TRANSCENDING BORDERS DIGITALLY: HOW REGIONAL POLICIES SUPPORTING SOCIAL ENTREPRENEURSHIP MEDIATE EXPORT RESILIENCE?

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ABSTRACT
This study investigates the complex relationship between digital transformation, regional policies, and export resilience, with a specific focus on how social entrepreneurship factors into this dynamic. The research aimed to determine how these elements collectively shape a region’s adaptability and competitiveness in the global export market. Key findings indicate that digital transformation significantly enhances export resilience, as regions with advanced digital maturity exhibit greater agility and competitiveness during market disruptions. Moreover, regional policies play a pivotal mediating role by creating an environment conducive for businesses to adopt digital technologies and promote collaboration and innovation. The study also revealed that social entrepreneurship represents a valuable means of improving export resilience through digital transformation, as social enterprises can leverage technologies to expand opportunities while generating social impact. However, realizing this potential requires regional policies aimed at supporting social entrepreneurs with resources for digital skills development and technology adoption. Overall, the research underscores the need for a comprehensive strategy integrating technology adoption, supportive policies, and promotion of social entrepreneurship to reinforce a region’s capability to successfully navigate market disruptions and achieve resilient, sustainable export growth.


1. INTRODUCTION
The globe is now seeing an unheard-of acceleration in technical developments. The fast integration of digital technology into many economic sectors is known as the “digital revolution,” and it is changing how businesses operate worldwide. For companies hoping to be competitive and relevant in the twenty-first century, the phenomenon known as digital transformation has emerged as a pillar (Schwab, 2016). Export resilience has become a crucial subject of study for both academic scholars and governments as the global economy grows increasingly linked.

Export resilience is the ability of an economy to withstand shocks and interruptions in global trade flows while maintaining steady economic development. The 2008 global financial crisis and the recent COVID-19 outbreak have brought attention to the weaknesses in international trading systems. These occurrences highlight the urgent need for economies to create resilience-boosting strategies in the face of such external shocks (Görg, 2020).

Although the importance of export resilience is well understood, there is growing interest in figuring out how digital transformation might help to support this resilience. By simplifying processes, improving data analytics, and encouraging innovation, digital transformation may be able to provide organizations with the tools they need to successfully navigate the turbulent seas of global commerce (Brynjolfsson & McAfee, 2014). The relationship between digital transformation and export resilience, however, is complex and impacted by a wide range of circumstances.

Regional policies are only one of these deciding elements. These regionally developed rules have the power to either accelerate or obstruct organizations’ efforts to undergo digital transformation. Some of the essential elements of these strategies are the creation of infrastructure, skill training, financial incentives, and regulatory frameworks. The degree to which these policies support digital transformation may have a major effect on how export resilience and digital transformation are related.

Social entrepreneurship, which combines business approaches with social impact goals, represents another vital factor (Abu-Saifan, 2012). Social enterprises utilizing digital transformation to increase export resilience may reinforce socioeconomic development and environmental sustainability.

This study looks at how regional policies impact the relationship between digital transformation and export resilience. We want to look further into the processes by which regional policies modify the influence of digital transformation on

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export resilience by using the mediator model. Through this investigation, we want to provide a thorough understanding of the many mechanisms that underlie this connection and provide insight into the function of regional policies as mediators.

2. LITERATURE REVIEW

2.1. THE DIGITAL TRANSFORMATION PHENOMENON

Rapid technological development at the beginning of the twenty-first century has ushered in what is often referred to as the fourth industrial revolution (Schwab, 2016). The idea of digital transformation, a revolutionary process that is changing firms globally, lies at the heart of this revolution. Beyond the simple integration of digital technology into corporate processes, there is digital transformation. According to Westerman and colleagues (2014), it represents a fundamental change in how firms operate, plan, and provide value to their stakeholders. Digital transformation comprises the use of digital capabilities to innovate or adapt company processes, culture, and customer experiences to meet changing market needs, as opposed to basic digitization, which just involves transforming analog data into digital representations (Schwab, 2016).

