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A COMPARATIVE STUDY OF SRI LANKAN AND GLOBAL RETAIL BANKING CUSTOMER BEHAVIOR CHANGES DUE TO THE COVID – 19 HEALTH CRISIS AND RESPONSES BY BANKS

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ABSTRACT

Organizations and consumers worldwide were caught off guard by the COVID-19 pandemic and banks and banking customers have been no exception. Research surveys across the world address several changes in retail banking customer behavior due to the crisis. Notable among these is a sharp decline in bank branch visits and an increase in adoption of digital (internet and mobile banking) interactions with banks. Related to these behavioral changes are challenges faced by certain customers, especially the older and rural customers in adopting to digital interactions, attitudes towards internet based mobile banking, trust in banks, and concerns about privacy and security. In addition to addressing threats imposed by this crisis to banks' liquidity and profitability, retail banks have also had to address above aspects of retail banking customer behaviors. Banks actions reported include redesigning their customer service to ensure business continuity, customer communication strategies, aiding customers in use of internet and mobile banking, enhancing cyber security, promoting customer trust, restructuring operations and staff scheduling (including work from home), and addressing employee morale and emotional issues, and organizational culture issues. This paper will report findings of a survey of 119 Sri Lankan retail banking customers to ascertain their behavioral changes and attitudes due to the COVID -19 health

crisis. Then it will present a survey of top and/or Operational Managers of the 12 most prominent banks in Sri Lanka to ascertain how banks handled the COVID – 19 crisis. These findings will then be compared to findings on retail bank customer behavior changes and bank responses in 27 other countries based on recent research papers and industry reports. The findings from this study were that Sri Lankan retail banking customers reduced physical contacts, and increased digital interactions, with their banks. They also found the change useful and easy to handle, thus leading them to trust the banks with the privacy and security of information resulting in overall satisfaction with the change. These findings are consistent with findings across the globe. It was also found that Sri Lankan banks are sufficiently addressing service continuance and safety of customers and employees with administrative changes comparable to actions by banks across the world. However, Sri Lankan banks, compared to banks across the world, have not established formal cybersecurity policies or programs, communication and educational programs for customers, programs to enhance employee morale and emotional issues, and addressed organizational culture issues although they seem to be aware of the significance of these issues. The paper will finally present certain recommendations for bank Managers and areas for further research.

Keywords: COVID – 19; Retail banking; Customer behavior; Bank responses.

1. Introduction

The Coronavirus Disease 2019 (COVID-19) pandemic has caused widespread economic disruption. Millions of businesses across the world were forced to shut down causing unemployment to soar. Banks and banking customers have been no exception to this crisis (Congressional Research Paper, 2020). The weakened economic conditions have caused implications for the financial systems, the banks, and retail bank customers.

Literature covering academic publications and industry reports across the world address several changes in retail bank customer behavior due to the crisis. An analysis of findings in these publications indicate a sharp decline in bank branch visits and an increase in adoption of digital (internet and mobile banking) interactions with banks. Related to these behavioral changes are challenges faced by certain customers, especially the older and rural customers in adopting to digital interactions; attitudes towards internet based mobile banking and factors influencing adoption of internet banking (such as attitudes, subjective norms, perceived behavioral control, perceived usefulness, perceived ease of use); trust in banks; and concerns about privacy and security (Tan and Teo, 2000)

An analysis of literature indicates that primary issues banks had to face were threats to their stability, profitability and liquidity. Additionally, they had to address customer, employee and organizational issues leading to actions to restructure operations and staff scheduling (including work from home), protect health of their workforce, redesign customer service and customer communication strategies, aid customers in use of internet and mobile banking, enhance cyber security, and promote customer trust. Banks have also had to address employee morale and emotional issues, and organizational culture issues. Literature reports that banks have addressed some of these issues but not all. For example, Dahl et al. (2020) report that Asian banks continue experimenting with initiatives by focusing on three imperatives-ensuring business survival, fulfilling social responsibilities, and adapting to the new normal.

Our research problem can be described as follows:

First, to ascertain changes, if any, in retail banking customer behavior and attitudes due to the COVID 19 pandemic. We decided to do this by using an online questionnaire because physical meetings with customers and reliable mail questionnaire processes were not feasible during this pandemic period. The questionnaire would cover changes in physical and online interactions with banks, satisfaction with changes imposed by the pandemic and factors affecting such satisfaction/dissatisfaction and trust. We wanted to compare these findings with changes in customer behavior and practices of retail bank customers in other parts of the world, especially in developing countries.

Second, to ascertain how banks have responded to the pandemic and these customer behavior changes and needs. For this, we decided to adopt a qualitative technique, namely requesting open-ended responses from top/operational managers of leading Sri Lankan to a set of questions and follow up interviews by phone. Again, physically meeting and interviewing these managers were not feasible due to the pandemic. Then, we wanted to compare our findings with bank responses across the world and identify any useful and practical lessons banks in Sri Lanka can adopt from managerial actions in banks in other parts of the world.

It must be emphasized that our exploratory research project was limited to ascertaining changes in customer behavior and attitudes in their banking practices due to the COVID 19 crisis and how banks have responded to these customer behavior changes and needs. Our research project was not aimed at evaluating the profitability, liquidity, and stability of Sri Lankan banks and, as such, will not address these corporate level financial issues and any actions taken by banks to address these issues.

Methodology adopted by us included an online survey of 119 Sri Lankan retail banking customers to ascertain changes in their customer behavior and attitudes in their banking practices due to the COVID 19 health crisis. This was followed by a survey of top/operational managers of the 10 most prominent banks in Sri Lanka to ascertain how banks have responded to these customer behavior changes and needs. We also conducted a comprehensive literature survey on retail banking customer behavior changes and bank responses across the world in 27 countries (India, Philippines, Singapore, Hong Kong, South Korea, Vietnam, Indonesia, Malaysia, Thailand, Australia, New Zealand, USA, Canada, UK, South Africa, Columbia, Mexico, China, Bangladesh, Italy, Poland, Denmark, Pakistan, Nigeria, Romania, and Brazil; Not all countries compared on the same issues.)

Our conclusions, based on our findings, are that Sri Lankan retail banking customers reduced physical contacts, and increased digital interactions, with their banks during the COVID – 19 pandemic. They also found the change useful and easy to handle thus leading them to trust the banks with the privacy and security of information resulting in overall satisfaction with the change. These findings are consistent with findings on retail banking customer behaviour across the globe. We also conclude, based on our findings, that Sri Lankan banks are sufficiently addressing service continuance and safety of customers and employees with administrative changes, comparable to actions by banks across the world. However, Sri Lankan banks, compared to banks across the world, have not established formal cybersecurity policies or programs, communication and educational programs for customers, programs to enhance employee morale and emotional issues, and addressed organizational culture issues although they seem to be aware of the significance of these issues. The paper will finally present certain recommendations for bank managers and areas for further research.

2. Literature Review

As our research project focused on changes in retail banking customer behavior as a result of the COVID 19 pandemic, and responses by banks to meet challenges imposed by the pandemic, we have organized our survey of literature by topics and subtopics relevant to these two issues.

2.1 General topics and issues relevant to the impact of COVID – 19 crisis on the banking industry

Marcu (2021) compares and contrasts the COVID-19 pandemic crisis and the great recession of 2008-2009. Prior to the pandemic, banks were well capitalized and in a stronger position compared to the last crisis in 2008 when the banking system was fragile, and banks were a main part of the problem. In the current pandemic times, banks are seen as a solution.

