training interviewers, allowing respondent validation of responses, and offering incentives for participation. The overall response rate was 67%.

By using both online surveys and face-to-face interviews, the researchers aim to maximize coverage of the target audience (Albanian SMEs). Online surveys allow to cover a wider geographical range of participants, while face-to-face interviews provide an opportunity to find specific SMEs or regions that may be underrepresented in the online component. Face-to-face interviews usually yield higher response rates and more comprehensive and qualitative data than online surveys. Interviews allow for refinement of questions, more detailed responses, and observation of non-verbal cues, which can increase the richness and accuracy of the data collected. Combining online surveys and face-to-face interviews can facilitate triangulation, where data from multiple sources are used to validate and verify findings. This approach helps mitigate potential biases or limitations associated with one method of data collection. Online surveys are convenient, cost-effective and easily accessible to participants, while face-to-face interviews provide personal interaction and may be more appropriate for specific target groups or contexts (e.g. SMEs with limited internet access or technical capacity).

2. QUANTITATIVE RESEARCH DESIGN

The study aims to assess the current state of digitalization among small and medium-sized enterprises in Albania. Specifically, it seeks to evaluate the level of adoption and utilization of digital technologies, with a particular focus on social media engagement, website development, and automation of internal processes. Additionally, the study aims to analyze the relationship between various factors, such as marketing budget, years of operation, and company size, and the extent of digital technology implementation within SMEs, identifying potential correlations or patterns. The collected data were analyzed using a combination of quantitative and qualitative methods. Descriptive statistics, such as frequencies, percentages, and measures of central tendency, were calculated to summarize the key characteristics of the sample. Inferential statistical analyses, including non-parametric tests like the Wilcoxon rank-sum test and Spearman's correlation, were employed to examine relationships between variables. Graphical representations, such as box plots and scatter plots, were utilized to visually depict the data and highlight patterns or trends.



The quantitative research design employed a structured questionnaire as the primary data collection instrument. The questionnaire was carefully designed to capture relevant information about the digital practices and adoption of technologies within SMEs. It included sections on the use of social media platforms, website development and maintenance, automation of internal processes, and digital marketing strategies. The questionnaire also gathered data on factors such as company size, years of operation, marketing budget, and industry sector. In addition to the quantitative analysis, the researchers utilized various other analytical methods to achieve a thorough comprehension of the topic. A historical analysis was performed to investigate the development of small and medium-sized enterprises (SMEs) and the influence of previous trends on present-day operations. The utilization of abstraction techniques facilitated the simplification of intricate data by concentrating on pivotal factors that directly impact the digitalization of small and mediumsized enterprises (SMEs), thereby eliminating extraneous information. Forecasting techniques were utilized to predict future patterns using present data, offering valuable insights into the potential development of digitalization. The process of deduction was utilized to identify the primary factors that have an impact on the development of small and medium-sized enterprises (SMEs), using empirical data. Graphical methods were employed to visually represent data and findings, facilitating the understanding of intricate relationships.

The justification for employing this comprehensive and diverse analytical approach was based on various factors. Initially, the utilization of non-parametric methods was suitable due to the non-normal distribution of the data, thereby guaranteeing the integrity of the analysis. Furthermore, the integration of historical and forecasting techniques facilitated a comprehensive analysis of the past achievements and prospects of SMEs, resulting in a more profound comprehension of patterns and potential advancements in the digitalization of SMEs. Furthermore, the graphical method facilitated the comprehension of intricate data, thereby enhancing the accessibility and practicality of the findings for stakeholders such as policymakers and business proprietors. Furthermore, Spearman's correlation proved to be efficient in addressing the non-linear associations between variables, a common occurrence in practical business settings. Ultimately, the use of abstraction and deduction facilitated the identification of the key factors that impact digitalization, thereby guiding making strategic decisions and formulating policies. The study was conducted using a comprehensive analytical approach, which ensured that it was thorough, data-driven, and applicable to realworld situations. As a result, valuable insights were obtained regarding the current state and progress of digitalization among Albanian SMEs. The selected methodologies enabled a comprehensive comprehension of the intricate dynamics involved, which is essential for making informed decisions and formulating policies to enhance the competitiveness of small and medium-sized enterprises (SMEs) through digital technologies.

