THE IMPACT OF CROSS BORDER E- COMMERCE PLATFORMS ON FIRMS GROWTH OF PAKISTAN

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ABSTRACT

The emergence of cross-border e-commerce platforms has brought about a huge transformation in the international trade scene, especially for rising economies such as Pakistan. This study explores the relationship between export performance and trade policy openness, as well as the influence of cross-border e-commerce platforms on company growth in Pakistan. The aim of this research is to examine the relationship between cross-border e- commerce platforms and company growth in Pakistan, taking into account the role that trade policy openness and export performance play as mediators. The purpose of the study is to present actual data about how these factors affect the expansion of Pakistani businesses who engage in cross-border e-commerce. With the use of SPSS software for data analysis, the study takes a quantitative research method. Surveys will be used to gather information from Pakistani businesses involved in international e-commerce. The purpose of the study is to gather data on export performance, trade policies, business growth indicators, and the use of e-commerce platforms. The study will utilize regression analysis to investigate the correlation between cross-border e-commerce platforms and company growth, in addition to the mediating role of trade policies' openness and export performance. The results show a strong correlation between cross-border e-commerce platforms and Pakistani enterprise expansion. Furthermore, the research shows that export performance and trade policy openness moderate this link, meaning that businesses with more favorable trade policies and improved access to global markets see higher rates of growth from cross-border e-commerce. By illuminating the complex relationship between trade policies, export performance, cross-border e-commerce platforms, and company growth in Pakistan, this study adds to the body of current work. The findings highlight the significance of implementing legislative changes that promote cross-border e-commerce and, in turn, boost economic growth and competitiveness in the digital age.
Keyword: Cross Border E-Commerce Platforms, Firms Growth, Trade Policies, Export Performance.

INTRODUCTION

Cross-border e-commerce platform has emerged as a revolutionary force in today's more interconnected global economy, with the ability to alter economic dynamics, trade

policy, and export performance of countries. In the specific context of Pakistan, this study aims to explore the complex interaction between international e-commerce and important economic variables. It is crucial to comprehend how this phenomena is affecting the country's firm's growth, openness of trade policy, and export performance as the digital world crosses geographical boundaries.

A crucial link in the modern business environment is the influence of cross-border e-commerce dependence on businesses' expansion, with the mediating role of trade policy openness and export performance. Recognizing how these elements interact is crucial, as businesses in Pakistan are increasingly using cross-border e-commerce platforms. With its ability to broaden market reach, boost competitiveness, and encourage innovation, cross-border e-commerce presents businesses with development prospects never seen before. But the success of this expansion depends on how liberal trade laws are, as they can help or impede international trade. Furthermore, the export performance of companies that heavily rely on cross-border e-commerce serves as an important intermediary, indicating how well-capable these companies are of taking advantage of global opportunities and navigating regulatory settings. Through an examination of the intricate connections among export performance, trade policy openness, and cross-border e-commerce platforms reliance, this research aims to offer significant understandings of the factors propelling businesses' expansion in the digital age and assist in formulating policies that promote sustainable firms' growth.

In terms of cross-border e-commerce platforms reliance, it goes by that name as well. It refers, in a limited sense, to cross-border online retail-assisted cross-border payment settlement and cross-border distribution of goods. It encompasses all cross-border international trade activities carried out through e-commerce in a wide sense. Cross-border e-commerce, in its various forms, is a trading form that has emerged from the growth of the Internet Cross-border e-commerce platforms reliance in Pakistan has developed in phases: from 1999 to 2008, it was in its embryonic stage;

from 2008 to 2014, it was in its development stage; and after 2014, it was in its outbreak stage. It now makes up a sizable amount of China's foreign trade in terms of cross-border e-commerce development. In 2020, it is predicted that 26.6% of all import and export expenses will come from cross-border e-commerce platforms reliance activities. All of these can serve as excellent examples of cross-border e-commerce development and are crucial in advancing the growth of cross-border trade.

In Pakistan, cross border e-commerce platforms reliance has grown significantly, removing barriers between regions and giving companies of all sizes the chance to reach a wider audience both domestically and abroad. During the COVID-19 epidemic, the industry gained significant traction, which boosted online sales and established e-commerce as many firms' main online outlet. Due to issues affecting e-commerce sales in Pakistan, such as demand destruction, currency depreciation, and inflation, this growth has not exactly followed worldwide patterns.

Notwithstanding these obstacles, Pakistan's e-commerce market appears promising, with billions of dollars in revenue expected in 2025 with a focus on industries including media, electronics, furniture, appliances, and apparel. The sector exhibits apparent development potential as major e-commerce players increase their national footprint. Additionally, the industry has made a significant contribution to economic growth through tax contributions and the creation of job opportunities in a variety of industries (Zahoor N, Khan H, Shamim S, et al 2023).

Research emphasizes the significance of elements such as political stability, economic conditions, social variables, technology advancements, environmental considerations, and legal frameworks in forming the strategic climate for e-commerce development in the context of cross-border e-commerce. Research highlights that the development of cross-border e-commerce depends on a stable political climate, but improvements in supply chain management and logistics can also lower prices and improve delivery services. Additionally, current studies show that export performance can be strongly impacted by increasing the Electronic

Commerce Custom Declaration (ECCD) ceiling value at difficult times like the COVID-19 epidemic. The results indicate that raising the ECCD trade ceiling has a significant impact on export growth and that this impact is sustained in the face of a pandemic.

In conclusion, despite obstacles like inflation and currency devaluation that hinder sales development, Pakistan's e-commerce industry is still expected to generate significant revenue. It is imperative to comprehend the interplay between trade policies and export performance, as well as the effect of cross-border e-commerce platforms on firm growth, in order toward formulate policies that promote sustainable expansion within Pakistan's e-commerce domain.

According to PTA (2017), the primary force behind digital Pakistan is the dependence on cross-border e-commerce platforms. In 2000, only 1% of Pakistan's population had internet access; however, the country's internet user base grew annually, reaching 22.2% of the total population in 2018 (Internet World Stats, 2018). Despite these challenges, the country has made significant progress in terms of e-commerce legislation and infrastructure development. Data from the population poll about internet usage. Cross-border e-commerce platform dependence has increased dramatically in developed nations. Similar to other developing nations worldwide, Pakistan has only recently established and heartily welcomed the internet (Khan et al., 2021). In contrast to industrialized nations, Pakistan still has a low level of cross- border e-commerce platform development and business growth (Khan & Bawden, 2005). [6]. the progress and development of cross-border e-commerce platform reliance is currently being actively promoted by the Pakistani government. Pakistan now has an e-commerce law, and the country's internet user base is expanding (Blythe, 2006).

