UNITED INTERNATIONAL UNIVERSITY

Project report

Exploring ways to improve business resilience for micro entrepreneurs in the agricultural supply chain of Bangladesh

Supervised by:	Submitted by:
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Date of submission: 23/11/ 2023

Letter of Transmittal

December 31st, 2021
Dr. Saad Hasan
Associate Professor
School of Business and Economics,
United International University

Subject: Submission of the project report on "Exploring ways to improve business resilience for micro entrepreneurs in the agricultural supply chain of Bangladesh."

Dear Sir,

With due respect, I would like to submit my project report on exploring ways to improve business resilience for micro entrepreneurs in the agricultural supply chain of Bangladesh.

I am happy to announce that after many months of hard work and an extensive amount of research to gain a grasp of various complex research methodologies along with the knowledge gained at various different courses, I have completed my project report. Based on your directions, I have tried to be very thorough in my analysis. I hope that my report has been detailed, relevant and accurate enough for you to accept my efforts and oblige thereby.

Yours sincerely,

Fahim Foysal Tanim

ID: 111 182 084

Declaration of the student

I, Fahim Foysal Tanim, an enrolled student at United International University and bearing ID 111 182 084, hereby announce that the project titled "Exploring ways to improve business resilience for micro entrepreneurs in the agricultural supply chain of Bangladesh" has been submitted by me to Dr. Saad Hasan as partial fulfilment of the prerequisites for obtaining my BBA degree with a specialization in Supply Chain Management.

I would also like to announce that I accept responsibility for any copyright violations or damage to third parties arising out of the presence of any unsubstantiated information present in this report.

Fahim Foysal Tanin
ID: 111 182 084

Acknowledgement

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1. Abstract

Micro enterprises have struggled hard during the Covid 19 lockdowns. Most of them suffered because they weren't allowed to stay open due to the lockdowns. However, despite the fact that agriculture-based businesses were allowed to remain open, micro enterprises in this category struggled to remain in business. Their suffering can be explained through various reasons including a lack of foot traffic among a multitude of other reasons which are explored in this paper. Our goal has not been to just explore the reasons for the suffering but to figure out ways in which such situations can be mitigated if or when such situations arise in future. To summarise, we have tried to explore ways to improve the business resilience for micro-enterprises in the agricultural supply chain of Bangladesh.

In order to achieve our goal for this paper, we had set a standard definition of micro-enterprises. The definition of micro-enterprise varies from country to country and also between various authoritative organisations. We have used the standards used by Bangladesh Bank to distinguish micro enterprises from other large-scale businesses. Next, we defined two methods which could be used to improve business resilience during times of pandemic like uncertain situations. The first method involved conducting risk mitigation activities on social media and the second one involved practising informal customer relationship management activities to build strong ties with customers. These two methods were used to set up two different hypothesis and their effectiveness in improving business resilience were tested. The dataset used for testing our hypothesis was collected from various parts of Bangladesh and included a good mixture of rural and urban microenterprises, thus providing a great overall picture. The data was then analysed via partial least square based structural equation modelling to draw conclusions. Based on our results, we have also come up with multiple recommendations that can help micro enterprises survive and even thrive during uncertain situations or in other words improve their business resilience.

2. Introduction

2.1 Background

The shortages of many essential and non-essential items during the covid 19 pandemic have taught us how fragile modern supply chains can be. Businesses selling non-essential items had to close their operations due to government restrictions. Businesses selling essential commodities were allowed to remain open but few had to close down or continue their operations in extremely limited scope due to supply chain disruptions both upstream and downstream. However, the supply chain for agricultural products and fresh produce had to be maintained even during these times of hardship.

Unlike the West, where large fields are cultivated by single family farms or by large corporations, in Bangladesh, the supply chain for vegetable and fresh produce is mostly made up of small businesses which fall under the classification of micro-enterprises. Small farmers typically cultivate their own land or work for others as day labourers. The fresh produce produced by these farmers are transported and stored by various middlemen only to be ultimately sold by small-scale vendors either at street corners or dedicated markets for fresh produce called "Kacha Bazar". Typically, these end retailers add the largest amount of value to the fresh produce. Our research will consist of these small retailers for fruits and vegetables throughout the country who contribute the most value addition. These small retailers suffered immensely during the pandemic due to various factors such as much lower foot traffic, higher number of unsold produces, shortage of funds due to wasted batches among many others.