Lin et al. (2021) reports that developing countries come higher on the Fear of Covid 19 Scale (FCV 195). Iran scored 2.132 on this scale compared to New Zealand that scored - 1.435. Other selected scores: Bangladesh 0.0, Cuba 0.3, Japan 0.847, Brazil 0.572, and UK - 0.743.

Vater et al. (2020) reports that early actions by banks in China, Hong Kong, Italy, and South Korea, along with the first weeks of severe effects in other countries, suggest three immediate areas for focus: Protecting the employees, focused actions to improve customer service and experience, and make the financial position more resilient.

Bryan et al. (2020) report how banks in Asia, Italy, and Spain has used insights learned from previous crises such as mortgage restructuring in Ireland and the US, and management of small- and medium-enterprises' non-performing loans in Greece. They emphasize focusing on three key areas: serving customers – ensuring access to critical services in the near term and accelerating the transition to digital beyond that; helping society – supporting customers and communities through the pandemic; and responding to financial difficulty – scenario planning, establishing a COVID-19 credit policy, and operationalizing restructuring capabilities.

Baicu et al., (2020) concluded that all Romanian banks (Transylvania Bank, BCR, Raiffeisen Bank, CEC, Alpha Bank, ING, Uncredited Bank) implemented actions from four identified categories: appropriate measures for SMEs, measures to protect individual customers, measures to protect staff, and responsible social actions in the context of the COVID 19 pandemic.

2.2 Retail banking customer behaviour

Bellens (2021) states that the way people bank has changed. but it might not yet be permanent. He cites the Ernst & Young Future Consumer Index that has found forty-three percent of respondents say the way they bank has changed due to COVID-19. This is unsurprising since the lockdowns have limited the choice of physical channels, with two-thirds of customers saying they are visiting physical stores less.

Teo (2020) reports that, in Malaysia, Standard Chartered (SC) Bank clients who are digitally active has doubled and currently, 40 per cent of its customers are active users of the SC Mobile App. This trend conforms that Malaysia leads other countries in Southeast Asia in the usage of mobile/digital wallets at 40 per cent, ahead of the Philippines (36 per cent), Thailand (27 per cent) and Singapore (26 per cent). The author cites the Mastercard Impact Study 2020 that some of the trends and habits formed in response to the pandemic would likely remain even after the crisis. Additionally, about 64 per cent of Malaysians said they will conduct online shopping in the same frequency as currently or before the pandemic, even after restrictions are lifted. Malaysian consumers also shifted to other payment methods other than mobile/digital wallet, such as contactless debit cards (26 per cent) and contactless credit cards (22 per cent), while cash usage declined 64 per cent since the beginning of the Covid-19 pandemic.

FIS (2020): More than 45% of bank customer respondents in the FIS Survey stated they have changed how they interact with their bank since the outbreak of the pandemic. FIS explained these findings were true across all generations surveyed, with 46% of Baby Boomers, 39% of Gen Xers and 35% of millennials saying they are using new channels

such as online and mobile to do their banking. The FIS survey also found that consumers are flocking to mobile wallets and contactless payment methods to avoid the exchange of paper money or checks during the current pandemic. FIS mentioned 45% of survey respondents said they are using a mobile wallet of some type and 16% indicated they are now using paper-based currency less than before the pandemic.

FICO (2021) explains this high digital use in Malaysia. They report findings of their Consumer Banking Survey, conducted between December 2020 and January 2021 using an online, quantitative poll of 14,000 consumers across 14 countries (Vietnam, Indonesia, Malaysia, Thailand, Australia, New Zealand, USA, Canada, UK, South Africa, Columbia, Mexico, and Brazil) showed that 23 per cent of Malaysians prefer to open a bank account on their phone compared to 18 per cent in the US and 16 per cent in Canada. "It is demographically a young country, with 80 per cent of the population under the age of 50. Plus, the Malaysian government is actively encouraging development and investment in the digital economy which makes up about a fifth of the country's GDP. These factors have promoted a digital-first consumer base." (FICO, 2021). Leading the digital push were 25-34-year-olds, with 76 per cent of them saying they would open a bank account online. This dropped to 49 per cent when it came to consumers 45-55 years-old, but interestingly climbed back up to 61 per cent for those over 55 years of age. Malaysian households are often multi-generational, so, this finding might be explained by younger generations helping their grandparents with their banking.

Baicu (2020). Vast majority of bank customers in Romania found internet and mobile banking easy to use. Confidence in technology is quite high as well; 41.6% of the respondents trust technology to a great extent, and 44.9% of them, to a very great extent. Customers believe that technology helps increase the efficiency of banking services. Also noticeable was that lifestyle modification under the COVID-19 pandemic conditions does not alter the trust in banks.

Sheng (2020) states that April 2020 saw a 200% jump in new mobile banking registrations in USA, while mobile banking traffic rose 85%, according to Fidelity National Information Services (FIS), which works with 50 of the world's largest banks. She adds that young and old Americans have suddenly flocked to online and mobile banking during the pandemic. Among those affected are online platforms for large US banks such as U.S. Bank, PNC, and Bank of America. With many branches closed, banks have also been dealing with a significant increase in call center traffic, creating long wait times.

Agha and Saeed (2015) present a study carried out to determine the customer acceptance of using online banking in Pakistan. Study concludes that perceived credibility and perceived usefulness are significantly and positively associated with customer acceptance, suggesting that customers who perceive that bank provide online services to their customers are credible enough and useful in their transactions, are more likely to accept online banking. The study employed Technophobia as a moderating variable to check for its effects on the relationship of the variables on customer acceptance. It was found that Technophobia only impacted the perceived credibility of the banks. They emphasize that banks must design user friendly websites, that are not only easy to use but also provide a sense of security when making transactions.

Devanesan et al. (2021) report findings of their Indian study that the Covid-19 pandemic lockdown has altered the buyer behaviour of consumers and increased usage of digital payment systems (DPS) for procuring various goods and services. Buyer behaviour associated with DPS could remain unchanged post pandemic, but digital payments will continue to grow. Urban and suburban residents were likely to opt for bulk purchases during the Covid crisis, while rural residents opted for cheaper options due to lower purchasing power. Generation Z users (those under 25 years) are most likely to increase their usage of DPS. Millennials (age 25-40) were identified in the study as the leading users of banking services and mobile payment systems as the preferred DPS.

Akter et al. (2021). Bangladesh. An online survey was conducted for collecting data about the changes in buying behavior through a structured questionnaire. The research targeted 200 respondents belonging to different age-gender segments, qualifications & occupations, and household monthly income. The 191 completed responses showed that the health and safety concern, imposed restrictions, financial condition, surrounding environment-people, and other realities caused a remarkable change in consumer buying behavior during the pandemic.

Asif et al. (2020) reports that consumers' banking preferences are rapidly evolving. In Italy, Spain, and the US, 15 to 20 percent of customers surveyed expect to increase their use of digital channels once the crisis has passed; in other markets that percentage ranged from 5 to 13 percent. Notably, preference for handling everyday transactions digitally is as high as about 60 to 85 percent across Western European markets, even for customers 65 years of age or older. They claim that age is no longer a differentiator for retail banking digital preferences.

Cuthell et al. (2020). A significant share of consumers tried contactless payment methods during the pandemic. Increased use of payment apps/contactless cards UK 20%/45%; Poland 20%/40%; India 40%/36%; China 50%/27%; Brazil 30%/30%; Denmark 20%/22%; Italy 20%/22%; USA 10%/10%. 30% of consumers reduced or stopped using traditional payments such as cash during the pandemic, a trend that will likely continue. Branch visits sharply declined (by 41%) during the pandemic, and many consumers plan to limit visits even after Covid-19 abates.

