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FinTech Adoption among Online Grocery Buyers during COVID-19 Lockdowns in Nepal

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Abstract

FinTech has not only become a buzzword but also brought several business opportunities in the financial world, with the potential to increase financial inclusion, enhance people's daily lives, and spur growth. The issue of online buyers' knowledge about FinTech adoption has emerged from the rapid trend of digital technology in Kathmandu Valley. It also suggests that demographic variables (age and gender) and digital activity (internet experience and level of awareness) mitigate the major correlations. This paper aims to understand online grocery buyers' prior knowledge imprint in FinTech adoption during COVID-19 lockdowns. An exploratory research design was adopted, and data were collected through structured questionnaires using both descriptive and inferential statistics with the help of structural equation modeling. We find that the most respondents are aged twenty-one to forty, showing that most youth are attracted to technological innovation in FinTech (e-commerce and e-banking). We find that two-thirds of online buyers in Kathmandu Valley are facing the challenge of FinTech adoption due to slow internet and lack of awareness about its applications. The structural equation modeling shows that six out of eight constructs are fit and validated with the model. Attitude has a significant effect on actual purchases, whereas trust does not play a partial mediating role between dependent and independent variables. The internet as a digital marketplace has become an important part of marketing strategy and customer-

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relationship management. Thus, internet issues should be solved immediately with stable connections by internet service providers.

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Keywords: online grocery buyers, FinTech adoption, buyer satisfaction, COVID-19 lockdowns, structural equation modeling

I. Introduction

Many scholars studying private enterprise have documented the importance of the development of financial intermediation for the Western world (Berg, Markey-Towler, and Novak 2020; Mata, Costa, and Justino 2015; Stringham 2002; Wright et al. 2004). In addition, financial intermediation helps bring together buyers and sellers, borrowers and lenders, and companies and investors to expand the scope of private enterprise. Williamson (2011) provides evidence about the importance of expanding access to financial services in less developed nations as well. This article looks at the recent expansion of FinTech in Nepal.

The term *FinTech* obviously combines the words *finance* and *technology*. FinTech, at the most basic level, is used to help businesses, business proprietors, and customers better control their financial activities, processes, and lives through the use of advanced software and algorithms that run on computers and, increasingly, smartphones. Financial technology is widely regarded as one of the most significant innovations in the financial sector, and it is rapidly growing owing to several aspects such as the sharing economy, favorable legislation, and information technology (Lee and Shin 2018). The rise of FinTech has forever changed the way companies do business with the changing behavior of consumers. FinTech has become a buzzword in the financial world, with the potential to increase financial inclusion, enhance people's daily lives, and spur growth (Cohen Tervaert 2012). Although banks have been responsible for payment innovations such as credit cards, Mike Laven, CEO of the international-payments platform The Currency Cloud, explains that online banking has proven inappropriate for the growth of smartphones, social media, and cloud computing. FinTech began a phase of incremental innovation for all financial-industry apps, processes, products, and business models (Choo and Teh 2019).

Being a primary channel in the financial sector, technology would offer an excellent chance to investigate the efficacy of providing

purchasers with a better experience in easier ways. However, in order to implement FinTech services, the financial industry must first assess buyers' level of acceptance of technology in financial services (Dapp 2014). For example, mobile banking, which can be supplied by financial-services providers, allows purchasers to conduct financial transactions remotely using mobile devices such as a smartphone or tablet. Choo and Teh (2019) argue that FinTech turns out to be a valuable asset to the finance industry by permitting consumers to access financial services via mobile devices, social media, and the internet. Despite using traditional modes of transactions, FinTech has progressed to the point where financial institutions must improve their customers' experiences by bridging the gap between information technology and the services they provide (Guild 2017). With advancements in information technology, it has the ability to unbundle and reorganize existing financial facilities. Romanova and Kudinska (2016) find that new market-entrance opportunities, particularly for technology suppliers, are opening up as current internet technologies become more widely adopted.

Technological advances have had a direct effect on the delivery of financial services, resulting in unparalleled and innovative changes (Quevedo 2019). To better explain the history of FinTech, Quevedo (2019) divides significant historical events into three eras: FinTech 1.0, which spans the years 1866 to 1967; FinTech 2.0, which spans 1967 to 2008; and FinTech 3.0, which spans 2008 and beyond. In an ever-changing technology-driven society, the industry is expected to upend traditional banking, finance, and insurance with solutions that satisfy consumer and corporate demands. Blockchain, crowdfunding, mobile payments, and peer-to-peer lending are examples of innovative financial solutions created by a new generation of technology entrepreneurs and finance professionals (Kursh and Gold 2016). However, the online retail industry is currently experiencing a growth bottleneck, and e-commerce companies are facing stiff competition. FinTech is still a recent development; and only a few studies focus on its social, legal, technological, and managerial aspects. This makes it difficult for financial institutions to make well-informed decisions about whether to invest in FinTech ventures (Romanova and Kudinska 2016). The use of technology plays a major role in any business's ability to succeed in the market. Romanova and Kudinska (2016) find that the emergence of digital technology and its numerous applications in all areas have resulted in a rapid rise in demand for technology in order

to acquire and use it. Technological developments have significant implications for financial technology.

Digital payment schemes emerged in Nepal after the COVID-19 pandemic. This article attempts to address a digital payment gateway platform in Nepal. We developed and implemented a conceptual platform called Cashless Transactions (e-wallets, card payments, POS machines, QR scans, online transfer system). Now, with the extensive use and launch of various digital platforms such as mobile wallets in Nepal, one can pay for almost any product or service or transfer money using this technology (Kalwar 2020). In today's world, mobile digital wallets are the preferred solution. Cashless transactions have increased substantially following the introduction of contactless payments and mobile payment options in Nepal through emerging gateways such as eSewa, Khalti, IME Pay, Cell Pay, Prabhu Pay, QR Pay, Connect IPS, and others. Online mobile digital wallets are popular nowadays, and consumers can easily use those wallet services through apps (Rathore 2016). A digital wallet is considered an instant, secure, and hassle-free online payments. It is also known as an e-wallet or electronic wallet (Hayashi and Klee 2003). However, in the context of Nepal, consumers prefer to use digital payment schemes such as online transfer, QR scan, debit/credit card, or electronic wallet (for example, eSewa, Khalti, Connect IPS) for purchasing groceries for their homes. From the data survey, the majority of the respondents were using online-transfer digital schemes from their bank accounts while others were using QR scans, card systems, and e-wallet schemes that make it easy to protect oneself from the risk of spreading COVID-19. On the other hand, various supermarkets have launched websites with different discount schemes for consumers to buy the products online for groceries in order to be free of risk from current diseases. The majority of consumers are using those sites to buy household goods, and they are paying via online means.

In Nepal, the interaction between finance and technology has seen a rise in the use of mobile digital wallets and payment gateway platforms, which act as a hybrid strategy to help Nepal's digital payment gateway ecosystem (Giglio et al. 2021). The so-called FinTech revolution has occurred in the financial industry, and the growth of a cashless society is now upon us in Nepal. The current study's systematic literature analysis backs up our hypothesis with previous research on the adoption of other new technologies, which can be a good predictor of electronic payment acceptance and usage. This rise of information technology, together with cloud computing,

blockchain, and artificial intelligence, is putting the old financial industry under scrutiny (Leong 2018). As a result, the ongoing financial revolution has thrown traditional banking into disarray. The involvement of regulatory authorities and central banks in responding to the Now Economy may be seen in the quick evolution of digital wallets and payment gateways.

The popularity of online shopping has grown with the development of the internet. Indeed, the rapid and consistent rise of online sales has piqued people's curiosity to learn more about customer behavior in the digital world. Online buyer behavior has become a new topic of study. Several studies have been conducted in the areas of adoption of FinTech services—mostly in the international context but not in the Nepalese context. Very few studies aim to understand prior knowledge imprinted in FinTech adoption among online grocery buyers. FinTech adoption in Nepalese organizations needs rapid and continuous assessment for the robust functioning of any organization. In the context of Nepal, based on the studies done so far, these questions remained unanaswered: What are online grocery buyers' general perspectives on FinTech? What are the factors influencing online grocery buyers' satisfaction using FinTech? What are the challenges faced by online grocery buyers' in adopting FinTech? What management strategies can overcome the adoption of FinTech among online grocery buyers? This study aims to understand online grocery buyers' prior knowledge imprint in FinTech adoption.

