

# The Impact of Electronic Marketing on Reducing The Economic Impacts Considering Disasters and Crises (Corona Pandemic as An Example)

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## Abstract

The main purpose of this study was the impact of electronic marketing on reducing the economic impacts in light of disasters and crises (Corona pandemic as an example). The statistical population of this study was Accounting and management graduates (90 individuals) in the Applied colleges at King Khalid University in KSA country and 90 people were selected as samples by a simple random sampling method. The Bussakorn and Dieter (2025) questionnaire was used to measure electronic marketing, and a researcher-made questionnaire was used to measure the economic effects of Corona. The validity of the questionnaire was confirmed by a supervisor and a number of accounting and management professors, and the reliability of the questionnaire was confirmed by Cronbach's Alpha, which was 0.92. The questionnaires collected were analyzed by structural equation modeling (SEM) and path analysis models by Lisrel software. Data analysis showed that e-marketing hurts the economic effects of the Corona pandemic. And incentives, interactive marketing, and advertising hurt the economic effects of the Corona pandemic.

**Keywords:** E-Marketing, Economy, Disasters and Crises, Corona.

## 1. Introduction

Today, due to the rapid spread of severe acute respiratory syndrome (coronavirus disease), it has led to an epidemic of the disease all over the world, which has caused many problems in the functioning of businesses (Saeb Nia and Karimi, 2019). The spread of Covid-19 or the coronavirus forces these businesses to adapt to an uncertain, unpredictable, and rapidly evolving environment. By making changes in economic, social, cultural, and political conditions, this virus has changed the main and known form of activities and has faced the world with issues that have both positive and negative aspects (Investment Bank Europe and World Health Organization, 2020).

The spread of this disease has caused many problems for countries, including the reduction of tourism income and stagnation in economic activities. The International Monetary Fund has announced that the COVID-19 disease has plunged the world into an economic recession worse than the financial crisis of 2000, and has had a significant impact on the global economy, from stocks to businesses and emerging markets. At the end of the first quarter of 2020, the collapse of global stocks, accompanied by a 60% slump in oil prices, and the financial market is witnessing more turbulence (Kattah and Welbeck, 2020). Economically, the global economy was greatly affected by the outbreak of COVID-19, and the measures of the disease led to the closure of entire sectors and industries were forced to relocate (She and Harris, 2020). The economic surveys that have been conducted so far and during the epidemic show that the spread of the coronavirus affects economic sectors, including tourism, foreign trade, retail market, capital businesses, foreign exchange market, housing market, general businesses, and commodity prices, and will affect the GDP (Fernando and McKibbin, 2020).

Governments and organizations are trying to curb the Coronavirus and prevent humanitarian losses (Chauhan, Shah, 2020). Atkeson (2020), Coibion et al. (2020), Dingle and Neiman (2020), Mongey and Weinberg (2020), and Ozili and Arun (2020), among many other studies - which are also rapidly expanding - have investigated various dimensions investigated the spread of the COVID-19 virus on the global economy. The results of this research show that the crisis caused by the Corona epidemic and the resulting uncertainties have faced both the supply and demand sides in the economy with a negative shock, and especially, the labor force is the first route of vulnerability of the economy from the resulting crises. It is one of the epidemic diseases. Generally, during the Corona period, people's work activities decreased and unemployment increased. Working hours decreased, some jobs were temporarily closed, and layoffs and temporary dismissals of employees increased. Some people were disappointed to find work again, and women were more at risk of losing their jobs (CCSA, 2020). In addition, the results of various research have shown the destructive effects of the Corona epidemic on the economy of countries. For example, Coibion et al. (2020) studied the effects of the coronavirus on the American labor market. They argue that the emergence of the Covid-19 virus and the policy responses to it led to an unprecedented number of initial jobless claims since the beginning of 2020 in



