

An Exploratory Study on the Impact of Online Business on Retailers with Special Reference to Dakshina Kannada District in Karnataka

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Citation: Kumari, S., & S V, P. (2025). An Exploratory Study on the Impact of Online Business on Retailers with Special Reference to Dakshina Kannada District in Karnataka. International Journal of Innovations & Research Analysis, 05(03(I)), 85–98. [https://doi.org/10.62823/ijira/5.3\(i\).7832](https://doi.org/10.62823/ijira/5.3(i).7832)

ABSTRACT

The active growth of online business has changed the global retail landscape significantly. Even though it has increased the reach and convenience, the retailers are facing challenges. The purpose of this exploratory study is to investigate the impact of online adoption on retail businesses in Dakshina Kannada district, Karnataka. This study specially focuses on both the positive and negative consequences of online business on retailers. By understanding these impacts, the study seeks to provide insights into the strategies that retailers can employ to adapt to the evolving retail environment and mitigate the potential negative effects of online business.

Keywords: Traditional Retailers, Online Business, Digital Knowledge, Business Impact.

Introduction

In the modern business environment, the traditional business has changed dramatically due to the explosive growth of online business. The retail industry's dynamics has completely changed because of the purchasing and selling of goods and services on the internet. As retail firms contribute significantly to the national economy, it is better to understand how online business affects the economic growth and overall business sustainability. And knowing the impact on retail business in different regions will contribute a broader understanding of global business trends and challenges.

This exploratory study focuses specially on Dakshina Kannada District in Karnataka, India for investigating the significant effects of online business on traditional retail firms. The home to a thriving and diverse ecosystem of retail business is the coastal district of Dakshina Kannada in Karnataka. These companies like neighbourhood supermarkets, specialty apparel stores, and outlets for traditional crafts, have long formed the backbone of the area's economic activity. But it is a challenge to the traditional brick-and-mortar paradigm due to the rise of online business and brought in a new era of retail.

There are several strong reasons are there to say how the online business affects traditional retail companies in Dakshina Kannada District. Firstly, the consumer expectations and behaviour has changed because of the exponential growth of online business. It is required to understand that how tiny retailers in this area are adjusting with this type of change if they are to survive and expand. Secondly this study is motivated by knowing the difficulties of retail firms to compete with the online business.

Statement of the Problem

In India, the online business and the digital marketplaces are growing rapidly which has changed the purchasing pattern of consumers leading to challenging the traditional offline retailers. The online business offers convenience, competitive pricing and wide reach. Whereas offline retailers especially in Dakshina Kannada, struggles to full fill the consumers expectations. While this digital transformation has driven economic growth in some sectors, it has simultaneously created significant challenges for traditional offline retailers.

There are several studies been conducted on online business, but there is limited evidence on district specific research focusing on local retailers who are affected. It is very important to explore the current scenario in Dakshina Kannada to understand the impact of online business.

Review of Literature

Wassan, S., et al. (2022) studied the Impact of Digitalization on Retailers and its Future Trends. The study reveals that online market leads over the offline market.

Shetty, P. V. (2020) focused on the Impact of Online Shopping on Retail Business: A Study with Reference to Udupi District. The study reveals that, the retailers should focus on building the stable relationships between manufacturers and customers to increase the business and to accelerate the growth.

Gupta, M. (2019) did a study on impact of online food delivery app on Restaurant Business Special Reference to Zomato and Swiggy. Study concludes that online food delivery platforms have the impact on the traditional restaurant. Consumers are very drawn to the ease offered by the digital food ordering system.

Apăvăloaie, E. I. (2014), studied the impact of the internet on the business environment. This study focuses on the impact of the internet on business on the changes brought by the internet in running a business.

Xia, Y., & Zhang, G. P. (2010) focused on the Impact of the Online Channel on Retailers' Performances: An Empirical Evaluation. The study suggests that there is a significant improve in the sales, cost, inventory and return on investments provided by the online channels.

Wu, F., Mahajan, V., & Balasubramanian, S. (2003) did research on the topic "An analysis of e-business adoption and its impact on business performance". The study finds that the aspects such as communication and internal administration of e-business affect the performance positively.

Scope of the Study

In India, the adoption of online business has grown rapidly, significantly impacting traditional retail businesses. Since retail firms play a vital role in the local economy, it is essential for them to adapt to changing market dynamics to remain competitive. Every region has its own unique characteristics and challenges. Studying the impact of online business specifically in the Dakshina Kannada District provides localized insights that can be directly applied by local businesses. The findings of this study can assist policymakers, business owners, and other stakeholders in understanding how retailers can withstand and adapt to the growing competition from digital platforms. Additionally, the study can support government efforts to raise awareness and promote fair competition, while encouraging and strengthening small retail businesses in the region.

Objectives

- To know the demographical profile of the respondents.
- To determine the level of digital literacy and technological readiness among respondents who have not adopted online businesses.
- To evaluate the impact of online business over traditional businesses.

Hypotheses

• Hypothesis 1

H_0 : There is no association between Gender and Familiarity in online business platforms.

H_1 : There is an association between Gender and Familiarity in online business platforms.

- **Hypothesis 2**

H_0 : There is no significant relationship between age and the familiarity in online platforms among respondents having offline business.