This study is structured in different sections. The first includes a literature review on technology acceptance and the impact of various elements. Second, the study presents a research framework and formulates hypotheses. Following that, steps for constructing an empirical framework, data-collection procedure, and methodology are discussed. The conclusions and major research findings are then addressed, followed by the study's theoretical and practical implications, limitations, and future research directions.

II. Literature Review

This section elaborates on the development of FinTech, adoption of FinTech by the business sector, and adoption of FinTech in the COVID-19 pandemic period.

Development of FinTech: The FinTech industry is growing at a breakneck rate. As a result, it may be a challenge or an advantage (Romanova and Kudinska 2016). Customers are also reluctant to

embrace and use FinTech because it is creative but inherently volatile, which has a negative impact on its development (Ryu and Ko 2020). The study by Romānova et al. (2018) states that artificial intelligence, robo-advisers, and smart contracts are all becoming increasingly popular in today's financial world, transforming the traditional business model. Andreeva et al. (2018) highlight that the digital economy offers financial stability and highly developed technical resources for businesses to operate. Financial technology is seen as a relatively new industry (Romānova et al. 2018). FinTech transactions are more complex and less reliable than traditional e-banking transactions. Ryu and Ko (2020) elaborate that FinTech success depends on IT quality, which also plays a significant role in FinTech transactions. Information and communication technologies allow the digital transformation of financial services (Breidbach et al. 2019).

Adoption of FinTech by business sector: FinTech is an umbrella term for creative technology-enabled financial services and business models. Financial technology is innovative (Choo and Teh 2019), aids in the development of a variety of business models, and caters to the needs of customers. FinTech aids in analyzing the financial system's and institutions' fast development (Singh et al. 2020). As Chuang et al. (2016) explain, it continues to challenge and appeal to customers' perceptions that are tolerant of new technology products to gain market opportunities. Digital networks are less expensive means of interacting with customers (Jünger and Mietzner 2020). The aim is to examine the factors that lead to new financial-institution business models as a result of the introduction of convergent technology to educate online users and nonusers.

Adoption of FinTech during the COVID-19 pandemic:

On November 17, 2019, the first COVID-19 case was reported in China. In circumstances where direct interaction is difficult or limited, such as during the community lockdown to prevent the spread of COVID-19, Akpan et al. (2021) explain, small and medium-sized enterprises may use virtual reality technology to help them create and manage distant operations and activities. It can be concluded that the pandemic has had a dramatic influence on firm operations and performance. Firms have engaged in process and product innovations, which are generally considered by the respondents to have had a positive impact on performance and expect to maintain changes beyond the current crisis (Riom and Valero 2020). In terms of economic considerations, sociopsychological variables, and international relations,

the impact of the public health catastrophe has been devastating to countries and people. Recent advances in information technology, particularly the rise of social media, have prompted academics to reconsider how individuals engage with information in computerized environments (Pan et al. 2020).

From the review, it can be observed that various studies have been conducted on the adoption of FinTech among online buyers around the globe. The studies find that FinTech creates, and equips customers with, a technical tool that is user friendly, accessible, and successful at performing its tasks (Choo and Teh 2019). In conclusion, FinTech will continue to run smoothly, constantly gaining ground in the financial environment and continuously increasing its market share, which is dictated by the constant change in customer needs and preferences, the constant pursuit of innovation, and conditions of fierce competition (Zhou et al. 2019). A further recommendation from Chuang et al. (2016) has led to future research that the marketers should concentrate on improving consumers' views of the company's brand and service quality. And, to create a brand, research and development should be prioritized in the upgrading of industrial and economic growth services.

Fostering confidence by making online purchasing safe and secure is critical to activating online customers' repurchase intentions (Lim 2013). The research finds that attitude has a significant impact on actual e-purchases whereas other studies show that it has an insignificant impact on actual e-purchases. Thus, the hypothesis related to attitude and actual e-purchases is accepted. A study conducted by Lim (2013) suggests that the conceptual connections between perceived value, perceived ease of use, perceived usefulness, attitude, e-purchase intention, actual e-purchase, e-shopping experience, and trust have been experimentally validated. Buyers' attitudes regarding online buying are affected by their perceptions of value, the convenience of use, and utility, which is a strong predictor of online purchase intentions.

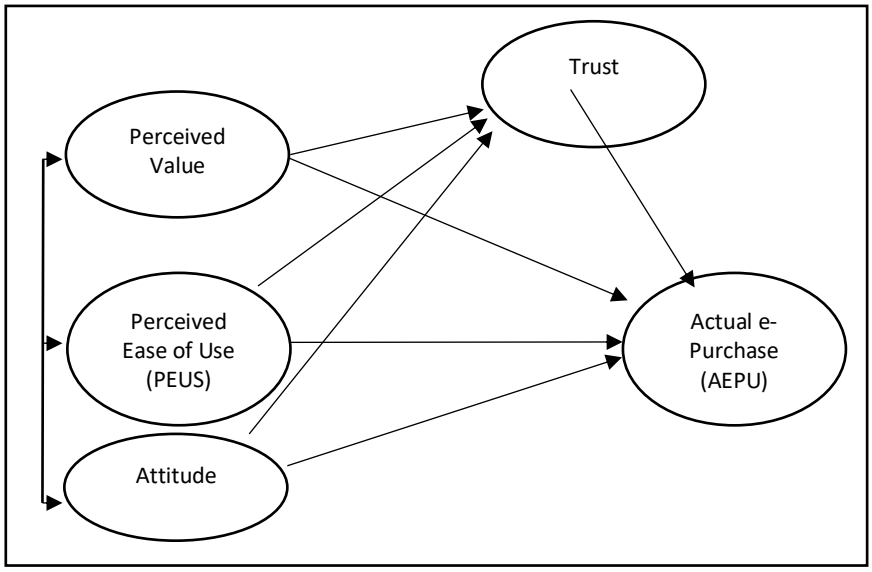
III. Methods

A. Conceptual Framework

Information technology is quickly becoming a key instrument in the lives of consumers across generations. Several theories have been discussed, including regulatory focus theory (Park et al. 2017), actor network theory (Heeks and Stanforth 2015), theory of reasoned action (Chuang et al. 2016), theory of planned behavior (Taylor et al.

2006) and innovation diffusion theory (Askar 2020), to understand buyers' knowledge of the use of FinTech service during the COVID-19 pandemic. Regulatory focus theory explains people's perceptions in the decision-making process while pursuing their objectives; in particular, it studies the link between a person's motivation and the process of pursuing a goal when planning and marketing their services (Park et al. 2017). Actor network theory considers networks of relationships to understand adoption of information and communication technology with people, technology, and any other component as actors (Heeks and Stanforth 2015). Similarly, the theory of reasoned action seeks to understand and predict actual buying behavior (Chuang et al. 2016). Likewise, innovation diffusion theory describes how relative benefit, compatibility, complexity, divisibility or trialability, and communicability or observability affect the pace, amount, and degree of technological uptake (Askar 2020). This study uses the technology acceptance model as a theoretical framework to explore the link between behavior intention and actual usage (Chawla et al. 2015) and justifies that the study is more relevant showing technological and buying changes.

Figure 1. Conceptual model



Source: Modified from Lim (2013)

From the above modified conceptual review, the technology acceptance model (Chuang et al. 2016) signifies various models based

on digital payment and banking adoption (Alkhowaiter 2020), consumer acceptance of FinTech products and services (Jin et al. 2019), a theory of online buyer behavior (Lim 2013), propensity to use FinTech (Razzaque et al. 2020), and adoption of FinTech service (Choo and Teh 2019). According to the buyer behavior model, any person's conduct is driven by their desire to perform in a certain way, which is in turn affected by how their attitude is formed for the action. People are said to collect experiences as a result of an activity that affects the chance of the action recurring in the days to come. Furthermore, the obtained experience has been shown to influence the formation of trust, which can affect the likelihood of the activity (Lim 2013). Dickson et al. (2018) explain the link between a study's key concepts that are logically constructed to create a picture of how the concepts in a research link to each other. This framework establishes an online buyer behavior theory to describe the steps customers take in the process of online transactions (Lim 2013). An actual online purchase also provides customers with an online ease of purchase that influences their faith in online shopping and future desire to buy items online (Leong 2018; Ozili 2020). Therefore, a re-conceptual framework is constructed after the result is validated (figure 1).