the United States. So that until April 4, 2020, the number of unemployment claims reached more than 16.5 million people, and in the initial months of the disease outbreak, new claims were even at the rate of 6 to 7 million people per week. Atkeson (2020) studied the effects of COVID-19 on the American economy and showed that 10 to 20 percent of the American people will suffer serious damage from the spread of the disease. This issue creates a significant disruption in the labor market. Therefore, policymakers face a trade-off between health costs and economic damage. Ozili and Arun (2020) consider the high vulnerability of the global economy to the coronavirus because of two issues. First, the spread of the virus caused social distancing, which led to the closure of financial markets, corporate offices, businesses, and events. Second, the prevalence rate of the coronavirus has greatly increased uncertainty about the severity of the situation. Therefore, this has led to very cautious behavior in consumption and investment among consumers, investors, and international business partners. The COVID-19 pandemic brought restrictions that forced changes in how to make businesses prove the efficiency of digital sales tools (Richter, 2020). Motti (2020) stated that COVID-19 has not only impacted consumer shopping and habits; however, it has compelled operators of departmental stores to make responsiveness changes inevitably in stocking the products and delivering services that are essential and trending among customers; if they are to retain their brand loyalty. Adach (2020) believes that the COVID-19 business world that marketers must strategically plan to respond effectively is deliberately rising to the occasion. Intense pressure of swiftly providing and delivering the products, brands, goods and services (like household staples and health-related goods, such as groceries, bottled water, hand sanitizer, toilet paper, face masks, etc.) which consumers desire or crave in COVID-19 period were out broken using technology; as a strategy to increase retailing without physical contact in isolation period (Adebayo and Ogundele, 2022). Theorists who blamed the lack of physical presence of shoppers in stores before the outbreak changed their opinions regarding online exchange after the outbreak. They stated that without the Internet, the impact of this epidemic would have been two or three times or even a hundred times (Abbruzzese & Ingram, 2020). Ratten (2020) attributes the Covid-19 pandemic to the rapid movement of small businesses online. They believe that more emphasis should be placed on digital transformation so that small businesses can compete in the global market. Digital marketing is a product activity using digital media or the internet. The purpose of digital marketing is to attract consumers and potential customers quickly (Ritz et al., 2019). Gao et al. (2023) showed that e-commerce had a significant association with MSMEs' financial performance and sustainability amid the pandemic. It also observed that digital marketing strategies had a substantial impact on MSMEs' financial performance.

In facing the existing challenges, dealing with and taking advantage of the possible opportunities resulting from the coronavirus epidemic can be a key strategy for different sectors. Along with all the problems caused by the coronavirus epidemic in different societies, many fields have tried to adapt to the new situation. In many cases, it has tried to use the new situation as a new opportunity to create new ideas and strategies. In this, electronic marketing can play an important role. There is no doubt that electronic marketing does not only mean creating an internet space, but it is a form of creative marketing. In which the common marketing theories and the technical and technological aspects of the Internet are integrated. They used to improve and develop advertising and sales design. Electronic marketing is actually the application of the principles and conventional policy of marketing through the Internet, which has caused significant changes in the way and scope of marketing. Therefore, the researcher wants to measure electronic marketing methods to reduce the negative effects in the Corona situation from the perspective of graduates of the management and accounting department of Malak Khaled University. Because no research has been done in this field in the Kingdom of Saudi Arabia so far, the necessity of the present research arises. So, the main purpose of this study was the main purpose of this study was the role of e-marketing on sales to decrease the economic effects of the corona pandemic.

## 2. Methodology

The method of this study was descriptive-survey. The statistical population for this study was female students of applied colleges specializing in accounting and management at King Khalid University in the Kingdom of Saudi Arabia, and 90 people were selected as samples using a simple random sampling method. The Bussakorn and Dieter (2025) questionnaire was used to measure electronic marketing, and a researcher-made questionnaire was used to measure the economic effects of Corona. The reliability of the questionnaire was confirmed by Cronbach's alpha, which was 0.92. The questionnaires collected were analyzed by structural equation modeling (SEM) and path analysis models by Lisrel software.

## 3. Findings

### 3.1 Descriptive Findings

The results of data analysis showed that (65) individuals represent (72.2%) of the sample members (from 18 to 25 years old), (15) individuals represent (16.7%) of the sample members (from 26 to 30 years old), and (10) One individual representing (11.10%) of the sample (over 31 years old), and (35) individuals representing (38.9%) of the sample, specializing in accounting, and that (55) Individuals, representing 61.10% of the sample, who specialize in management.