Sheth (2020). The lockdown and social distancing to combat the covid-19 virus has generated significant disruptions on consumer behavior. As consumers adapt to the house arrest for a prolonged period of time, they are likely to adopt newer technologies which facilitate work, study and consumption in a more convenient manner. Embracing digital technology is likely to modify existing habits. Finally, public policy will also impose new consumption habits especially in public places such as airports, concerts, and public parks.

Gurbaxani and Gupte (2021). A sample survey was conducted to determine the impact of COVID-19 on individuals' financial transactions in Madhya Pradesh (MP) India, especially investment decisions of individuals with respect to Systematic Investment Plans (SIPs). Significant association was found between measures taken to prevent the spread of COVID-19 (such as lockdown and travel restrictions) and individual income; such preventive measures directly impacted savings and investment behaviour. Indeed, respondents reported a 43% drop in SIP investments during the COVID-19 pandemic.

While decline in investment was common to genders, the difference between percentage decline was statistically non-significant. Furthermore, investment behaviour did not vary with investor age.

Daqar et al. (2020) report that Millennials (age 25-40) are the largest segment adopting banking services via DPS. Though credit/debit cards are currently the preferred mode of DPS, the rapid adoption of mobile payment systems will lead to a decrease in use of credit/debit cards.

Chittineni (2018). The average adoption of DPS for various services does not exceed 32% across age groups, which indicates that cash is still the preferred mode of transaction in India.

Deloitte (2019). New survey data finds men and women differ in their banking attitudes and behaviors—but that the variation is influenced by generation. Gender differences in the use of online bill payments between Men/Women: Total 62%/66%; Millennials (25-40 years) 53%/62% significant at .05 level; Gen X (41-56) 66%/64%; and Baby boomers (over 56) 73%/76%

Drenik (2020) reports that in-store visits to banks and other financial institutions in US and Europe dropped by 33% since the start of 2020.

2.2.1 On retail banking customer trust

Hampshire (2017). UK, Survey of 101 bank customers. Mobile payments. Perceived trust positively influences perceived usefulness and mitigates perceived risk.

Research also reports that there is a direct and positive influence of trust in banks, and perception of privacy and security, on retail bank customer attitude towards internet and mobile banking (Baicu et al, 2020, Rajaobelina et al, 2020).

Rajaobelina et al. (2018). A total of 396 panelists of a recognized Canadian research firm responded to a self-administered online questionnaire. Findings demonstrate that the cognitive and negative affective dimensions of mobile experience impact trust, whereas the positive affective/sensory dimension influences commitment.

van Esterik-Plasmeijer and van Raaij, W. Fred (2017). Survey among 1,079 respondents of 18 years and older in The Netherlands on person trust, system trust, bank trust, and their scores on determinants of trust and loyalty. Findings: Integrity is the most important determinant of bank trust. Transparency, customer orientation, and competence are also significant. Trust is a strong predictor of loyalty. Determinants explaining bank loyalty are competence, stability, transparency, and value congruence. System trust is also a determinant of bank trust.

Poromatikul et al. (2020). Thailand. Purpose The purpose of this paper is to examine the drivers of continuance intention with mobile banking apps, in a Thai context. The secondary objective is to examine if there are underlying segments that differ meaningfully in this regard. Design/methodology/approach A structural equation model based on the European Customer Satisfaction Index is estimated. The data were obtained by conducting an online survey of mobile banking users in Thailand (n=399). Findings

The top 3 factors directly affecting continuance intention toward mobile banking are satisfaction, trust, and expectancy confirmation

Mostafa (2020). A questionnaire was administered with a sample of 301 respondents from Egypt. Service quality dimensions (ease of use, usefulness. Security/privacy and enjoyment) and customer trust contributes to customer value co-creation in mobile banking.

Lin et al. (2021) reports that developing countries come higher on the Fear of Covid 19 Scale (FCV 195). Iran scored 2.132 on this scale compared to New Zealand that scored - 1.435. Other selected scores: Bangladesh 0.0, Cuba 0.3, Japan 0.847, Brazil 0.572, and UK - 0.743.

2.3 Issues relevant to bank responses to COVID - 19 pandemic and customer behavior changes and needs

Marcu (2021) cites surveys by KPMG and Price Waterhouse Cooper showing that about 25% of the bank branches were closed across the world. Of the remaining 75 percent, many were kept open on reduced hours and with reduced staff. Priorities to focus are business continuity planning on issues for survival: adjust branch hours and staffing mix and times, switch in-branch visits to appointment-only, close some branches temporarily. Areas to focus are technological innovation and digitalization, security, and internet and mobile banking.

Marcu (2021) also discusses social responsibility actions by Romanian banks during the pandemic. Up to May 2020, Romanian banks donated over 4.8 million Euros for 220 hospitals and 100 NGOs, in the fight against the COVID-19 pandemic.

2.3.1 Cyber Security Issues Imposed by Changes in Operational Practices Including Staff Work from Home Practices.

Wang et al. (2020) report the findings from a research project on cyber security in the Nigerian Internet banking industry, by presenting the main cyber security breaches it has experienced, along with its cyber security capability and practices. An online survey conducted with 100 experienced professional working in both the Nigerian banking and banking security service sectors found a transformation of the Nigerian cybercrime industry from low-tech cyber-enabled crimes to high-tech sophisticated breaches, with viruses, worms or Trojan infections; electronic spam mails; and hacking being the top three most experienced breaches.

Pranggono and Arabo (2021) claim that there is a correlation between the pandemic and the increase in cyber-attacks targeting sectors that are vulnerable. The pandemic has also raised the issue of cybersecurity in relation to the new normal of expecting staff to work from home (WFH), the possibility of state-sponsored attacks, and increases in phishing and ransomware.

Furnell and Shah (2020) state that hitherto, across the globe, home working wherever possible was the standard advice, and technology was the fundamental enabler of the change. They claim that with the Covid-19 pandemic, home working has become the standard, and technology has become the fundamental enabler. However, they report a survey showing that only 38% businesses have a cybersecurity policy in place.

Hakak et al. (2020) review some of the malicious cyber activities associated with COVID-19 and potential mitigation solutions. They also propose an attack taxonomy, which (optimistically) will help guide future risk management and mitigation responses.

2.3.2 Organizational Policies (such as Work from Home); Efficiency and Organization Culture Issues

Spicer (2020) emphasize that COVID-19 has profoundly transformed organisational cultures. Open place workspaces have been replaced by screens and personal protective equipment. The underlying values and assumptions of many organisations seem to have shifted from exploration and creativity towards safety and resilience.

Kniffin et al. (2021) present a survey of 229 Human Resources (HR) departments by Gartner (2020), showing that approximately one half of the companies had more than 80% of their employees working from home during early stages of the COVID-19 pandemic—and estimating substantial long-term increases for remote work after the pandemic. They also highlight that though remote workers are highly productive, the turnover risk is much higher.

Among the more specific leader-subordinate activities that will be important to consider in relation to COVID-19 is how assessment and appraisal systems will function. For example, without being able to directly monitor subordinates in the way that office settings allow, there may be a shift to results-focused assessment, which prior research shows to be generally effective (Pritchard et al. 2008). Over longer spans of time, though, working remotely may reduce the opportunities for subordinates to gain feedback from leaders and prior research suggests that a lack of learning opportunities is associated with lower organizational commitment and higher risk of turnover.

Prior research has shown that high-quality social interactions—including informal chats among coworkers—are essential for mental and physical health. Handshakes that are also known to be valuable for social connection (e.g., Schroeder et al. 2019) are now restricted. Against this backdrop, both the requirement to WFH and plans to dedensify workplaces in support of physical distancing are likely to have side effects that include at least some degree of harm to individuals' mental and physical health.