According to economists, the nation's economic growth may be significantly impacted by the adoption of new information and communication technologies (ICTs). Because of its large population and high percentage of young people in society, Pakistan offers tremendous potential for the development and growth of e-commerce (Agren & Barbutiu, 2018). Pakistan continues to accept e-commerce at a basic level despite its ICT progress (Moomal & Masrom, 2015; Sohaib & Kang, 2014). However, the nation is currently moving more and more toward digitalization and encountering both positive and negative experiences in the process. Positive experiences with widely available broadband and widely accepted internet, and negative experiences with payment issues and ICT utilization limitations. Despite this, people are starting to understand that doing business online has many benefits (Moomal & Masrom, 2015; Qureshi, Fatima, & Sarwar, 2014). However, there are a lot of barriers in Pakistan, which is why there aren't as many customers making purchases online. There are differences in Pakistani people's attitudes toward internet shopping. Despite the fact that many people utilize the internet, there are still certain reasons why customers are reluctant to make purchases online. A crucial component was discovered to be trust (Nazir, Tayyab, Sajid, ur Rashid, & Javed, 2012). The primary barrier to online shopping for Pakistani consumers, despite the country's high rate of e- commerce activity, continues to be trust. Zeb (2017) claims that security is the primary factor impeding Pakistan's e-commerce industry's expansion. In their study on the elements influencing Pakistani consumers' acceptance of online buying, Chaudary, Rehman, and Nisar (2014) addressed privacy as a roadblock to the country's e-commerce growth.

The economy of Pakistan has been severely impacted in recent years, and the cost of the manufacturing sector is growing. Significant cross-border trade as well as conventional overseas trade have been significantly disrupted. In contrast to conventional international trade, Pakistan's Internet economy is currently doing well globally, and the cross-border e-commerce dependence sector is growing quickly. Online shopping has significant competitive benefits, particularly for modest cross-border purchases. At the same time, national policies are still in place to encourage the growth of international e-commerce.

Cross border E-commerce platforms reliance is a common trend in which Pakistani goods are offered to customers worldwide and are

expected to gradually supplant conventional trading techniques. It has grown increasingly challenging in this environment to actualize the growth of businesses that solely depend on reasonably priced goods. They can only gain a footing in the intense competition by simultaneously generating breakthroughs in the product, channel, brand, and supply chain building domains. We present selection criteria and the foundation for the overseas warehouse construction model of the platform through the research for this paper. This holds significant practical implications for enhancing and innovating the current model of cross-border logistics, strengthening logistics connections, and advancing Pakistan's foreign trade structure adjustment and power conversion.

A complex and crucial topic of research that arises from both theoretical and practical backgrounds is the effect of cross-border e-commerce platform reliance on the firms growth of Pakistan, particularly when taking into account the mediating effect of openness of trade policy and export performance.

The empirical background for "The Impact of Cross-Border E-Commerce platforms on Firms' Growth Pakistan" is a result of how international trade is changing and how digital technologies are being used more and more in corporate operations. The emergence of e- commerce platforms has presented opportunities and challenges for businesses in Pakistan when it comes to transnational transactions. Cross-border e-commerce presents businesses with the opportunity to penetrate new markets, increase their clientele, and boost sales on the one hand. However, the regulatory framework, which includes trade policy, affects how successful this reliance is and can help or hurt businesses' capacity to conduct international business. To navigate the complexities of global trade dynamics, optimize growth strategies, and promote sustainable economic development in Pakistan, policymakers and businesses must have a thorough understanding of the intricate relationships that exist between cross-border e- commerce reliance, trade policy, and export performance.

The direction of global trade has changed dramatically in recent years, moving more and more towards digital platforms and cross-border platform reliance. With an increase in international e-commerce, Pakistan has not escaped this trend. This expansion has been made possible by the growth of online markets, improved internet access, and shifting customer tastes. It is crucial to look into the role that international e-commerce plays in Pakistan's efforts to broaden its economic frontiers.

The theoretical background for "The Impact of Cross-Border E-Commerce platforms on Firms' Growth of Pakistan" use a number of theoretical frameworks. The resource-based view (RBV) theory is first incorporated, which contends that companies' dependence on international e-commerce platforms can be viewed as a strategic asset that fosters growth and competitive advantage. Secondly, it is consistent with the theory of transaction cost economics (TCE), which highlights how firms make decisions about cross-border transactions based on the advantages and disadvantages of trade policies and regulatory frameworks. Thirdly, it incorporates the idea of institutional theory, which emphasizes how trade policies and other formal and informal institutions influence how businesses behave and approach business. Through the integration of various theoretical frameworks, this study seeks to offer a thorough comprehension of the ways in which a firm's growth is impacted by its on cross-border e-commerce, as role by trade policy and export performance, all within the framework of Pakistan's business environment.

Cross-Border E-Commerce and Innovation Adoption

Examine the ways in which cross-border e-commerce platforms help Pakistani businesses adopt new technologies and business strategies. Examine case studies of businesses that have effectively used e-commerce to propel process improvement, product innovation, and market expansion. Innovative Policies for Cross-Border Electronic Commerce: Examine novel legislative approaches and regulatory structures that can facilitate the expansion of international electronic commerce within Pakistan. To find policy recommendations for promoting an environment that is favorable for the growth of e-commerce, analyze best practices from other nations and regions, such as digital trade agreements,

legislation governing cross-border data flows, and consumer protection laws.

E-commerce has grown rapidly in Pakistan; across the Asia-Pacific area, there are an estimated 330 million online shoppers. By 2020, cross-border B2C e-commerce sales from Asia and the Pacific are predicted to account for $476 billion, or roughly 48% of worldwide cross- border e-commerce sales. Businesses that use e-commerce typically export 40% more than other businesses, and this difference is much higher for businesses in Asia (up to 50% more), demonstrating the potential of e-commerce to encourage exports and cross-border trade. E- commerce may help Pakistani businesses develop and invest by giving them access to new markets and commercial prospects.