To describe each of the variables present in the conceptual model of the research, descriptive statistics indicators of mean, standard deviation, skewness, and kurtosis, as well as the Kolmogorov-Smirnov test to measure the normality of the statistical distribution of the variables, are listed in Table 1).

**Table 1:** Descriptive statistics indicators of research variables and Kolmogorov-Smirnov test

Variable	M	SD	Skewness	Kurtosis	Zt	P
Incentives	17.98	5.126	0.675	0.134	0.986	0.179
Interactive Marketing	10.17	3.456	0.531	0.720	0.748	0.195
Advertisement	14.36	4.74	0.984	1.765	- 1.058	0.101
E-Marketing	42.51	8.954	1.163	1.464	1.246	0.082
Economic Effects of the Coronavirus Pandemic	27.97	5.432	0.423	- 1.412	1.095	0.094

As can be seen, the values of the skewness and kurtosis indices for the research variables are in the range (2, -2). This means that the statistical distribution of the variables is approximately normal and symmetrical in terms of skewness and kurtosis. In addition, the significance level of the Kolmogorov-Smirnov test is greater than the error level of 0.05 ( $P > 0.05$ ). This means that the distribution of the research

variables is normal with a 95% confidence level. Therefore, the prerequisite for normal data distribution is to use structural equation modeling (SEM) and path analysis models.

### 3.2 Inferential Findings

Before testing the structural model of the research, the first-order confirmatory factor analysis (CFA) technique is used to ensure the validity of the constructs present in the structural model of the research. Until it is determined whether there is the necessary coordination and alignment between the observed variables (indicators) in each construct, and indicators measure what they are designed to measure. In Figures (1) and (2), the first-order confirmatory factor analysis model for the constructions present in the structural model of the research is shown in the standard estimation and T-test modes, respectively. According to Figure (2), the values of the t statistics (t) related to the factor loadings are greater than the critical value of 1.96 ( $t > 1.96$ ). This means that the factor loading of each of the observed variables (indicators) in each of the constructs of the research structural model is significant at the 5 percent error level.

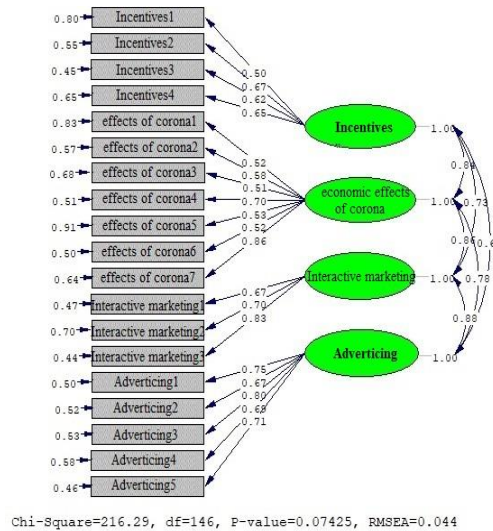


Fig. 1: Confirmatory factor analysis model of the constructs present in the structural model of the research in the standard estimation mode