H_1 : There is significant relationship between age and the familiarity in online platforms among respondents having offline business.

- **Hypothesis 3**

H_0 : There is no significance difference between the median age of the respondents having offline business across the familiarity levels

H_1 : There is significance difference between the median age of the respondents having offline business across the familiarity levels

- **Hypothesis 4**

H_0 : There is no association between education and familiarity in online Platforms

H_1 : There is an association between education and familiarity in online Platforms

- **Hypothesis 5**

H_0 : There is no association between type of business and familiarity in online platform.

H_1 : There is an association between type of business and familiarity in online platform.

- **Hypothesis 6**

H_0 : There is no association between year in business and familiarity in online platform

H_1 : There is an association between year in business and familiarity in online platform

- **Hypothesis 7**

H_0 : There is no association between perceived threat level of online business and its impact on local retail.

H_1 : There is an association between perceived threat level of online business and its impact on local retail.

- **Hypothesis 8**

H_0 : There is no association between perceived threat level of online business and expected future retail challenge.

H_1 : There is an association between perceived threat level of online business and expected future retail challenge.

Research Methodology

This is an exploratory study, in which cross-sectional survey design is administered to investigate the impact of online business on retailers of Dakshina Kannada district, Karnataka. The respondents for the study are the retailers who have not adopted online business. Both primary and secondary data are used. Primary data is collected through a structured questionnaire to gather data on business demographics and impact of online business. Data collection involved face-to-face interviews, telephone surveys and online surveys, depending on the accessibility of participants. Secondary data is gathered through various research articles and web sources. The convenience sampling method is adopted to collect data from 189 respondents from various taluks of Dakshina Kannada, leveraging lists from local panchayats. Descriptive statistics, such as mean and percentages were used to summarize the data and to know about the effect of online business on retailers. Inferential tests like Fisher's Exact test, Kruskal Wallis test, Ordinal Regression are used to assess statistical relevance of the data.

Data Analysis and Interpretation

R and Excel software has been used for the analysis purpose. The data has been presented graphically and in tabular form to extract the information. The statistical techniques such as Fisher's Exact test, Ordinal logistic regression and Kruskal Wallis test has been used to interpret the result.

- **Demographic Profile of the Respondents**

Fig 1: Distribution of Respondents According to the Gender

Gender Distribution of Respondents

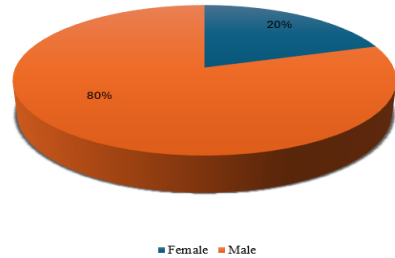


Fig 2: Distribut 6.1.3: Education Qualification of Respondents

Age Distribution of Respondents

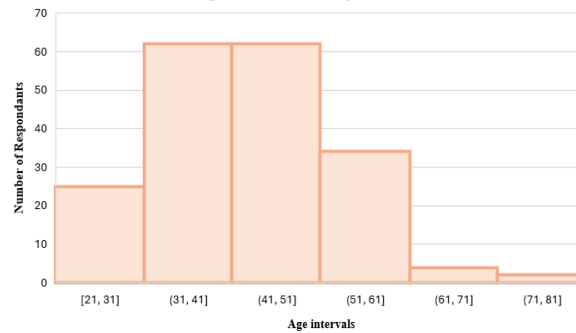
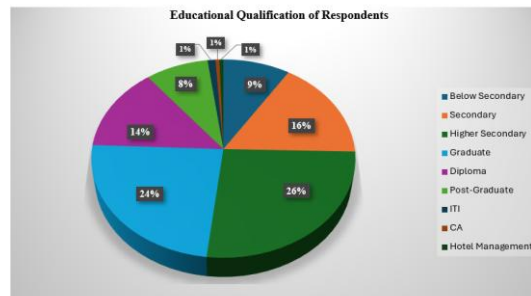


Fig 3: Education Qualification of Respondents

Educational Qualification of Respondents



The figures 1, 2 and 3 represents the distribution of respondents according to their gender, age and education qualification. The graphical representation reveals that 80% of the respondents are male and remaining are female having the business in Dakshina Kannada. Among them most of the respondents belong to the age group of 31 years to 51 years. Which indicates that most of the retailers are of middle aged who are running the business in Dakshina Kannada. Also, it can be observed that 26% of the respondents are having higher secondary and 24% of the respondents are graduates. And only 9% of the respondents are having below secondary education indicates that, most of the respondents are literates and have some basic knowledge.