However, many Asian economies, including Pakistan, are still unable to fully benefit from cross-border e-commerce due to the existence of digital divides, gaps in critical infrastructure like internet penetration and delivery logistics, access to financial accounts, and limitations in e-commerce legislation. Pakistan should concentrate on bolstering the regulatory framework surrounding e-commerce, lowering compliance costs for startups and small businesses, strengthening oversight and mechanisms for cross-border electronic transactions, and investing in skill development, particularly in areas like creativity, agility, and resilience, in order to facilitate cross-border e-commerce growth and increase enterprise exports. Pakistani businesses can use cross-border e-commerce to reach international markets, boost exports, and support general economic growth by addressing these issues through trade policy reforms and encouraging e-commerce adoption.

Characteristics of the data

The data's attributes—such as its kind, source, scope, and quality—are carefully looked at. To give a thorough grasp of the data's validity and reliability for the research, any restrictions or limits related to it are also covered. The source, kind, breadth, quality, and other relevant factors of the data used in the study are all covered in detail in this part, along with some extra thoughts. The data's legitimacy and relevance to the study goals are established by the clear identification of

the data's source, which may include surveys, interviews, databases that are already in existence, or secondary sources. Specifically, questionnaire-based data collection is emphasized as a main source, highlighting its function in obtaining candid answers from participants. In order to ensure that the data gathered is specifically customized to address the research questions, the questionnaires are structured to capture specific factors relating to the study's aims. The description of the data type—qualitative, quantitative, or mixed—directs the analytical strategy and findings interpretation. To guarantee that the research findings are in line with the research questions, the scope of the data—which includes the time period covered, geographical range, and particular variables or parameters included—is described. In order to guarantee solid study results, an evaluation of the data's quality is also carried out, analyzing elements like validity, representativeness, accuracy, completeness, and dependability. In order to preserve transparency and facilitate the interpretation of the findings, any restrictions or limitations related to the data—such as sample size restrictions, mistakes in data collection, missing data, or potential biases in the dataset—are also noted. Through a comprehensive analysis of these data elements, researchers can provide the groundwork for a rigorous and reliable study.

Merit and Applicability of Research Methods

This study benefits from the validity and practicality of quantitative research methodologies, as well as the use of SPSS software for data analysis and questionnaire-based data collecting. Researchers are able to quantify correlations between variables and achieve statistical rigor through the systematic collection and analysis of numerical data made possible by quantitative approaches. Researchers can collect standardized replies from a sizable sample size through the use of questionnaires, which improves the findings' generalizability and makes statistical analysis with SPSS possible. Advanced statistical analysis, including regression analysis, correlation analysis, and descriptive statistics, are made easier with the use of SPSS software,

enabling a thorough examination of patterns, trends, and associations in the data. Researchers can test hypotheses, find important predictors, and come to trustworthy finding.

The impact of cross-border e-commerce platforms on firm growth and trade policies in Pakistan has garnered significant attention as these platforms reshape global trade dynamics. This review consolidates existing research to explore how e-commerce influences firm growth, trade policy, and export performance, particularly in Pakistan. It also examines the interplay of digital infrastructure, market conditions, and regulatory frameworks that affect cross-border e-commerce adoption. Research highlights the benefits of e-commerce in reducing trade costs and fostering firm growth (Anderson & Win-coop, 2003; Malik & Bilal, 2018). The evolution of technology has transformed business models, with innovations like electronic payments and improved logistics enabling seamless global transactions. However, challenges such as inadequate infrastructure, digital literacy, and cybersecurity persist.

Studies also emphasize the role of market share, customer satisfaction, and product diversification in leveraging e-commerce for business success. While Pakistan's export growth has been stagnant, competitors like India and Bangladesh have significantly enhanced their export performance through structural reforms, digital innovation, and diversified markets. Trade policies play a crucial role in shaping the e-commerce landscape. Research suggests that supportive regulations, improved logistics, and streamlined tax systems can enhance Pakistan's e-commerce ecosystem. Conversely, high tariffs, energy shortages, and limited female labor participation hinder competitiveness. Despite these challenges, opportunities for growth exist. Rising internet penetration, a growing middle class, and government support provide a foundation for expanding cross-border e-commerce. To fully harness these opportunities, Pakistan must address infrastructural gaps, enhance digital literacy, and adopt sustainable practices. In summary, cross-border e-commerce holds transformative potential for Pakistan's economic growth and trade policies. However, realizing its benefits requires targeted reforms and strategic investments in digital infrastructure, market diversification, and regulatory frameworks.

The theoretical framework for examining the impact of cross-border e-commerce platforms on firm growth of Pakistan is anchored in several theoretical perspectives. Firstly, drawing from resource-based theory, the framework suggests that firms leveraging cross-border e-commerce platforms can access new resources and capabilities, such as advanced technology infrastructure and global market intelligence, which can drive sustainable competitive advantages and ultimately lead to accelerated growth. Secondly, institutional theory underpins the hypothesis by emphasizing the role of institutional environments, including trade policies and regulatory frameworks, in shaping firms' behaviors and strategies. It posits that firms operating in environments characterized by open trade policies are better positioned to capitalize on the opportunities presented by cross-border e-commerce, resulting in enhanced export performance and growth.

Furthermore, the framework incorporates elements of the network theory, highlighting the importance of strategic partnerships and networks formed through cross-border e-commerce platforms, which can facilitate knowledge sharing, collaboration, and market access, thereby fostering firms' growth trajectories. By integrating these theoretical perspectives, the framework offers a comprehensive understanding of the mechanisms through which cross-border e-commerce platforms influence firm growth, mediated by trade policy openness and export performance, within the context of Pakistan's economy
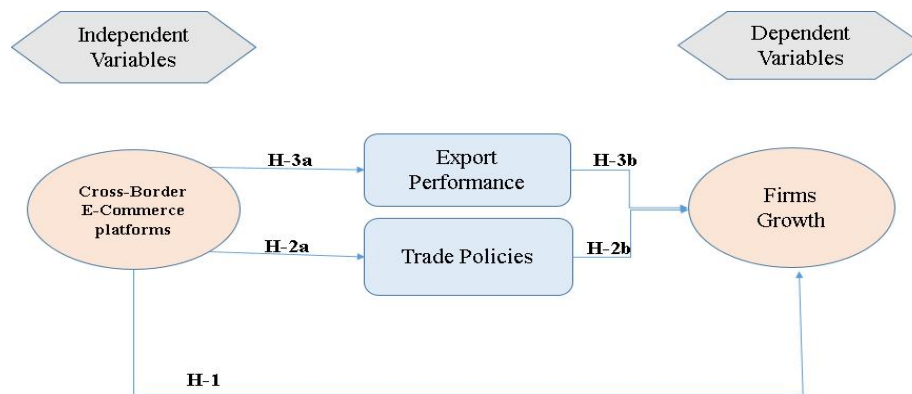
Figure 1: Summary of Hypotheses and Related Concepts

Cross-Border E-Commerce and Firm Growth (H1)

H1 posits a positive relationship between cross-border e-commerce (CBECP) and firm growth (FG), suggesting that increased reliance on CBECP fosters firm development through enhanced financial indicators and market access. Studies (Fadaki et al., 2020; Iqbal et al., 2020) emphasize complementarity between strategies like JIT, TQM, and flexibility in leveraging CBECP for FG.