B. Hypothesis Formulation

We formulate hypotheses showing the relationship between our constructs: perceived value, perceived ease of use, attitude, trust, and actual e-purchase.

Perceived value: Product selection, ease/comfort of purchasing, and enjoyment are all perceived as advantages of online shopping by online customers. Money, quality, benefit, and social psychology may all be used to determine a customer's perceived worth. The monetary perspective states that value is created when items are purchased for a lower price (for example, through discounts or promotion). The perceived value is the gap between the maximum price customers are prepared to purchase a product and the amount actually paid. As indicated by the benefit perspective, the perceived value can be defined as overall evaluation of the customer in the utilization of perceived advantages and sacrifices. In this study, customers' appraisal of the advantages of a product based on their prior sacrifices and ex post perceived performance, while using mobile value-added services is referred to as perceived value (Kuo et al. 2009; Ali and Naushad 2021).

H1: Online buyers' perceived value of online purchasing has a significant relationship with actual e-purchase.

Perceived ease of use: When faced with a new technology, people are inclined to assess its simplicity of use and utility before deciding whether to utilize it. The perceived ease of use is "the degree to which a person believes that using a new technology is free from effort" (Chuang et al. 2016). Users are more likely to accept a new technology if it is perceived as simple to use and requires less effort and time. External variables such as individual traits, system characteristics, and organizational support all influence perceived ease of use to use new technologies for buyers' behavior. It is important to persuade potential users that a new technology is simple to use and that they would profit from adopting it in order to increase their desire to utilize it. Technology-adoption characteristics that are easy to use have a favorable impact on attitude. Users feel that the advantages given by FinTech service are simple to use (for example, they can get started without assistance), which helps to improve users' perceptions of FinTech service (Nasir and Charfeddine 2012; Bauerová and Klepek 2018).

H2: Online buyers' perceived ease of use of online purchasing has a significant relationship with actual e-purchase.

Attitude: The purchasing process that online shoppers face begins with forming an attitude/perception about online shopping, which is affected by the perceptions about value, convenience of use, and utility. An attitude is a reaction that happens when someone expresses feelings about items, activities, events, or other people. Attitude is an abstract conception for comprehending human behavior. When someone first understands the attitude or backdrop of the creation of attitudes in a person, it is easier to comprehend their conduct. A continuous attitude change is a shift in the system from a good to a negative evaluation or vice versa, as well as feelings and attitudes of agreeing or disagreeing with an item. Individually, attitudes are representations of the state of self in people who move to act or engage in specific activities with various sentiments in reaction to objects in circumstances or conditions in the surrounding environment (Iskandar 2019).

H3: Online buyers' attitude has a significant relationship with their actual online purchase.

Actual e-purchase: An actual online purchase helps buyers for online purchasing experience that significantly shapes trust and also to purchase things via the internet in future. Their intention to use is affected by the attitude toward online purchasing, which influences actual online purchase. A real-world online transaction also provides shoppers with an online purchasing experience that influences their interest in online purchasing and potential intent to purchase items online (Lim 2013; Pauzi et al. 2017). The combination of internet users' personality qualities with their attitudes toward technology might help researchers better comprehend human behavior. It suggests that if "one intends to investigate web-based phenomena, including social commerce" separately, one must first comprehend the aspects of online users' interaction and objectives (Moslehpour et al. 2018).

H4a: Online buyers' actual online purchase has a significant relationship with trust.

Trust: Trust is considered to be the most important factor in e-purchase intention, as most of the buyers trust online services and purchase the products and services from them. Trust is a multifaceted, complicated phenomenon that plays an important role in commercial interactions (Stewart and Jürjens 2018). Thus, a consumer's online shopping intention is positively affected by trust (Kursh and Gold 2016; Alkhowaiter 2020). Fu and Mishra (2020) use *trust* to describe the confidence individuals or firms have in a given financial institution based on personal relationships, familiarity, persuasive advertising, and other forms of communication. Issues related to trust seem to surmount technological innovation or novelty of products in capturing new customers or retaining preexisting ones. Studies on individual-level determinants of FinTech adoption tend to emphasize the role of digital and financial literacy and trust in new technologies, which tends to be closely related with demographics. Stewart and Jürjens (2018) define "trust as a complex, multidimensional phenomenon that plays a major part in business relationships."

H4b: Online buyers' trust in online shopping has a significant relationship with actual online purchase.

C. Variable Constructs

We define our variables as shown in table 1.

Table 1. Variable constructs

Constructs	Observed variables	Description
Perceived value	Less effort	It requires less exertion in finding what the consumers want in online shopping.
	Price comparison	Comparing about the prices of goods and services in online transaction are lower than those of brick-and-mortar retailers.
	Convenient shopping	Most of the online shopping is found to be very convenient.
	FinTech vs traditional service	Nowadays, using FinTech is cheaper as compared to using traditional financial services.
Perceived ease of use	Easy to use	Most of the online shopping locations are found easy to use.
	Learning	Consumers find it easy to use most online shopping sites.
	Quick search	Consumers are easier with most online shopping locations.
	Friendly	The operation interface of FinTech is friendly and understandable.
Attitude	Comfortable	Consumers feel it is convenient to shop from online retailers.
	Need recognition	Consumers want to buy what they require from online retailers.
	Desirable	It is desirable for consumers to shop online.
Actual e-purchase	Frequent purchase	Consumers make online purchase frequently.
	Intensive purchase	Consumers make online purchases intensively.
	Selection	Consumers would definitely prefer FinTech.
Trust	Confidence	Consumers feel confident to shop for the product they want from online retailers.
	Privacy	Consumers feel their privacy is protected in their online transactions.
	Safe transaction	Consumers feel safe in online transactions.
	Information	Consumers believe FinTech services keep personal information safe.

D. Study Area, Sampling Techniques, and Research Instruments

Kathmandu Valley is the study area. It is located in Bagmati Province with an area of 899 sq km, with a total area of 665 sq km (Shakya 2021). Kathmandu Valley is situated between the latitudes 27º 32' 13"

and 27° 49' 10" north and the longitudes 85° 11' 31" and 85° 31' 38" east with a mean elevation of around 1,300 m (4,265 ft) above sea level (Devkota et al. 2021). Since Kathmandu is the capital city of Nepal and has the highest concentration of population and is the center of the business sector (Devkota et al. 2021), we believe that conducting a study of FinTech adoption would give better and more factual results. There is a huge market growth of online system due to the pandemic, so buyers prefer to use FinTech system (Ozili 2020). There are currently a few websites that offer online advertisement and marketing services to customers (Romanova and Kudinska 2016). As of May 2019, Nepal had thirty-one private internet service providers, with around 200,000 customers and nearly 16.67 million internet users. The online hobby is centered in Kathmandu and a half-dozen other towns, with extremely poor internet availability in rural regions, though this is slowly changing, with the majority of customers accessing the internet through cellular phones (Devkota et al. 2021). While only a small percentage of business is conducted online, the market is expanding. When dealing with foreign partners, many businesses rely on the internet (Sharma 2019). The survey is aimed at people who live in the Kathmandu Valley and are active on their websites, as well as those who have sold products or services via online platforms.

Convenience sampling, which collects market-research data from a conveniently available pool of respondents (Etikan 2016), is applied in this survey to analyze the perception of online grocery buyers' satisfaction with FinTech adoption (Lim 2013; Ryu and Ko 2020). Data are collected from potential online grocery buyers to understand specific issues or manage opinions regarding FinTech adoption. We use the following formula in order to determine the sample size for the study (Paudel et al. 2020; Singh and Masuku 2014):

$$n_0 = z^2pq/l^2$$

Here, n_0= sample size, standard tabulated value for 5 percent level of significance (z) = 1.96, p = prevalence or proportion of an event 50 percent = 0.50. So the value of P = 0.5 and q = 1−p = 0.5 respectively. Similarly, the allowable error that can be tolerated (e) is 6 percent. So total population for the study $n_0 = z^2pq/l^2$ denotes $1.96^2 \times 0.5 \times 0.5/0.06^2 = 266.78$. Also, nonresponse error is 5 percent; that is, $266.78 \times 5/100 = 13.34$. Thus, sample size taken for the study is 266.78+13.34 = 280.12(≈280). Precisely 280 respondents participated in the study. A structured questionnaire was constructed

to conduct a survey on prior knowledge imprint on FinTech adoption. Pretesting of the data was conducted among twenty respondents along with their feedback. The formulated structured questionnaires are maintained in Kobo toolbox for data collection with both online and off-line methods. The necessary changes were finally made according to it for final data. Primary data from a questionnaire survey have been collected, and the researchers have linked questionnaires to meet the objectives. Respondents filled out the questionnaire survey, which was uploaded to the Kobo toolbox directly between April and July 2021. For the inferential analysis, structural equation modeling and SPSS were performed to identify FinTech adoption users and online satisfaction of buyers.

