

Facilitating Digitalization of
**WOMEN
OWNED
BUSINESSES**



SAMRIDDHI
FOUNDATION

**Facililtating
Digitalization of Women Owned Businesses**

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Abbreviations and Acronyms

ADB	Asian Development Bank
CBS	Central Bureau of Statistics
CIPE	Center for International Private Enterprise
DPA	Data Protection Authority
ETA	Electronic Transaction Act
EU	European Union
FWEAN	Federation of Women Entrepreneurs Associations of Nepal
GDPR	General Data Protection Regulation
ICT	Information, Communication, and Technology
IP	Intellectual Property
ITU	International Telecommunications Union
MSMEs	Micro, Small and Medium Enterprises
NML	New Markets Lab
NRB	Nepal Rastra Bank
OECD	Organisation for Economic Co-operation and Development
PSO	Payment System Operators
PSP	Payment Service Providers
SME	Small and Medium Enterprises
TEVT	Technical Education and Vocational Training
UNDP	United Nations Development Programme
WEAN	Women Entrepreneurs Associations of Nepal

Introduction

Millions of Nepalis go online every year. Between 2016 and 2020, the number of internet users in Nepal saw steady growth in the country. Nepal Telecommunications Authority estimates that 82 per cent of the total population in the country had access to the internet in mid-January 2021. Mobile broadband users makeup over 60 percent of the said estimate. As scores of Nepalis move online, businesses are also ramping up their presence in the digital sphere. With the Nepali economy taking strides in digitalization, entrepreneurs have been at the forefront of this transformation. From digitizing how we do grocery shopping to providing essential healthcare services, the businesses are changing how we experience the way we consume different goods and services.

While digitalization is in vogue, it is important to note the preparedness of businesses in satiating the needs of consumers. Most importantly, what are the prospects of the much talked about Digital Nepal? The digital transformation that is taking place in the market surely boasts of incredible advantages for business growth. However, it is important to consider whether all entrepreneurs, especially the micro, small and medium enterprises (MSMEs) are set to benefit from the opportunities offered by digitalization. For the wider population to gain from the shift towards the digital transformation, Nepali MSMEs need to have a level playing field.

This study aims to identify policy barriers along with practical challenges Nepali women entrepreneurs face in accessing the digital market. In the following chapter, readers are provided with an overview of the laws that guide different facets of the digital economy in Nepal. The policy barriers and inadequacies along with their implications for businesses are further described in the subsequent chapter, followed by discussion on practical challenges faced by women entrepreneurs in the process of digitalization of their businesses. Chapter five offers more insight into the needs of women entrepreneurs, interventions made by the government of Nepal in the digital transformation and other notable interventions that have proved to be beneficial to women entrepreneurs in other countries. Finally, a summary of all the issues and recommendations on creating an enabling environment for entrepreneurs for digitalization can be found in the final chapter.

An Overview of Policies Shaping the Digital Economy in Nepal

This chapter outlines a list of acts, regulations and bills that are related to the digitalization and digital transformation in Nepal. The following table offers brief discussion on specific legislative provisions and their implication on businesses and individuals:

Table No. 1: An overview of policies related to the digital economy in Nepal

SN	Section	Comments
1.	E-commerce Bill	
	2(a) Intermediary Business means a business facilitating the seller and buyer on behalf of another business through an internet medium for any electronic commerce and such word shall also denote a wholesaler, retailer, commercial agent, broker or distributor operating an electronic business.	The legislation fails to differentiate between intermediaries and sellers. For the purposes of ecommerce, a proper differentiation between the various parties involved must be made in order to carve out liabilities pertaining to each party.
	2(f) Seller means any business operating an e-commerce business as per this act.	Prevailing laws require different licenses to be procured in order to operate any business. It is unclear as to whether the same form of specific business licensing will be required for operating an e-commerce business in the form of an intermediary or otherwise.
	3(1) In accordance with prevailing laws any business that can be operated can operate an e-commerce business in accordance with this law.	Many businesses operating over the medium of the internet have made use of pre-existing platforms such as Facebook and Instagram. Such businesses are small and medium enterprises that have no capacity to operate their own platform.