The study acknowledges some limitations and constraints. One notable limitation is the sample size of 111 SMEs, which may not accurately represent the entire population of Albanian SMEs, potentially leading to limited generalizability of the results. Additionally, the study relied on data obtained through questionnaires and surveys, which may be subject to response biases or misunderstandings. Furthermore, the scope of digital technologies examined was limited to social media platforms, website development, and automation of internal processes, while more advanced strategies such as e-commerce, data analytics, robotics, and process automation were not explored. The study provides detailed information to facilitate replication by other researchers. The quantitative research design employed a structured questionnaire as the primary data collection instrument, with sections on social media usage, website development, automation of internal processes, and digital marketing strategies. The sampling strategy utilized a combination of random and stratified sampling techniques to ensure adequate representation of different business sectors and company sizes. Data collection was conducted through a combination of online surveys and face-to-face interviews with SME owners or managers.

IV. DATA ANALYSIS

The methodology employed in this study deviates from previous approaches in several aspects:

 The utilization of non-parametric statistical tests, specifically the Wilcoxon rank-sum test and Spearman's correlation coefficient, is a notable departure from traditional parametric methods commonly used in similar studies. By adopting non-parametric techniques, the analysis was able to accommodate the inherent characteristics of the data, enhancing the validity and robustness of the findings.



- 2. The study incorporated a comprehensive analytical approach that combined multiple methods, including historical analysis, abstraction, forecasting, deduction, and graphical representation. This multi-faceted approach allowed for a more holistic understanding of the phenomenon under investigation, as opposed to relying solely on statistical analyses.
- 3. The study acknowledged the presence of both quantitative and qualitative data, requiring the application of appropriate analytical techniques. Spearman's correlation coefficient proved particularly useful in addressing non-linear associations between variables, which are common in practical business settings and often overlooked in traditional linear models.
- 4. The researchers triangulated the quantitative findings with qualitative data sources, such as interviews or case studies, providing a more comprehensive and nuanced understanding of the phenomena under investigation.

The motivation was to develop an analytical methodology that could handle the complexities of the data, capture historical context, make forecasts, identify key factors, and provide a comprehensive picture by combining quantitative and qualitative methods (Figure 1).

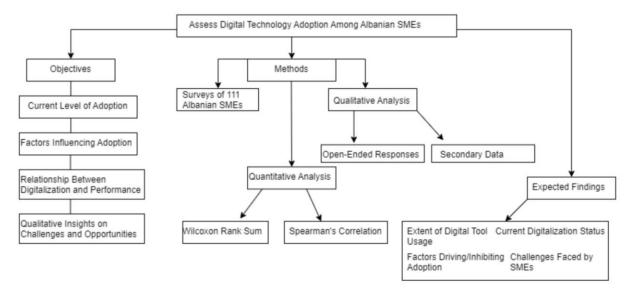


FIGURE 1. Research framework

SMEs contribute to Albania's economic development. They create new jobs in rural areas and enable the country to adapt quickly to changes in the environment. In the domestic market, micro-enterprises, however, make the largest contribution to the economy. They are also significant drivers of job creation, innovation, and productivity growth. Therefore, it is not surprising that the country's current policy (after the transition from centralized planning to a market-oriented system) is primarily aimed at creating conditions to facilitate the development of these enterprises. One of these components is digitalization, which can be facilitated by the state and was partially assessed in this study. Table 1 shows some selected characteristics of the selected sample of companies obtained through the survey

Table 1. Main characteristics of the enterprise sample

Characteristic	A number of SME enterprises participated in the survey		
	Business area		
Marketing agencies	6	5.41	
Online services/consulting	3	2.7	
Construction	7	6.31	