2.2 Significance of the study

Access to fresh produce is undoubtedly essential for a healthy human diet. During the pandemic, while governments actions have stifled supply chains of various goods, the same government has tried hard to ensure that the supply chain for foods including fresh produce remain unaffected. Even after all these measures, many micro-enterprises within the fresh produce supply industry have suffered immensely during that period. There was an increase in food wastage due to increased amounts of unsold produce along with increased economic hardships for these businesses. At the same time consumers had to pay higher prices for these products even though there was ample production.

2.3 Objective

In this paper we aim to explore ways in which the small-time retailers have managed to survive and even thrive during these hard times. Two particular dimensions have been studied to find out their impacts on business resilience. The first is informal customer relationship management. The second is risk mitigation using social media. By studying these relationships, we hope to allow these micro-enterprises to conduct business in a manner that would make them more resilient to pandemics or similar situations. At the same time, we hope it would allow governments and other relevant stakeholders to make better decisions that would ensure better food security.

2.4 Scope of this study

This study primarily focuses on the retail side of the supply chain of fresh produce, consisting primarily of vegetable and fresh produce sellers situated at designated fresh produce markets along with street vendors. Data on the demographics, business scale, use of customer relationship management tactics and propensity to use social media to conduct businesses has been collected from multiple areas within multiple divisions thus allowing us to paint a picture that is quite representative of the retailers of fresh produce throughout Bangladesh.

2.5 Limitations

There are certain limitations discussed below that may affect the accuracy of our result or conclusion.
- While the questionnaire has been designed to reduce respondent bias, it is very difficult to eliminate it completely especially for questions relating to the quality of service our respondents provided to their customers.
- Due resource and time constraints only retailers of agricultural produce were surveyed. Ideally, we should have surveyed micro-enterprises within the entire supply chain.
- We have collected our third-party data from well reputed sources but even then these sources are not completely immune to errors.
- The limited time requirement for this paper prevents us from collecting even more detailed information and conducting a more in-depth analysis of the collected data.

3. Literature review and hypothesis development

3.1 Definition of microenterprise

The definition of micro-enterprise depends on a few factors including the amount of fixed assets the business owns, the number of employees, their yearly turnover, the sector etc. Although this definition can vary based on country and organisations. For example, the International Finance Corporation defines Micro-enterprise as those businesses that have less than 10 employees, assets worth less than $100,000 and annual sales less than $100,000 (Khodakivska, 2013).

On the other hand, Bangladesh Bank defines micro-enterprise businesses as those having total fixed assets worth 0.5 to 5 million BDT excluding land and building and a labour force of 10 to 24 people or smaller in the manufacturing industry. For the service industry, the total amount of fixed assets, excluding land and building Should be less than 0.5 million BDT and the total number of employees has to be lower than 10 (Sukamal Sinha Chowdhury, 2011). For this paper, we will be considering the definition provided by Bangladesh bank.

3.2 CRM in microentrepreneurs

According to Philip Kotler, customer relationship management is the process of managing detailed information about individual customers and carefully managing all customer 'touch points' to maximise customer loyalty (*Framework for Marketing Management*, 2007). When we think of CRM, we tend to think of databases of customer information but we have to realise that the main purpose of the databases is simply to retain information. Generally, for large, medium, or even small businesses, databases are a must if they plan to keep track of their customer bases. The customers come in contact with the business through multiple touch points and multiple employees who are subject to change frequently. For these reasons, there isn't a way to keep track of the customer information without a proper database. Many definitions of customer relationship management mention the use of technology to achieve this but in the context of Bangladesh's perishable agro retailers, the use of CRM software or even spreadsheets are almost non-existent. Most vendors of fresh agricultural produce are extremely small businesses with very few or no other employees. The owners themselves typically perform all operations and are responsible for sourcing and selling the produce to the end customer, thus having a lot of personal interaction with them. Since the owners themselves are typically the one who come in contact with the customers, the micro entrepreneurs can easily remember them, recall the purchases they made, provide personalised discounts, respond to their problems, listen to the feedback and ultimately build strong profitable relationships. Hence these entrepreneurs are able to perform many of the traditional CRM activities without maintaining databases and IT infrastructures.