	4(1) All E-commerce businesses so as to ensure that consumers, buyers and customers can make informed decisions shall establish as prescribed a website or electronic platform connected to computer networks.	Intermediaries are not sellers themselves; rather they act as facilitators to the seller and buyer. In addition to this, prevailing laws on e-commerce worldwide apply standards to differentiate between sellers and intermediaries in order to design specific liabilities.
2.	Consumer Protection Act 2018	
	41(1) Constitution of Consumer Court: (1) The Government of Nepal may, in order to try and settle the cases other than the cases to be prosecuted pursuant to subsection (1) of Section 40 under this Act, constitute a Consumer Court as per necessity, by notification in the Nepal Gazette.	The increasing use of ecommerce platforms has given rise to concerns regarding the protection of consumer rights. As more and more citizens buy and sell online, laws must anticipate an uptick in consumer-merchant and business-to-business disputes. In these cases, litigation might not be an appropriate and cost-effective way to resolve disputes as desired. The law needs to provide alternative dispute resolution mechanisms.
3.	Payment and Settlement Act 2019 (PSA)	
	Payment and Settlement Act encourages a safe and sound payment system and ensures public confidence and trust over the payment system. The Act provides for “development, expansion, promotion, oversight and regulation of the overall payment and settlement system of the country”. As per the Act, Nepal Rastra Bank (NRB) has the powers to give directions to its licensed entities.	NRB has set limits on daily transactions through mobile and internet banking. The daily limit on transactions through mobile phones is NRs 200,000, merchant payment through the internet is NRs 2,000,000 and fund transfer through the internet is NRs 2,000,000. These limits need to be reviewed to facilitate digital payments in Nepal.

4. Information Communication Technology Bill	
<p>Section 37 of the bill pertains to provisions related to data security and privacy. The section states the legal obligations involved in the collection and processing of personal data, which are as follows:</p> <ul style="list-style-type: none"> • to disclose information on the purposes of data collection • to not use, transfer and disseminate the collected information for a purpose other than what has been disclosed; to publish or disclose or cause to publish or disclose personal information for other purposes only with the consent of the concerned individual • to dispose and assure the concerned individual of the disposal of the collected data within 30 days since the purpose of the collection and storage ends. 	<p>Similar personal data protection measures are prescribed by the Individual Privacy Act (2018) and the Individual Privacy Regulation (2020).</p> <p>Data protection measures put in place by the bill are in no way sufficient enough to ensure adequate data protection framework in Nepal.</p>
<p>Section 12 on different goods and services to be not provided in case of purchase of goods and services over the internet.</p>	<p>The bill states that the untimely delivery and delivery of wrong items is an offense whereby a fine of up to NRs 100,000 can be levied. The provision seemingly does not take into account the logistical hassles involved in making timely deliveries in Nepal. Apart from the Force Majeure i.e. factors beyond human control such as civil unrest, natural calamity etc, logistical challenges such as the limited use of house numbering, consumers' preference of cash on delivery, among others also lead to delays in delivery.</p>

	(2) Digital signature means a signature pursuant to section 16.	The bill does not distinguish between a digital and an electronic signature. The distinction between the two becomes important with regards to the enforcement of contracts.
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The following chapter offers a more detailed discussion on this legislation and their implications.

Policy Barriers

3.1 The eCommerce bill

The most visible front of the digitalization of businesses is selling and buying online. For businesses to make sales, they need to make a presence where their targeted customers are. At the present moment it happens to be digital platforms. Digital platforms have become an important avenue for businesses to market their brand and build their customer relations. As transactions move online, it is important that the government establish a clear guideline for the purchase of goods and services through electronic means. Such law must provide clear guidelines on consumer protection, data protection, cybersecurity, and electronic payments.

In Nepal, online sellers and eCommerce platforms have frequently run into problems with their consumers and government bodies due to the absence of eCommerce regulations. The Ministry of Industry, Commerce, and Supplies presented a draft of a long-due eCommerce bill for public discussion in December 2020. Below is a more detailed breakdown of issues that require amendments in the eCommerce bill:

Table No. 2: A review of ecommerce bill

S.N	Provision	Action required	Reason for actions
1	2(a) Intermediary Business means a business facilitating the seller and buyer on behalf of another business through an internet medium for any electronic commerce and such word shall also denote a wholesaler, retailer, commercial agent, broker	Amendment required	An intermediary business is itself not a seller, therefore defining such a term to include a retailer, commercial agent, broker or distributor could potentially lead to additional liabilities to be borne by the intermediary business. For the purposes of ecommerce, a proper differentiation between