Cross-Border E-Commerce and Trade Policies (H2a)

H2a proposes that supportive trade policies enhance the impact of CBECP on firm performance. Effective policies enable seamless cross-border transactions, fostering business growth and innovation. Research highlights the synergy between CBECP and openness in trade policies (Iqbal et al., 2020; Abdelilah et al., 2021).

Trade Policies and Firm Growth (H2b)

H2b suggests that open trade policies positively influence FG by reducing barriers, facilitating international trade, and promoting innovation. Studies (Fadaki et al., 2020; Ghobakhloo & Azar, 2018) highlight how trade policies encourage flexibility and dynamic capabilities that drive FG.

Cross-Border E-Commerce and Export Performance (H3a)

H3a asserts that reliance on CBECP improves export performance (EP) by expanding global reach, targeting niche markets, and enabling efficient trade practices. Studies underline the role of JIT and TQM in boosting EP (Swafford et al., 2008; Maqueira et al., 2021).

Export Performance and Firm Growth (H3b)

H3b links EP with FG, arguing that improved export capacity drives economic growth, revenue diversification, and job creation. Research (Iqbal et al., 2020; Narasimhan et al., 2006) highlights how flexibility and resource optimization in EP strategies lead to FG.

Research Methodology

Overview

The research employs a structured methodology to explore the relationship between cross-border e-commerce reliance, trade policies, export performance, and firm growth in Pakistan.

Study Approach

A deductive approach is used to test hypotheses and measure the impact of independent variables (cross-border e-commerce reliance) on dependent variables (firm growth). Quantitative data collected via questionnaires is analyzed using SPSS software. Methods include descriptive statistics, correlation, regression, and mediation analyses to identify variable relationships and effects.

Study Design

This causal explanatory research uses a cross-sectional design and quantitative methodology to study businesses in Pakistan involved in cross-border e-commerce. Data is collected via structured questionnaires and analyzed through statistical techniques to explore causal relationships and mediating effects, offering empirical evidence for decision-making and policy formulation.

Research Strategy

The study adopts a cross-sectional survey to collect quantitative data from Pakistani businesses using e-commerce platforms. Statistical methods such as regression, correlation, and mediation analyses are employed to examine the influence of trade policy openness on the relationship between e-commerce reliance and firm growth.

Measures

The questionnaire, designed using a Likert scale (1 = strongly disagree, 5 = strongly agree), covers variables related to cross-border e-commerce reliance, trade policies, export performance, and firm growth. Sections are tailored to assess each variable comprehensively.

Population and Sampling

The study targets a sample of 200 marketers engaged in cross-border e-commerce from diverse sectors in Pakistan. Convenience sampling ensures quick and cost-effective data collection, albeit with potential limitations in representativeness. Stratified random sampling can supplement the approach to ensure sectoral representation.

Data Collection

Data collection relies on both primary (questionnaires) and secondary sources over a period of 5–10 years. Online self-administered surveys allow anonymous responses, ensuring honest feedback. The questionnaire is distributed to individuals aged 25+ through platforms like Facebook and email, targeting participants actively involved in e-commerce activities.

Results:

Data Analysis Using SPSS; Describe the process of data analysis conducted using SPSS software. Explain the steps taken to input, clean, and analyze the data, including the selection of variables, statistical tests performed, and any relevant assumptions made. Comparison of Dependent and Independent Variables; Present the results of your data analysis by comparing dependent variables (e.g., firm growth, export performance) with independent variables (e.g., cross-border e-commerce platform usage, trade policy openness). Use descriptive statistics, such as means, medians, or frequencies, to summarize the data and highlight any significant differences or trends observed.

Charts and Graphs; Utilize charts and graphs to visually present the relationship between dependent and independent variables. Depending on the nature of your data, you can create various types of charts, including: Use bar charts to compare the means or frequencies of different categories of independent variables with the dependent variable. Create line graphs to illustrate trends over time, such as changes in firm growth or export performance in response to variations in cross-border e-commerce platform usage or trade policy openness.

Generate scatter plots to visualize the relationship between two continuous variables, such as the correlation between cross-border e-commerce platform usage and firm growth. Use charts to display the distribution of categorical variables, such as the proportion of firms experiencing different levels of export performance based on their usage of cross-border e-commerce platforms. Interpretation of Charts and Graphs Provide detailed interpretations of the charts and graphs, highlighting any notable patterns, correlations, or trends observed. Discuss the implications of the findings for your research hypotheses or objectives and relate them back to the theoretical framework and existing literature. By incorporating data analysis using SPSS software and utilizing charts and graphs to compare dependent and independent variables, you can enhance the visual presentation of your research findings and provide a clearer understanding of the relationships between different variables in your study.

Table 1: Demographic Analysis

Category	Subcategory	Percentage/Description
Gender	Men	68%
	Women	32%
Age Range	Wide age range	Diverse spectrum of respondents
Education Level	Varied educational backgrounds	Mix from various organizations

Occupation Level	Diverse occupational groups	Representatives from various organizations

Table 2: General Questions

Question	Description
Do you use cross-border e-commerce platforms?	Respondents were asked about usage
Which cross-border e-commerce platforms do you use?	Asked about specific platforms utilized
Which cross-border e-commerce platforms do you use? (Repeated)	
How often do you engage with cross-border e-commerce platforms?	Frequency of engagement analyzed
Do you post product reviews on the internet?	Questions about posting reviews

Reliability Analysis

Table 3: Reliability Analysis

Measure	Cronbach's Alpha	Interpretation
Scales Used in Study	0.8	Reliable and Consistent

Conducting a reliability investigation of the balances used to measure this specific study is the first phase of the analysis. Cronbach's alpha, which shows that the scales utilized for the analysis were very consistent and dependable, was 0.8. Consequently, more research may be relevant in light of this. The conclusions drawn in this regard come from Cronbach alpha analysis, which has a target value of 0.7 to 0.9.