Restaurants/cafes	29	26.3
		1 30.6
Retail	34	30.6
		28.8
Other spheres	32	3
Business operation len	igth, years	
<1	9	8.11
1-5	46	41.4
1-3	40	4
5-10	22	19.8
5-10	22	2
>10	34	30.6
		3
Online present	ce	
No website	43	38.7
	15	4
Registered domain	6	5.41
Privately made website	45	40.5
·	13	4
Website made by third parties and maintained	5	4.5
privately	Ç	
Website made and maintained privately	12	10.8
		1
Monthly marketing s	pendings	
<1000	35	31.5
		3
1000-2000	30	27.0 3
		14.4
2000-5000	16	
		1 27.0
>5000	30	3
		<u> </u>

As can be seen from Table 2, most of the selected businesses are cafes and restaurants, as well as retailers. In addition, the companies are young (operating for 1-5 years) and either do not have a website or only have one made by themselves. This suggests that Albanian companies are not actively using existing digitalisation methods. A more detailed description of the number of social networks used for marketing campaigns is shown in Figure 2.

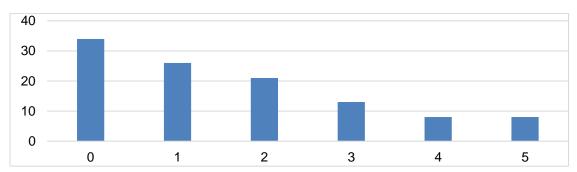


FIGURE 2. Number of social networks used by the surveyed enterprises.



As can be seen in Figure 2, few businesses use many social media platforms (4-5) and many businesses do not use any social media platform. This may be since in Albania they are not considered as marketing tools for business promotion and development and are relatively new. It is possible to conduct a more detailed analysis of the received data, in particular – in terms of enterprises and how they use social networks. This is shown in Figure 2.

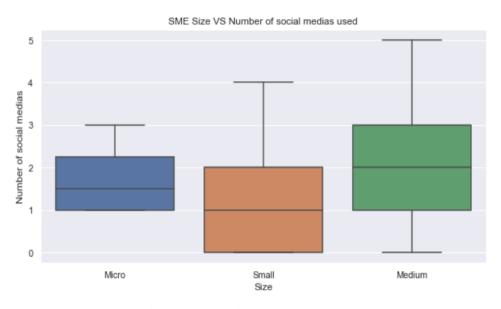


FIGURE 3. The dependence of the number of social networks used by the company on its size.

Figure 3 shows that the size of the enterprise does not affect the presence of these enterprises in social networks. This can be done from the main characteristic demonstrated, which is the median. It can be seen that as the size of enterprises increases, the median number of social networks used by these enterprises does not follow any trend, but they are quite close to each other (1-2). However, this may be due to many other factors such as the industries these businesses belong to, the annual target budget. A similar consideration can be made in terms of the annual marketing budget, which is shown in Figure 3.

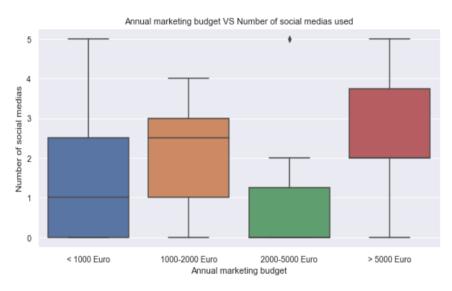


FIGURE 4. Dependence of the use of social networks depending on the amount of marketing expenses.



As can be seen from Figure 4, in terms of the annual budget for marketing, it can be concluded that it does not affect the number of social networks used. This can be done from the fact that, as shown in the figure on the left, the medians of each rectangle are not affected by an increase or decrease in the budget. This can be justified by the fact that social media is free to use and companies in Albania do not want to pay for targeted advertising and other services offered by social media platforms, hence the lack of dependence on the marketing budget. Finally, the estimate depending on the number of years the company has been in business is shown in Figure 5.

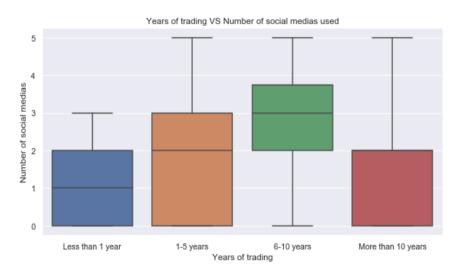


FIGURE 5. The relationship between the number of years of business and the number of social networks used by the company.