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	or distributor operating an electronic business.		the varying parties involved must be made in order to carve out liabilities pertaining to each party. Furthermore, the present definition and the implication of subsequent liability also goes against the general principles of Civil law as prescribed in part 2 section 8 of the Civil Code, 2015 which states “A wrongdoer to bear liability for loss or damage”. Under the prevailing definition of intermediary it becomes highly likely that the intermediary will be held liable for actions of the seller and/or distributor.
2	2(f) Seller means any business operating an e-commerce business as per this act.	Amendment required	An e-commerce business may or may not be the seller of the product and could only be acting as an intermediary. Under such circumstances, the reasons mentioned above will be applicable to the current definition of seller.
3	3(1) In accordance with prevailing laws any business that can be operated can operate an e-commerce business in accordance with this law.	Amendment required	Prevailing laws require different licenses to be procured in order to operate any business. It is unclear as to whether the same form of specific business licensing will be required for operating an e-commerce business in the form of an intermediary or otherwise. Furthermore, in accordance with section 3 of the E-commerce bill, an e-commerce business

			must be listed with the relevant government authority. Therefore, clarity in relation to the operation of e-commerce business through listing as opposed to specific business licenses as can be inferred from section 3(1) is required.
4	4(1) All E-commerce businesses so as to ensure that consumers, buyers and customers can make informed decisions shall establish as prescribed a website or electronic platform connected to computer networks.	Restrictive interpretation needed	Many businesses operating over the medium of the internet have made use of pre-existing platforms such as Facebook and Instagram. Such businesses are small and medium enterprises that have no capacity to operate their own platform. Therefore, in accordance with the prevailing section, many such businesses will be restricted from their access to potential consumers over the internet and any transaction to be conducted over such platforms. Some form of restrictive interpretation thus will be required to facilitate such businesses, but such interpretation must consider the safety and security of consumer data and consumer interests.
5	12(b) To withdraw, bargain or reimburse the goods or services as if they were produced or provided by him if the goods or services sold by him are not acceptable to the buyer and are returned in accordance	Amendment required	Intermediaries are not sellers themselves; rather they act as facilitators to the seller and buyer. In addition to this, prevailing laws on e-commerce worldwide apply standards to differentiate between sellers and intermediaries in order to design

	with the law.		specific liabilities. To that extent, it becomes necessary to recognize that sellers and intermediaries are different entities both with different functions that ultimately determine their liability. Therefore, the section needs to be revisited in light of the differences between the two entities and the many complaints made by consumers in relation to intermediary platforms in the past.
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The legislation fails to differentiate between intermediaries and sellers. An important reference in this regard is the Chinese eCommerce legislation. The E-Commerce Law of the People’s Republic of China, 2018 provides clear definitions of “e-commerce operators”, “e-commerce platform operators”, “operators on platform”.

E-commerce operators mean the natural persons, legal persons or unincorporated organizations that engage in the operational activities of selling goods or providing service through Internet and other information network, including e-commerce platform operators, operators on platform and ecommerce operators selling goods or providing service via their self-built websites or other web service.

E-commerce platform operators mean legal persons or other unincorporated organizations that provide online business premises, transaction matching, information distribution and other services to two or more parties to an ecommerce transaction so that the parties may engage in independent transactions

Operators on platform mean e-commerce operators that sell goods or provide services through an e-commerce platform.

The E-Commerce Law also offers a restrictive interpretation as to what is not included in the definition of e-commerce operators. It states that e-commerce operators shall go through market entity registration according to laws. However, the preceding sentence shall not apply to the sale of self produced agricultural products and/or cottage craft by individuals, labor services using his skills that require no license under the laws and odd and petty transaction activities of an individual, or those not subject to industrial and commercial registration as provided by laws and administrative regulations.

Another contentious issue in the eCommerce bill is related to the provision of mandatory websites. Women entrepreneurs operating small and medium-sized firms have a limited digital presence. They often make use of social media platforms such as Facebook, Instagram, Viber to promote their products online and connect with potential customers. Maintaining an active profile on these platforms and curating products require significant time and investment. For businesses that cannot afford to hire an employee with social media management skills or allot resources for the same, growing their businesses online becomes extremely difficult. Due to resource constraints, many business owners take it upon themselves to curate content and communicate with consumers online. Tied to their reluctance in investing in human resources dedicated to lead generation online is that for many of these businesses physical sales often outweighs online sales.