Demographic Analysis

Table 4: Demographic Analysis (Gender Distribution)

Gender	Percentage
Men	68%
Women	32%

The gender of the marketers that participated in the review procedure is the subject of the first section of the analysis done in light of demographics. Of the 200 participants involved in this study, 68% were men and 32% were women.

Table 5: Demographic Analysis (Age Range)

Age Range	Frequency	Percentage
25-34 years	43	21.5
35-44 years	41	20.5
45-54 years	44	22
55-64 years	39	19.5
64 to above	33	16.5
Total	200	100

The age range of the respondents to this specific survey is the subject of the second section of the demographic analysis. The results of the survey showed a range of the age groups of the employees who participated, demonstrating the presence of diverse groups of representatives from various organizations.

Descriptive Statistics
The replies obtained on various variables were identified through the analysis of descriptive statistics.

Table 6: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
CBCEP is largely used in our international trade	200	1	5	4.04	1.314
Using CBCEP has an increased sense of security	200	1	5	4.02	1.335
Engaging in CBCEP has expanded the market reach	200	1	5	4.04	1.314
Using CBCEP has facilitated my business operation	200	1	5	4.09	1.401
Usable N (tilt-wise)	200				

First, there is the CBECPR's electronic commerce variable. Given that the mean values of the replies were 4, it can be concluded that the majority of respondents agreed with the claims provided in this section of the questionnaire.

Table 7: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
TP facilitates the domestic trade market	200	1	5	4.51	1.439
Clear and predictable trade policies help my business make informed decisions	200	1	5	4.09	1.440
Trade policies encouraging international trade	200	1	5	4.77	1.371
Trade policies prioritize safe and transparent payment systems for international transactions	200	1	5	4.03	1.111
Usable N (tilt-wise)	200				

The dependent variable of organizational growth is covered in the second section of the descriptive statistics. The research indicates that the respondents comprehended the assertions on the questionnaire, as seen by the mean value that was obtained, which likewise falls inside or very near to 5. The acceptability of the theory is positively

impacted by the results in this area.

Table 8: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
EP is determined by government incentives and subsidies to promote exports	200	1	5	4.08	1.317
Pakistan's export sector needs to improve its marketing and branding strategies in the global market	200	1	5	4.07	1.297
EP needs to diversify its products and explore new markets to reduce dependence on traditional exports	200	1	5	4.09	1.317
My business has experienced an increase in international sales and exports due to cross-border e-commerce platform reliance	200	1	5	4.82	1.344
Usable N (tilt-wise)	200				

The cross border e-commerce issues that businesses in Pakistan's various industries are projected to confront are shown in the table above. The average scores for these answers are slightly higher than four, showing that most respondents had a positive opinion of the Export performance.

Table 9: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
FG improves the competitive position of your company	200	1	5	4.87	1.312
FG uses web-based procurement and purchases to cut expenses	200	1	5	4.88	1.317
FG attracts new investment to the company	200	1	5	4.84	1.297
FG provides easier	200	1	5	4.08	1.317

access to international markets					
Usable N (tilt-wise)	200				

The last dependent variable relates to the growth of firms when they use cross border e-commerce to communicate through their customers. Like in the other examples, the mean values in this instance are likewise 4 or above, indicating that the respondents concur with the reports made in the survey questionnaire.

whether there is a suggestion among the independent and the dependent variables. Altogether the table's obtainable overhead about regression analysis show that the sig values stated in all the tables are below the threshold value of .05, which indicates that the hypothesis is accepted. In assumption, there is an optimistic suggestion amid cross border e-commerce platforms reliance and firm's growth.

Regression Analysis
The determination of regression study is to statement the theory's outcomes to test

Table 10: Coefficient Analysis

Model	Unstandardized Coefficient (B)	Std. Error	Standardized Coefficient (Beta)	Sig.
(Constant)	1.571	0.289		0.000
CBEC Platform Reliance (CBECPR)	0.604	0.075	0.500	0.000

Dependent Variable: Firm Growth

Table 11: Discriminant Validity

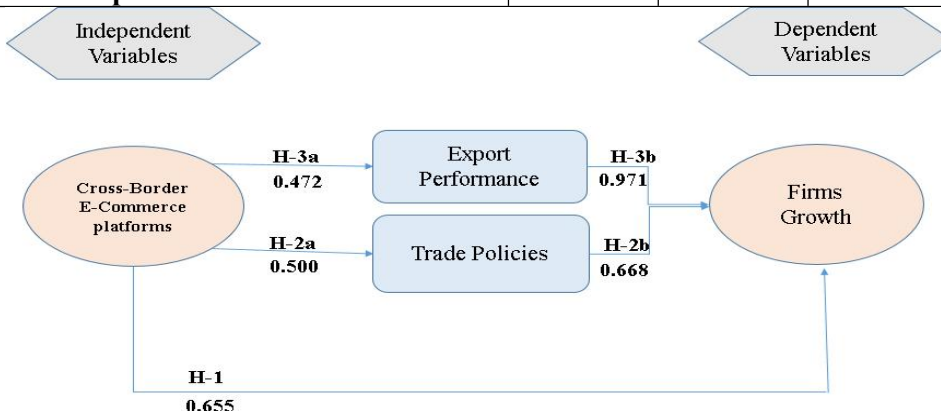| Key Variables	1	2	3	4
Cross-border E-commerce Platforms				
Firm Growth	0.116	_		
Trade Policy	0.243	0.258	_	
Export Performance	0.354	0.454	0.324	_

Figure 2: Connecting Hypothesis Theoretical framework

To establish a proper connection between each hypothesis and provide a good reason, let's analyze each hypothesis:
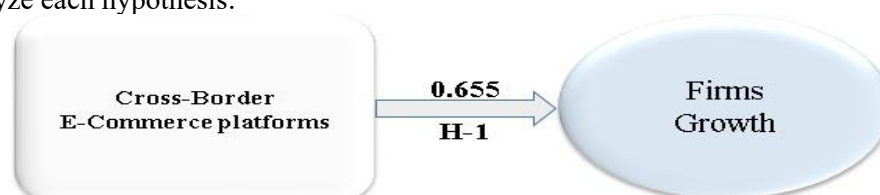

Figure 3: CBECP AND FG

Connecting (H1) asserting a positive relationship between cross-border e-commerce platforms and firms growth, suggests that as countries or regions actively participate in international online commerce, it is anticipated that their firms will experience positive growth. This hypothesis implies that the expansion of cross-border e-commerce platform reliance can act as a catalyst for firm's development and prosperity. (Kamble et al., 2019; Núnez-Merino et al., 2020˘; Raji et al., 2021a) The positive relationship posited in H1 implies that increased engagement in cross-border e-commerce platform reliance activities may lead to enhanced firms indicators and overall financial well-being. (Frank et al., 2019; Núnez-Merino et al., 2020˘) Cross-border e-commerce platforms enable firms to access larger markets, expand customer bases, and increase sales, which can lead to enhanced firm growth.