There is generally a positive correlation between customer relationship management and business performance (Coltman et al., 2011; Reinartz et al., 2004) or even performance of new product launches (Ernst et al., 2011). However, the existing literature mostly focuses on small, medium and large-scale businesses with high enough income and knowledge to rely on an IT infrastructure and proper customer databases. Similar literature on very small businesses and particularly street vendors are mostly absent. Use of informal CRM by street food vendors in India has been linked to be an effective strategy for business viability by only one study (Jaiswal, 2018). In fact, in this particular study by Jaiswal, among the nine factors that were measured such as innovation, quality, cost et cetera, CRM had the largest impact on business viability for street vendors. However, none of the studies have specifically tried to explore the impact of CRM activities by micro entrepreneurs on business resilience during times of pandemic and other large-scale supply chain disruptions.

Owing to the relationship between business performance and informal CRM practices in small businesses by various researchers, our first hypothesis is defined below.

H1: Informal CRM practices positively impacts business resilience among micro-enterprises in the agricultural sector.

3.3 Social Media use among microentrepreneurs

In the last decade and a half, social media has led to a paradigm shift in how businesses are operated and social media presence is considered to be a must for most businesses. It is particularly great for micro enterprises because of their widespread adoption and low barrier to entry. Popularity of social media in recent times have led to an immense number of small businesses to be established and this has led to an increased appreciation for micro-enterprises and their role in the wider economy. It is generally thought that social media presence improves business performance and various papers have tried to test this theory with good amount of success (Smits & Mogos, n.d.). We have also seen an influx of research focusing on how proper utilisation of social media can specifically positively impact micro enterprises (Ab Jalil & Zakaria, 2021; Kazungu et al., 2017; Vatanasakdakul et al., 2020). These papers have conducted their studies in Malaysia, Indonesia and Kenya respectively, the latter two of which are developing countries and their fresh produce supply chains closely resemble that of Bangladesh. At the same time, a study conducted within Bangladesh has found similar results where the researchers have found a strong Relationship between Relationship Management strategies using social media and improved business performance (Sumona Salam & Abu Shams Mohammad Mahmudul Hoque, 2019). This paper however does not directly attribute the success of these micro-entrepreneurs to social media marketing but rather how social media can improve customer relationship management activity which in turn improves the business performance. While many papers have tried to assert the relationship between business performance and social media

presence, this particular one has gone further and tried to figure out the reasons behind it. According to (Paniagua & Sapena, 2014), the reason behind the performance uplift can be attributed to customer revealed preferences, social marketing and social networking. Social media has also enabled female micro entrepreneurs to thrive (Sultana & Akter, 2021) which is a welcome sight seeing in a country like Bangladesh where a much lower percentage of women contribute to the economy.

Based on the discussion around the positive impact of social media on small business performance, we would like to test whether this improved performance can also be observed during times of pandemic or similar situation and ultimately resulting in better business resilience within the scope of the fresh produce sector in Bangladesh. Therefore, our proposed hypothesis is defined below.

H2: Use of social media by microenterprises in the agricultural sector of Bangladesh positively impact their business resilience.

4. Research methodology and data

4.1 Types of data

Our paper is based on mixed method approach where we will be collecting mostly quantitative data but also incorporate some qualitative methods. Quantitative data will allow us to quantify the impact that use of social media by businesses and informal customer relationship management has on business resilience. The qualitative data that has been collected allowed us to better understand the full picture, especially things which are much harder to quantify. However, our main focus will be on qualitative data as it allows us to come to a thorough conclusion of whether our hypothesis is true. We have utilised both primary data and secondary data for this paper although the questionnaire and its result which is the most major source of data should be considered to be secondary data.