Gartner (2020) suggests a new model to manage remote employees based on (1) Normalizing Self-Direction where managers should focus on employees' work product and outputs rather than processes; (2) Enabling New Relationships because 41% of respondents of their survey did not feel connected to colleagues when working remotely and 26% of employees feel isolated when they work remotely. New relationships suggested here are aimed at helping employees build; (3) Accentuating the Positive. Emphasize not only on behavior that was not successful but also on what is going right while citing specific examples; and (4) Revamp Team Expectations. Fully remote employees are 3.5 times more likely to work across five or more teams. It is crucial for managers to set expectations with individual team members and the larger team to ensure effective individual contributions and team collaboration. Managers should also emphasize individual and team objectives in these conversations. social and emotional connections to ensure individuals feel connected to their colleagues and the organizations, and to help teams continue to work together seamlessly.

Lee (2020) reports a study conducted in the Singapore context. In light of the COVID-19 pandemic, and government regulatory restrictions, most workplaces implemented work from home arrangements for most of the employees. 131 respondents comprising full time, part time and contract employees participated. Findings were that the phenomenon of emotion triggered by social comparison emotion and critical socio-emotional resources (i.e., task, flexibility, communication, health and safety and social support) during a health crisis. Specifically, the employees' emotional reactions were elicited from the perceived organisational support, in how organisation cares for their well-being and work contributions and, in turn, influence the psychological safety. For example, the approach of the online communication (as a form of organisation support) practiced by the managers has implications on the different levels of psychological safety experienced by the employee. In addition, emotional resources can be interpreted as organisation support. The findings revealed that emotions such as anxiety, stress, unfairness, inferiority and vulnerability are triggered by perceived inequity and comparison with the decisions or resources of the referent others of higher level such as the management (upward social comparison emotion). On the other hand, the emotions of pride, empathy, shared goals and support are generated by the care, collective interest and comparison of the referent others of lower level such as the subordinate (downward social comparison emotion).

2.3.3 Digital Transformation

FIS (2020). FIS surveyed more than 1,000 American consumers about the ways they are paying and banking amid social distancing and stay-at-home actions taken across the U.S. since the COVID-19 outbreak. The findings indicated that the pandemic has accelerated the digital transformation of banking and commerce, and that these adjustments likely will not be temporary but rather mark a new normal in consumer behavior in a post COVID-19 marketplace

Adarkar et al. (2020) report that In China and Italy, for example, four weeks after the coronavirus began to spread, the estimated increase in customers' digital engagement is 10 to 20 percent. If these customers have a positive experience, it could shift behavior for the longer term.

Asif et al. (2020). Many banks have yet to see this mindset shift translate into actual user behavior, perhaps due to limitations of their digital capabilities. Should these emerging preferences become banking's post COVID-19 "next normal," retail banking distribution will experience up to three years of digital preference acceleration in 2020. In some markets, this may translate to 25 percent fewer branches, with those remaining performing a different set of activities with more flexible job configurations. Call centers may be transformed to remove up to 30 percent of less customer-centric and lower value-added activities. Digital sales and servicing will accelerate markedly, and the remote advisory channel should finally come of age, potentially handling 35 percent of complex needs remotely.

Human-centered remote channels will evolve significantly but remain essential. In the wake of COVID-19, branch closures led to call volumes spiking by one-third and wait times more than tripling between December 2019 and April 2020.⁹ This pattern likely reflects lagging digital capabilities, as poorly designed or missing digital features force customers

to call their bank; pre-COVID-19 Finalta research indicates a four-fold higher global rate of inbound calls per active customer (1.6 vs. 6.4) for banks with immature digital journeys.

Cuthell et al. (2020). Three lessons emerge from these recent surveys. Flex the workforce to augment virtual channels. While it's uncertain how the mix of traffic throughout the network will eventually settle, flexibility in staffing locations and roles now matters more as the pandemic situation fluctuates. While banks digitize more interactions, they also could train more employees to fill in as virtual call center agents on some days or blocks of time. And more employees could spend time promoting digital channels to customers to speed up that migration.

Citizens Bank in the US has been transitioning some branches to "advice centers," where customers go for financial guidance rather than to complete transactions that they can take care of digitally. That has required training employees to take on more specialized roles. HDFC Bank in India set up an online facility that helps open savings accounts instantly. As of early June, HDFC had added 250,000 new customers in just more than a month.

Bensley et al. (2020). In the context of COVID-19, banks can better serve customers in distress by enhancing support in the use of digital tools and go digital and remote. Presents relationship between retail banking customer satisfaction (CS) and frequency of use mobile interactions with the bank:

- Those who never used mobile app usage for deposit products (34%); CS scale 54.
- Used less than once per month (13%). CS scale 46.
- Used more than once per month (20%). CS scale 54.
- Used more than once per week (33%). CS scale 62

In China, leading banks set up new online portals to explain available services and the actions they were taking in the context of the coronavirus. These portals provided video servicing and sales capabilities, as well as educational videos for investors. One leading Chinese bank launched an integrated digital coronavirus program covering banking services, wealth-management services, tutorials, and timely advisory content, as well as non-banking-related services ranging from help with online shopping to doctor appointments to the delivery of disinfectant.

For services that require branch interaction, digital tools can provide information on adjusted hours, essential services, reduced staff numbers, heightened safety precautions, social-distancing measures, and digitally enabled queuing.

One leading Singaporean bank rapidly introduced a comprehensive online solution for small and medium-size enterprises (SMEs), including six-month property-loan principal deferments, temporary bridging loans, fee rebates, new digital account-opening services, and next-day and collateral-free business loans. They added an online "SME Academy" to help business owners navigate the new context.

2.3.4 Employee Experience Measurement and Enhancement

Bensley et al. (2020): Strong digital offerings are necessary but not sufficient; employee experience is a key differentiator. An analysis of 13 US banks with iOS App Store scores of 4.8 and higher, on a 5-star scale, found that their customer-satisfaction ratings ranged from an average of 47 percent for the bottom three banks, to an average of 69 percent for the top five; in other words, even if a bank has a great app, it does not seem to be determinant of overall customer experience. In comparison, employee experience tracked differences in overall customer experience well.

Banks will need tremendous effort from their employees to navigate the crisis, they must engage with customers empathetically. Banks need to make a credible commitment to their employees and acknowledge the contributions they are making, using both words and policy (for instance, flexible sick leave and compensation).

Equip employees with the skills they need to support customers' new digital experiences, teaching customers how to use existing digital services. Introducing externally meaningful credentialing so employees' new skills are portable. Reskilling is an alternative to reducing staff.

2.3.5 Telework Practices

Abulibdeh (2020). Prior to the pandemic, telework practices varied substantially between countries, sectors, and occupation. However, around 24% of employees that have never experienced telework before the pandemic start telework during it, compared to 56% of employees, who practice telework occasionally before the pandemic. This indicates that the increase of telework practices can be achieved using the right technology tools and work reorganization. In Japan, less than 13% of employees in the country were able to telework in March 2020. Employers increased interaction with their employees working remotely due to the COVID-19 pandemic. Nearly 88% (9 in 10) of employers have increased their communication with their employees regarding health and safety tips. Furthermore, 84% of employers have provided advice on teleworking. A survey in the United States to evaluate the impact of the pandemic on telework practice found that about 50% of the employees are working from home, including 35.2% indicated that they were commuting pre-COVID-19 pandemic and switch to perform their work from home.