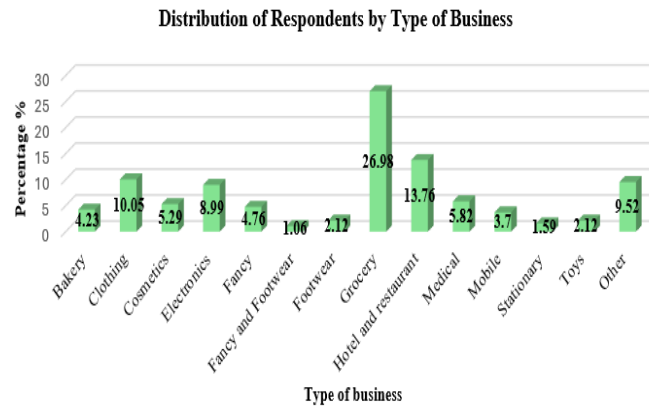
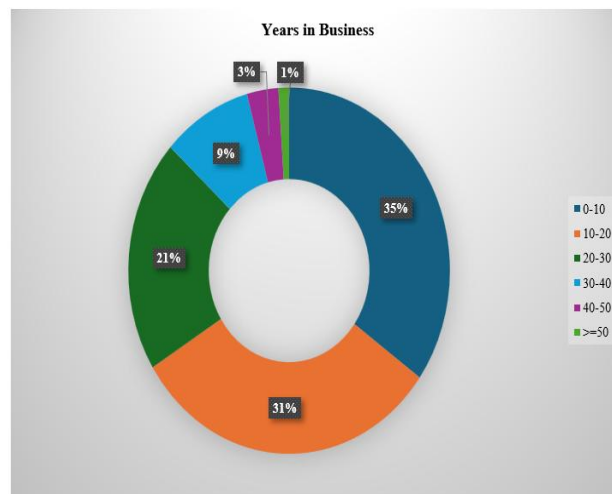
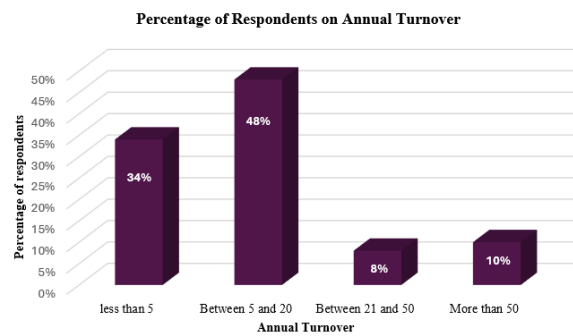
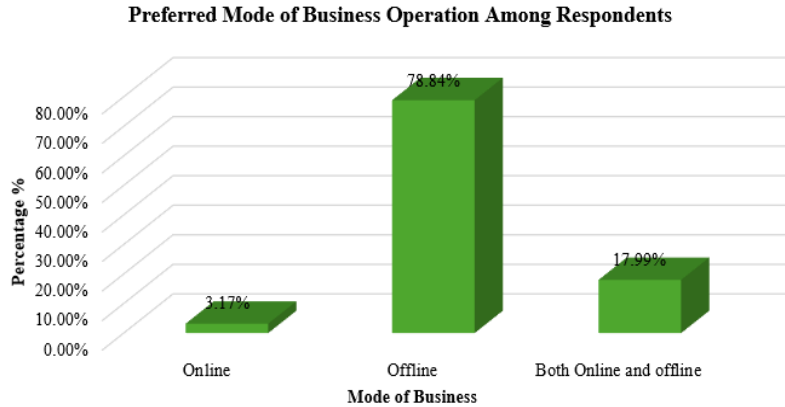
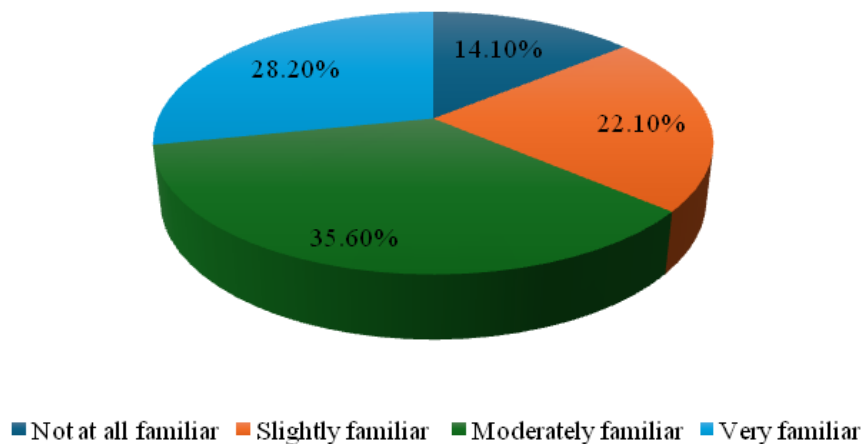
Fig 4: Distribution of Respondents by Type of Business**Fig 5: The Distribution of the respondents according to their years in business****6.1.6: Distribution of Respondents According to their Annual Turnover****6.1.7: Distribution of the Respondents based on the Preferred Mode of Business**

Fig 7: Distribution of the Respondents based on the Preferred Mode of Business

The figures 4, 5, 6 and 7 describes the distribution of the respondents by their type of business, year of business, annual turnover and their preferred mode of business. It reveals that about 26.98% of the respondents have grocery shops followed by hotel and restaurants with 13.76%. About 35% of the respondents have 0 to 10 years of the business and is followed by 10 to 20 years with 31%. And only 1% of the respondents have more than 50 years in business. Most of the respondents (48%) are having the annual turnover between 5 to 20 lakhs followed by less than 5 lakhs (34%). And about 8% of the respondents are having between 21 and 50 lakh turnovers per annum. From the surveyed respondents, 78.84% of them are having only offline business and 17.99% of them have both online and offline. Which indicates most of the respondents are having offline business than online business in Dakshina Kannada.