Connecting H-1 indicates the hypothesis being tested concerning the association between cross-border e-commerce platforms and firms' growth.

The correlation coefficient is a statistical measure indicating the strength and direction of the linear relationship between two variables. Here, the value of 0.655 suggests a moderately strong positive correlation between cross-border e-commerce platforms and firms' growth.

A correlation coefficient of 0.655 implies a moderately robust positive correlation between cross-border e-commerce platform reliance and firms' growth. This indicates that as reliance on cross-border e-commerce platforms increases, there's a tendency for firms' growth to increase as well.

The positive sign of the correlation coefficient (+0.655) signifies that as cross-border e-commerce platform reliance rises, firms' growth tends to follow suit. Hence, there's a proclivity for firms with higher reliance on cross-border e-commerce platforms to experience greater growth. The correlation coefficient of 0.655 underscores a significant and positive relationship between cross-border e-commerce platform and firms' growth. It suggests that firms leveraging cross-border e-commerce platforms are more likely to witness enhanced growth, emphasizing the pivotal role of such platforms in fostering business expansion and economic development. Reason: Firms that rely more on cross-border e-commerce platforms are likely to experience greater growth opportunities due to increased market reach, efficiency in reaching customers, and potential cost savings compared to traditional brick-and-mortar operations.

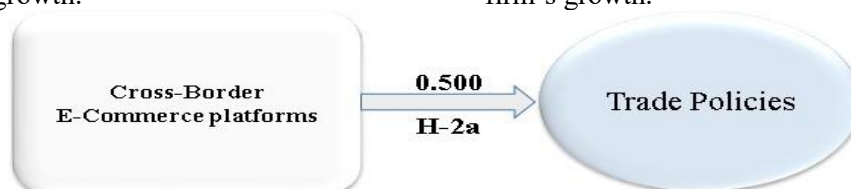H1: There is a positive relationship between cross-border e-commerce platform and firm's growth.

Figure 4: CBECP AND TP

Connecting H-2a indicates the hypothesis being tested regarding the association between cross-border e-commerce platform and the trade policy.

The correlation coefficient is a statistical measure that quantifies the strength and direction of the linear relationship between two variables. Here, the value of 0.500 suggests a moderate positive correlation between cross-border e-commerce platform reliance and the openness of trade policy.

A correlation coefficient of 0.500 indicates a moderate positive correlation between cross-border e-commerce platform reliance and the openness of trade policy. This suggests that as reliance on cross-border e-commerce platforms increases, there's a tendency for trade policies to be more open.

The positive sign of the correlation coefficient (+0.500) implies that as cross-border e-commerce platform reliance rises, there's a propensity for trade policies to be more open. In other words, increased reliance on cross-border e-commerce platforms may coincide with greater openness in trade policies.

The correlation coefficient of 0.500 signifies a significant and positive relationship between cross-border e-commerce platform reliance and the openness of trade policy. It

suggests that countries with a higher reliance on cross-border e-commerce platforms may be more inclined to adopt open trade policies, potentially as a means to facilitate international trade and economic growth. (Oliveira-Dias et al., 2022a). This suggests that when countries or regions implement favorable openness of trade policies, it is expected to enhance the positive impact of cross-border e- commerce platform reliance on their firm's activities. (Bi et al., 2013; Liu et al., 2013; Oliveira-Dias et al., 2022b) In essence, H2a suggests that well-crafted openness of trade policies can play a crucial role in fostering and optimizing the relationship between cross-border e-commerce platform reliance and the

facilitation of international trade. Cross-border e-commerce platforms thrive in environments with open trade policies, as they facilitate seamless international transactions and reduce barriers to entry for foreign businesses. Reason: Countries with open trade policies typically have fewer restrictions on cross-border transactions, making it easier for firms to engage in e-commerce activities across borders. Therefore, a positive relationship is expected between reliance on cross-border e-commerce platforms and the openness of trade policies

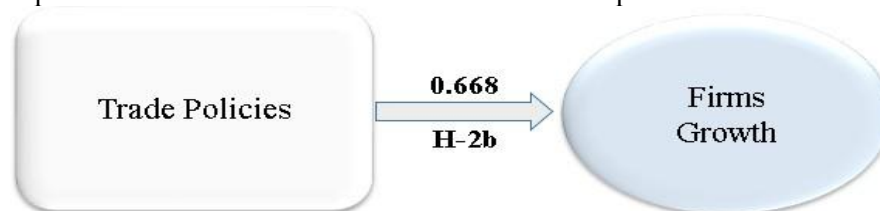H2a: There is a positive relationship between cross-border e-commerce platform and trade policies.

Figure 5: TPAND FG

Connecting (H2b) suggesting a positive relationship between cross-border e-commerce platform and export performance, indicates that engaging in international online commerce is expected to have a favorable impact on a country's or region's ability to export goods. This hypothesis implies that as cross-border e-commerce platform activities increase, there is an anticipation of enhanced performance in terms of exporting products to international markets. (Novais et al., 2020; Powell and Dent-Micallef, 1997). In essence, H3a suggests that a robust presence in cross-border e-commerce platform reliance can contribute positively to a nation's export capabilities and performance. Open trade policies create favorable conditions for firms to expand internationally by reducing tariffs, simplifying customs procedures, and promoting free movement of goods and services.