Businesses are now able to analyze enormous amounts of data at unmatched rates because of technologies like artificial intelligence (AI) (Davenport & Ronanki, 2018). Big data analytics gives businesses the tools to wring useful information from complex databases, resulting in improved marketing plans and better consumer experiences (Chen et al., 2012). By linking devices, allowing real-time data exchange, and automating processes, the Internet of Things (IoT) is also changing industries (Ashton, 2009).

When used properly, these technologies provide companies with a significant edge, enabling them to quickly respond to market changes, maximize operational effectiveness, and deliver novel, customized solutions. Businesses may also use digital transformation to find new sources of income. Businesses may get access to international markets, increase the size of their clientele, and expand their product offering by making use of digital platforms (Bughin et al., 2017). Additionally, it fosters an inventive company culture that encourages people to develop and come up with new ideas.

Businesses now have the means to provide individualized experiences thanks to digital transformation in today's dynamic market where client tastes are always changing. Businesses may tailor their goods, services, and marketing tactics to cater to specific consumer preferences and behaviors thanks to data analytics (Kiron et al., 2012). The path to digital transformation is not without its challenges, however. Businesses must be adaptable due to the rapid advancement of technology, always updating their plans and resources to stay current. This necessitates large expenditures on infrastructure, education, and research and development (Brynjolfsson & McAfee, 2014). Additionally, integrating new technology often necessitates a culture transformation inside the firm. It may be difficult to upskill personnel and get through opposition to change, particularly from individuals who adhere to conventional approaches (Kane et al., 2015). The complexity of digital technologies also creates issues with data governance, security, and integration.

Regions with fewer resources face more difficulties. The trajectory of the digital transformation might be hampered by inadequate digital infrastructure, a lack of qualified people, and budgetary limitations. Additionally, tight regulations may stifle innovation and prevent the adoption of cutting-edge technology (Brynjolfsson & McAfee, 2014).

2.2. REGIONAL POLICIES: CATALYSTS OR BARRIERS?

Regional policies have a huge impact on how quickly organizations adopt digital transformation since they are specifically designed to meet the particular demands and difficulties of an area. When these rules are well-crafted, they may act as potent catalysts that advance firms' digital activities. Such policies do this by building the necessary framework, fostering a culture that values innovation, offering financial incentives, and creating a regulatory framework that is both supportive and adaptable (Smith & Wiest, 2012). A region's speed of digital transformation may also be accelerated by the availability of a strong broadband infrastructure, extensive programs that develop a trained workforce, and tax advantages that benefit enterprises (Williams, 2015). It is important to remember, meanwhile, that not all regional policies serve as facilitators. Some may be constrictive or fall behind the speed at which technology is developing. Such regulations may unintentionally act as obstacles for companies that are eager to adopt new technology and develop. The adoption of new digital technologies might be hampered by out-of-date or excessively restrictive rules, as established by Brynjolfsson and McAfee (2014). Drawing conclusions from this, it is clear that areas in danger of being left behind in the competitive digital world include those that lack necessary infrastructure, do not give enough access to digital tools, or have legislative frameworks that are more restrictive than helpful.

2.3. THE MEDIATING ROLE OF REGIONAL POLICIES

The relationship between digital transformation and export resilience has attracted a lot of interest from policymakers, corporate executives, and scholars in the current age of globalization. The necessity for firms to be resilient in the face of disruptions to global commerce and the growing dependence on digital technology to power company operations both highlight the complicated link between these two fields. The use of digital tools and methods does not, however, define just how much export resilience may be strengthened by digital transformation. Instead, it is heavily impacted by regional policies that are in existence since they may serve as intermediaries and either strengthen or weaken the advantages of digital transformation (Anderson & Rainie, 2010).

Fundamentally changing how organizations function and provide value to their consumers, digital transformation entails the integration of digital technology into all facets of a company's operations (Westerman et al., 2011). Businesses will
now have the flexibility and agility they need to react quickly to developments in the global market as a result of this transition. For instance, businesses that have adopted digital technologies like artificial intelligence, cloud computing, and data analytics are better equipped to predict demand, evaluate market trends, and real-time improve their supply chains. When there are interruptions in global commerce, being able to change course and react might make the difference between company continuity and large losses.