IV. Results

A. Sociodemographic Status

This study analyzes the sociodemographic characteristics of FinTech adoption among online buyers during the COVID-19 pandemic. Balancing the ratio of men (49.64 percent) and women (50.36 percent), we confirm no gender bias for using FinTech services for purchase of online goods. The findings of Choo and Teh (2019) show that men were more interested in adopting FinTech than women, owing to men's higher technological know-how, particularly in FinTech, which necessitates increased technological abilities including monetary transactions. Out of 280 respondents, the most respondents (62.14 percent) are in the age group twenty-one to forty, which shows that most youths are attracted to the technological sector on using online services such as e-commerce and e-banking facilities (table 2). The majority of respondents belong to the group with bachelors' (44.28 percent) and master's (28.93 percent) degree who adopt FinTech services in their daily life. It shows that the higher degree of academic qualification amplifies up-to-date technological adoption for fast and convenient services. FinTech software-application users are mostly concerned with the nuclear family, which constitutes 64.65 percent of the total study. Similarly, it shows that 42.14 percent of the students are more attracted to buying products and services online through their social media sites (table 2). And the profession of businesspersons or entrepreneurs in the banking and insurance fields is highly engaged and involved with online services, knowing the importance and benefits of technological adaptation in their day-to-day business activities.

Regarding monthly income, 51.43 percent of the respondents have less than Rs. 20,000 monthly, as many of them are students, housewives, industry service providers, or unemployed (Choo and Teh 2019).

Table 2. Sociodemographic status of respondents

Title	Number	Percentage
Sex:		
Male	139	49.64%
Female	141	50.36%
Age:		
Below 20	37	13.21%
21–30	174	62.14%
31–40	50	17.86%
41–50	13	4.64%
Above 51	6	2.14%
Education level:		
Above	5	1.79%
Master's	81	28.93%
Bachelor's	124	44.28%
Intermediate	48	17.14%
Up to secondary education examination	17	6.07%
Illiterate	5	1.79%
Family type:		
Nuclear	181	64.65%
Joint	90	32.14%
Extended	9	3.21%
Profession:		
Business	54	19.29%
Banking and insurance	34	12.14%
Industry	23	8.21%
Teaching	18	6.43%
Health	17	6.07%
Agriculture	9	3.21%
Government service	7	2.5%
Others	118	42.14%
Monthly income:		
Less than Rs. 20,000	144	51.43%
Rs. 20,000–Rs. 40,000	102	36.43%
Rs. 40,000–Rs. 60,000	25	8.93%
More than Rs. 60,000	9	3.21%

B. Online Grocery Buyers' General Perspectives on FinTech

Globally, grocery shopping is still considered a time-consuming process. Shoppers are still looking for greater convenience. Hence, the online grocery market is expected to grow further at fast rates

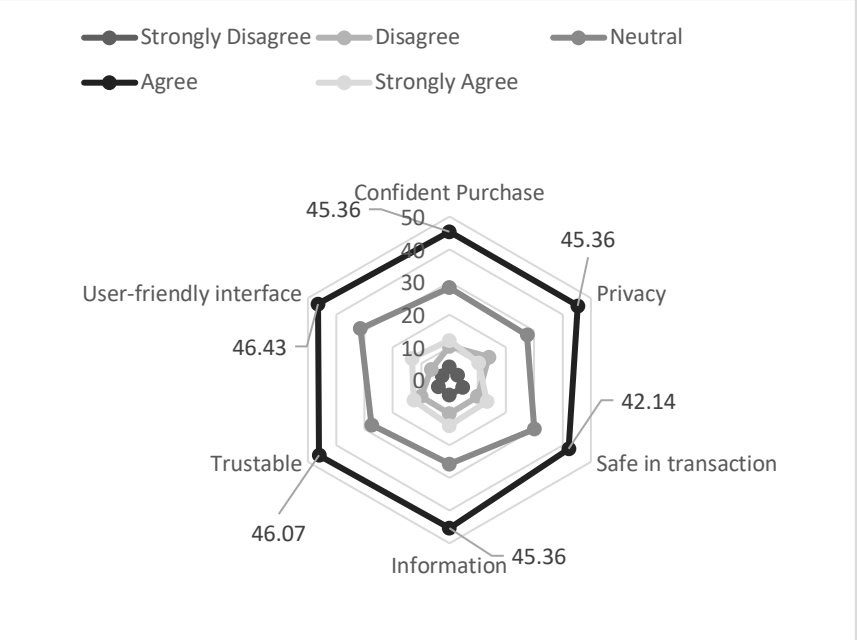
(Askar 2020). There are many online grocery buyers using FinTech: 54.64 percent prefer going to the supermarket. Due to the COVID-19 pandemic, buyers are slowly adapting to online purchasing and payment (figure 2). In a study on India, Sreeram et al. (2017) find that the grocery and food-retail industries have seen an unexpected increase in consumer base and expenditure on grocery items via online platforms. They explain that a greater number of respondents are in favor of using online purchases, mostly for commodity shopping rather than tax payment, utility payment, grocery shopping, and other related purchases. A huge percentage of respondents are highly satisfied with online grocery purchasing due to its convenience and time saving: 43.57 percent. And 36.43 percent of respondents agree to purchase online grocery items, as it enables them to buy faster. The results reveal that a majority of respondents (253) use internet access of less than three hours per day for online shopping due to their busy work schedule. Moslehpour et al. (2018) find that as of March 31, 2017, the online shopping market was increasing rapidly; thus, it is important to determine which forces drive electronic purchase intentions of consumers. Many respondents (34 percent) found that the online service is more informative and valuable, while 11 percent indicated that it is a complete waste of time, as the online services are not so good and effective due to low-quality products. The details are presented in figure 2.

Figure 2. Advantages of buying groceries online

C. Factors Affecting Online Grocery Buyers' Satisfaction

Perceived value is customers' total assessment of the utility of perceived benefits and perceived sacrifices (Kuo et al. 2009). Various studies show that customers are more satisfied with the benefits they receive than with the sacrifices they make to purchase the goods. Users perceive that FinTech services' benefits are simple to use, which can help to improve users' attitudes toward FinTech service (Nasri and Charfeddine 2012). And 47.5 percent of respondents agree that online shopping sites are easy to use and also feel that it is easy to learn. Consumer attitudes toward purchasing may be influenced by the perceived usefulness of online shopping, which has a favorable effect on consumer intention to utilize an online application (Moslehpour et al. 2018). And 47.86 percent of respondents are satisfied with shopping goals as they can quickly purchase what they like, while 46.07 percent of respondents are able to improve their shopping performance and use mobile software applications to meet their service needs.

Figure 3. Trust in online purchases



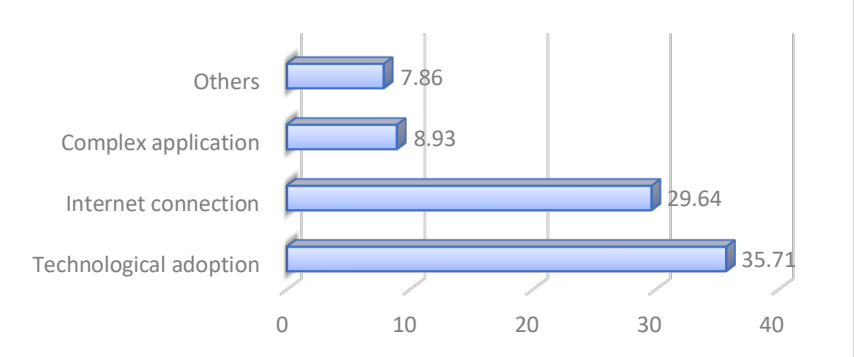
There is a large influence (50.36 percent) upon the interest of using FinTech application by youths due to the newly launched software. Only 2.86 percent of respondents strongly disagree about

recommending that their friends and family use FinTech services (mobile devices, internet, and software technology or cloud services). The survey data reveal that 47.14 percent of the respondents agree about the positivity of FinTech services in their choice list. Few respondents (6.79 percent) strongly disagree that they should use online applications (FinTech) for grocery shopping rather than visiting supermarkets, as it saves time and effort. Only 8.57 percent of respondents deny that they like interacting with a person that provides a service. Trust is one of the most important aspects in FinTech application while buying online materials (Chen and Barnes 2007). It also explains that 31.43 percent of respondents believe that the website and apps that sell online have user-friendly interfaces (figure 3).