Management is another significant element in the successful implementation of telework practices. Management of teleworkers is more complex and challenging than managing employees at the workplace, particularly during crises such as COVID-19 pandemic. Management concerns during an emergency situation are, managerial control, human resource management practices and policies, preventing social and professional isolation, and how to measure employee performance (Blount, 2011).

Investments in digital infrastructure (i.e., IoT, 5G, new fiber-to-the-premises, new broadband strategy) to facilitate new methods of communicating can facilitate telework practices.

Bellens (2021), states that the way people bank has changed. but it might not yet be permanent. He cites the Ernst & Young Future Consumer Index that has found forty-three percent of respondents say the way they bank has changed due to COVID-19. This is

unsurprising since the lockdowns have limited the choice of physical channels, with two-thirds of customers saying they are visiting physical stores less.

2.3.6 Corporate social responsibility issues

Bellens (2021). Responsible banking is more important than ever. For all banks, behaving ethically and doing the right thing will be important to consumers' purchasing decisions. More than half of the respondents indicate that their future purchasing decisions will be impacted by banks actively supporting the community, being transparent in all they do, and ensuring they are doing good for society. Conversely, 44% say decisions will be negatively impacted where they perceive banks to maximize profits during this time. Customers will want greater flexibility and security. The current pandemic crisis is a great financial shock for many. Recovering from this crisis will require relying on extended support from banks to help customers get back on their feet; 27% expect their banks to be more flexible in the future.

3. Methodology of the Study

In studies such as these, qualitative and quantitative methods (or a combination of the two methods) are used to collect data. Quantitative studies rely on numerical or measurable data and qualitative studies rely on personal or organizational accounts that illustrate human and organizational behaviour. We adopted a methodology that is a combination of these two methods. To ascertain the changes in customer behaviour due to the COVID 19 health crisis, we decided to conduct an online survey of a sample of Sri Lankan retail banking customers. To ascertain bank responses to the crisis, we decided to conduct interviews with top/operational managers of the 10 most prominent banks in Sri Lanka. In studies such as these, researchersWe also conducted a comprehensive literature survey on retail banking customer behavior changes and bank responses across the world covering over 12 countries. These are described in detail below.

3.1 Retail banking customer survey

As this project was undertaken during the height of the COVID 19 pandemic, interviewing customers or even effectively conducting a mail survey was not feasible. It is also not possible to obtain personal data of customers from banks. Therefore, making a list of the total population of bank customers and selecting a random or stratified sample of customers was also not feasible. Besides this was beyond the scope of an exploratory survey. Therefore, we decided to send an online questionnaire to a convenient sample of retail banking customers. A questionnaire was sent online to a convenient sample of 390 retail banking customers from WhatsApp contacts available to the five authors. As the five authors provided a mix of ages (students below 25 years of age, young academics, and professionals ages 30 – 50, and senior professionals ages 60 and above) and different educational and social backgrounds, we believe this convenient sample to be demographically fairly representative of retail banking customers in Sri Lanka. 119 responses were received (28%).

Distribution of the 119 respondents:

- 51 male (43%) and 68 female (57%). This is comparable to Sri Lanka Census of Population and Housing 2012 figures showing that 48.4 percent are males and 51.6 percent are females.
- Age: 17-20 years 5; 21-27 years 72; 28-49 years 22; and over 50 years 20. This distribution is comparable to age demographics of Sri Lanka where 79% of the population is under 54 years of age (Indexmundi, 2020). In our sample, 83% are of age under 50.
- Occupation: 48 students (40.3%); 48 employees (40.3%); 8 self-employed/own business (6.7%); 15 not working/not employed (12.6%).
- Educational level: 46 (38.7%) University graduate; 44 (37%) university student; 20 (16.8%) passed AL (not in a university); 9 (7.6%) passed OL.

3.2 Survey of bank managers

Again, it was not feasible to meet bank managers in person due to COVID 19 restrictions. Due to work re-scheduling in all the banks, many bank managers were not available to obtain responses within a short time. Therefore, a structured questionnaire was emailed to 16 top/operations/branch managers in 12 of the most prominent banks who agreed to participate in the survey, to ascertain how banks handled the COVID – 19 crisis. The questionnaire included questions on operational and staffing changes, customer access and communications, supporting increase in digital interactions, data and cybersecurity issues, and future outlook. Responding managers were then interviewed by phone to clarify their responses.

Top/operational managers from 11 of the 12 most prominent banks in Sri Lanka (individual responses will be kept confidential) responded to the survey. The banks were: Hatton National Bank, Commercial bank, Sampath Bank, Hong Kong Shanghai Banking Corporation (HSBC), Habib Bank, Nations Trust Bank, National Development Bank (NDB), Development Finance Corporation (DFCC) Bank, SDB Bank, People's Bank, and Bank of Ceylon (BOC).

3.3 Comprehensive literature survey

A comprehensive literature survey of articles from international academic journals and industry reports from highly reputable global consultancy firms (E.g., Bain & Company's new survey of roughly 10,000 consumers in eight countries, namely India, USA, Brazil, UK, Italy, China, Poland, and Denmark, on their banking behaviors in response to Covid-19) will provide data and information to compare our findings with consumer behaviour and bank strategies adopted in 27 countries across the globe.

4. Results, Analysis and Discussion

4.1 Changes in Sri Lankan retail banking customer behaviour.

We present below the seven key findings in our survey of 119 Sri Lankan retail banking customers.

(1) 72% of Sri Lankan retail banking customers decreased physical visits and contacts with their bank due to the pandemic.

(Question posed was, “During the COVI – 19 pandemic, have you decreased physical visits and contacts with your bank?”)

This figure is comparable, and even higher than, figures reported in various studies across the world. For example,

Cuthell et al. (2020) reported that bank visits had declined by an average 41% (average of 8 countries – India, US, Brazil, UK, Italy, China, Poland and Denmark) during the pandemic. Some individual country figures were Brazil (65%), UK (55%), India (50%), USA (40%) and China (36%).

Ogden (2020) highlights the new BAI (a non-profit organization) survey showing a massive increase in the use of digital banking tools as preferences of going into a branch dramatically drop. This BAI survey also found while the branch remained the top choice for consumers to get advice about more complex products or services, “the percentage of consumers preferring the branch decreased from 45% to 32%” since January 2020.

Drenik (2020) reports that in-store visits to banks and other financial institutions in US and Europe dropped by 33% since the start of 2020.

Gender wise analysis: 37/51 = 72.5% males and 47/68 = 69.1% females decreased physical visits and contacts. In a t test for difference in percentages, the p value is 0.68916. The result is not significant at $p < .05$ indicating that there is no significant difference between male and female customers who have decreased physical visits and contacts with their bank due to the pandemic.

Analysis by age: Among customers who decreased physical visits and contacts, 54/77 (70.1%) were below 27 years of age; 17/22 (77.3%) were 28-49 years of age; and 8/20 (40%) were over 50 years of age. Inter group t tests for difference in proportions yielded the following: Between first and second groups, $p = 0.50926$. Difference not significant at .05 level; between first and third groups, $p = 0.01242$. Difference significant at .05 level; Between second and third groups, $p = .0139$, difference significant at .05 level. This implies that the over 5 years of age had significantly fewer physical visits and contacts than the other younger age groups.

Conclusion based on above findings: Sri Lankan retail banking customers have significantly reduced physical visits and contacts with banks during the pandemic as much as or more than in other countries across the world.