4.2 Methods of data collection

Our data for the questionnaire has been collected by the project supervisor Dr. Saad Hassan for an alternative paper titled 'Supply chain networking relationship for risk mitigation and business resilience among micro entrepreneurs' and hence should be considered as secondary data as mentioned earlier. However, we have in-depth information about how the data was collected, where it was collected from and the personnel involved in collecting the data. Hard copy of the questionnaire was maintained at all times while collecting the individual data of the respondents. The response was then input into an Excel sheet and corresponding photos of the hardcopy were collected into cloud storage. The data was collected from a variety of places from a variety of cities, the details of which will be included in the demographics section.

4.3 Method of data analysis

The collected data was then cleaned and analysed using partial least squares based structural equation modelling. There are many reasons for choosing structural equation modelling with the most important of them being the ability to quantify data which are generally thought to be qualitative in nature using scales and its ability to perform complex analysis by drawing models. We also chose the partial least square approach rather than covariance-based approach because the sample size for conducting PLS-SEM is comparatively lower than that required for CB -SEM. PLS-SEM Works efficiently with small data sets even for complex models. It also does not make any underlying assumptions about the data, such as the data being normally distributed (F. Hair Jr et al., 2014). We have used the software 'Smart PLS 3' to conduct all the data analysis involving structural equation modelling. The data was first checked for reliability and validity. The indicators that did not

perform well were removed and only then the path coefficients were analysed to figure out the actual relationship between business resilience, social media use for risk mitigation and informal customer relationship management.

4.4 Questionnaire details

The survey consisted of 31 questions in total among which 13 questions were related to the demographics of our respondent along with information about the types of agricultural business they are involved in, the problems they experience and the way they try to mitigate them. The rest of the 18 questions measure the three main factors namely business resilience, customer relationship management and the risk mitigation ability using social media. For each of these factors, there were six questions, each with a scale of 1 to 5 which were termed as 'strongly disagree', 'disagree', 'neutral', 'agree', 'strongly agree'. For the purposes of this paper, we will only be working with these 18 questions measuring the 3 factors mentioned just before.

Questionnaire scale items	
Items	**Code**
Buiness Resilience	
During economic crisis, I still run my business as usual	BR1
I can easily get loans from any micro finance institutions	BR2
I am able to make business decisions during an economic crisis *	BR3
I am able to manage the business cash flow during an economic crisis	BR4
I am able to adjust the business budget to sustain my business	BR5
I am able to sell alternative products in time of economic crisis	BR6
Customer Relationship Management	
I offer customized product and services to customers' needs	CRM1
I try to find out what our customer needs are	CRM2
I treat customers with great care	CRM3
I commit time to manage my relationship with customers	CRM4
I commit resources to manage my relationship with customers	CRM5
I appreciate my loyal customers	CRM6
Risk mitigation through social media	
I use social media for information seeking	RM1
I use social media for sharing information	RM2
I use social media to buy agricultural supplies	RM3
I use social media to sell agricultural produce	RM4
I use social media to improve branding from a business	RM5
I adopt social media as a tool for marketing	RM6

Table 1: Questionnaire scale

The data has been cleaned by checking for minimum, maximum, missing and average values along with standard deviation to check for straight lining issues. None of the data had to be removed out of the 400 surveyed.

4.5 Demographics

The respondents consisted of both floating vegetable or fruits sellers selling fresh produce in carts or baskets at the street corner and vendors with dedicated stalls at the various 'Kacha bazars' which are grocery stores consisting mainly of fresh produce and are typically people's primary means of buying them. It has been a consistent goal to to include a wide variety of populations in the data set including a wide age range, vendors from different socio-economical areas, markets at different stages of the chain including wholesale markets such as 'Kawran bazar', rural and urban markets and also female vendors. Sadly the number of female vendors were quite low due to the much lower number of female participants in this sector thus resulting in a response of 1 female respondent for every 24 male respondent.

140 (35%) samples from the Dhaka Division were collected consisting mainly of the urbanites from the areas of Gulshan, Banani, Sadarghat, Mohakhali, Bashundhara R/A, Kawran bazar, Uttara, Uttar khan, Rayerbazar, Dhanmondi, Saidnagar, Beraid, Kamrangir Chor and Mironjila.