D. Challenges Faced by Online Buyers

The COVID-19 epidemic has posed enormous problems for individuals all around the world (Pan et al. 2020). A large number of respondents agree that there are a lot of challenges in FinTech adoption regarding online grocery buying: 82.14 percent. Technology adoption and internet connection are found to be the most common challenges while buying groceries online. We found that technological adoption arises more than the internet connection challenges. Our data reveal that 19.29 percent and 11.43 percent of respondents face technological adoption occasionally and frequently (figure 4). A huge amount of competition has arisen in the payments industry; these constraints have to be removed as soon as possible to change the buyers' perception of the use of FinTech applications for online grocery purchases.

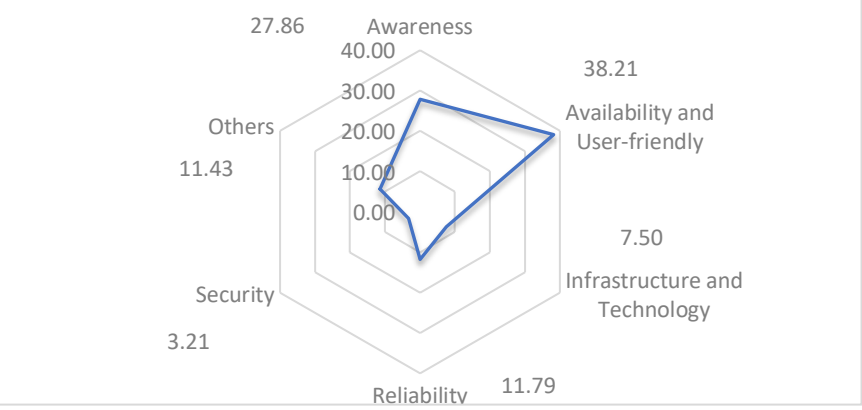
Figure 4. Types of challenges faced



E. Management Strategies regarding Online Grocery Buyers

Today, digital security is more important than it has ever been (Stewart and Jürjens 2018). The study explains that the majority feels that security is not a major concern for online grocery buying in FinTech applications. Few respondents feel that security should be considered as a major concern in FinTech for online grocery buying for a number of reasons such as contactless payment, data loss/leakages, privacy and protection, hacking, and many others. In the survey, the data reveal that 266 respondents believe that the problem of managerial situation can be overcome by adopting various measures or strategies. The situation is manageable if the online users are aware of how to use the FinTech application for their easiness in purchasing groceries online. One hundred eleven respondents believe that the FinTech service should be made easy to use. Similarly, seventy-nine respondents believe that online users should be guided by training sessions on how to adopt and adjust to FinTech solutions during the pandemic. The internet connection is slow in the market. So those issues should be resolved immediately by internet service providers as soon as possible for making huge online purchases. Some also believe that the FinTech solution cannot be managed because of small management team, unstable internet connection, slow facility services, and unsafe data protection. Respondents were asked to provide their recommendations regarding improvement of FinTech services (figure 5).

Figure 5. Improvement of FinTech service



F. Inferential Analysis

The data analysis and findings were conducted using SPSS and structural-equation-modeling techniques. First, exploratory factor analysis was conducted through principal component analysis by using SPSS version 22.0. Second, the two-stage approach was used to test the research model by using Amos version 22.0. This study conducted exploratory factor analysis to discover the factor structure of a measure, measurement model to check the validity of data, and structural model to assess the relevance, direction, and magnitude of each structural parameter.

1. Exploratory Factor Analysis

Exploratory factor analysis was performed to determine the factor structure of measurement items and to assess its reliability. Principal component analysis was used as the coefficient method with the help of varimax rotation and also cutoff criteria of eigen value of 1.0. Kaiser-Meyer-Olkin and Bartlett's tests were used to determine whether data were suitable for structure reduction. This study revealed that the Kaiser-Meyer-Olkin value is 0.811, indicating that all the items used for the study are suitable for making predictions. Similarly, the value of the Bartlett's test is 0.00, which is less than 5 percent, meaning the variables are sufficiently correlated, which allows us to perform the factor analysis. Similarly, Cronbach's alpha was calculated (see table 3) with a cutoff threshold higher than 0.70. Our finding revealed that all the constructs' Cronbach's-alpha values were higher than 0.75, indicating good internal consistency as well as suitability of Likert-scale data for future analysis. The communalities and rotated factor matrix results show that all of the observed items in each variable have factor loadings greater than 0.5, indicating a significant level of internal validity. Furthermore, the proposed model accounted for 17.408 percent of variance, which is less than 50 percent, showing that there were no issues with common method bias in our data set. Hence, some factors were deleted due to low factor loadings, and only twenty-four observed items of five latent variables were retained for further analysis.

2. Measurement Model

In this section, we measure the validity of data collected for the study (N=332). Of all the validity methods in this study, we consider only two—convergent and discriminant validity—in order to assess the measurement instruments. According to convergent validity, tests

with the same or similar constructs should be substantially correlated. Convergent validity is determined using construct reliability (CR), which is based on Cronbach's alpha and average variance explained (AVE). In order to ensure convergent validity, the following three conditions must be satisfied: CR>0.7, CR>AVE, and AVE>0.5. All five latent constructs have an alpha value greater than 0.70, and all individual constructs have an average variance explained greater than 0.5. Furthermore, the construct reliability is much bigger than the average variance explained for each of the five separate constructs (see table 3). Discriminant validity establishes whether the model's constructs are significantly linked and is calculated using average variance explained and maximum shared variance (MSV). AVE > MSV and AVE > r (that is, correlation) are the two requirements for ensuring discriminant validity. The overall components were determined to be significantly valid in terms of discriminant validity because both maximum shared variance and correlation of five latent constructs were found to be lower than their respective average-variance-explained values (see table 3). Thus, Gaskin's Microsoft Excel–based validity-concerns toolkit was employed to generate discriminant-validity estimates for the latent constructs. All of the latent constructs' model-fit indices were determined, and the results are shown in table 4. All fit indices (chi-square, root mean squared residual, goodness-of-fit index, Turker-Lewis index, comparative fit index, incremental fit index, and root mean square error of approximation) in the measurement model for five latent constructs are within acceptable standards, indicating a good model fit.

3. Structural Model

The structural model in figure 6 was designed to examine the causal links between three exogenous variables (*Perceived Value*, *Perceived Ease of Use*, and *Attitude*) and two endogenous variables (*Trust* and *Actual e-Purchase*), with *Trust* serving as a mediator. Using the Amos program, the path analysis is calculated and interpreted in the diagram. Maximum-likelihood estimation approach is used to estimate the model. Hypothesis testing (direct effect) is carried out using the proposed model. Table 6 shows the standardized regression weights derived from the model's results for the corresponding direct paths associated with the hypothesized model. The result of regression weights indicates that *Attitude* has a positive and statistically significant impact on *Actual e-Purchase*. However, *Perceived Value*,

Perceived Ease of Use, and *Trust* have negative impacts on *Actual e-Purchase*. Therefore, hypothesis H3 is accepted and hypotheses H1, H2, and H4 are not supported.