The high figure of banking customers who have reduced physical visits and contacts with banks may be related to greater fear of COVID 19 in developing countries. Lin et al. (2021) reports that developing countries come higher on the Fear of Covid 19 Scale (FCV 195). Iran scored 2.132 on this scale compared to New Zealand that scored -1.435. Other selected scores: Bangladesh 0.0, Cuba 0.3, Japan 0.847, Brazil 0.572, and UK – 0.743. Comparable figures for Sri Lanka are not available.

(2) 73.8% of Sri Lankan retail banking customers increased online banking during the COVID 19 pandemic.

(Question posed was, “During the COVOD -19 pandemic, have you increased online banking with your bank?”)

This figure is comparable to figures reported by Cuthell et al. (2020) who reported that a significant share of consumers tried contactless payment methods during the pandemic. He reports increased use of payment apps/contactless cards as UK 20%/45%; Poland 20%/40%; India 40%/36%; China 50%/27%; Brazil 30%/30%; Denmark 20%/22%; Italy 20%/22%; and USA 10%/10%. He predicts an anticipated use of over 95% of contactless payment methods.

Sheng (2020) states that April 2020 saw a 200% jump in new mobile banking registrations, while mobile banking traffic rose 85%, according to Fidelity National Information Services (FIS), which works with 50 of the world's largest banks. She adds that young and old Americans have suddenly flocked to online and mobile banking during the pandemic. Among those affected are online platforms for large US banks such as U.S. Bank, PNC, and Bank of America. With many branches closed, banks have also been dealing with a significant increase in call center traffic, creating long wait times.

Ogden (2020) highlights the new BAI (a non-profit organization) survey, conducted in August 2020 to understand how digital banking behavior had shifted for consumers once the coronavirus had spread in the U.S. This survey showed a massive increase in the use of digital banking tools as preferences of going into a branch dramatically drop. It showed that more than 50% of consumers have used "digital banking applications more since the start of the pandemic." Furthermore, 87% of consumers plan on maintaining their increased usage after the end of the pandemic.

Data on the use of online banking services in Egypt shows that 30 % increasing use online banking from January 2020 till March 2020. By end of 2020 it was 35% in the Middle East Region (Al-Siqili, 2020).

Devanesan et al. (2021) report findings of a survey among Indian retail banking customers revealing that the Covid-19 pandemic lockdown has altered the buyer behaviour of consumers and increased usage of digital payment systems (DPS) for procuring various goods and services. They predict that buyer behaviour associated with DPS could remain unchanged post pandemic and digital payments will continue to grow.

Asif et al. (2020) report that in Italy, Spain, and the US, 15 to 20 percent of customers surveyed expect to increase their use of digital channels once the crisis has passed; in other markets that percentage ranged from 5 to 13 percent.³ Notably, preference for handling everyday transactions digitally is as high as about 60 to 85 percent across Western European markets, even for customers 65 years of age or older.

On the contrary, Chittineni (2018) claims that the average adoption of DPS for various services does not exceed 32% across age groups, which indicates that cash is still the preferred mode of transaction in India.

Agha and Saeed (2015) report that online banking is escalating in Pakistan, but rapidity of growth is not as brisk as compared to other developed countries. They found that perceived credibility and perceived usefulness are significantly and positively associated with customer acceptance of mobile banking. Customers who felt that their banks are credible enough and useful in their transactions, are more likely to accept online banking. The study employed Technophobia as a moderating variable to check for its effects on the relationship of the variables on customer acceptance. It was found that Technophobia

only moderated the relation between Perceived Credibility and Customer Acceptance, implying that fear of technology only impacted the perceived credibility of the banks.

Dahl et al. (2020) report that respondents to a survey who enrolled in online banking for the first time because of the COVID-19 crisis was 13% on the average. Figures for China was 33% and South Korea 21%.

World Retail Banking Report (2020). With over half (57 per cent) of consumers now preferring internet banking, up from 49 per cent pre-Covid-19 and 55 per cent preferring banking mobile apps compared with 47 per cent previously, the stakes have risen further as the Covid-19 context continues to move consumers towards digital banking.

Deloitte (2019) reports a new survey that finds men and women differ (with women taking the lead slightly) in their banking attitudes and behaviors—but that the variation is influenced by generation. Gender differences in the use of online bill payments: Men/Women 62%/66%; Millennials (25-40) 53%/62% significant at .05 level; Generation X (41-56) 66%/64%; Baby boomers (over 56) 73%/76%.

Gender wise analysis: Among Sri Lankan retail banking customers reporting an increased online banking were 41/51 (80.3%) male customers and 43/68 (63.2%) female customers. In a t test for difference of fractions, p value for difference in percentages is 0.04338 which is significant at both .01 and .05 levels. This means that there is a significant difference between the two groups (males and females) in increased use of online banking with males leading the increase.

This is consistent with findings of Deloitte (2019) above and Jha and Kalam (2019) for Indian bank customers that found a significant difference in frequency of usage of internet banking among male and female groups of bank customers. This is a general finding not specific to pandemic times.

Age wise analysis: Age 21-27 (54/72 = 75%) and 28-49 (18/22= 81.8%) accounted for the largest subgroups. The figure is lowest for customers over 50 years (5/20 = 25%). T tests for difference of proportions again showed that the increase in internet banking was lesser among the over 50 years of age group compared to the other younger age groups.

This is consistent with studies across the world reporting older banking customers unable or unwilling to adopt digital interactions with banks.

Devanesan (2020): In India, Generation Z users (those under 25 years) are most likely to increase their usage of DPS. Millennials (age 25-40) were identified in the study as the leading users of banking services and mobile payment systems as the preferred DPS.

On the contrary, Bensley et al. (2020) report that age is no longer a differentiator for retail banking digital preferences. He cites the McKinsey Financial Decision Maker Pulse Survey run in mid May 2020 covering UK, France, Italy, Spain, Germany and Sweden (1,000 representative consumers each) showing internet/mobile banking preferences by age groups for everyday transactions/simple needs/complex or ad hoc activities as:

18-34	70%	35%	20%
35-50	77%	37%	22%

51-64	74%	32%	17%
65+	72%	29%	16%

Conclusion based on above findings: Sri Lankan retail banking customers have increased internet (online and mobile) banking during the COVID 19 pandemic. Women appear to use internet banking more than men, but the real difference comes from generation levels where the increase is higher among younger customers and lower among older customers. These findings are highly consistent with findings across the world.

(3) 79.6% of Sri Lankan retail banking customers increased banking activities using the mobile phone.

(Question posed was, "During the COVID – 19 pandemic, have you increased banking activities with your bank using your mobile phone?")

Sheng (2020) reports that April 2020 saw a 200% jump in new mobile banking registrations in USA while mobile banking traffic rose 85%, according to Fidelity National Information Services (FIS).

Drenik (2020) reports that Mobile banking has jumped in usage since the start of 2019, especially among young adults. Just over half of millennials and baby boomers bank from their smartphones according to their latest study at Prosper Analytics.

Mostafa (2020) who administered a questionnaire to a sample of 301 respondents from Egypt reports that service quality dimensions (ease of use, usefulness. Security/privacy and enjoyment) and customer trust contributes to customer value co-creation in mobile banking.

Dahl et al. (2020) reports that an average of 12% of respondents enrolled in mobile banking for the first time because of the COVID-19 crisis. The figures for China/S Korea were 32%/21%. Mobile log ins are expected to increase fivefold and mobile payments by 10 percent.

Conclusion based on above findings: Mobile banking has also increased among Sri Lankan retail banking customers. This increase is consistent with increases reported across the world.

(4) Customer satisfaction/dissatisfaction with changes in banking practices due to COVID - 19

We asked the question: On a scale of 1-5 (1= Dissatisfied, 2 = Not satisfied, 3 = Neutral, 4 = Satisfied and 5 = very satisfied), how satisfied are you with this change, that is having to reduce physical access to the bank and increasing online and mobile access?