The rest of the 260 (65%) samples were collected from various other divisions and districts consisting a mixture of sub-urban, rural and urban population from the areas of Narsingdi, Tangail, Savar, Faridpur, Barisal City, Mymensingh City, Muktagacha, Jamalpur, Chittagong city, Rangpur City, Dinajpur, Kurigram, Sylhet City, Sunamganj, Khulna City and a few others.

4.6 Model development
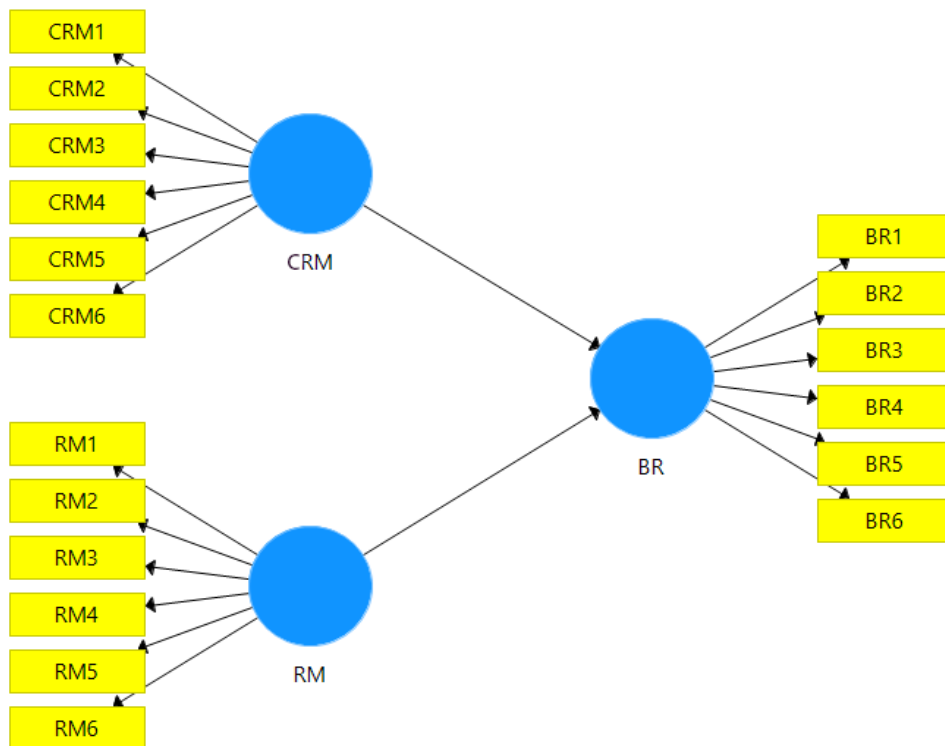
Figure 1: Model

Our model consists of three latent variables namely customer relationship management, risk mitigation using social media and business resilience. Here, customer relationship management and risk mitigation using social media's arrow points to business resilience as we are trying to figure out the impact the former two latent variables have on business resilience. We are also trying to measure business resilience using five different factors labelled here from 'Business resilience 1' to 'Business resilience 5'. The independent approach to measuring business resilience allows our SEM software to measure the impacts of risk mitigation using social media (RM) and customer relation management (CRM) on business resilience (BR).

4.7 Reliability and Validity statistics

	BR	RM	CRM	CR	Cronbach's alpha	AVE
Business resilience				0.878	0.794	0.706
BR3	0.873					
BR4	0.771					
BR5	0.873					
Customer relationship management				0.894	0.77	0.808
CRM1		0.859				
CRM2		0.937				
Risk mitigation usings social media				0.928	0.939	0.763
RM1			0.836			
RM2			0.859			
RM3			0.962			
RM4			0.831			

Table 2: Reliability and validity statistics

We have determined the reliability and validity of our constructs using the measurement model. The factors which had low or very high loadings were removed. As suggested by (F. Hair Jr et al., 2014) we have removed factors which had loadings below 0.6, and we have removed most of the factors which had loadings higher than 0.95. The omitted items include BR1, BR2, BR5, CR3, CRM4, CRM5, CRM6, RM5 and RM6.