Table 3. Measurement model extracted and test of reliability and validity

Factor/items	Communalities	Factor loading	Cronbach's alpha	Composite reliability	Average variance extracted	Maximum shared variance
Factor 1: Perceived value						
PV1: Convenient online shopping online	.549	.721	.782	0.871	0.695	0.031
PV2: Less effort in searching for buyers	.651	.789				
PV3: Lower price of products sold online than those of brick-and-mortar retailers	.537	.723				
PV4: Cheaper FinTech services (mobile devices, internet, software technology, or cloud services) than traditional services	.580	.758				
PV5: Peer-to-peer transactions between providers and users without middleman	.519	.692				

Table 3 (continued). Measurement model extracted and test of reliability and validity

Factor/items	Communalities	Factor loading	Cronbach's alpha	Composite reliability	Average variance extracted	Maximum shared variance
Factor 2: Perceived ease of use						
PEU1: Online shopping sites easy to use	.558	.735	.810	0.807	0.517	0.075
PEU2: Easy-to-learn online shopping sites	.643	.797				
PEU3: Easy to find what buyers want	.614	.773				
PEU4: User-friendly and understanda ble	.521	.704				
PEU5: Easy to have the equipment to use services (cellphone, app, Wi-Fi)	.535	.724				
Factor 3: Attitude						
ATT1: Comfortable to shop from online	.629	.784	.838	0.812	0.524	0.027
ATT2: Like to purchase what buyers need	.562	.744				
ATT3: Very desirable to shop online	.569	.752				
ATT5: Interested in FinTech services	.600	.767				

Table 3 (continued). Measurement model extracted and test of reliability and validity

Factor 4: Actual e-purchase						
AEP1: Online purchases frequently	.777	.879	.827	0.767	0.524	0.027
AEP2: Online purchases intensively	.773	.869				
AEP3: Prefer FinTech services	.706	.835				
AEP4: Positively consider FinTech in choice set	.646	.796				
Factor 5: Trust						
TRU1: Confident in buying due to security	.592	.743	.875	0.827	0.546	0.075
TRU2: Feel safe to purchase as it protects privacy	.650	.795				
TRU3: Feel safe in transaction as it provides security measures	.646	.796				
TRU4: Believe that FinTech services keep personal information safe	.585	.761				
TRU5: FinTech services are trustable	.661	.797				
TRU6: Websites/apps selling online have user-friendly interface	.579	.747				

Notes: Some factors were deleted due to low factor loadings, and only twenty-four observed items of five latent variables were retained for further analysis.

Table 4. Model-fit indices

Fit indicates	Results of model values	Acceptable values	Decision for model fit
Chi-square/df (CMIN/df)	1.306	<5	Good
Root mean squared residual	0.036	<0.08	Good
Goodness-of-fit index	0.951	>0.8	Good
Comparative fit index	0.982	>0.9	Good
Turker-Lewis index	0.978	>0.9	Good
Incremental fit index	0.982	>0.9	Good
Root mean square error of approximation	0.030	<0.08	Good

Table 5. Interconstruct correlation

	Actual e-purchase	Perceived value	Perceived ease of use	Attitude	Trust
Actual e-purchase	**0.833**				
Perceived value	0.052	**0.719**			
Perceived ease of use	-0.016	-0.161	**0.724**		
Attitude	0.163	-0.019	-0.009	**0.724**	
Trust	-0.073	-0.176	0.273	0.057	**0.739**

Notes: The values in the diagonal represent the average variance explained (AVE) of each construct. Values below diagonal are squared correlation coefficients between constructs. MSV=maximum shared variance. MSV < AVE; √ AVE > max r; AVE is boldface diagonal.

Table 6 shows the outcome of the proposed hypotheses used in the research model. The table illustrates that the p-value is less than 0.05 of *Average e-Purchase* and *Attitude*, which means that there is a significant relationship between the dependent (*Average e-Purchase*) and independent (*Attitude*) variables. The result indicates that the hypotheses were accepted, showing positive relationship between *Attitude* and *Actual e-Purchase* and others remaining insignificant.

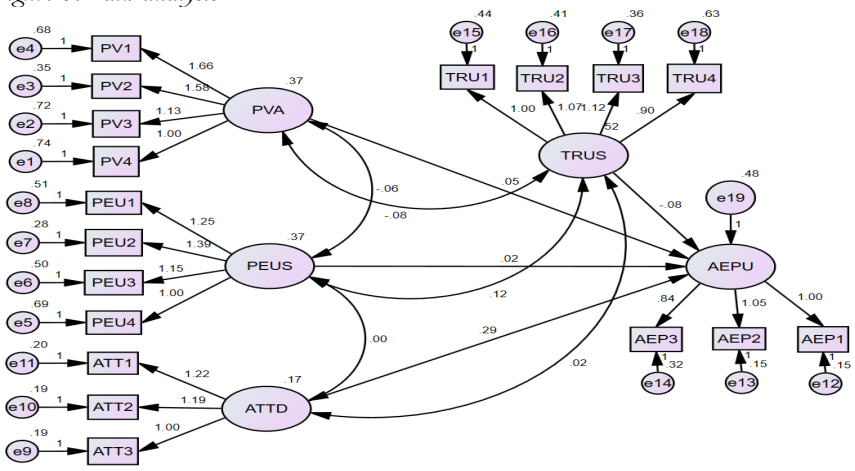
Furthermore, the study finds that highly knowledgeable consumers may not be keen on the service provider's continual digital or personal interference, which they may perceive as an invasion of privacy or demanding on their time. As a result, high-awareness users may find the responsiveness of FinTech platforms for giving assistance irritating, but low-awareness users may require regular guidance and support to climb the learning curve for knowing how to utilize FinTech services.

Table 6. Hypothesis testing

Hypothesis	Path			Estimate (ß)	CR	P-value	Hypothesis support
H1	AEPU	<—-	PVA	.049	.663	.507	Not supported
H2	AEPU	<—-	PEUS	.016	.207	.836	Not supported
H3	AEPU	<—-	ATTD	.288	2.508	.012	Supported
H4a H4b	AEPU	<—-	TRUS	-.077	-1.172	.241	Not supported

*Notes:***p-value<0.01;** p-value<0.05,* p-value<0.1. CR = composite reliabiltiy; PVA = perceived value; PEUS = perceived ease of use; ATTD = attitude; AEPU = actual e-purchase; TRUS = trust. CMIN = 1.306, comparative fit index = 0.982, goodness-of-fit index = 0.951, root mean squared residual = 0.036, root mean square error of approximation = 0.030, Turker-Lewis index =0.978, and incremental fit index =0.982.*

Figure 6. Path analysis

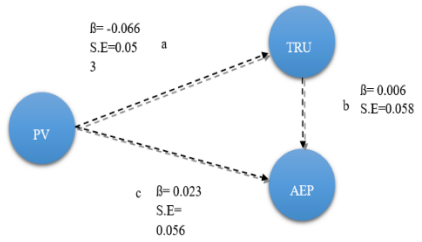


Path analysis displays the five technology-acceptance-model factors on respondent's behavioral intention to adopt FinTech. The structural-equation-model findings show the route coefficients from *Perceived Value* (β=0.37, p>0.05), *Perceived Ease of Use* (β=0.37, p>0.05), and *Attitude* (β=0.17, p<0.05), respectively. Similarly, the value of R^2 in *Attitude* is 0.17, which indicates 17 percent of the variance is explained by all three constructs taken together, which shows a significant impact on *Actual e-Purchase* in Kathmandu Valley (figure 6). Likewise, for *Trust* (β=0.52, p>0.05), the value of R^2 is 0.52, so 52 percent of the variance is explained by all four constructs taken together. But *Perceived Value*, *Perceived Ease of Use*, and *Trust* have no statistically significant relationship with *Actual e-Purchase*.

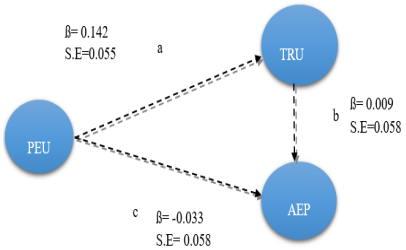
4. Mediation Analysis

When a mediator is present in a model, the effect must be estimated by comparing it to the direct and indirect effects of mediating variables in the model. *Trust* is being investigated as a mediating factor between *Perceived Value*, *Perceived Ease of Use*, *Attitude*, and *Actual e-Purchase* in the current study. This research also aims to determine whether the impact of the mediating factor is full or partial. We get the results in figure 7 using the Preacher KJ, the web page of the Sobel test calculator.