Although it seems from Figure 5 that there is no clear relationship between the years of trading and the number of social media used, it can be seen that a certain feature still exists. Thus, younger companies (1-10 years) show a tendency to increase the number of social media, which can be explained by the company's growth over many years as a strategy to compete in the market. However, this is not the case for companies older than 10 years. This is due to the fact that the old companies were already well established at a time when social media marketing was not widespread in Albania. The red square shows that half of these companies were reluctant to innovate and currently have no online presence. In Figure 6, you can see the distribution of the studied data, which needs to be evaluated before checking the correlation.

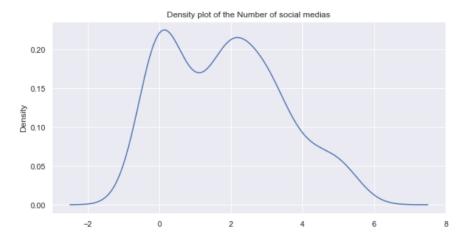


FIGURE 6. Graph of the density of the number of social networks.



Figure 6 shows that the data used are not normal, and the study uses a mixture of both quantitative and qualitative data, so Spearman's correlation can become a qualitative method for finding correlation in this case. The correlation table can be seen in Figure 7.

	Timestamp	Industry	Years of trading	Annual marketing budget	Size	Online presence(Yes/No)	How are you present online?	Number of social medias	Most used social media	Social media managment	Decision making factors
Timestamp	1.000000	0.112557	0.152271	-0.071277	-0.009439	0.007929	-0.037629	0.049141	0.188797	-0.108423	-0.023972
Industry	0.112557	1.000000	-0.034241	-0.177483	0.411310	-0.066444	-0.358578	-0.110146	-0.014663	-0.086630	0.029923
Years of trading	0.152271	-0.034241	1.000000	0.131292	-0.111525	-0.090101	0.080770	-0.089689	0.015691	-0.077774	-0.129163
Annual marketing budget	-0.071277	-0.177483	0.131292	1.000000	-0.140484	0.033907	0.141186	0.056541	-0.016793	0.136279	0.000019
Size	-0.009439	0.411310	-0.111525	-0.140484	1.000000	-0.201664	-0.430610	-0.239089	-0.111118	0.098648	-0.101350
Online presence(Yes/No)	0.007929	-0.066444	-0.090101	0.033907	-0.201664	1.000000	0.535395	0.820120	0.130841	0.001095	0.815094
How are you present online?	-0.037629	-0.358578	0.080770	0.141186	-0.430610	0.535395	1.000000	0.536721	0.224853	0.167436	0.374699
Number of social medias	0.049141	-0.110146	-0.089689	0.056541	-0.239089	0.820120	0.536721	1.000000	0.169536	0.087118	0.628992
Most used social media	0.188797	-0.014663	0.015691	-0.016793	-0.111118	0.130841	0.224853	0.169536	1.000000	0.023034	0.089524
Social media managment	-0.108423	-0.086630	-0.077774	0.136279	0.098648	0.001095	0.167436	0.087118	0.023034	1.000000	0.029903
Decision making factors	-0.023972	0.029923	-0.129163	0.000019	-0.101350	0.815094	0.374699	0.628992	0.089524	0.029903	1.000000

FIGURE 7. Spearman's correlation matrix.

From Figure 7, it can be seen which factors have the highest correlation: these are the pairs between "decision-making factors" and "online presence", "number of social networks" and "how the company is present online", "decision-making factors" and "by the number of social networks". In general, the increased use of digital technologies can improve the efficiency of organisations in several ways. For example, they can automate many a company's internal business processes, which reduces the likelihood of human error [8]. For example, an electronic accounting system helps to manage finances and inventory. Other applications allow you to shape customer interaction and facilitate communication and sales. In addition, such technologies significantly improve the ability to conduct marketing activities, not only in one country but in many. E-commerce allows businesses to sell their goods and services anywhere in the world, and digital marketing helps to promote the brand and attract new customers. It is worth noting that the development of marketing policies was partially assessed in the survey given to businesses in the context of their use of social media. In general, it can be concluded that the use of this type of digital technology is not very widespread in Albania.