All our composite reliability of the latent variable being greater than 0.8 indicates that good reliability has been attained (Brunner & SÜβ, 2005). We have assessed the internal consistency reliability using (Werts et al., 1978) composite reliability which in our case ranged from 0.878 to 0.928 thus indicating that the results were good. Another popular method for examining the internal consistency of multiple-item scales is Cronbach's coefficient alpha (Saunders et al., 2009). A construct's minimum allowable limit for Cronbach's alpha is 7 which is well in line with our values. We have measured the convergent validity of each of the constructs to figure out the extent to which the items converge to explain its variance. We have used average variance extracted (AVE) to assess the convergent validity. Our minimum AVE is 0.706 indicating that the construct explains 70.6% or more of the variants that make up the construct.

Discriminant validity result			
	BR	CRM	RM
BR	*0.84*	0.428	0.078
CRM	0.351	*0.899*	0.436
RM	-0.103	-0.409	*0.873*

Note: Above the diagonal are the HTMT values. The diagonal represents the square root of the average variance extracted (AVE) and the values below the diagonal represents the correlation between the construct's values.

Table 3: Discriminant validity

We will be assessing the discriminant validity using Fornell Larcker criterion (Fornell & Larcker, 1981) and Heterotrait-Monotrait ratio (HTMT) methods. The Fornell Larcker Criterion works on the basis that the correlation between the factors themselves should be higher than the correlation between itself and others. Therefore, according to Fornell Larcker, the square root of AVE (Average Variance extracted) of an item should be greater than the correlation between the factor itself and another factor. Looking at Table 3, where the diagonal represents the square root of AVE, we can see that the values below the diagonal are smaller thus establishing discriminant validity. According to (Henseler et al., 2015) the HTMT values should be less than 0.90. Again, from Table 3 we can observe that the values above the diagonal which represents the HTMT values, are all less than 0.90 thus again strengthening our results on discriminant validity.

5. Discussion and interpretation of results

5.1 Results

This paper aims to study the impacts of informal customer relationship management and use of social media by small agricultural businesses to improve business resilience. We have previously announced hypotheses which we will be determining if they turn out to be true or not and identify the reasons.

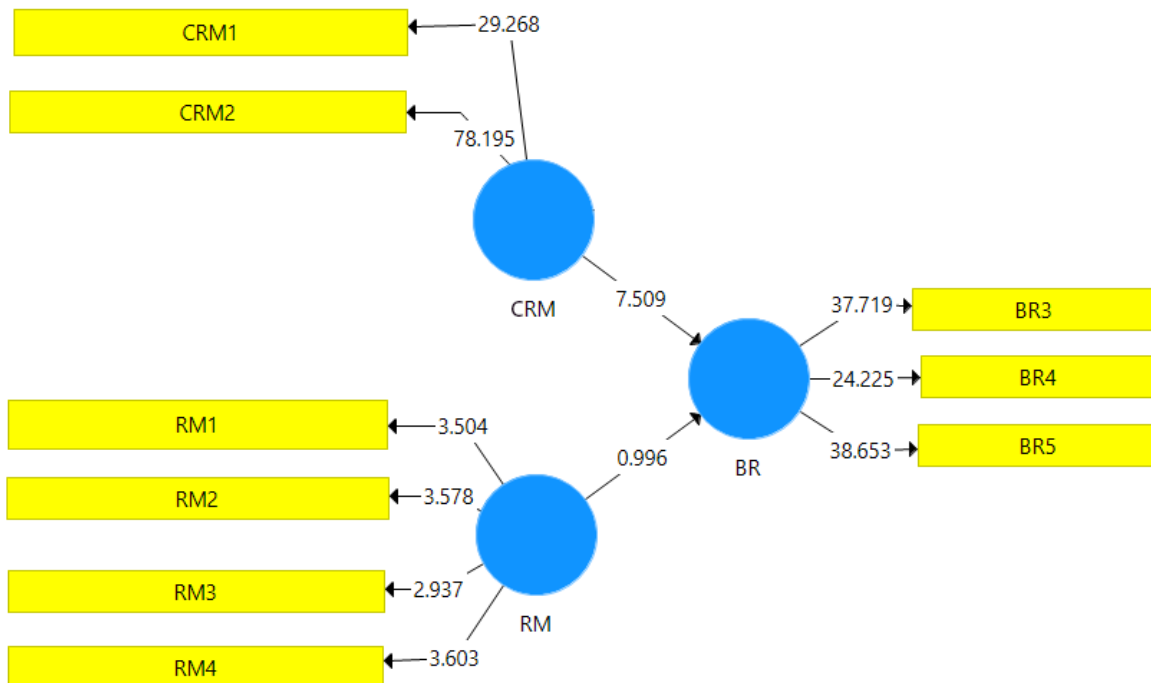| Path coefficients				
	Path coefficient	Standard Deviat	T Statistics	P Values
CRM -> BR	0.368	0.048	7.704	0
RM -> BR	0.041	0.048	1.012	0.312