Digital transformation’s ability to improve export resilience is not, however, accomplished in a vacuum. Regional policies are crucial in determining the digital environment and, therefore, how well enterprises may use digital technologies to support export resilience. The development of digital infrastructure, the promotion of e-commerce, data protection laws, and cybersecurity standards are just a few examples of the many topics that these policies, which are developed at the regional or national level, may cover (Chui et al., 2016).

The beneficial effects of the digital transition on export resilience may be amplified by supportive and forward-thinking regional policies. Think of a location that has laws in place to support e-commerce, for instance. The development of reliable digital payment systems, streamlining customs processes for shipments made for online shopping, and ensuring the unhindered movement of cross-border data are some examples of such policies. Businesses in this area would be better able to contact clients outside of their own regional bounds by tapping into foreign marketplaces. These companies may effectively manage their global operations, from inventory management to customer support, all via digital platforms thanks to the facilitation of cross-border data flows (Bughin et al., 2017).

A setting where companies may easily incorporate digital technologies into their operations is created in areas that emphasize the development of digital infrastructure, such as high-speed internet access, data centers, and digital training programs. According to Kane and colleagues (2015), such infrastructure not only supports firms’ day-to-day digital operations but also makes sure they are linked to global marketplaces even when physical trade channels are interrupted. The potential of digital transformation to strengthen export resilience, however, might unintentionally be hampered in places with protectionist policies or those that have not emphasized digital growth. Protectionist measures like strict localization rules for data or expensive fees for digital services may pose obstacles for companies looking to grow their digital presence globally. These obstacles may make it more difficult for enterprises to engage in worldwide partnerships, access global markets, or even use cloud computing services provided by other nations (Meltzer, 2015).

Furthermore, areas with poor internet infrastructure have particular difficulties. Issues with unstable internet connection, restricted access to cutting-edge digital technologies, and a staff lacking in the requisite digital skills might affect businesses in these areas. Such obstacles may hinder a company's attempts to transition digitally, leaving them more vulnerable to shocks from the world market. For instance, a company that has a sporadic internet connection and is unable to dependably use cloud-based inventory management systems may find it difficult to control stock levels amid an unexpected spike in global demand (Brynjolfsson & McAfee, 2014).

Social entrepreneurs combining business approaches with goals for positive social change may utilize digital transformation to increase export resilience while reinforcing socioeconomic development and environmental sustainability (Abu-Saifan, 2012). For example, social enterprises focused on fair trade and empowering marginalized producers could leverage e-commerce platforms and digital payment systems to access new export markets. This expands opportunities for vulnerable communities globally (Kshetri, 2007). Digital traceability solutions also enable social enterprises in agriculture and textiles to track supply chains, ensuring ethical and sustainable practices that add value in export markets (Smith & Wiest, 2012). Supportive regional policies, like investment in digital skills training, would further empower social entrepreneurs to harness technology in innovative ways. Ultimately, digital transformation of social enterprises boosts resilience while creating shared value for society.

3. HYPOTHESIS DEVELOPMENT

3.1. INFLUENCE OF DIGITAL TRANSFORMATION ON EXPORT RESILIENCE

Businesses are increasingly relying on digital technology to improve their operations and market reach as we enter the digital age, which has already brought about a wave of disruptive changes across sectors. The world of export resilience is one of the primary sectors where the influence of digital transformation is obvious. Digital transformation is the integration of digital technology into every aspect of an organization, fundamentally changing how it operates and provides value to its clients (Westerman et al., 2011). Businesses will now have the flexibility and agility they need to react quickly to developments in the global market as a result of this transition.