For many businesses struggling to be active on social media, establishing their website or electronic platform connected to computer networks, as required by the draft of the eCommerce bill, will prove to be a costly task. Although having a website is considered a must for businesses these days and there are a wide variety of options available on creating and hosting websites, ranging from free website hosting sites to paid ones, maintaining a website requires a company to invest in human resources with technical know-how. Thus, making websites mandatory will further restrain businesses' digitizing efforts. Such provision can also discourage new small business owners, who start out with sales on social media platforms.

If the provision of a mandatory website is enforced without any restrictive

interpretation, many such businesses will be restricted from their access to potential consumers over the internet and any transaction to be conducted over such platforms. In addition, these businesses also run the risk of being outlawed.

Recommendation:

The legislation needs to differentiate between intermediaries and sellers and provide clear definitions that respond to the different nature of both businesses. Given that most eCommerce platforms in Nepal operate as intermediaries it becomes necessary to detail out the different nature of both businesses. A proper standard for distinguishing between the two is required. In the absence of the aforesaid standards, problems of determination of liabilities will arise in the future, it could further ensure in court battles costing intermediaries and sellers large sums of money.

The two possible rationale for the provision making the website mandatory for all businesses operating on the internet could be consumer protection and taxation. Firstly, making a website may help assure consumers that they are transacting with a trustworthy business. Secondly, the government perhaps hopes to curtail the proliferation of stores that sell primarily on social media platforms, such as Instagram and Facebook, regardless of whether they are legitimate businesses. However, upon closer inspection, it is obvious that a website is not sufficient to ascertain whether any business is legitimate or fraudulent. Neither does it help in ensuring that new social media platform native businesses are registered according to the law and paying taxes. Thus, the provision should be removed from the eCommerce bill.

3.2 Consumer protection in digital commerce

The presence of a robust consumer protection regime that ensures the interests of both buyers and sellers are safeguarded is crucial to the operation of eCommerce businesses. Consumer protection laws also offer clarity on who

shoulders the liabilities of protecting the rights of consumers to quality goods and services. In relation to consumer protection online, the eCommerce bill is largely based on the Consumer Protection Act 2018.

With the proliferation of online shopping both on renowned online marketplaces, like Daraz, Sasto Deal, Thulo.com, and social media platforms, consumers have also been subject to business misconduct. Concerns related to substandard and counterfeit products, late delivery, exchange and refund problems, and overpricing are frequently raised by consumers. These concerns and related disputes need to be addressed carefully both by online marketplaces and sellers and the regulatory body. Doing so will be crucial in developing trust and confidence in online purchases among consumers and will help allay their seeming reluctance to buy online.

Consumer protection regulation often refers to the three main stages of transactions: the pre-purchase phase (duties to disclose and advertising), payment phase (terms and conditions of transactions, transparent/secure payment, and data protection), and delivery/after-sale phase (dispute resolution and redress and the right to withdraw/cancel or cooling-off period) (Center for International Private Enterprise (CIPE) and New Markets Lab (NML), 2018). With regards to dispute resolution and redress, the Consumer Protection Act, 2018 envisions a Consumer Court, where consumers who have suffered bodily, mental, financial, physical or other kinds of harm and injury resulting from transactions involving goods or services, have the opportunity to resolve their complaints against businesses and to obtain redress. The Act also states that consumers can make a complaint in writing or orally or even through electronic means to the Central Market Monitoring Committee, the Commerce, Supplies and Consumer Welfare Protection Department or Inspection Officer. However, the Act does not elaborate on how such complaints will be handled. However, the role of these authorities does not include dispute resolution. In the case of a Consumer Court envisioned by the Act, it has not been established. Consumers can go to the District Court, but resolving disputes via litigation is often time-consuming and adds unnecessary cost and burden on consumers. This points to the need for alternative dispute resolution and redress frameworks that are accessible, timely and easy to use.