- **Identifying the Digital literacy and Technological Readiness among Respondents who have not Adopted Online Business.**

Fig. 8: Distribution of the Respondents According to their Familiarity in Online Business Platforms

From the figure 8 it can be observed that about 35.60% of the respondents are moderately familiar with the online business platforms and 28.20% of them are very familiar. Only 14.10% of the respondents are not familiar with the online business platforms like Amazon, Flipkart, social media selling. It indicates that most of the respondents are familiar with the online business platforms.

H_0 : There is no association between Gender and Familiarity in online business platforms

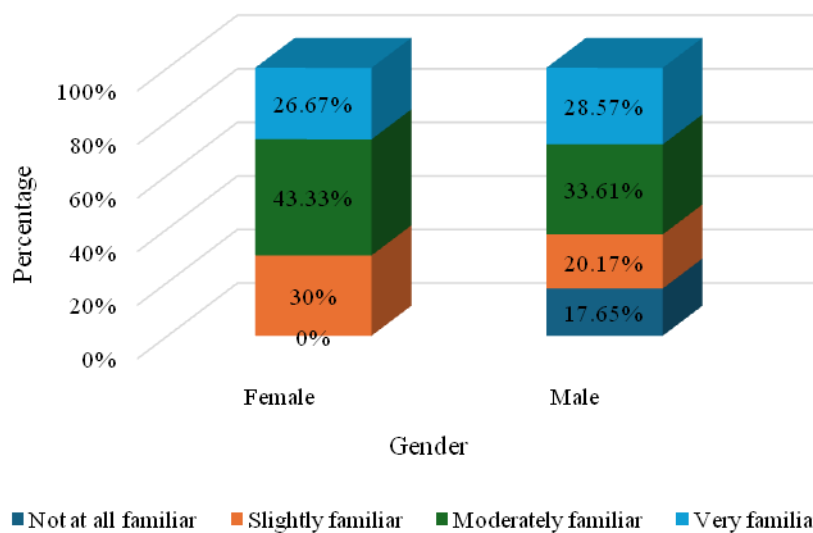
Table 1: Contingency table of gender and Familiarity in online business

Gender\ Opinion	Not at all Familiar	Slightly Familiar	Moderately Familiar	Very Familiar
Female	0	9	13	8
Male	21	24	40	34

As the expected frequency is less than 5, Fisher's exact test been used instead of Chi-square test to check for the association between gender and the familiarity in online business.

The p value = 0.03661 which is lesser than the level of significance 0.05, indicates the rejection of null hypothesis. This concludes that there is an association between gender and the familiarity in online business.

Fig. 9: Percentage of Familiarity across the Gender among Offline business respondents



The figure 9 reveals that a gender can influence on the familiarity of the online platform. Even though both male and female have moderate level of familiarity, male's respondents are being very familiar is larger as compared to females. This suggests that males have higher technological exposure as compared to females.

H_0 : There is no significant relationship between age and the familiarity in online platforms among respondents are having offline business.

Here the ordinal logistic regression is used by considering age as independent variable, to find whether age is any influencing factor.

The model gives result like, estimated coefficient for age is -0.014 and the p value is 0.3265, which indicates fail to reject the null as p value greater than level of significance. So, it can be concluded that there is no significant relationship between age and the familiarity in online platforms among respondents.

H_0 : There is no significance difference between the median age of the respondents having offline business across the familiarity levels.

The Kruskal Wallies test been conducted to study whether the median age across familiarity levels is same. And the test reveals that the test statistics value is 1.83 with p value 0.6072, which is greater than the level of significance. Therefore, there is failed to reject the null hypothesis and can be conclude that. no significance difference in the age across the familiarity levels

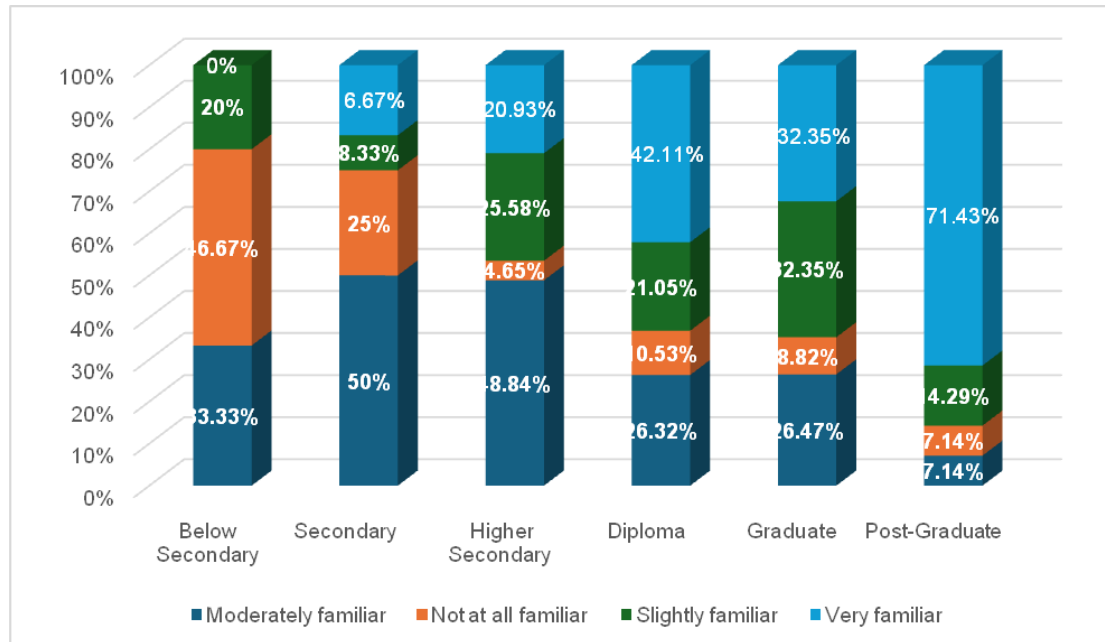
H_0 : There is no association between education and familiarity in online Platforms