The responses were:

Very satisfied	45 (37.8%)
Satisfied	53 (44.5%)
Neutral	10 (8.4%)
Not satisfied	5 (4.2%)
Dissatisfied	2 (1.7%)

The large percentage of Sri Lankan retail banking customers seem to be satisfied with the change over to digital banking.

There is no significant difference between male and female customers in satisfaction with the change over to digital banking. 53/62 female customers and 36/41 male customers were satisfied or very satisfied. P value for testing the difference between percentages of the two groups is 0.72786 which is not significant at .05 level.

Age wise, those of age 21-27 years were the largest number of satisfied and very satisfied customers followed by customers of age 28-49.

A limitation with our findings is that our study has not taken into account the frequency of use of internet banking. In a study that took into account the frequency of use, Bensley et al. (2020) found that customer satisfaction (CS) with digital banking was highest (62 on the CS scale) with users of more than once per week (33% in their study). The CS figures for those customers who have never used mobile apps (34% in their study) was 54; users of less than once per month (13% in their study) was 46; users of more than once per month (20% in their study) was 54.

Ogden (2020) reports that a majority of digital banking users increased their digital banking usage as 69% because they found the digital banking applications intuitive and figured out how to use them on their own. Consumers also report high satisfaction with digital banking, with 92% indicating that their financial services organization's digital tools met their needs.

JD Power (2020) reports that digital-only (no physical or phone contacts) customers have lowest levels of satisfaction: Overall customer satisfaction with retail banks tends to decline as customers transition away from the branch and to digital-only banking relationships. The overall satisfaction score among branch-dependent bank customers is 824 (on a 1,000-point scale), which is 23 points higher than the score among digital-only customers. That satisfaction gap is widest (31 points) among members of Generation.

Conclusion based on above findings: Lack of dissatisfaction appear to come partially from a sense of accepting the crisis and compromises that come with such a crisis. Research also shows that customer adoption of internet banking depends on several factors such as usefulness, convenience, credibility of the system, and privacy and security (Adesina and Ayo, 2010 in a Nigerian study); and internet experience, lower risk of privacy and security, confidence in technology use, and technology support (Hettiarachchi, 2013 in a Sri Lankan study on customer adoption of internet banking) quality of the interactive platforms, ease of use, serving customer needs, and customer trust of the bank. These factors are high among Sri Lankan retail banking customers as shown below in their responses to the next three issues.

These three main factors that increase satisfaction with internet banking, namely ease of use, usefulness and trust are discussed in the next three sections.

(5) Ease of using internet and mobile banking

Respondents were asked to agree or disagree to the question: During the COVID 19 pandemic, I found the use of internet and mobile banking to be easy.

The responses were:

Very easy	41 (34.5%)
Easy	56 (47.1%)
Indifferent	13 (10.9%)
Hard	6 (5.0%)
Very hard	3 (2.5%)

In comparison, Ogden (2020) reports that a majority of digital banking users increased their digital banking usage as 69% reported that they found the digital banking applications intuitive and figured out how to use them on their own. Consumers also report high satisfaction with digital banking, with 92% indicating that their financial services organization's digital tools met their needs."

Baicu (2020) reports that in Romania, vast majority of bank customers found internet and mobile banking easy to use. Confidence in technology is quite high. 41.6% of the respondents trust technology to a great extent, and 44.9% of them, to a very great extent. Customers believe that technology helps increase the efficiency of banking services.

Conclusion based on above findings: The large number of younger participants who are generally computer and internet savvy most likely contributed to this high percentage of participants claiming the use of internet banking in general, and during the pandemic, was easy enough.

The correlation between responses on satisfaction and ease of use was 0.431 indicating a moderate relationship between perceived ease of use and perceived satisfaction with internet banking.

(6) Usefulness of internet banking

Respondents were asked to agree or disagree to the question: During the COVID 19 pandemic, use of internet and mobile banking increased the efficiency of my banking service.

The responses were:

Highly agree	46 (38.7%)
Agree	46 (38.7%)
Indifferent/Not sure	18 (15.1%)
Disagree	8 (6.7%)
Highly disagree	1 (1%)

Conclusion based on above findings: As stated earlier, perception of usefulness, together with perception of ease of use, appears to provide satisfaction with internet banking.

The correlation between responses on satisfaction and usefulness was 0.492 indicating a moderate relationship between perceived usefulness and perceived satisfaction with internet banking.

(7) Retail banking customer trust on online/mobile banking services provided by the bank.

Respondents were asked, “To what extent do you currently trust the online and mobile banking services you use?”

Responses were:

Highly trust	37 (31.1%)
Trust	52 (43.7%)
Neutral	22 (18.5%)
Do not trust	7 (5.9%)
Mistrust	1 (1%)

Hampshire (2017) found, in a UK survey of 101 bank customers using mobile payments, that perceived trust positively influences perceived usefulness and mitigates perceived risk.

Research also reports that there is a direct and positive influence of trust in banks, and perception of privacy and security, on retail bank customer attitude towards internet and mobile banking (Baicu et al, 2020, Rajaobelina et al, 2020).

Rajaobelina et al. (2018). A total of 396 panelists of a recognized Canadian research firm responded to a self-administered online questionnaire. Findings demonstrate that the cognitive and negative affective dimensions of mobile experience impact trust, whereas the positive affective/sensory dimension influences commitment.

Agha and Saeed (2015) report that perceived credibility and perceived usefulness are significantly and positively associated with customer acceptance of mobile banking. Customers who felt that their banks are credible enough and useful in their transactions, are more likely to accept online banking. The basic risk in Pakistan, when it comes to online transactions of any sort, is default or fraud, thus banks can minimize this by better performance, and standing by what they claim. This may lead to better trust on the banks and thus in a way minimizing perceived risks attached.

Conclusion based on above findings: Sri Lankan retail banking customers trust the internet banking systems they have to use. This is consistent with the well-established finding in retail banking literature that customer trust in the bank is one of the factors highly influencing customer satisfaction with the bank, customer loyalty to the bank and retention.

Surprisingly, the correlation between responses on satisfaction and trust was 0.195 indicating a positive but weak relationship between perceived trust and perceived satisfaction with internet banking. This indicates that it is the perceptions of ease of use and usefulness that acts as independent variables, leading to trust that acts a mediating variable, in creating the acceptance of internet banking in general, and during the pandemic, in the context of Sri Lankan retail banking customers.

4.2 Responses by Sri Lankan banks to COVID 19 crisis

Interviews with 15 top/operational/branch managers of the 12 banks listed in the methodology section yielded the following responses on action taken or planned by Sri Lankan banks in response to the COVID 19 health crisis.

4.2.1 Financial impact

Banks recorded a higher level of Non-Performing Loans during the FYE 2020 and lower income levels due to Central Bank interest rate caps compliance

4.2.2 Customer services to ensure continuity of service

Provided financial support and debt restructuring to businesses. Extensions on loans. Special emphasis on the more vulnerable SME and credit card sectors.

Provided mobile ATMs to customers, as well as CDMs to facilitate cash deposits.

Provided online banking support.

No bank mentioned any special actions taken. One bank reported support with account opening, and credit card/loan applications.

Apps provided for customers. Mobile banking App, Digital Wallet and online and voice chat services.

One bank provided a summary of the online and digital support provided in a chart form. No bank described how success on these actions was measured.

Two banks reported their perception that customer satisfaction has improved.

No mention on how this was determined or the existence of formal customer satisfaction measurement systems.

One bank reported that customer service problems now less.