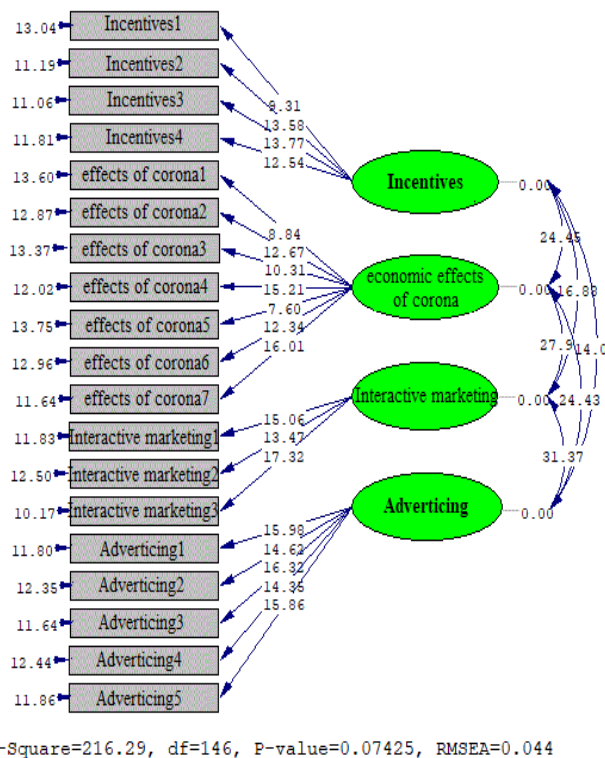


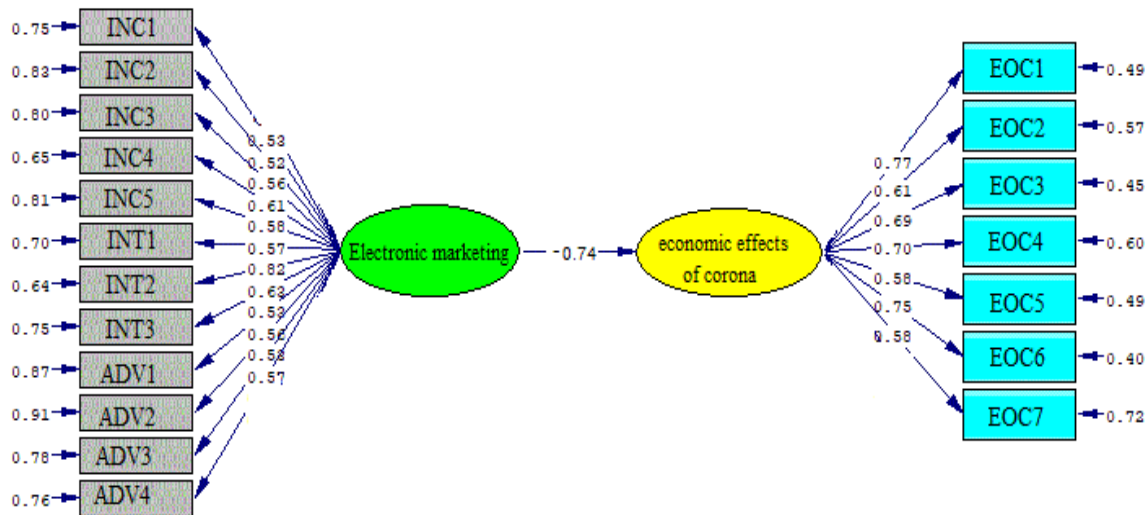
Fig. 2: Confirmatory factor analysis model of the constructs present in the structural model of the research in the T-test mode

The fitness indices for measuring the confirmatory factor analysis model of the constructs present in the structural model of the research are listed in Table 2. As can be seen, the achieved indicators are within the acceptable range. This means that the observed variables can well measure the constructs present in the structural model of the research. The measurement model of the constructs of the research structural model has a good fit; in other words, the validity of the constructs present confirmed in the research structural model.

**Table 2:** Fit indices to examine the validity of the constructs present in the structural model of the research

Index	Approximate acceptance range	Estimated amount
Chi-squared over degrees of freedom (CMIN/DF)	Less than 3	1.48
Root Mean Square Error of Estimate (RMSEA)	Less than 0.08	0.044
Comparative Fit Index (CFI)	0.8 to 1	0.98
Incremental Fit Index (IFI)	0.8 to 1	0.97
Goodness of Fit Index (GFI)	0.8 to 1	0.95
Amendment goodness-of-fit index (AGFI)	0.8 to 1	0.92

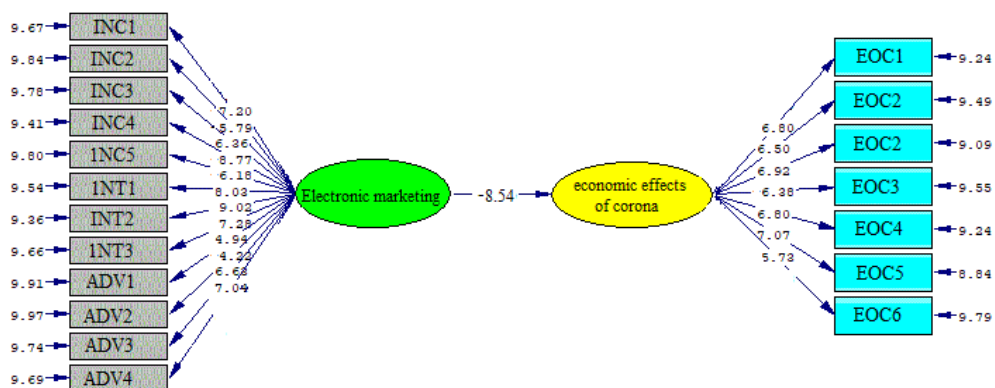
The fitting of the research conceptual model in the LISREL software environment in the standard estimation mode (factor loading and standard path coefficient) and the test of significance of the paths (T-test) to test the main hypothesis of the research are shown in Figures (1) and (2), respectively.