Table 2: Contingency Table of education and familiarity in online Platforms.

Education\ Opinion	Moderately familiar	Not at all familiar	Slightly familiar	Very familiar
Below Secondary	5	7	3	0
Diploma	5	2	4	8
Graduate	9	3	11	11
Higher Secondary	21	2	11	9
Post-Graduate	1	1	2	10
Secondary	12	6	2	4

Here Fisher's exact test conducted instead of chi-square test since the expected frequency were less than 5, but as the dimension of the table were very large, had done the simulation via Monte Carlo method. Here 10,000 time the simulation has been done and got the p value 0.0002, which is less than the level of significance. It indicates to reject the null hypothesis. Therefore, there is an association between education and familiarity in online platforms.

Fig. 10: Percentage of Familiarity across the Education among Offline Business Respondents



From the figure 10, it can be concluded that, those having higher education are very familiar with the online platform as compared to the respondents having below secondary education.

H_0 : There is no association between type of business and familiarity in online platform.

Here Fisher's exact test conducted instead of chi-square test since the expected frequency were less than 5, but as the dimension of the table were very large, had done the simulation via Monte Carlo method. Here 10,000 time the simulation has been done and got the p value 0.6294, which is greater than the level of significance. It indicates fail to reject the null hypothesis. Therefore, there is no association between type of business and familiarity in online platforms.

H_0 : There is no association between year in business and familiarity in online platform

Here the ordinal logistic regression is used by considering years in business as independent variable, to find whether years in business is any influencing factor.

The model gives result like, estimated coefficient for age is -0.005125 and the p value is 0.6643, which indicates fail to reject the null as p value greater than level of significance. So, it can be concluded that there is no significant relationship between years in business and the familiarity in online platforms among respondents. Therefore, the years in business does not influence the familiarity in online platform.

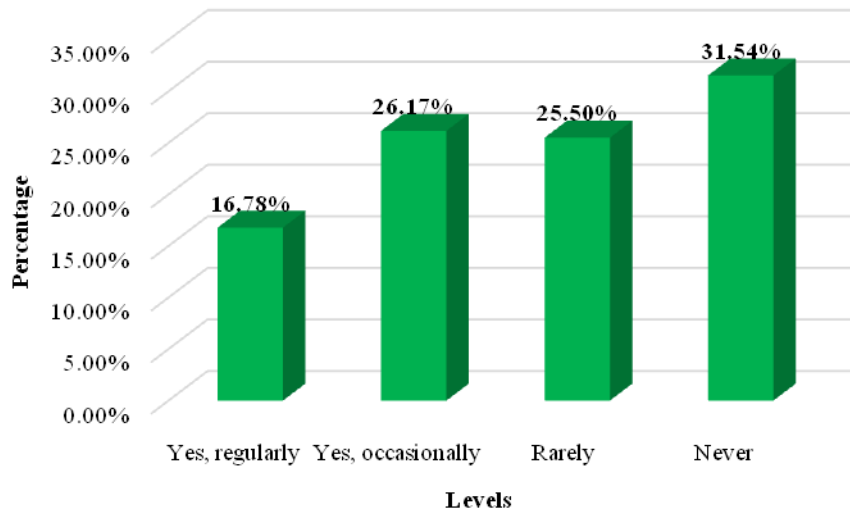


Fig. 11: The distribution of the Respondents having offline business based on the levels of the usage of social media for business.

From the figure 11, it can be observed that most of the respondents that is around 31.54% are not using any social media for the business purpose. But 16.78% of the respondents are regularly using for the business purpose. It indicates that respondents with offline business are not much dependent on social media to promote their business.