Another key piece of legislation tied to consumer protection, especially over the electronic means is the section related to delivery of goods and services in the Information, Communication and Technology bill. The bill states that the untimely delivery and delivery of wrong items is an offence whereby a fine of up to NRs 100,000 can be levied. The provision seemingly does not take into account the logistical hassles involved in making timely deliveries in Nepal. Apart from the Force Majeure i.e. factors beyond human control such as civil unrest, natural calamity etc, logistical challenges such as the limited use of house numbering, consumers' preference of cash on delivery, among others also lead to delays in delivery. Thus, this provision of the bill seems harsh on online businesses (Pandey et al., 2020).

Recommendation:

The eCommerce industry is relatively small and is still evolving. While there is already a strong consumer protection regulation in Nepal, the current dispute settlement and redress framework, including the Consumer Court, have not been implemented. But as the eCommerce industry grows, one can expect a corresponding rise in merchant-consumers and business-to-business disputes to increase as well. While traditional litigation may be appropriate for disputes with high-value claims, consumers, with low-value claim complaints, need to be provided with accessible mechanisms that can “enable consumers to elect to conduct the procedure without the need for legal representation or assistance as far as possible” (OECD, 2007).

In addition, several small disputes could be avoided or resolved at the earliest opportunity if sellers invest time and make effort to inform and educate consumers and vendors, in the case of online marketplaces, on the terms and conditions of the transaction. These marketplaces can set up a mechanism to guarantee the quality of goods and services. In a similar vein, marketplaces can benefit from setting their own “processes for internal complaints handling, which provide consumers with the opportunity to resolve their complaints directly with the business concerned in a fair, effective, and timely manner without imposing a fee or charge for accessing or using these processes” (OECD, 2007).

In line with the recommendations made by Pandey et al. (2020), the incorporation of the said provision in the laws pertaining to Sale of Goods in Country Civil Act, 2074 would be more appropriate. The provision also needs to include Force Majeure as a means to be exempt from contractual liability under agreements concluded at the time of trade over the internet.

3.3 Data Protection

Grey hat hackers, computer hackers who do not have malicious intent but may use illegal means of hacking, published the names, phone numbers, residential and email addresses of 170,000 Vianet customers in April 2020 and released personal details of 57,000 users of Foodmandu, a popular food delivery company in March 2020. Earlier the same year, hackers had released the email addresses of Prabhu Money Transfers (Pudasaini & Bijukchhe, 2020). These data dumps highlighted the need to heighten the security of the personal data of users availing the services of these companies. It is important to note that data security measures of government institutions are equally vulnerable, if not more.

With the rise in the use of digital technologies in everyday life, data protection has become a topic of growing concern in Nepal. Repeated cases of data breaches over the years have shown that data security mechanisms in Nepali state institutions and private entities are vulnerable.

Data protection is an overarching topic, with discussion ranging from national security, surveillance, eGovernance, the privacy of citizens, among others. This paper is mainly concerned with data security legislation applicable to businesses and their compliance practices across the life cycle of data. In its simplest form, the life of any data begins at the collection and processing stage, passes through storage, transfers and concludes at the disposal stage. Data protection legislation outlines the obligations of businesses in all of these stages (CIPE & NML, 2018).

Nepal does not have a comprehensive legal framework for the regulation of data protection. Although the Electronic Transaction Act (ETA) (2008) was enacted to regulate the exchange of information over the internet and facilitate it through

electronic means, the Act fell short in addressing the demands of the digital landscape. The Ministry of Information Communication and Technology has prepared the Information, Communication and Technology (ICT) bill, which will replace the ETA, to respond to the changing environment of information and technology. With endless political upheavals, the ICT bill currently remains tabled in the parliament and has not been adopted into the law.

Section 37 of the bill pertains to provisions related to data security and privacy. The section states the legal obligations involved in the collection and processing of personal data, which are as follows:

- to disclose information on the purposes of data collection
- to not use, transfer and disseminate the collected information for a purpose other than what has been disclosed; to publish or disclose or cause to publish or disclose personal information for other purposes only with the consent of the concerned individual
- to dispose and assure the concerned individual of the disposal of the collected data within 30 days since the purpose of the collection and storage ends

It is also worth noting similar personal data protection measures are prescribed by the Individual Privacy Act (2018) and the Individual Privacy Regulation (2020).

Section 38 of the bill requires encryption of collected personal data and the processing, dissemination, and storage of such information to be done within the country.