Artificial Intelligence should allow for increased productivity, reduced costs, improved service quality, and innovation. However, it should be borne in mind that successful AI implementation requires infrastructure, competent staff, and a balanced approach to technology use, which can be difficult for small and medium-sized companies to implement. The reason for this is their limited capabilities and resources: the introduction of AI into business processes can be costly in terms of both money and time. Also, such companies may not always have sufficiently qualified personnel. Therefore, at this stage, deep integration of artificial intelligence seems unlikely for them.

In general, SMEs in Albania are already partially using the latest technologies in their operations. For example, local companies are quite active in using computers (and related software) to automate and simplify certain processes, and the same applies to the Internet. Nevertheless, the overall state of digitalisation of these businesses can be described as at an early stage. Moreover, this applies not only to the introduction of the latest technologies within companies but also to the country. For example, the government is investing in the development of information and communication infrastructure, such as high-speed Internet and mobile communications, and is introducing electronic services and e-administration to simplify procedures and provide online access to public services (electronic platforms for paying taxes and



obtaining documents have been created). Nevertheless, government officials still have much to do in this area. To facilitate digitalisation, the government and relevant authorities should provide access to information, support and infrastructure to facilitate the use of new technologies by SMEs: further investment in infrastructure, development of digital services, access to digital technologies and raising the level of digital literacy among the population is needed.

When it comes to the specifics of digitalisation in SMEs, Albanian companies are generally ready to move to new principles of operation and digital transformation. Currently, the financial sector is the most advanced in this regard, while agriculture is the least. There is optimism about the tourism sector due to the possibility of attracting investment as the negative impact of COVID-19 eases. Nevertheless, the current level of digitalisation in small and medium-sized enterprises allows them to significantly improve their performance due to the positive effects mentioned earlier: automation of internal processes, creation of new channels for the distribution of their products, facilitation of payment for services. Digital marketing, ecommerce, data analytics, robotics and process automation are particularly important areas of development in the digitalisation sector today. The main weaknesses of small and medium-sized enterprises in Albania are limited access to finance, low levels of professionalism, difficulties in hiring qualified staff and lack of economies of scale. Digital technologies can also help to address these challenges in the future. For example, they can provide access to finance by connecting potential investors with businesses through various online platforms. Crowdfunding is a popular method of raising funds from people on certain online resources who like the technology or solution that an entrepreneur plans to provide. The use of such resources in today's environment can significantly increase the efficiency of SMEs. As for the recruitment process, the use of both social media and specialised online services can simplify the process of finding, selecting, and hiring qualified staff. Further training and professional development of such staff can also take place through specialised online courses. However, it is worth noting that this should be facilitated by the state, which should create centralised training systems for both entrepreneurs and employees.

In conclusion, the study found no statistically significant correlations between specific digital strategies and business performance. Nevertheless, it was discovered that the utilisation of digital technologies in a broad sense can enhance the effectiveness of organisations in various ways, including the automation of internal procedures, enhancement of customer communication, and expansion of marketing endeavours. In addition, the study revealed that a significant number of SMEs in Albania are not actively utilising digital technologies. However, the SMEs that do employ these technologies acknowledge advantages such as enhanced efficiency, decreased expenses, and broader market penetration. Nevertheless, the study did not evaluate the precise influence of digitalization on day-to-day activities. The study acknowledged some limitations of the data analysis methods employed, specifically noting the non-normal distribution of the data. It mentions that non-parametric tests like the Wilcoxon rank sum test were used to accommodate the non-normal distribution, which is appropriate given the data characteristics. However, it does not provide a detailed rationale for choosing specific analytical techniques over others.