Figure 7. Cause-and-effect relationship among variables (a, b, c)

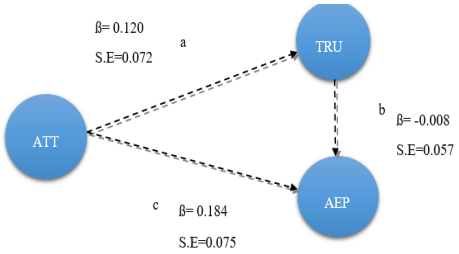


Sobel test statistic:	**-0.10309317**
One-tailed probability:	**0.45894451**
Two-tailed probability:	**0.91788903**



Sobel test statistic:	**0.15489291**
One-tailed probability:	**0.43845287**
Two-tailed probability:	**0.87690574**

Figure 7 (continued). Cause-and-effect relationship among variables (a, b, c)



Sobel test statistic:	**-0.13985587**
One-tailed probability:	**0.44438694**
Two-tailed probability:	**0.88877387**

Notes: The Sobel test indicates that Trust has no mediating role between the three independent variables and the dependent variable.

V. Conclusion, Implications, and Future Research

FinTech, as a new business with features distinct from the old financial industry, is viewed as a driver of long-term economic growth. Global FinTech investments have grown considerably in response to strong expectations for the expansion of FinTech. A lot of research has been done in the domain of FinTech acceptance, primarily in an international context but not in the Nepalese context. FinTech adoption in Nepalese organizations needs fast and ongoing evaluation in order for any organizations to perform efficiently. The main objective of the study was to understand online grocery buyers' prior knowledge imprint in FinTech adoption.

The research found that among 280 respondents, there are many online grocery buyers using FinTech: 54.64 percent prefer going to the supermarket. There is a heavy influence (50.36 percent) upon the interest of using FinTech application by youths due to the newly launched software. It also explains that 31.43 percent of the respondents believe that the website and apps that sell online have user-friendly interfaces. The study also covers overall managerial strategies to overcome challenges by online grocery buyers using FinTech. The study suggests that the internet connection is slow in the market, so those issues should be solved immediately as soon as possible for making huge online purchases. Also, respondents' feedback was highly important for further future implications. The survey concludes with a strong suggestion that financial institutions should pay more attention to e-wallet technology and apps as a key trend that would change the economic industry in future decades.

The results suggest that practitioners should focus on implementing other theories too as a primary driver of digital-technology adoption that conceptualize to online buying behavior,

while understanding the role of other drivers, such as perceived value, perceived ease of use, attitude, trust, and actual e-purchase to help in developing marketing strategies. We recommend that policy makers adopt and innovate new ways to solve internet issues to build initial trust among consumers. Since the digital payment scheme controls the spread of COVID-19, the research should try to explore various aspects of this. As more payment systems allow users to have a flawless e-payment procedure, the emerging directions for further studies include data-transmission technologies, security issues, user experiences, data-analytics techniques, and more. Moreover, the studies related to e-payment solutions should focus on how to improve the process in terms of convenience, efficiency, traceability, or security. From a business standpoint, the new breakthroughs in linked technologies and research should, directly or indirectly, improve the business process, such as enhancing sales, improving automation efficiency, improving customer retention, and so on. For example, a new interface design based on Human-Computer Interactions studies can help secure data transmission over wireless networks by affecting customer trust and retention. Despite this, payment-related research should not be limited to the B2C sector, but should also include the B2B sector. For example, how might seamless settlement transactions between suppliers and purchasers be made more effective? Enterprise resource planning, customer relationship management, internet-of-things, database management, distributed ledger, and other enabling technologies may be used. This research could be used as a guide for academics, particularly those with a technological background, on how to find and build innovative FinTech solutions.

The FinTech sector is undergoing significant transformations, with new technologies being launched into the market on a daily basis. Users must always adjust to updated offerings from the buyer's standpoint. FinTech service providers must thoroughly comprehend and incorporate the demands and perceptions of buyers in order to accomplish effective adaptation and commercial advantages. The current study adds to the current knowledge production on technology acceptance by taking into account traditional behavioral features (perceived ease of use, value, and attitude) as well as identifying key technological attributes (trust and actual e-purchase) that influence a buyer's choice to use FinTech facilities and services. This will aid FinTech-facilities providers in determining the best interface features for maximizing user behavior. In addition, the

current study looks at whether there are any changes in the adoption of FinTech services based on buyers' knowledge of FinTech and their internet experience. Furthermore, the paper indicates that under the suggested research paradigm, sex has no effect on the dynamics between characteristics for FinTech services, implying that service benefactors ought to target consumers regardless of sex. However, age ought to be taken into account since consumers between the ages of twenty-one and forty place a greater priority on technological services and security. Furthermore, the approaching postmillennial age presents a challenge for service benefactors since these people are more accustomed to FinTech facilities and services and behave differently from earlier generations. As a result, it implies that widespread customization of services is required to appeal to more customers, comparable to the advertising activities of well-known shoemakers like Nike.

The findings of this study are promising, with an elucidated variation of 17 percent for real electronic purchasing behavior due to additional antecedents. In addition, the moderating influence of trust and internet experience may be used to investigate the impact on behavioral characteristics. The study, however, has several flaws. First, convenience sampling was utilized to include only current internet users, restricting the scope of generalizability to just current consumers of online transactions. Second, rather than relying on observation, this study relied on the Kobo toolset to track real FinTech usage. The predictive value of this study can be improved by capturing the actual behavior of the respondents. The study solely looks at the constructs of security, trust, and intent to act. Future studies might look into factors like information quality and website quality as well as how these affect people's intention, expectation, and actual online transactions. Likewise, the current measuring tool can be improved in future research to improve its reliability and validity. For the sake of generalization, future studies may be conducted on additional product categories.

References

Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2021). "Cutting-Edge Technologies for Small Business and Innovation in the Era of COVID-19 Global Health Pandemic." *Journal of Small Business and Entrepreneurship 33(6): 607-611.*

Ali, I., and M. Naushad. 2021. "Determinants of Customer Satisfaction in Online Grocery Shopping." *International Journal of Data and Network Science* 5: 383–90.

Alkhowaiter, W. A. 2020. "Digital Payment and Banking Adoption Research in Gulf Countries: A Systematic Literature Review." *International Journal of Information Management* 53 (9): 1–17.

Andreeva, L. Y., T. V. Epifanova, O. V. Andreeva, and A. S. Orobinsky. 2018. "Competency-Based Management in a System of Sustainable Development of Banks, Financial and Technology Companies." *Contemporary Studies in Economic and Financial Analysis* 100: 49–59.

Askar, W. 2020. "Factors Influencing Consumer's Intention towards Online Grocery Shopping in the United Arab Emirates." PhD diss., SBS Swiss Business School.

Bauerová, R., and M. Klepek. 2018. "Technology Acceptance as a Determinant of Online Grocery Shopping Adoption." *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis* 66 (3): 737–46.

Berg, A., Brendan Markey-Towler, and N. Mikayla. 2020. "Blockchains: Less Government, More Market." *Journal of Private Enterprise* 2 (35): 1–21.

Breidbach, C. F., B. W. Keating, and C. Lim. 2019. "Fintech: Research Directions to Explore the Digital Transformation of Financial Service Systems." *Journal of Service Theory and Practice* 30 (1): 79–102.

Chawla, M., M. N. Khan, and A. Pandy. 2015. "Online Buying Behaviour : A Brief Review." *AIMA Journal of Management and Research* 9 (2/4): 1–17.

Chen, Y. H., and S. Barnes. 2007. "Initial Trust and Online Buyer Behaviour." *Industrial Management and Data Systems* 107 (1): 21–36.

Choo, W., and J. Teh. 2019. "An Adoption of Fintech Service in Malaysia." *South East Asia Journal of Contemporary Business, Economics and Law* 18 (5): 134–47.

Chuang, L.-M., C.-C. Liu, and H.-K. Kao. 2016. "The Adoption of Fintech Service: TAM Perspective." *International Journal of Management and Administrative Sciences* 3 (7): 1–15.

Cohen Tervaert, J. W. 2012. "What's in a Name?" *WegenerWijzer* 2: 15–17.

Dapp, T. 2014. "Fintech—The Digital (R)evolution." Deutsche Bank Research.