Chi-Square=654.16, df=463, P-value=0.05631, RMSEA=0.045

**Fig. 3:** Fitting the research conceptual model in standard estimation mode

In Figure (1), the factor loading of all observed variables (items or indicators) in each construct is greater than 0.5. In addition, the standard path coefficient shows that the direct effect of electronic marketing on the economic effects of the Corona pandemic is -0.74.



Chi-Square=654.16, df=463, P-value=0.05631, RMSEA=0.045

**Fig. 4:** Fitting the structural model of the research in T-test mode

In Figure (2), it can be seen that the values of the t-statistics related to all factor loadings are greater than the critical value of 1.96 ( $t < 1.96$ ). This means that in each case, the factor loading values are significant at the 5% error level and none of the indicators (components) will be removed from the structural model. The estimation of the t-statistic values shows that the t-statistic values of the software do not lie between

the two critical values of 1.96 and -1.96 ( $1.96 < t$  or  $1.96 > t$ ), meaning that the expected relationships between the variables of the conceptual model presented are significant at the 5% error level.

The most important fit indices for measuring the suitability of the structural and conceptual model fit, as well as the approximate acceptable range of each index, are listed in Table 3. As can be seen, the goodness-of-fit indices obtained by the LISREL software for measuring the suitability of the structural model are in the approximate acceptance range. This means that the data observed in the statistical sample under study largely conforms to the structural model of the research. In other words, the values of the goodness-of-fit indices obtained indicate the appropriate fit of the structural model of the research. It can be said that overall, the presented structural model is relatively appropriate and can explain the structural relationships between the variables present in the presented model.

**Table 3:** Estimation of fitness indices to measure the suitability of the research structural model

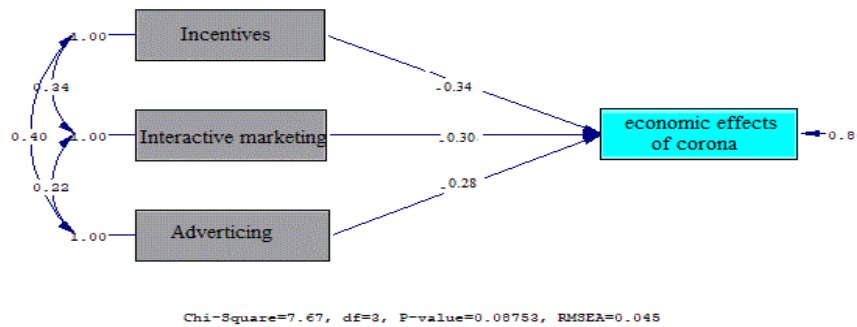
Index	Approximate acceptance range	Estimated amount
Chi-squared over degrees of freedom (CMIN/DF)	Less than 3	1.41
Root Mean Square Error of Estimate (RMSEA)	Less than 0.05	0.045
Comparative Fit Index (CFI)	0.8 to 1	0.96
Incremental Fit Index (IFI)	0.8 to 1	0.95
Goodness of Fit Index (GFI)	0.8 to 1	0.92
Amendment goodness-of-fit index (AGFI)	0.8 to 1	0.89

The results of parameter estimation in structural equation modeling to test the main hypothesis based on Figures (3) and (4) are given in Table (4). As can be seen, the standard coefficient of the influence of electronic marketing on the economic effects of the Corona pandemic is -0.74. The value of the t-statistic obtained (-8.54) is smaller than the critical value of -1.96 ( $t < -1.96$ ). This means that the impact of electronic marketing on the economic effects of the coronavirus pandemic is negative and significant at the 5% level of error. By increasing the amount of electronic marketing by one standard deviation, the economic influence of the coronavirus pandemic decreases by 0.74 standard deviations. The R<sup>2</sup> value is 0.55, meaning that a total of 55 percent of the variance or changes in the economic effects of the coronavirus pandemic are directly explained by e-marketing. Therefore, the main hypothesis of the research is confirmed with 95% confidence.