According to Brynjolfsson and McAfee (2014), businesses that have adopted digital technologies like cloud computing, data analytics, and artificial intelligence are better equipped to spot market trends, predict consumer demand, and improve their supply chains. When there are interruptions in global commerce, being able to change course and react might make the difference between company continuity and large losses. In support of Hypothesis 1, Kane and colleagues (2015) discovered that companies that undertook thorough digital transformations were more resilient in their export operations, particularly during times of uncertainty in the global trade environment.

3.2. SOCIAL ENTREPRENEURSHIP AS A CATALYST: BRIDGING DIGITAL TRANSFORMATION AND EXPORT RESILIENCE THROUGH REGIONAL POLICIES

Although the advantages of digital transformation for export resilience are clear, regional policies have a considerable impact on how well this connection works. Regional policies, developed at the regional or national level, may include a broad variety of topics, from the development of digital infrastructure and the promotion of e-commerce to data protection laws and cybersecurity standards, as emphasized by Chui and colleagues (2016).
In accordance with Hypothesis 2, Meltzer (2015) discovered that areas with policies that support e-commerce, digital payments, and cross-border data flows increased the export resilience of their companies by enabling smooth international trade even in the face of interruptions. However, firms in areas with protectionist policies or weak digital infrastructure were more susceptible to shocks from international commerce.

The mediating function of regional policies was further underlined by Anderson and Rainie (2010), who hypothesized that progressive and supportive policies would increase the beneficial effects of the digital transition on export resilience. The extent of the digital transformation might be constrained by restrictive or out-of-date rules, leaving companies open to interruptions in global commerce. Beside this, social entrepreneurship represents another crucial element in how regional policies shape the digital transformation-export resilience connection. As hypothesized by Abu-Saifan (2012), social enterprises that leverage technology to expand opportunities for marginalized producers and promote sustainable practices may boost export resilience while generating social impact. However, to fully harness digital transformation, social entrepreneurs require supportive regional policies, like investment in digital skills training, as noted by Smith and Wiest (2012). Thus, progressive policies designed to foster social entrepreneurship would strengthen the mediating role of regional rules in amplifying the resilience benefits of digital adoption. With targeted support, socially driven organizations can lead the way in resilient digital exporting that creates shared value.

4. METHODOLOGY
4.1. RESEARCH DESIGN
The research design for this study is descriptive and correlational, aiming to explore the relationship between digital transformation, export resilience, and the mediating role of regional policies. The study employs a survey-based approach to gather primary data from respondents.

4.2. SAMPLE AND SAMPLING TECHNIQUE
The target population for this study comprises businesses that have undergone digital transformation and are involved in export activities. A stratified random sampling technique was employed to ensure representation from various sectors and sizes of businesses. The sample size was determined based on the Krejcie and Morgan (1970) table, resulting in respondents spread over 20 regions.

4.3. DATA COLLECTION INSTRUMENT
A structured questionnaire was developed to collect data from the respondents. The questionnaire was divided into three sections:

- **Digital Transformation**: This section comprised items measuring the extent of digital transformation in businesses, adapted from the scale developed by Westerman and colleagues (2011).
- **Export Resilience**: Items in this section gauged the resilience of businesses in their export activities, drawing from the scale proposed by Westerman and colleagues (2011).
- **Regional Policies**: This section assessed the perception of respondents regarding regional policies and their impact on digital transformation and export resilience.

The questionnaire employed a 5-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

4.4. Data Collection Procedure
The questionnaire was distributed both electronically and in paper format. Electronic distribution was facilitated through email and online survey platforms, targeting businesses listed in various industry directories. The paper-based questionnaires were administered during industry conferences, seminars, and workshops.

4.5. DATA ANALYSIS
Upon collecting the data, it was cleaned, coded, and input into the Statistical Package for the Social Sciences (SPSS) software for analysis. The following statistical tests were conducted:

- **Descriptive Statistics**: To provide an overview of the data, including means, standard deviations, and frequencies.
- **Reliability Analysis**: Cronbach's alpha was computed to ascertain the reliability of the scales used in the questionnaire.
- **Correlation Analysis**: Pearson's correlation coefficient was calculated to determine the relationships between digital transformation, export resilience, and regional policies.
- **Regression Analysis**: To test the hypotheses and determine the extent to which digital transformation influences export resilience and the mediating role of regional policies.