V. DISCUSSION

In the study, the light was shed on the crucial role that SMEs play in the country's economic development, their contributions to job creation, innovation, and productivity growth, particularly in the domestic market were highlighted. Among the potential benefits of digitalization for SMEs, there are streamlining internal processes, enhancing customer communication, expanding marketing reach, and increasing operational efficiency. The knowledge of factors influencing digital technology implementation, such as marketing budget, years of operation, and company size, can guide the development of tailored support programs and policies that address the specific needs and challenges faced by SMEs of varying sizes and maturity levels. Fostering a more conducive environment for SME digital transformation needs measures such as improving access to finance, enhancing digital literacy, and facilitating the adoption of emerging technologies like e-commerce, data analytics, and process automation.

The impact of digitalisation on the efficiency of innovation in small and medium-sized enterprises was studied by D. Radicic and S. Petkovic [20]. They note that while digital transformation can increase productivity and efficiency, its impact on innovation varies. Thus, micro-enterprises demonstrate the lowest level of innovation and adoption of digital changes, while medium-sized enterprises benefit most from



digitalisation [21; 22]. The authors note that the state should promote the development of SMEs through a tailored approach, in which the amount of support would vary depending on the size of the firm and the level of participation in research and development. They note that a relatively higher level of support should be provided to those companies that do not engage in research and development (R&D) activities on their own, as this may lead to them adopting them. Although traditional R&D support measures are still relevant for SMEs engaged in R&D, the combined impact of digitalisation and innovation on firm performance may be relatively lower than for others [23-26]. The current study provides guidelines that can ensure more efficient use of budgetary funds when designing support for SMEs which can also be used in the context of Albania, where, as shown above, most companies are just beginning to use the latest technologies in their operations. In turn, the challenges faced by SMEs during the digitalisation process have been studied by A. Telukdarie et al. [27]. They note that such companies have time, skill, and resource constraints, which are major obstacles to the adoption of new technologies. It is worth noting that the above work also noted that the main problem of SMEs in terms of digitalisation is financial constraints. Thus, insufficient access to resources does not allow such companies to effectively attract and implement the latest technologies. That is why the state plays a special role in these processes, as it can use its influence to directly finance such enterprises or provide guarantees, loan discounts, or tax benefits as an alternative to cash collateral [28; 29]. All of this can improve the current situation and ensure more effective implementation of innovations.

The relationship between digitalisation and the internationalisation of SMEs was studied by A. Gawel et al. [30]. The researchers note that due to the COVID-19 crisis and its impact on digitalisation in the world, processes have also changed in terms of internationalisation. Digital maturity has become a key source of competitive advantage, which is why various companies pay a lot of attention to it before forming any agreements [31; 32]. The study showed that internationalisation depends on digital awareness and skills. Moreover, the increase in internet speed has also led to internationalisation processes occurring at a slightly faster pace than before. The peculiarities of the digital transformation of SMEs (based on data from the European Union (EU)) during the COVID-19 pandemic were also studied by J. Brodny and M. Tutak [33]. The authors note that the digitalisation of small and medium-sized enterprises is an important issue for EU countries. It is a priority component in building a competitive and innovative knowledge-based economy, where innovative SMEs will play a leading role [34, 35]. The researchers also found a positive correlation between economic parameters such as GDP per capita and R&D expenditures and the performance of small and medium-sized enterprises. In the current study, the importance of development and SMEs for different countries around the world was also proved.

The use of the latest technologies and their effect on small and medium-sized enterprises in Albania was studied by E. Kalaj and F. Merko [36]. The authors note that the use of the latest technologies in such companies is quite widespread, which can be concluded by analysing the use of computers and the Internet by employees during their activities. Subsequently, they conducted a statistical analysis of the impact of indicators characterising the level of digitalisation in a country on certain development characteristics [37]. The results showed that digitalisation affects enterprise efficiency only partially; however, the effect is positive and statistically significant, especially when it comes to labour productivity. Nevertheless, the researchers point out that there is a need for additional research on this topic. It is worth noting that the study above also partially assessed what factors influence the use of specific digital technologies by SMEs in Albania. In the current study, it was also difficult to find indicators with a high enough level of statistical significance. This may indicate that there is no direct link between the use of innovative tools and business performance in the country, or it may mean that the relationship is more complex (not linear) [38-41]. In this case, drawing conclusions based on this issue requires additional future research.