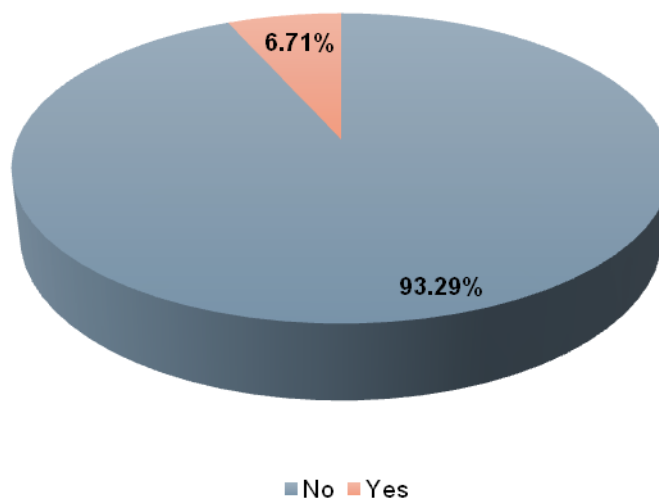


Fig 12: The Percentage of Respondents having Offline Business taken the Digital Training Programme.

From the figure 6.2.5 it can be observed that 93.29% of the respondents have not taken any digital training programmes to build their business.

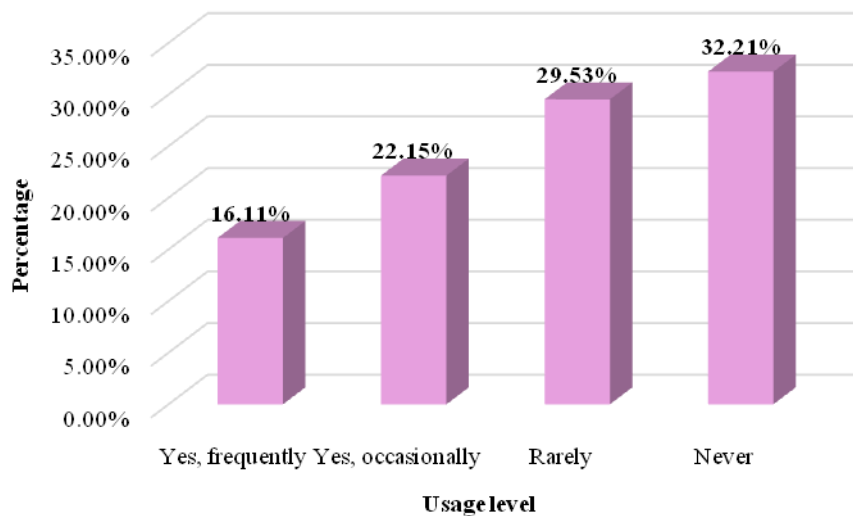


Fig 13: Percentage of Respondents using search engine for their business

From the figure 13, it can be observed that most of the respondents (32.21%) are not using any search engines for their business purpose. But 16.11% of them are using.

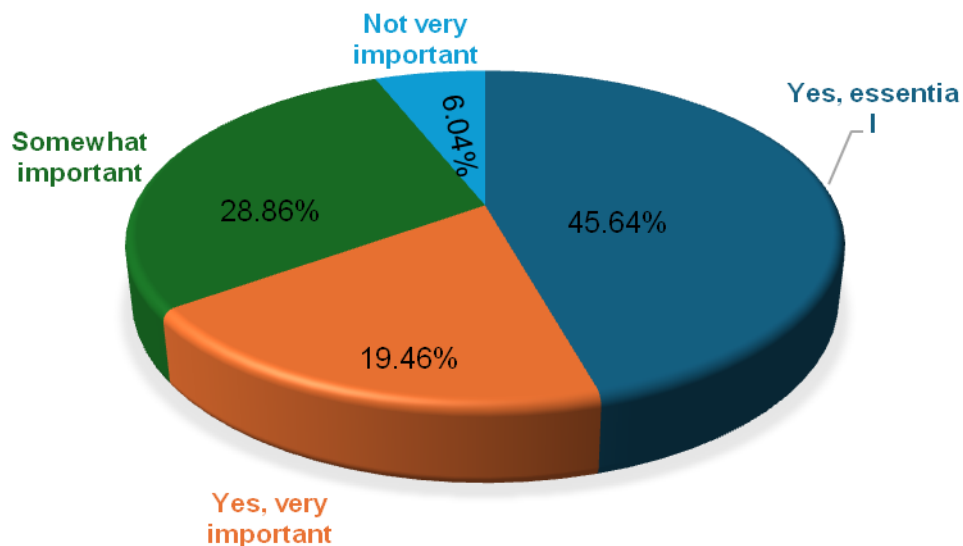
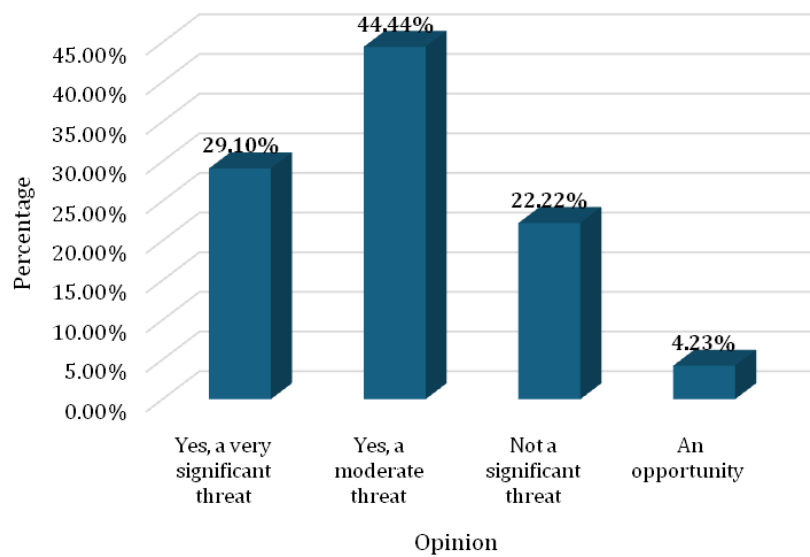
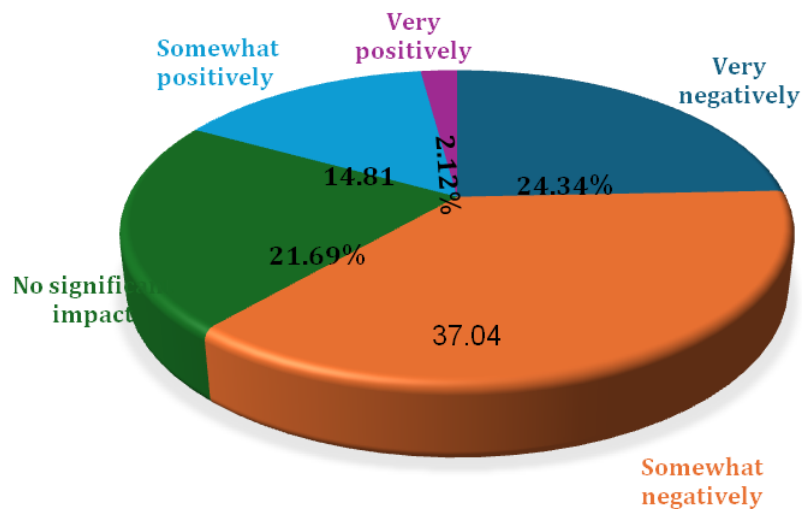