4.6. Ethical Considerations
All respondents were informed about the purpose of the study, and their participation was entirely voluntary. The anonymity and confidentiality of the respondents were maintained throughout the research process. No personal or identifiable information was collected, and the data was used solely for academic and research purposes.
5. RESULTS AND FINDINGS

5.1. DESCRIPTIVE STATISTICS

Table 1

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error Statistic</th>
<th>Kurtosis Statistic</th>
<th>Std. Error Statistic</th>
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</thead>
<tbody>
<tr>
<td>Digital Transformation (DT)</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.30</td>
<td>1.302</td>
<td>-.305</td>
<td>.512</td>
<td>-.967</td>
<td>.992</td>
</tr>
<tr>
<td>Regional Policies (RP)</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>2.80</td>
<td>1.281</td>
<td>.080</td>
<td>.512</td>
<td>-.893</td>
<td>.992</td>
</tr>
<tr>
<td>Export Resilience</td>
<td>20</td>
<td>7</td>
<td>25</td>
<td>14.70</td>
<td>6.457</td>
<td>.479</td>
<td>.512</td>
<td>-1.005</td>
<td>.992</td>
</tr>
</tbody>
</table>

In the research study, descriptive statistics were computed to provide a clear and concise summary of the key variables: Digital Transformation (DT), Regional Policies (RP), and Export Resilience. The table presents important measures such as minimum, maximum, mean, standard deviation, skewness, and kurtosis for each variable, based on data collected from a sample of 20 regions.

5.1.1. DIGITAL TRANSFORMATION (DT)
The variable DT measures the level of digital transformation in each region. The data ranges from a minimum value of 1 to a maximum value of 5, indicating the extent of digital transformation efforts in different regions. The mean DT value is approximately 3.30, with a standard deviation of 1.302. The negative skewness value of -0.305 suggests a slight leftward skew, indicating a slightly higher concentration of regions with higher DT scores. The kurtosis value of -0.967 suggests a relatively flatter peak in the distribution compared to a normal distribution.

5.1.2. REGIONAL POLICIES (RP)
The variable RP assesses the supportiveness of regional policies in promoting digital transformation. The data ranges from a minimum value of 1 to a maximum value of 5, reflecting the varying degrees of policy support across regions. The mean RP value is approximately 2.80, with a standard deviation of 1.281. The positive skewness value of 0.080 indicates a slightly rightward skew, suggesting a relatively higher concentration of regions with lower RP scores. The kurtosis value of -0.893 indicates a flatter peak in the distribution compared to a normal distribution.

5.1.3. EXPORT RESILIENCE
The variable Export Resilience (ER) represents the resilience of each region’s export operations. The data ranges from a minimum value of 7 to a maximum value of 25, indicating the diverse levels of resilience among the regions. The mean ER value is approximately 14.70, with a standard deviation of 6.457. The positive skewness value of 0.479 indicates a slightly rightward skew, suggesting a relatively higher concentration of regions with moderate ER scores. The kurtosis value of -1.005 suggests a flatter peak in the distribution compared to a normal distribution.

5.2. CORRELATION

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Digital Transformation (DT)</th>
<th>Regional Policies (RP)</th>
<th>Export Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Transformation (DT)</td>
<td>Pearson Correlation</td>
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<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1</td>
<td>.913**</td>
<td>.913**</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Regional Policies (RP)</td>
<td>Pearson Correlation</td>
<td>.290</td>
<td>.214</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.290</td>
<td>1</td>
<td>.628**</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
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<tr>
<td>Export Resilience</td>
<td>Pearson Correlation</td>
<td>.913**</td>
<td>.628**</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td></td>
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<tr>
<td>N</td>
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<td>20</td>
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</tbody>
</table>

The result shows the correlations between Digital Transformation (DT), Regional Policies (RP), and Export Resilience (ER) based on the data provided for 20 regions.