Connecting H-2b indicates that there is a hypothesis being tested regarding the relationship between trade policy and firms' growth. Correlation Coefficient (0.668): The correlation coefficient measures the strength and direction of the linear relationship between two variables. In this scenario, the correlation coefficient of 0.668 indicates a

positive and moderately strong correlation between trade policy reliance and firms' growth. Strength of Correlation: A correlation coefficient of 0.668 suggests a moderately strong positive correlation between openness of trade policy reliance and firms' growth. The closer the correlation coefficient is to +1, the stronger the positive correlation between the variables. Direction of Correlation: The positive sign of the correlation coefficient (+0.668) indicates that as the level of openness of trade policy reliance increases, there tends to be a corresponding increase in firms' growth. Therefore, there is a tendency for firms operating in an environment with more open trade policies to experience higher levels of growth. Interpretation: The correlation coefficient of 0.668 suggests a significant and positive relationship between openness of trade policy reliance and firms' growth. This implies that firms operating in countries with more open trade policies are likely to experience higher levels of growth. It underscores the importance of trade policy openness in fostering business expansion and economic development.

Reason: Firms operating in countries with trade policies can benefit from increased access to foreign markets, lower input costs,

and greater opportunities for specialization and economies of scale. These factors contribute to enhanced firm growth in

environments with more open trade policies.
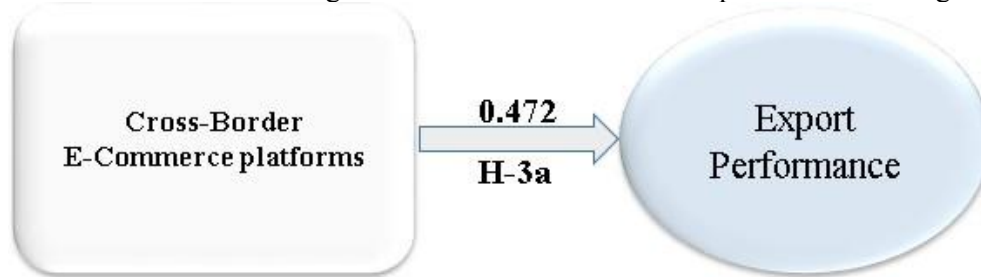H2b: There is a positive relationship between trade policies and firms growth.

Figure 6: CBECPAND EP

Connecting (H3a) suggesting a positive relationship between cross-border e-commerce platform and export performance, indicates that engaging in international online commerce is expected to have a favorable impact on a country's or region's ability to export goods.

"Connecting H-3a" indicates the hypothesis being tested concerning the association between cross-border e-commerce platform and export performance.

The correlation coefficient quantifies the strength and direction of the linear relationship between two variables. Here, the value of 0.472 suggests a moderate positive correlation between cross-border e-commerce platform and export performance. A correlation coefficient of 0.472 indicates a moderate positive correlation between cross-border e-commerce platform and export performance. This implies that as reliance on cross-border e-commerce platforms increases, there is a tendency for export performance to improve, albeit moderately.

The positive sign of the correlation coefficient (+0.472) suggests that as cross-border e- commerce platform reliance rises, there is a tendency for export performance to increase. In essence, heightened reliance on cross-border e-commerce platforms may coincide with better export performance. The correlation coefficient of 0.472 indicates a significant and positive relationship between cross-border e-commerce platform reliance

and export performance. This suggests that businesses relying more on cross-border e-commerce platforms may experience improved export performance, possibly due to expanded market reach and enhanced efficiency in reaching international customers. This hypothesis implies that as cross-border e-commerce platform reliance activities increase,

there is an anticipation of enhanced performance in terms of exporting products to international markets. (Ghobakhloo and Azar, 2018; Iqbal et al., 2020) In essence, H3a suggests that a robust presence in cross-border e-commerce platform reliance can contribute positively to a nation's export capabilities and performance. Cross-border e-commerce platforms serve as effective channels for firms to reach international customers and export their products or services to foreign markets.

Reason: Firms that heavily rely on cross-border e-commerce platforms can leverage their global reach to expand their export activities, penetrate new markets, and capitalize on international demand. Therefore, a positive relationship is expected between reliance on cross-border e-commerce platforms and export performance.

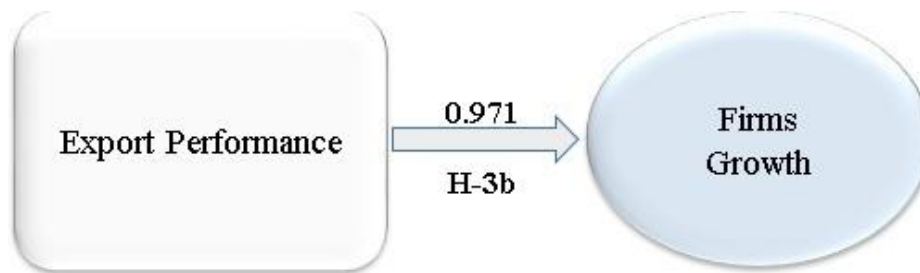H3a: There is a positive relationship between cross-border e-commerce platforms and exports performance.

Figure 7: EPAND FG

Connecting (H3b) asserting a positive relationship between export performance and firms growth, suggests that a nation's ability to effectively export goods is expected to contribute positively to its overall economic development. "Connecting H-3b" suggests the hypothesis being examined regarding the association between export performance and export performance. The correlation coefficient quantifies the strength and direction of the linear relationship between two variables. Here, the value of 0.971 indicates a perfect positive correlation between export performance and itself. However, this result is likely an error or an artifact of the data analysis process.

A correlation coefficient of 0.971 suggests a perfect positive correlation between export performance and itself. This implies that the variable is perfectly correlated with itself, which is a mathematical certainty but not meaningful in practical terms. The positive sign of the correlation coefficient indicates that the correlation between export performance and itself is positive. However, since we are comparing the same variable with itself, the direction of correlation is not relevant in this context.

Although a perfect positive correlation between export performance and itself is implied by the correlation coefficient of 0.971, in actuality it has little practical significance. This outcome most likely suggests a mistake in the data entry procedure or a misinterpretation during the analysis. It is crucial to confirm that the variables being compared are separate and significant within the context of the investigation before evaluating correlation coefficients. According to this theory, a nation's good export performance tends to boost business growth by generating income, opening up job chances, and promoting a more stable economic climate. (Frank & colleagues, 2019; Núnez-Merino & colleagues, 2020) In conclusion, H3b asserts that there is a positive relationship between a country's performance in exports and the growth of its entire firm. Businesses can grow overall by diversifying their clientele, generating more income, and realizing economies of scale by exporting. Reason: Firms that achieve higher export performance are likely to experience increased sales, profitability, and market share, leading to enhanced firm growth. Exporting also exposes firms to international best practices, innovation, and new business opportunities, further fueling their growth trajectory.