Table 4: Path coefficients

Figure 2: PLS SEM bootstrapped path analysis

5.2 Relationship between CRM and business resilience

Using the coefficients, we can see that our first hypothesis 'Informal CRM practices positively impacts business resilience among micro-enterprise in the agricultural sector' can be accepted as indicated by the high T statistics. It is not very surprising that informal customer relationship management practices as practised by our local lenders has a positive implication on business resilience. Agricultural products like fruits and vegetables are considered to be commodities where the product of one seller does not vary significantly from another. Although one might still argue that the freshness of the produce or the particular variety of the produce can vary across sellers. Nonetheless, within a particular area or market it is very likely for the sellers to be sourcing their produce from same or similar wholesalers thus mitigating such differences. Most of the sellers typically rely on foot traffic to sell their products to. So during normal times regardless of whether the seller practises CRM or not, they may be able to sell enough quantity for a sustainable micro-enterprise to exist and even thrive.

However, the situation shifted radically during the pandemic as foot traffic reduced significantly due to government lockdowns which resulted in all offices and stores, except for the absolute essentials, to remain closed until further notice. Hence, it was much less reliable for vegetable sellers to depend on a steady flow of pedestrians for their sales. Most importantly, buyers of fresh produce and vegetables were reluctant to explore different sellers for better quality products or compare prices across multiple stores in fear of being exposed to more people thus increasing the odds of contracting covid. This resulted in buyers directly going to the seller that they personally knew and had a good relationship with for their fresh produce needs.

Another factor that might have played a part is the empathy of buyers towards the sellers that they knew and had maintained a good relationship with. It is in human nature to try to help those people closer to you. Covid brought down more than year long periods of economic hardship for people throughout the world. Hence, it might be a plausible theory that a part of why buyers shopped more from sellers that they had previous relationships with could be due to the fact that they were trying to help out their known sellers out during this period of economic hardship. This is even more substantiated by the fact that South Asian societies like Bangladesh have a greater cultural emphasis on collective harmony, familial ties and societal obligations especially compared that of the west (Gupta et al., 2002).

5.3 Relationship between risk mitigation using social media and business resilience

With the T statistics value of 1.012 and a p value of 0.312 which is greater than the 0.05 needed to accept the hypothesis, we can see that risk mitigation using social media does not have a significant impact on business resilience and hence our hypothesis cannot be said to be true.

Bangladesh has experienced a boom in its e-commerce sector over the past few decades. This can be attributed to many factors including the availability of smartphones among people of all if not most socio-economic classes. People buy and sell various kinds of goods over social media platforms but the selling and buying of fresh produce on this platform is quite minimal. This can be attributed to factors inherent to fresh produce which makes them challenging to deliver via regular couriers. Fresh produce cannot be kept in storage for very long and they need to be delivered very quickly to ensure freshness and this comes at an extra cost which makes them uncompetitive to be sold online.

At the same time, there is a lack of trust in e-commerce platforms across Bangladesh. This issue has arisen over many years due to the presence of many e-commerce platforms or individual sellers providing poor quality goods or goods which do not match their description. This has resulted in scepticism among the Bangladeshi population when shopping online for products which are not standardised or belong to a particular brand. As stated earlier fresh produce can have variance in its quality and freshness therefore it is much harder for fresh produce based micro enterprises to gain the trust of online consumers.