While the information on data storage and backup practices among the private sector is scarce, according to a survey of government organizations conducted by Giri and Shakya (2019), “the main way of backing up data is by using a hard drive (50.7%). Other methods are using a pen drive (40%), putting the password in the workstation computer (35%), using an external hard disk (27.9%), using servers (22.1%), using Google drive/ sky drive (6.4%).” The authors also state that

the security of the data in government organizations could be compromised due to the lack of knowledge, devices, and negligence of employees.

Similarly, highlighting the data security risks involved in data disposal, the data breach of 170,000 Vianet customers in 2020 was reportedly caused by the company's negligence in the transfer and disposal of data (Digital Economy Conclave, 2020).

As recent cases of data breaches have been prominently reported on and discussed, it remains clear that data protection has not been prioritized by the leadership of private enterprises. According to Pudasaini & Bijukchhe (2020), "Traditionally, executives in businesses and large institutions have focused on managing financial and political risks personally while leaving all other matters to technical managers". In the case of small and medium-sized enterprises, the lack of funds appears to be a major factor that prevents them from investing in the infrastructure and human resources required to comply with data protection standards.

Recommendation:

Data protection regime is ever-evolving across the world. Different countries adopt a variety of international and regional frameworks as per the needs of their markets. While comprehensive data protection law is desirable for Nepal, the regulatory framework needs to respond to the needs of domestic markets. It is obvious that the ICT bill, in its current form, is riddled with problems related to undefined jargon, vague provisions and will prove inadequate to meet the data protection needs of the country. The ICT must address clearer provisions on data protection, involving all stages of the life cycle of any data. The bill will require an overhaul to respond to the existing needs for data protection and future developments in this avenue.

The European Union's data privacy and security law The General Data Protection Regulation (GDPR), which is more consumer-centric, is often studied by lawmakers as a model to reform data protection laws in their jurisdictions. A

closer study of regulatory approaches taken by countries in the region may be helpful to Nepal. The Indian government introduced the Personal Data Protection Bill in 2019 and the Indian parliament is currently deliberating on the bill. The bill envisions the creation of a new Indian regulatory authority, the Data Protection Authority (DPA). Similar to DPA, many countries are looking to establish a central data regulator with sweeping regulatory and oversight responsibilities (Hogan Lovells, 2020). Aside from studying the current regional development in data protection legislation, what could perhaps be of help to Nepal is a wider public discussion on the legislative and institutional framework for data protection in Nepal. A public hearing on the bill, where civil society actors, local business community, and private citizens can air their needs and concerns will help in identifying regulatory approaches suitable for the Nepali market.

3.4 E-payments

Payment gateways have been reaching new milestones in the country. Mobile wallets, such as eSewa, Khalti, IME Pay are becoming more ubiquitous across cities in Nepal. It has been reported that Fonepay Nepal, a payment service provider, recently settled NRs one billion in a day. The younger and tech-savvy population have embraced technology in making tedious everyday transactions easy. Anecdotal evidence suggests that the Covid-19 accelerated the adoption of digital payments.

Another often-cited fact when discussing the digitalization of services in Nepal is its astonishingly high rate of internet penetration. Millions of Nepalis go online every year. Between 2016 and 2020, the number of internet users in Nepal saw steady growth in the country. Nepal Telecommunications Authority estimates that 82 per cent of the total population in the country had access to the internet in mid-January 2021. Mobile broadband users makeup over 60 percent of the said estimate.

According to Financial Access in Nepal Report published by Nepal Rastra Bank (NRB), the population with at least one account is estimated to be 67.3 per cent compared to the estimate of 60.9 per cent in mid-July 2019 and the total number

of accounts per 1000 adults is 1348.1. The report also states that the percentage of ATM users, Internet banking users and mobile banking users are 20.35 per cent, 3.86 percent and 32.03 per cent. The findings of the report suggest that financial technology is more popular among the young and middle-aged population compared to other age groups. The study also shows that despite improvements in financial access, the female population from rural areas are far behind in accessing financial services.

The increase in internet penetration and improvement in financial access, however, has not translated to a corresponding behavioural change towards digital payments among Nepali consumers. By and large, Nepal remains a cash-based economy, with even online shoppers opting for cash on delivery over digital payment. Although the Nepali fintech market has seen steady growth in the number of mobile wallets and inter-bank payment services, there are several policy challenges facing businesses.