No mention on why this happened. They felt that, perhaps, 24x7 Contact Centres have helped.

4.2.3 Organizational restructuring

Reduction of staff; rotating staff, no reduction in customer related activity staff. Emphasis on business continuity during times of travel restrictions and heightened health risks.

Technical support for staff working from home - not too many specifics. Provided laptops, remote access whilst increasing staff communication via special support programs including a staff "help" line.

Virtual meetings both for customers and staff. Staff virtual meeting included those for training.

No specific training programs were mentioned. No recognition of effectiveness or problems with virtual meetings instead of face to face meetings.

4.2.4 Support for staff

Transport support provided for staff. Emphasis on minimising covid risk contraction amongst staff by ensuring adherence to basic steps such as temperature checks and sanitisation.

4.2.5 Privacy, security, and cyber security

Some steps taken to secure data: VPN, fire walls. Most were only given email access for work from home arrangements with VPN access limited to a few.

No formal cybersecurity strategies, investments or programs were mentioned.

4.2.6 Other problems recognized by banks on which definite action has not been taken so far.

Pensioners unable/reluctant to use online access.

Rural customers online use is low.

Elderly customers show low levels of digital banking.

Employees "panicked"/"terrified" at the beginning. Nothing on what was done to reduce this panic. One bank reported that unspecified special support and communication programmes were introduced by HR. One bank reported offering mindfulness and meditation programs.

4.2.7 Forecasts by banks for the future

Work from home will continue.

No plans yet on formally addressing issues related to working from home such as tracking productivity/efficiency, emotional problems due to isolation and lack of human interactions.

Digital banking will increase.

No specifics on actions to promote or support, and any customer educational programs.

We omit repeating here actions taken by banks across the world in response to the COVID – 19 crisis which we presented in Section 2: Literature Review. In Section 5 below (Conclusions and Implications) we will draw from experiences and actions of banks across the world to suggest actions/recommendations to Sri Lankan banks.

5. Conclusions and Implications

Our conclusions, based on our findings, are that Sri Lankan retail banking customers have reduced physical visits and contacts, and increased digital interactions, with their banks during the COVID – 19 pandemic. They also found the change useful and easy to handle thus leading them to trust the banks with the privacy and security of information resulting in overall satisfaction with the change. These findings are highly consistent with findings on retail banking customer behaviour across the globe.

We also found Sri Lankan banks sufficiently addressing service continuance and safety of customers and employees with physical distance measures, staff rotation, virtual meetings, mobile ATMs, mobile phone apps, and work from home policies, somewhat comparable to actions by banks across the world.

However, Sri Lankan banks, compared to banks across the world, have not established formal cybersecurity policies or programs, formal communication and educational programs for customers especially older and rural customers, formal programs to enhance employee morale and emotional issues, and addressed organizational culture issues although they seem to be aware of the significance of these issues. Noticeable was the lack of strategic plans in these areas although the general perception was that the new normal will continue for a long time.

Ours is an exploratory study. Therefore, it suffers from certain limitations. First, the sample of retail banking customers we used was a convenient sample. Although its demographic profile is consistent with the Sri Lankan population, it was not a scientifically random or stratified sample using mainly urban bank customers. Next, although we were able to get the largest and most prominent banks in Sri Lanka to participate, the responses of managers, on many issues, was very general. This is most likely because banks have actively set up only urgently needed programs for regulatory compliance, safety of staff and customers, and service continuity, all of which are commendable. Banks have not addressed higher level issues such as employee morale, emotions and mental health, customer education and communication, organizational management and culture issues, advanced cybersecurity provisions, and performance and customer service measurement systems. Finally, the impact of the COVID - 19 pandemic has been felt by the banking industry, customers and the academic community only for about one and a half years. Therefore, academic research, including ours, is in infancy. Much of the surveys across the world have been done by industry experts and organizations. As such, our analysis had to be based to some extent on industry surveys and reports.

In discussing management implications, we strongly believe in presenting real life bank managers with practical suggestions, borrowing from best practices identified from banks across the world, to improve organizational planning and policies, services to customers, customer trust in their banks, customer experience, and employee engagement and experience. Towards that end, we propose the following suggestions to bank managers to manage the impact of the COVID - 19 health crisis looking forward to the future as well.

- Set up data analysis to identify segments of bank customers by type of use, frequency of use, and need for assistance with digital banking. Focus actions below to address each group rather than attempting same strategies for all customers.
- Set up online and document based educational tools to assist older customers to adopt digital banking transactions.
- Set up educational tools to encourage use of mobile banking apps.
- Improve efficiency of call centers to reduce call waiting times and convert call centers to advise centers.
- Establish measuring systems for customer adoption and satisfaction of digital banking.
- Establish programs within HR departments to identify possible negative employee emotions and experience due to changes in work rescheduling, staff reductions, and work from home practices. Consider provision of COVID related

counseling and medical benefits to staff and families, pay for online counseling programs and remedial programs such as yoga/meditation programs.

- Establish education and training programs for senior management to manage the effects on organization culture due to virtual meetings, virtual directing and control of staff, and work from home practices.
- Establish programs for staff to acquire new digital based skills (with recognized certifications portable when they seek advancement in the industry). Get creative in cross-training and development of employees.
- Establish formal programs to increase adoption of digital banking, improve ease of using digital banking, and improve customer trust and confidence.
- Establish user friendly digital platforms, apps, educational videos, and tutorials.
- Enhance cybersecurity. Establish formal cyber security policies and programs.
- Establish communication programs with customers to continuously inform customers of regulation changes, bank policy and practice changes, and performance of banks (soundness) in key areas.
- Protective measures to the bank's service providers as well. For example, software and other technology suppliers often work alongside, or from their own homes, with banks' own IT staff. Therefore, banks must ensure these service providers and their staff they follow security protocols and safety measures.
- Reorient call center and frontline employees speaking with customers by phone or in person to have empathy and patience with customers who are themselves under pressure due to the pandemic. To allow customers opportunities to explain their situation, thereby tuning communications, and actions to the emotional state of these customers as much as possible. That helps reduce their anxiety and makes them feel that the bank is on their side.
- Banks should not depend only on mass emails and common messages on their websites. Differentiate communications to engage customers in different demographic groups.
- Data management: Use data analytics to address changes in customer preferences and problems. Build demand forecasting and capacity models not only to respond to the present circumstances but also to be able to face future demand patterns. Good data management also helps to improve bank's workforce flexibility, identify cross-training, and customer call waiting times.
- Establish strategic technology plans, addressing remote-work technology, home-office setups, adequate VPN bandwidths, remote application access, videoconferencing, file sharing, real-time communication, coediting, clear policies and communicating expectations to all employees. for anticipated continuity of digital banking beyond the present new normal.
- Keeping customers engaged via SMS, mobile apps, and digital media. Early and proactive communication can help minimize unpleasant surprises to customers (such as potential branch closures), encourage fraud-prevention measures, and clarify the availability of solutions on digital channels.

We omit lengthy and detailed descriptions on methods and techniques used in banks across the world relating to recommendations listed above, for example, SMS content, details on mobile app design, questionnaires on measuring customer adoption and

satisfaction of digital banking, and detailed designs of educational videos and tutorials. These can be provided upon request.

As for future research directions, we strongly recommend joint research by the academic community and the banking industry to address areas such as customer acceptance and satisfaction of digital banking, customer education and communication, bank staff employee emotions, morale and engagement due to the unusual environment created by the COVID 19 pandemic, and management level issues such as staff performance measurement, customer experience measurement, and organizational culture issues due to staff and work rescheduling, and work at home policies and practices.

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