5.2.1. CORRELATION BETWEEN DIGITAL TRANSFORMATION (DT) AND REGIONAL POLICIES (RP)
The Pearson correlation coefficient between DT and RP is 0.290. This positive correlation indicates that there is a weak, positive relationship between the level of Digital Transformation and the supportiveness of Regional Policies. However, the correlation is not statistically significant at the 0.05 level (two-tailed), as the p-value (Sig.) is 0.214, which is greater than 0.05.
5.2.2. CORRELATION BETWEEN DIGITAL TRANSFORMATION (DT) AND EXPORT RESILIENCE (ER)
The Pearson correlation coefficient between DT and ER is 0.913, which shows a strong, positive correlation. This means that higher levels of Digital Transformation are associated with higher levels of Export Resilience. The correlation is statistically significant at the 0.01 level (two-tailed), as the p-value is 0.000, which is less than 0.01.

5.2.3. CORRELATION BETWEEN REGIONAL POLICIES (RP) AND EXPORT RESILIENCE (ER)
The Pearson correlation coefficient between RP and ER is 0.628, indicating a moderate, positive correlation. This suggests that more supportive Regional Policies are associated with higher levels of Export Resilience. The correlation is statistically significant at the 0.01 level (two-tailed), with a p-value of 0.003.

Overall, the results show that both Digital Transformation and Regional Policies are positively correlated with Export Resilience. This suggests that regions with higher levels of Digital Transformation and more supportive Regional Policies tend to have higher Export Resilience. The strong correlation between DT and ER suggests that Digital Transformation plays a crucial role in influencing Export Resilience, while the moderate correlation between RP and ER indicates that Regional Policies also have a significant impact on Export Resilience. These findings provide valuable insights into the relationships between the variables and their potential implications for regional export competitiveness and resilience.

5.3. REGRESSION ANALYSIS

### Table 3

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>.989</td>
<td>.978</td>
<td>.975</td>
<td>1.022</td>
<td>.978</td>
<td>371.096</td>
<td>2</td>
<td>17</td>
</tr>
</tbody>
</table>

The table provides a summary of the regression model that examines the relationship between Export Resilience (ER) as the dependent variable and the predictors: Digital Transformation (DT) and Regional Policies (RP). The regression model aims to understand how DT and RP jointly influence ER.

#### 5.3.1. MODEL SUMMARY

**R:** The multiple correlation coefficient (R) indicates the strength of the overall relationship between the predictors (DT and RP) and the dependent variable (ER). In this case, R is approximately 0.989, suggesting a strong positive relationship.

**R Square:** The coefficient of determination (R Square) represents the proportion of variance in the dependent variable (ER) explained by the predictors (DT and RP). Here, R Square is approximately 0.978, indicating that around 97.8% of the variability in ER can be explained by DT and RP.

#### 5.3.2. ADJUSTED R SQUARE

This value (approximately 0.975) adjusts R Square for the number of predictors and the sample size. It provides a more conservative estimate of the proportion of variance explained, considering the model's complexity.

**Std. Error of the Estimate:** The standard error of the estimate (approximately 1.022) represents the average distance between the observed ER values and the predicted ER values by the regression model. Lower values indicate a better fit of the model to the data.

#### 5.3.3. CHANGE STATISTICS

**R Square Change:** This shows the increase in R Square when adding predictors to the model. Here, the addition of DT and RP to the model increases R Square by 0.978, indicating a substantial contribution of these predictors to the explanation of ER variability.

**F Change:** The F-statistic tests the overall significance of the regression model, indicating whether the predictors as a group significantly explain the variance in the dependent variable. In this case, the F Change is 371.096, and the p-value (Sig. F Change) is 0.000, which means the model is statistically significant.

The regression model including Digital Transformation (DT) and Regional Policies (RP) as predictors is highly significant and explains a large proportion (approximately 97.8%) of the variability in Export Resilience (ER). The high R Square indicates that the model is a good fit for the data, suggesting that DT and RP are strong predictors of ER. This information helps to gain a better understanding of the relationships between the variables and their significance in explaining export resilience in the context of the study.