According to Shrestha (2021), limits set by NRB on daily transactions defeats the whole purpose of adopting digital wallets. The daily limit on transactions through mobile phones is NRs 200,000, merchant payment through the internet is NRs 2,000,000 and fund transfer through the internet is NRs 2,000,000.

Similarly, cross-border transfer of capital is severely restricted in Nepal. Making payments from Nepal outside the country requires one visit to the bank with fairly onerous documentation requirements. Amidst the tightening of transfers, NRB has recently allowed Nepali banks to issue prepaid dollar cards for national and international online transactions. However, the card is limited to USD 500 annually which is not a significant amount for individual or corporate transactions. Despite its limitation, many small businesses have reportedly made use of the dollar card for online advertising, which previously had to be done via a third-party digital marketing agency.

Perhaps one of the most significant challenges facing the fintech market in Nepal is not policy barriers, but Nepal's poor levels of digital literacy. Educating Nepali consumers on the use of bank and non-bank payment getaways and assuring them of its reliability is crucial to getting them to leave cash-based payments.

While payment service providers have started aggressive marketing campaigns, increasing digital literacy requires a wider collaboration between bank and non-bank payment service providers, state institutions and the public.

Recommendation:

As noted above the growth of fintech services in Nepal faces considerable challenges in terms of regulatory restrictions and attitudinal barriers among users. Even though Nepal has seen a growing presence of bank and non-bank, alternative payment service providers, implementing laws that can keep pace with technological innovation will remain difficult. Thus, the NRB needs to provide avenues for these firms to test new products and service models while attending to the regulatory needs of the fintech landscape.

3.5 E-signatures

The ICT bill has recognized the legality of e-signatures. However, the bill does not distinguish between a digital and an electronic signature. A digital signature is only a tool to verify whether a document is authentic or not. In contrast, electronic signatures are the digital manifestation of a handwritten signature that is protected with a digital signature and is used to sign contracts concluded over the internet. An electronic signature is regarded as intent to be bound by any legal instrument. This becomes essentially important with regards to the enforcement of contracts where the intent is a prerequisite (Pandey et al., 2020).

Recommendation:

The bill needs to be amended with definitions and provisions for both digital signature and electronic signature.

Practical issues

In addition to the policy challenges that affect businesses across industries, Nepali women entrepreneurs also face several practical problems that affect the operation of their businesses in opting for digitalization. With rapid changes in technology, many women entrepreneurs are struggling to keep pace with the innovation in the market. This chapter illustrates further operational challenges that are tied to the nitty-gritty details of running a business.

4.1 Acquiring digital skills

Women entrepreneurs who have been operating their businesses for decades and those that come from an older demographic have a hard time learning new skills required for the digitalization of their businesses. The fast pace of digital change in the national and international economy demands businesses to always be on top of new developments in the industry. Many women entrepreneurs who are accustomed to the traditional ways of doing business, marketing and distribution and sales find it difficult to adapt to the demands of the digital age. While one cannot deny the need for the potential of digital marketing and building customer relations online, learning the ropes of the latest social media platforms, curating a strong online presence remains a difficult task for women entrepreneurs. In addition, women entrepreneurs who operate small and medium-sized businesses often wear several hats and are responsible for the entirety of the supply chain of their businesses; raw material sourcing, production, distribution, retail sales, customer relations and bookkeeping, which leaves them with little time to pick up and practice new skills, which makes the learning curve further steep for women entrepreneurs.

Many women entrepreneurs rely on support from their children in taking care of the digital needs of their businesses. Women entrepreneurs report taking help from their children in setting up vendor accounts with e-commerce platforms and making posts on social media pages of their businesses (S. Rajbhandari, personal communication, April 1, 2021). However, for entrepreneurs without

individuals who could provide them with immediate support, the gap of skills hindered them from tapping into the potential of digital marketing.

Organisations like the Federation of Women Entrepreneurs' Associations of Nepal (FWEAN) frequently conduct training and workshops for women entrepreneurs in their organization. Training on digital literacy has recently been organized by FWEAN to help its member entrepreneurs address the gaps in skills and knowledge. In 2020, FWEAN implemented a four-month pilot project 'Revitalizing Women's Business Amidst COVID-19 Pandemic' to support micro, small and medium women entrepreneurs cope from the impact of COVID-19 on their businesses and train them on business digitalization, disaster preparedness and economic recovery. As part of the project, Thulo.com an ecommerce platform, supported market outreach of 18 women-led businesses via online promotion and sales of their products on Thulo.Com and its website, mobile and social platforms.