**Table 4:** Results of parameter estimation in structural equation modeling to test the main research hypothesis

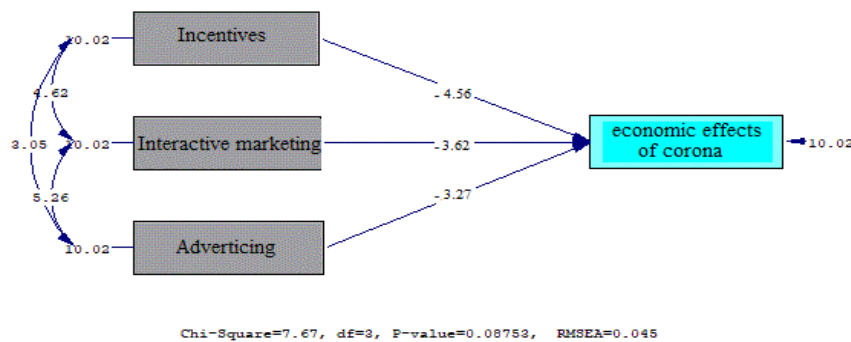
Path	Standard path coefficient	t	R <sup>2</sup>
The direct impact of e-marketing on the economic effects of the Corona pandemic	- 0.74	- 8.54	0.55

The path analysis model fitting in the LISREL software environment in the standard estimation mode and the path significance test (T-test) to test the research sub-hypotheses is shown in Figures (5) and (6), respectively.



**Fig. 3:** Fitting the path analysis model in standard estimation mode

In Figure (5), the direct impact of incentives, interactive marketing, and advertising on the economic effects of the Corona pandemic is -0.34, -0.30, and -0.28, respectively.



**Fig. 4:** Fitting the path analysis model in T-test mode

In Figure (6), the values of the t-statistics related to all paths in the path analysis model are smaller than the critical value of -1.96 ( $t > -1.96$ ), meaning that the expected relationships between the variables in the path analysis model are significant at the 5 percent error level.

The most important fit indices for measuring the suitability of the path analysis model fit, as well as the approximate acceptable range of each index listed in Table 5). As can be seen, the obtained goodness of fit indices are within the approximate acceptable range.

**Table 5:** Estimation of fitness indices to measure the suitability over the research path analysis model

Index	Approximate acceptance range	Estimated amount
Chi-squared over degrees of freedom (CMIN/DF)	Less than 3	2.56
Root Mean Square Error of Estimate (RMSEA)	Less than 0.05	0.045
Comparative Fit Index (CFI)	0.8 to 1	0.98
Incremental Fit Index (IFI)	0.8 to 1	0.97
Goodness of Fit Index (GFI)	0.8 to 1	0.95
Amendment goodness-of-fit index (AGFI)	0.8 to 1	0.92

Based on the estimated parameters, the research sub-hypotheses are tested. For each path, the obtained value for the t-statistic is compared with the critical values of 1.96 and -1.96. If the values calculated by the software are between the two numbers mentioned, the desired path is not significant at the 5% error level (95% confidence level). Otherwise, the desired path is significant at the 5% error level (95% confidence). The results of parameter estimation in the fitted path analysis model to test the sub-hypotheses based on Figures (5) and (6) are given in Table (6).