H3b: There is a positive relationship between exports performance and firm's growth

Correlation Analysis
Analyzing the degree of connection between the independent and dependent variables is the goal of correlation analysis.

Table 12: Correlations

Variable	Cross-border E-commerce Platform	Firms Growth	Openness of Trade Policy	Export Performance
Cross-border E-commerce Platform	1	0.655**	0.500**	0.472**
Firms Growth	0.655**	1	0.668**	0.655**
Trade Policy	0.500**	0.668**	1	0.971**
Export Performance	0.472**	0.655**	0.971**	1

Notes:
- ** indicates significance at the 0.01 level (2-tailed).
- N = 200 for all variables.

Table 13: Pearson Correlation

Variable	Pearson Correlation	Sig. (2-tailed)	N
Cross-border E-commerce Platforms	0.472**	0.000	200
Firms Growth	0.656**	0.000	200
Trade Policy	0.970**	0.000	200
Export Performance	1.000	0.000	200

Note: ** indicates significance at the 0.01 level.

The association between cross border e-commerce platform reliance and firm's growth is 0.655', according to the analysis of the aforementioned tables, whereas the relationship between cross-border e-commerce platforms' reliance and firms' growth is 0.6. A significant link between the variables is indicated by the extracted correlation value of 0.47 for cross border e-commerce platform reliance and Export performance

Discussion

The conversation that took place was based on the goals that were established for this study. The primary aim of the study was to determine the characteristics that influence Pakistani organisations' adoption of e-commerce. The results in this regard highlighted a few crucial elements that different establishments must take into account, like giving clients convenience and simplicity of shopping and motivating them to purchase a variety of goods and services. The trend towards greater globalization is another element that has raised the importance of e- commerce in organizations. The necessity for businesses to deploy e-commerce capabilities widely in order to enhance their overall business competency has been greatly exacerbated by the globalization of commercial operations. According to Moll and Yigitbasioglu's (2019) literature, e-commerce has emerged as a crucial necessity for firms in the modern period, given the heightened degree of competitiveness and technological improvements. [78]

The other goal has to do with how Pakistani consumers' behaviour is affected by e-commerce. The results in this area demonstrated how the emergence of e-commerce has prompted consumers to make large purchases of a variety of goods and services. It's because using e-commerce websites to make purchases is handy for customers.

The statistical results supported the validity of the issue's hypothesis, demonstrating the fact that e-commerce does, in fact, have a favourable impact on Pakistani consumers' purchasing decisions. The literature that has been published in this respect, by Choi and Mai (2018), indicates that the ease with which customers may make large purchases through e-commerce is a major factor in its popularity. On the other hand, Abd Aziz and Abd Wahid (2018) contend that traditional clients are typically apprehensive about making large and comprehensive purchases online. They worry the difficulties and roadblocks that may occur in this regard and struggle to comprehend its dynamics.

The impact of e-commerce on Pakistani organizations' expansion potential is the subject of the third aim. The analysis goal was based on the results of statistical methods, specifically regression and correlation. The determined sig value for the regression is.000, and the correlation value is greater than 0.5, indicating a strong positive association between Pakistan's organizational growth potential and e-commerce. In another way, the strategic use of e- commerce by businesses to optimise its potential for growth. According to the research conducted by Hua, Hight, Wei, Ozturk, Zhao, Nusair, and DeFranco (2019), e-commerce gives businesses the chance to support their long-term expansion. However, Hanna (2016) contends that strong organizational infrastructure is necessary to implement e-commerce services without any problems and to maximize growth-related prospects.

Determining or testing how e-commerce

applications affect organizational difficulties was the fourth objective. Given that the hypothesis can be accepted based on a threshold value of.005, the sig value was below.000. Ultimately, the utilization of e-commerce tools and resources frequently presents major obstacles for businesses in Pakistan. A variety of obstacles that organizations may encounter were demonstrated by the questionnaire replies, including visibility, order fulfilment, cyber-security, providing a great customer experience, and dealing with unstable political and economic environments.

Conclusion

The research's conclusions help Pakistan's e-commerce industry's decision-makers determine what needs to be done to boost the nation's chances in the near future. The research's variables and difficulties will be specifically referenced in the findings, which will be important in understanding consumer behaviour towards e-commerce facilities and recognising the advantages and potential drawbacks for customers. In this sense, there's a good chance that in the long term, authorities and business decision-makers will resolve all problems and difficulties related to e-commerce services. This study has offered thorough insights into the dynamic interaction between business growth, trade policy openness, export performance in Pakistan, and cross-border e-commerce platforms. The dependence of enterprises on cross-border e-commerce has been shown to have a substantial impact on their growth trajectory through empirical analysis and theoretical frameworks. Trade policies' openness and export performance have been found to be important mediators in this relationship. The results illustrate the transformative potential of e-commerce for firms in Pakistan and emphasize the significance of strategic alignment between export objectives, trade policies, and e-commerce activities. To maximize the socio-economic benefits of cross-border e-commerce, specific interventions are also necessary to help businesses increase their export capacity and gain access to international markets. Pakistan can promote equitable development and job creation in the digital economy era, along with economic progress, by capitalizing on the opportunities provided by e-commerce and optimizing trade policies. This research has thoroughly examined the complex relationship between international e-commerce platforms, business expansion, trade policy openness, and export success in the particular setting of Pakistan. The results highlight the revolutionary potential of cross-border e-commerce and highlight its critical role in boosting market competitiveness and business growth. Export performance and trade policy openness' mediation effects clarify the complex mechanisms by which e-commerce affects economic results. This work advances theoretical knowledge, which benefits academia, and it also provides useful advice for businesses and governments. It is recommended that policymakers take a comprehensive approach that includes investments in digital infrastructure, targeted support mechanisms to enhance enterprises' export capacities, and regulatory reforms to create an environment that is favorable to e-commerce. Businesses are also urged to adopt digital transformation plans, utilizing e-commerce platforms' capacity to expand their market reach, maximize operational efficiency, and spur innovation. Pakistan may fully utilize cross-border e-commerce as a driver of equitable growth, job creation, and sustainable development in the twenty-first century by adopting these ideas.

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