Devkota, N., A. Bijukshe, U. R. Paudel, and S. Parajuli. 2021. "Factors Influencing Attitude toward Online Advertising in Kathmandu Valley." *PYC Nepal Journal of Management* 14 (1): 17–30.

Dickson, A., J. Adu-Agyem, and H. Emad Kamil. 2018. "Theoretical and Conceptual Framework: Mandatory Ingredients of a Quality Research." *International Journal of Scientific Research* 7 (1): 438–41.

Etikan, I. 2016. "Comparison of Convenience Sampling and Purposive Sampling." *American Journal of Theoretical and Applied Statistics* 5 (1): 1–4.

Fu, J., and M. Mishra. 2020. "Trust and Technological Adoption during Crises."

Giglio, Stefano, Matteo Maggiori, Johannes Stroebel, and Stephen Utkus. 2021. "Five Facts about Beliefs and Portfolios." *American Economic Review* 111 (5): 1481–1522.

Guild, J. 2017. "Fintech and the Future of Finance." *Asian Journal of Public Affairs* 10 (1): 1–14.

Hayashi, Fumiko, and Elizabeth Klee. 2003. "Technology Adoption and Consumer Payments: Evidence from Survey Data" Review of Network Economics 2 (2).

Heeks, R., and C. Stanforth. 2015. "Technological Change in Developing Countries: Opening the Black Box of Process Using Actor-Network Theory." *Development Studies Research* 2 (1): 33–50.

Jin, C. C., L. C. Seong, and A. A. Khi. 2019. "Factors Affecting the Consumer Acceptance towards Fintech Products and Services in Malaysia." *International Journal of Asian Social Science* 9 (1): 59–65.

Jünger, M., and M. Mietzner. 2020. "Banking Goes Digital: The Adoption of FinTech Services by German Households." *Finance Research Letters* 34 (August): 1–8.

Kalwar, M. A, and M. A. Khan. 2020. "Increasing Performance of Footwear Stitching Line by Installation of Auto-trim Stitching Machines. *Journal of Applied Research in Technology and Engineering* 1 (1): 31–36.

Kuo, Y. F., C. M. Wu, and W. J. Deng. 2009. "The Relationships among Service Quality, Perceived Value, Customer Satisfaction, and Post-purchase Intention in Mobile Value-Added Services." *Computers in Human Behavior* 25 (4): 887–96.

Kursh, S. R., and N. A. Gold. 2016. "Adding FinTech and Blockchain to Your Curriculum." *Business Education Innovation Journal Contents* 8 (2): 6–12.

Lee, I., and Y. J. Shin. 2018. "Fintech: Ecosystem, Business Models, Investment Decisions, and Challenges." *Business Horizons* 61 (1): 35–46.

Leong, K. 2018. "FinTech (Financial Technology): What Is It and How to Use Technologies to Create Business Value in Fintech Way?" *International Journal of Innovation, Management and Technology* 9 (2): 74–78.

Lim, W. M. 2013. "Toward a Theory of Online Buyer Behavior Using Structural Equation Modeling." *Modern Applied Science* 7 (10): 34–41.

Mata, Maria Eugénia, J. R. Costa, and J. David. 2015. "Darwinian Natural Selection or Political Interference? A Political Economic History of the Lisbon Stock Exchange." *Journal of Private Enterprise* 30 (1): 89–105.

Moslehpour, M., V. K. Pham, W. K. Wong, and I. Bilgiçli. 2018. "E-purchase Intention of Taiwanese Consumers: Sustainable Mediation of Perceived Usefulness and Perceived Ease of Use." *Sustainability* 10 (1): 234.

Nasri, W., and Charfeddine, L. 2012. "An Exploration of Facebook.com Adoption in Tunisia Using Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA)." *Interdisciplinary Journal of Contemporary Research In Business* 4 (5): 948–68.

Odoom, R., and J. P. Kosiba. 2020. "Mobile Money Usage and Continuance Intention among Micro Enterprises in an Emerging Market—The Mediating Role of Agent Credibility." *Journal of Systems and Information Technology* 22 (4): 97–117.

Ozili, P. K. 2020. "Financial Inclusion and Fintech during COVID-19 Crisis: Policy Solutions." *SSRN Electronic Journal*.

Pan, S. L., M. Cui, and J. Qian. 2020. "Information Resource Orchestration during the COVID-19 Pandemic: A Study of Community Lockdowns in China." *International Journal of Information Management* 54 (4): 102143.

Park, T. Y., S. Kim, and L. K. Sung. 2017. "Fair Pay Dispersion: A Regulatory Focus Theory View." *Organizational Behavior and Human Decision Processes* 142: 1–11.

Pauzi, S. F. F., A. C. Thoo, L. C. Tan, F. M. Muharam, and N. A. Talib. 2017. "Factors Influencing Consumers Intention for Online Grocery Shopping—A Proposed Framework." *IOP Conference Series: Materials Science and Engineering* 215 (1): 1-13.

Quevedo, M. F. 2019. "An Analysis on Fintech Apps for Payments." Opus.Hs-Furtwangen.De.

Razzaque, A., R. T. Cummings, M. Karolak, and A. Hamdan. 2020. "The Propensity to Use Fintech: Input from Bankers in the Kingdom of Bahrain." *Journal of Information and Knowledge Management* 19 (1): 1–22.

Taylor, D., M. Bury, N. Campling, S. Carter, S. Garfied, J. Newbould, and T. Rennie, T. 2006. "A Review of the Use of the Health Belief Model (HBM), the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB) and the Trans-Theoretical Model (TTM) to Study and Predict Health Related Behaviour Change." National Institute for Health and Clinical Excellence.

Iskandar, D. 2019. "The Use of the Financial Technology (Fintech) System Is Reviewed from Society Perception: Attitude, Interest, Motivation, Experience & Hope." *International Journal of Multidisciplinary Research 5* (6): 138–48.

Riom, C., and A. Valero. 2020. "The Business Response to Covid-19: The CEPCBI Survey on Technology Adoption." Centre for Economic Performance, London School of Economics.

Romanova, I., and M. Kudinska. 2016. "Banking and Fintech: A Challenge or Opportunity?" *Contemporary Studies in Economic and Financial Analysis* 98: 21–35.

Romānova, I., S. Grima, J. Spiteri, and M. Kudinska. 2018. "The Payment Services Directive 2 and Competitiveness: The Perspective of European Fintech Companies." *European Research Studies* 21 (2): 3–22.

Ryu, H. S., and K. S. Ko. 2020. "Sustainable Development of Fintech: Focused on Uncertainty and Perceived Quality Issues." *Sustainability* 12 (18): 7669.

Sharma, P. 2019. "Impact of Digitization on Transaction Banking in Financial Industry: An Evolving Landscape." Leeds University Business School, Leeds University.

Singh, A. S., and M. B. Masuku. 2014. "Sampling Techniques & Determination of Sample Size in Applied Statistics Research: An Overview." *International Journal of Economics, Commerce and Management* 2 (11): 32–33.

Singh, S., M. M. Sahni, and R. K. Kovid. 2020. "What Drives FinTech Adoption? A Multimethod Evaluation Using an Adapted Technology Acceptance Model." *Management Decision* 58 (8): 1675–97.

Sreeram, A., A. Kesharwani, and S. Desai. 2017. "Factors Affecting Satisfaction and Loyalty in Online Grocery Shopping: An Integrated Model." *Journal of Indian Business Research* 9 (2): 107–32.

Stewart, H., and J. Jürjens. 2018. "Data Security and Consumer Trust in FinTech Innovation in Germany." *Information and Computer Security* 26 (1): 109–28.

Stringham, Edward Peter. 2002. "The Emergence of the London Stock Exchange as a Self-Policing Club." *Journal of Private Enterprise* 17 (2): 1–19.

Williamson, C. R. 2010. "The Two Sides of de Soto: Property Rights, Land Titling, and Development." In *Annual Proceedings of the Wealth and Well-Being of Nations*, edited by E. C. Wright. Vol. 2. Beloit, Wisconsin: Beloit College Press

Wright, I., P. Reich, M. Westoby, et al. 2004. "The Worldwide Leaf Economics Spectrum." *Nature* 428: 821–27.

Zhou, G., J. Zhu, and S. Luo. 2022. "The Impact of Fintech Innovation on Green Growth in China: Mediating Effect of Green Finance." *Ecological Economics* 193 (1): 107308.

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