Fig 14: The Respondents Belief on Essential of Good Understanding on Technology for Future Success

From the figure 14 it can be concluded that 45.64% of the respondents feel that it is essential to have the good understanding of the technology for the future success of retail business. Only 6.04% of respondents feel it is not essential. Based on the majority it can be concluded that, it is essential to have the good understanding of the technology.

Identifying the Impact of Online Business over the Traditional Business**Fig. 12: Online Business as a Major Threat to the Traditional Retail Business**

From the figure 12, it can be observed that 29.10% of the respondents feel that online business is a very significant threat for the retail business, 44.44% of the respondents say that moderate threat is there. Only 22.22% of the respondents say that there is no significant threat. It indicates that according to the respondents, online business is a major threat to retail business.

**Fig 13: The Effect of Online Business on the Overall Retail Environment**

The figure 13 represents the opinion of the respondents on the effect of online business growth in overall retail environment in Dakshina Kannada district. Here it can be observed that 24.34% of the respondents say there was a very negative impact on retail business. 37.04% of the respondents reveal that there is a somewhat negative effect on the retail business. Only 17% of the respondents feel that online business had a positive impact on retail business. So, it can be concluded that the growth of online business affects the overall retail environment in the Dakshina Kannada District.

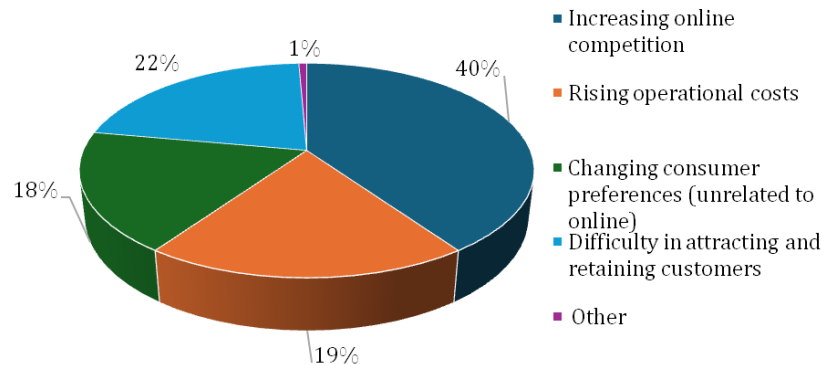


Fig. 14: The Biggest Challenge of the Traditional Retail Business in the Next five Years

From the figure 14, it can be observed that 40% of the respondents say that increasing online competition will be the biggest challenge for the retail business in the next 5 years. 22% of the respondents believe that having difficulty in attracting and retaining customers is the biggest challenge. 19% of the respondents think that rising operational costs is the biggest challenge. 18% of the respondents say that frequent changes of customer preferences are the biggest challenge for the retail business in the next 5 years.

H_0 : There is no association between perceived threat level of online business and its impact on local retail.

Table 3: Contingency table of threat level and impact on local retail

Threat Level \ Impact	Very negatively	Somewhat negatively	No significant impact	Somewhat positively	Very positively
An opportunity	0	4	2	1	1
Not a significant threat	4	11	12	15	0
Yes, a moderate threat	10	40	25	8	1
Yes, a very significant threat	32	15	2	4	2

Here Fisher's exact test conducted instead of chi-square test since the expected frequency were less than 5, but as the dimension of the table were very large, had done the simulation via Monte Carlo method. Here 10,000 time the simulation has been done and got the p value $9.999e^{-05}$, which is lesser than the level of significance. It indicates to reject the null hypothesis. Therefore, there is an association between perceived threat level of online business and its impact on local retail.