**Table 6:** Results of parameter estimation in structural equation modeling to test research hypotheses

Path	Standard path coefficient	t	R <sup>2</sup>
The impact of incentives on the economic effects of the coronavirus pandemic	-0.34	-4.56	0.115
The impact of interactive marketing on the economic effects of the coronavirus pandemic	-0.30	-3.62	0.09
The impact of advertising on the economic effects of the coronavirus pandemic	-0.28	-3.27	0.078

It is concluded that the standard coefficient of the path of the effect of incentives, interactive marketing, and advertising on the economic effects of the Corona pandemic is -0.34, -0.30, and -0.28, respectively. The values of the t-statistics obtained are smaller than the critical value of 1.96 ( $t > -1.96$ ). This means that the impact of incentives, interactive marketing, and advertising on the economic effects of the coronavirus pandemic is negative and significant at the 5% level of error. By increasing incentives, interactive marketing, and advertising by one standard deviation, the economic impact of the coronavirus pandemic decreases by 0.34, 0.30, and 0.28 standard deviations, respectively. The R<sup>2</sup> value shows that incentives, interactive marketing, and advertising directly explained 11.5, 9, and 7.8 percent of the variance or changes in the economic effects of the coronavirus pandemic, respectively, so the research's sub-hypotheses are confirmed with 95 percent confidence.

## 4. Discussion

The Covid-19 pandemic accelerated the changing process, and the post-pandemic marketing will not be back as before. The dominance of face-to-face interactions and exchange declined due to online exchange. Politicians and social commentators moved their views regarding online exchange (Abbruzzese & Ingram, 2020). According to the stated contents, the main purpose of this study was the role of e-marketing on sales to decrease the economic effects of the corona pandemic.

Data analysis showed that e-marketing hurts the economic effects of the Corona pandemic. And incentives, interactive marketing, and advertising hurt the economic effects of the Corona pandemic. And this is consistent with the findings of other researchers such as Ratten (2020), Gao et al. (2023), and Ritz et al. (2019).

Moreover, the interactive nature of e-marketing and the ability to personalize advertisements based on consumer behavior allowed businesses to maintain stronger customer relationships and sustain sales despite the crisis. As consumers increasingly shifted to online shopping during the pandemic, companies with robust digital marketing infrastructures not only retained their market share but, in some cases, even expanded it.

However, it is important to note that success in e-marketing is not merely about having an online presence. Optimizing content strategies, utilizing artificial intelligence for consumer behavior analysis, and enhancing user experience (UX) are equally critical in minimizing the economic damage caused by crises such as the COVID-19 pandemic.

In conclusion, e-marketing has proven to be not just a temporary crisis management tool but a structural transformation in commerce, playing a vital role in cushioning economic shocks. Therefore, policymakers and business leaders should invest more in digital infrastructure and workforce training to ensure greater resilience in future crises.

## 5. Conclusion

The COVID-19 pandemic served as a critical turning point, compelling businesses worldwide to rapidly adopt and enhance their electronic marketing capabilities. This study demonstrates that e-marketing played a pivotal role in mitigating the economic impacts of the crisis by enabling businesses to maintain operations, sustain customer engagement, and even expand market reach despite severe disruptions. The findings confirm that digital marketing strategies—including targeted advertising, interactive campaigns, and incentive-based promotions—significantly reduced the negative economic effects of the pandemic.

The consistency of these results with prior research underscores the importance of digital readiness in crisis resilience. Businesses that had already invested in robust e-marketing infrastructures were better positioned to adapt, whereas those slow to digitalize faced greater challenges. Beyond immediate crisis response, this shift toward digital commerce appears permanent, with consumers and businesses alike now preferring the convenience, efficiency, and adaptability of online platforms.

Moving forward, organizations must treat e-marketing not as an optional strategy but as a fundamental component of economic stability in an increasingly volatile world. Policymakers should support this transition through initiatives that improve digital literacy, expand internet access, and incentivize technological adoption among small and medium enterprises. Future research could explore long-term trends in consumer behavior post-pandemic and the evolving role of artificial intelligence in optimizing e-marketing effectiveness.

Ultimately, the lessons from the COVID-19 crisis are clear: in an era where disasters and disruptions can emerge unexpectedly, electronic marketing is no longer just a competitive advantage - it's an essential tool for economic survival and growth. The businesses that will thrive

are those that continue to innovate and integrate digital strategies into the core of their operations. Also, according to the stated contents, the following suggestions are presented to the relevant managers and officials:

- Developing electronic marketing programs that cater to different segments of society, each separately, and providing services according to each category to meet their needs.
- Diversifying the services provided by commercial establishments to attract consumers in different ways.
- Create programs that develop methods for quickly handling customer complaints to gain their trust and ensure their loyalty to commercial institutions.
- Preparing marketing research related to customer service on a regular and continuous basis to know all their aspirations and achieve their marketing desires with high quality.
- Continuously searching for the most effective means of communication to develop commercial institutions.
- Training marketing workers in the power of persuasion and the ability to build friendships with consumers and enhance their self-confidence to confront the problems they face while performing their work.
- The necessity of conducting studies and public opinion polls periodically for consumers to know and measure their level of satisfaction.
- Pay more attention to the promotional aspect and diversify between the various elements of the marketing mix to attract new consumers and introduce them to the services of the commercial institution.