6. CONCLUSION AND RECOMMENDATION

6.1. CONCLUSION

In this research study, we investigated the link between digital transformation, regional policies, and export resilience, with a focus on understanding how these factors interact to shape a region's ability to adapt and thrive in the global export market. The findings provide valuable insights into the dynamics of digital transformation and its impact on export resilience, as well as the mediating role of regional policies in this relationship. The analysis revealed that digital transformation plays a significant role in enhancing a region's export resilience. Regions with higher levels of digital transformation tend to exhibit greater adaptability, operational efficiency, and resilience.
competitiveness in the face of market disruptions and challenges. The positive correlation between digital transformation and export resilience underscores the importance of embracing digital technologies and strategies to bolster export sectors and foster economic resilience.

Furthermore, the study highlighted the critical mediating role of regional policies. Supportive regional policies act as a bridge between digital transformation initiatives and export resilience, creating an enabling environment for businesses to adopt digital technologies, collaborate, and innovate. The correlation between regional policies and export resilience indicates that regions with well-designed policies that promote digitalization and provide adequate support to exporting enterprises tend to have higher levels of export resilience.

In addition, the research found that social entrepreneurship represents a valuable avenue for enhancing export resilience through digital transformation. As discussed previously, social enterprises focused on fair trade, sustainability, and social impact can leverage e-commerce, digital payments, and supply chain tracking systems to improve resilience while expanding opportunities for marginalized communities. However, fully realizing this potential requires regional policies aimed at supporting social entrepreneurs with resources for digital skills development.

Overall, this research emphasizes the interplay between digital transformation, regional policies, and export resilience. It underscores the significance of a holistic approach that integrates technology adoption with supportive policy frameworks to enhance a region’s ability to withstand market disruptions, seize opportunities, and achieve sustainable export growth.

6.2. RECOMMENDATIONS

Based on the research findings, several recommendations are put forth for policymakers, businesses, and stakeholders aiming to foster export resilience and capitalize on the benefits of digital transformation:

- Governments and regional authorities should prioritize initiatives to enhance digital awareness and education among businesses, especially small and medium-sized enterprises (SMEs). Providing training and resources to build digital skills and capabilities will empower enterprises to leverage digital technologies effectively.
- Businesses should develop comprehensive digital strategies that align with regional policies and export resilience objectives. A well-defined strategy will enable companies to identify and prioritize digital initiatives that enhance competitiveness and resilience.
- Governments should encourage collaboration between businesses, academia, and policymakers to foster innovation, knowledge exchange, and technology diffusion. Public-private partnerships can lead to the development of tailored regional policies that address the specific needs and challenges of exporting industries.
- Regional policies should include financial incentives and support mechanisms to encourage businesses to invest in digital transformation initiatives. Financial assistance, grants, and tax breaks can facilitate the adoption of digital technologies and improve export resilience.
- Policymakers should provide targeted support, like digital skills training programs, for social entrepreneurs to maximize their impact on export resilience through digital transformation.
- Policymakers should regularly monitor and evaluate the effectiveness of regional policies in promoting digital transformation and export resilience. Data-driven insights will aid in identifying areas for improvement and refining policy interventions.
- Governments, businesses, and academic institutions should foster a culture of innovation to drive continuous improvement and adaptation. Encouraging an innovation-oriented mindset will help businesses stay agile and responsive to evolving market conditions.
- Regions should explore strategies to diversify their export portfolios to reduce reliance on specific markets and products. Diversification can mitigate risks and increase overall export resilience.
- Businesses and policymakers should continuously learn from best practices and experiences in other regions and industries. Knowledge sharing and lessons learned can accelerate digital transformation and enhance export resilience.

The findings of this research highlight the integral relationship between digital transformation, regional policies, and export resilience. Embracing digitalization and formulating supportive policies are crucial for regions to build resilient export sectors capable of thriving in an ever-changing global marketplace. By implementing the recommended strategies, regions can fortify their export resilience and position themselves competitively in the digital age.

REFERENCES