Thus, digitalisation plays an important role in ensuring the development of Albanian SMEs. Nevertheless, as shown above, most SMEs are just beginning to implement such technologies within their companies. That is why the state should take responsibility for implementing a policy that could address the existing difficulties faced by SMEs in the country and facilitate their digitalisation through both financial and non-financial instruments. Only then it will be possible to ensure a high level of innovation in these companies quickly and effectively.

This study provides novel insights into the field of entrepreneurship development in countries, with a specific focus on small and medium-sized companies. It enhances comprehension of the unique characteristics of the Albanian economy and the present status of small and medium-sized enterprise



digitalization in the nation. The study provides suggestions for future policymaking in the development of small and medium-sized enterprises (SMEs) in Albania, based on the identified shortcomings of SME development. Nevertheless, it is crucial to acknowledge that the study's results might be constrained by its sample size and methodology, thus necessitating additional research to validate and broaden its findings. The significance of this work lies in its potential to shape policies and initiatives that can empower Albanian SMEs to embrace digital transformation, thereby enhancing their efficiency, productivity, and market reach, ultimately contributing to the overall economic development of the country.

While the study provides valuable insights and contributions, it has its limitations, which can guide future research efforts. One limitation is the sample size of 111 SMEs used in the study. Although this sample size is not insignificant, it may not accurately represent the entire population of Albanian SMEs, which could potentially lead to limited generalizability of the results. The study relied on data obtained through questionnaires and surveys. Participants may have provided responses that they perceive as socially desirable or may have misunderstood certain questions, leading to potential distortions in the data. Another limitation lies in the scope of digital technologies examined: While the research focused on the utilization of social media platforms, website development, and automation of internal processes, it did not delve into such strategies as e-commerce, data analytics, robotics, and process automation. It is also worth noting that the study focused solely on the Albanian context, which may limit the generalizability of the findings to other countries or regions with different economic, cultural, and technological landscapes. By addressing these limitations, subsequent research can build upon the findings of this study and provide a more comprehensive understanding of the digital transformation of SMEs in Albania and beyond.

VI. CONCLUSION

The study showed that small and medium-sized enterprises in Albania play a crucial role in the country's economic development. They contribute to job creation, innovation, and productivity growth, especially in the domestic market. However, the adoption of digital technologies among them is still at an early stage. Most of the selected businesses (whose operations were analysed in the study), mainly cafes, restaurants, and retailers, are not taking advantage of digitalisation opportunities sufficiently. This was demonstrated by the relatively infrequent activity of these businesses on social media. Further, more active implementation of innovative technologies in enterprises can significantly improve their efficiency. Automation of internal processes reduces the likelihood of human error. In turn, certain applications and platforms can greatly simplify interaction and communication with customers. E-commerce and digital marketing provide businesses with the opportunity to expand their operations beyond national borders. However, the adoption of digital technologies, especially artificial intelligence, may be currently beyond the reach of many small and medium-sized enterprises due to the limited resources available to such companies and insufficient funding opportunities. That is why state support for such companies remains important. The government and its representatives should also focus on investing in infrastructure, improving digital literacy, and creating easier access to finance. However, significant progress in this context can only be achieved through joint efforts of the state, businesses, and citizens. The assessment of the experience of using digital technologies to improve the development of small and medium-sized enterprises in other countries and further evaluation of the possibilities of using this experience in Albania remains relevant for further research. In addition, it is necessary to conduct frequent surveys on the state of business in the country and identify new opportunities for its development.

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Author Contributions

Edlira Llazo: Writing - Original Draft, Writing - Review & Editing, Conceptualization, Methodology, , Formal analysis, Investigation. Violeta Neza: Writing - Original Draft, Writing - Review & Editing, Software, , Formal analysis, Investigation, Data Curation, Visualization,



Conflict of Interests

The authors declare no conflict of interest.

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