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## References

- [1] Abbruzzese, J., Ingram, D., Click, S., (2020) The Coronavirus Pandemic Drove Life Online. It May Never Return: What Passes For Normal Life Now Happens Almost Entirely Online, NBC News, 28th march 2020 Available At: [Http://: Www. Nbcnews. Com/tech/internet/coronavirus-pandemic-drove- Life- Online- ItMaynev-er- Return- N1169956](http://www.nbcnews.com/tech/internet/coronavirus-pandemic-drove-life-online-it-may-never-return-n1169956), Accessed 19th April 2020.
- [2] Adebayo A.P., & Ogundele T., (2022). Effect of E-Marketing on Sales of Consumer Goods in Covid-19 Era. *British Journal of Management and Marketing Studies*. 5. 24-36.
- [3] Atkeson, A. (2020). What will be the economic impact of COVID-19 in the US? Rough estimates of disease scenarios (No. w26867). National Bureau of Economic Research.
- [4] CCSA (2020). How COVID-19 is changing the world: a statistical perspective Volume II: [https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa\\_vol2.pdf](https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa_vol2.pdf)
- [5] Chauhan V, Shah MH. An Empirical Analysis into Sentiments, Media Consumption Habits, and Consumer Behaviour during the Coronavirus (COVID-19) Outbreak. *Purakala* 2020; 31(20): 353-78.
- [6] Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). Labor markets during the covid-19 crisis: A preliminary view (No. w27017). National Bureau of Economic Research.
- [7] Dingel, J. I., & Neiman, B. (2020). How many jobs can be done at home? (No. w26948). National Bureau of Economic Research.
- [8] Gao J, Siddik AB, Khawar Abbas S, Hamayun M, Masukujjaman M, Alam SS. (2023) Impact of E-Commerce and Digital Marketing Adoption on the Financial and Sustainability Performance of MSMEs during the COVID-19 Pandemic: An Empirical Study. *Sustainability*. 15(2):
- [9] He, H., Harris, L., (2020) The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy, *Journal of Business Research*, 116: 176-182.
- [10] Kattah, J. K., Welbeck, B. A. (2020) The Coronavirus Pandemic and Its Impact on Economies and Employment, *academia.edu*.
- [11] McKibbin, W. J., Fernando, R. (2020) The Global Macroeconomic Impacts of COVID -19: Seven Scenarios” *SSRN Electronic Journal*. Available in: [https://: doi. org/ 10.2139/SSRN3547729](https://doi.org/10.2139/SSRN3547729).
- [12] Mongey, S., & Weinberg, A. (2020). Characteristics of workers in low workfrom-home and high personal-proximity occupations. *Becker Friedman Institute for Economic White Paper*.
- [13] Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: impact on the Global Economy. Available at *SSRN* 3562570.
- [14] Ratten, V. (2020). Coronavirus disease (COVID-19) and sport entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*
- [15] Richter, A. (2020). Locked-down Digital Work. *International Journal of Information Management*, 55, Article ID: 102157.
- [16] <https://doi.org/10.1016/j.ijinfomgt.2020.102157>.
- [17] Ritz, W., Wolf, M., & McQuitty, S. (2019). Digital marketing adoption and success for small businesses: The application of the do-it-yourself and technology acceptance models. *Journal of Research in Interactive Marketing*.
- [18] Saebnia, Somia and Karimi, Fereshte, (2019); Investigating The Impact Of Corona Disease (Covid 19) on business performance; (case of study: small and medium businesses of Ardabil province). *Accounting and Management Perspectives*, 3(24): 93-83.
- [19] WHO and European Investment Bank, (2020), strengthen efforts to combat COVID-19 and build resilient health systems to face future pandemics, world health organization, 1 May .