The two points - the difficulty in the supply chain of selling fresh produce supply via e-commerce and the lack of trust means that the amount of fresh produce bought from wholesalers via social media or the amount sold to the end consumer makes up an insignificant amount of the overall sales. This is further proven by the fact that among our dataset only 12 participants used social media for conducting their business. Therefore, social media does not have much of an impact on risk mitigation for these micro-enterprises.

6. Recommendation

Considering the interpretation of the data that has been collected and analysed for this paper, we can make some well-rounded recommendations which can help improve the business resilience of micro-enterprises within the agricultural supply chain of Bangladesh.

Firstly, micro entrepreneurs should try to integrate CRM practices to their business. While we understand that traditional CRM using computerised databases is difficult to implement right now by agriculture based micro-enterprises due to multiple factors discussed in the paper, the businesses should still focus on informal CRM practices and relationship management. This can involve simple things like writing down names and phone numbers of customers who want an out-of-stock product and following up with them when the product gets restocked. They may also contact frequent customers when new lots of fresh produce for a category the customer frequently shops for arrives. The micro enterprise can also keep suggestions of novel items and categories the customers want them to stock and follow-up with them by actually stocking these items. If the item performs well, then the business can consider making the item a staple product of the store. Another often overlooked factor for these small businesses involves maintaining interpersonal relationships with the customers which can also be incredibly beneficial especially in a society like Bangladesh where there is a greater cultural emphasis on collective harmony, familial ties and societal obligations. Micro-entrepreneurs can go out of their way to build relationships with their customers through showing a genuine concern for the well-being of the customer and their families.

While informal CRM practices like this may work right now, it may not be sustainable in the long run. With time even the small businesses will move towards more formal and efficient CRM practices as literacy rates and technological competence among the general people improve. Traditional relationship management and informal customer relationship practices require much more time and effort which in turn means that the cost for retaining a customer is comparatively high. Therefore, these micro-enterprises should start preparing themselves in advance to stay competitive in the market. They should start by utilising smartphone CRM apps designed for small businesses as these offer very low barriers to entry while providing many of the great benefits associated with good CRM practices.

While we haven't found a significant impact of business resilience by the use of social media to conduct relationship management activities, we still think it's a good idea to incorporate these practices by micro-enterprises. As the number of two income households increase, saving time and convenience will be of the utmost importance. At the same time, it can be reasonably expected that trust in e-commerce will grow as it becomes more established in the country. Therefore, it makes sense for small businesses, with the capability of doing so,

to conduct relationship management activities through social media even though it may not bring significant monetary benefits right now. Simple steps like opening a social media account on behalf of the business and posting timely updates that the customers and other stakeholders may be interested in goes a long way. The entrepreneurs could ask regular customers to follow their social media accounts which would help the enterprise to maintain regular communication with customers especially during uncertain situations where the customer may not be able to visit the store directly.

7. Conclusion

In this paper we have tried to figure out whether risk mitigation activities through social media and informal customer relationship management activities by micro-enterprises in the agricultural retail sector of Bangladesh have any impact on their business resilience. The Covid 19 pandemic has pushed businesses to their limits and can be a good baseline of how businesses have survived during times of hardship. Their performance during pandemic has acted as the baseline for measuring business resilience. The data used for this research was collected across the various agriculture based micro enterprises across the country particularly street vendors and fresh produce markets known as 'kacha bazars'.

We have analysed the data using partial least square based structural equation modelling and found good correlation between business resilience and informal customer relationship management. This can be attributed to various factors including the close-knit societal structure of Bangladesh where there is a very strong emphasis on helping out the people you have good ties with and fresh produce being commodities resulting in low amount of product differentiation among sellers and thus causing consumers buying them from the seller that they have the best relationship with. However, we have failed to find any relationship between business resilience and risk mitigation using social media which can be attributed to a lack of trust towards online retailers and the extra costs associated with online delivery of perishable produce.

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