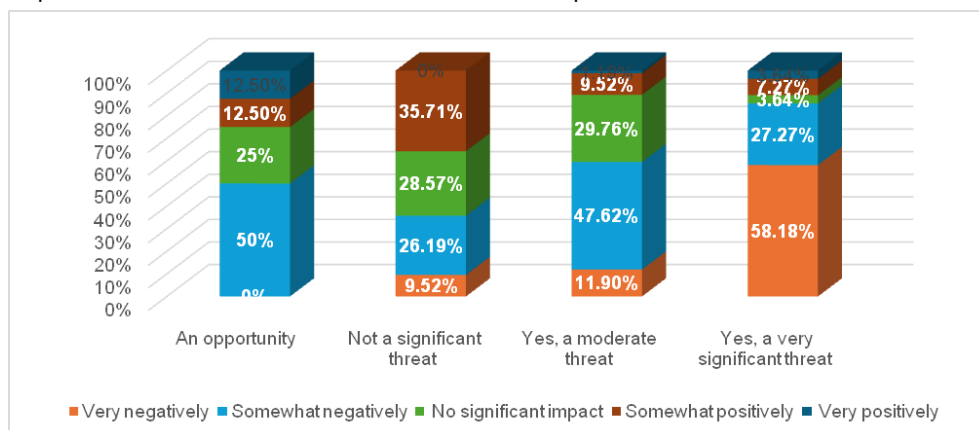


Fig 15: The impact on local retail based on the threat level of online business

From the figure 15, it can be observed the increase in online business is the major threat for the local retailers to carry out the business if they don't adopt the online business.

H_0 : There is no association between perceived threat level of online business and expected future retail challenge.

Table 5: Contingency table of threat level and expected future retail challenge

Threat Level \ Future retail challenge	Rising operational costs	Increasing online competition	Difficulty in attracting and retaining customers	Changing consumer preferences (unrelated to online)	Other
An opportunity	2	1	3	2	0
Not a significant threat	14	10	8	9	1
Yes, a moderate threat	15	33	19	17	0
Yes, a very significant threat	10	31	6	8	0

Here Fisher's exact test conducted instead of chi-square test since the expected frequency were less than 5, but as the dimension of the table were very large, had done the simulation via Monte Carlo method. Here 10,000 time the simulation has been done and got the p value 0.031, which is lesser than the level of significance. It indicates to reject the null hypothesis. Therefore, there is an association between perceived threat level of online business and expected future retail challenge.

Findings

- The graphical representation reveals that, 80% of the respondents are male who are having the business in the study area. Most of the respondents are having the basic education.
- Most of the respondents belongs to the age group 31 years to 51 years. It indicates that middle aged people are more likely to have the business.
- In the study area, most of the respondents have grocery business, hotel and restaurant as compared to other business. Also, 35% of the respondents have 0-10 years of business.
- Maximum respondents have offline business as compared to online business. Few of them have both online and offline business. But percentage wise it is less. It indicates that in the study area, respondents are having offline business.
- 35.60% of the respondents are moderately familiar with the online business platforms.
- From the Fisher's Exact test, it can be concluded that gender will influence the familiarity in online business. Through percentage graph, it has been concluded that compared to females, males have more knowledge on online platforms.
- From the ordinal logistic regression and Kruskal Wallies test, it is observed that age does not influence the familiarity in the online business platforms.
- From the Fisher's Exact test, it is concluded that there is an association between the education and the familiarity in online business. The percentage graph above (Fig 6.2.3) clearly indicates that, the higher the education the more knowledge about the online platform.
- From the Fisher's Exact test, it is observed that type of business does not have any association with the familiarity of the online business.
- From the Fisher's exact test, it is observed that years in business does not influence the familiarity in online platform.
- Through the bar graph and pie chart, it can be observed that most of the respondents of offline business are not using any social media to promote their business. And few of the respondents have taken the digital training programme for their business purpose. Most of the respondents are not using any search engines for their business purpose.
- From the pie chart it can be conclude that about 45.64% of respondents agree that having good understanding of technology is very essential for the future success.

- From the graphical representation it can say that, about 61% of the respondents feels that online business has a negative effect on the overall retail environment. Around 73% of respondents believe that online business is the threat for the retail business. 40% of the respondents says that increasing online competition is the biggest challenge of the traditional retail business in the coming years.
- From the Fisher's Exact test, it is observed that the perceived threat level of online business has its impact on local retail.

Conclusion

As online business is providing comfort to the customers, it became threat to the retailers who are running the business offline. Most of the customers prefers online shopping since they get varieties in the same product, with less price and can place order from anywhere. So, because of the online businesses the traditional retail business is slowly getting down.

To overcome this threat, offline businesses must focus on their future by improving their digital literacy. Also, they must utilize the social platforms to introduce themselves in the actual world.

Thus, the study concludes that there is a major threat to the offline business from the online business in the coming years. Retailers must plan some strategies from the current year to survive in the future.

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