Recommendation:

Digital literacy training is of utmost importance for women entrepreneurs. Women entrepreneurs benefit from one-off workshops and long term training to enhance their digital capacity development. Organizations like FWEAN have partnered with international agencies, ecommerce platforms to train its members in business digitalization. There is a need to increase investment in similar programs.

According to Olsson & Bernhard (2020), women entrepreneurs' behavior and ways to acquire digital skills to keep up the pace in digitalization consisted of learning by doing, informal learning and step-by-step self-development entrepreneurial behavior were practiced. In this study of women entrepreneurs in Western Sweden, the study found that strategic recruiting of young digitally skilled employees, i.e. digital natives was one of the ways entrepreneurs used to maintain their presence on social media. At an individual level, Nepali entrepreneurs could also benefit from hiring young and new staff.

4.2 Skills development and recruitment of employees

Women entrepreneurs acknowledge the importance of online marketing and highlight that digital marketing will become essential for their business going forward. With the onset of the COVID-19 pandemic, a majority of consumers are moving to online shopping. The pandemic and multiple lockdown measures have obstructed the normal supply chain of the businesses, with some reporting a significant decline in demands from their usual buyers. This has forced entrepreneurs to amplify their digitization efforts in hopes of attracting new consumers.

Maintaining a consistent digital presence and generating product sales online takes time. Entrepreneurs need to invest time in curating their products, attracting potential customers and engaging with them and replying to their queries regarding products. This requires businesses to be online and responsive around the clock.

As aforesaid, digital skills have a steep learning curve for women business owners. Even though the easiest solution to address the gap in digital skills would be hiring employees with expertise in digital marketing, there are several barriers keeping them from doing so. Firstly, hiring employees dedicated to digital marketing efforts is not an affordable option for many small businesses. Even when businesses are able to hire new employees, entrepreneurs say that a busy schedule prevents them from working closely with and providing supervision to their staff members. The experience entrepreneurs have in hiring and onboarding employees with the right skill set plays an important role in whether they are able to find and retain such employees.

Recommendation:

Nepal has a growing network of businesses offering services crucial to digital businesses. Often referred to as digital marketing agencies, these businesses offer a variety of services, such as product photo shoots, production of marketing materials and social media content, and advertising. The demand of

similar services at affordable rates for small and medium businesses for women led businesses could be an untapped opportunity for marketing agencies. They could also roll our schemes targeted at a group of small businesses with flexibility on services offered and corresponding fees.

Council for Technical Education and Vocational Training (TEVT), a body responsible for offering programs on TEVT, can add short-term courses on business digitalization, information technology, digital marketing, and other digitalization-related courses to their current curriculum. The current curriculum only provides a diploma course on information technology which is of three years and a pre-diploma course on information technology which is for twenty-four months.

4.3 Barriers in adoption of digital platform and tools

The majority of women entrepreneurs agree that digitalization of business is important, especially during current times when the pandemic has created obstruction in regular markets and market chains. Entrepreneurs can benefit much from the digitalization of business, which includes digitization of the front-end, customer facing side of the business, and back-end of the business in these unprecedented times. If a business is to keep up with the pace of industry specific or wider technological innovation in the market, businesses need to constantly adopt new changes.

As millions of Nepali join the internet every year, consumer behavior is also constantly changing in Nepal. While consumers accustomed to visiting physical shops for products are now learning to browse through products on ecommerce platforms, social media platforms, to place orders online, and use digital payments. Businesses are set to reap significant benefits from maintaining a consistent digital presence. However, there are several factors that can disincentivize them from digitizing their businesses.

The two motivating factors for women entrepreneurs are the benefits they could get from displaying their products in online marketplaces, including promotion

of their products among consumers who would not have known about them before. However, merely being present on the platform does not translate to sales. While entrepreneurs who produce and sell everyday consumer goods, such as food products, were able to generate considerable sales on ecommerce platforms, the same was not the case for sellers in other industries.

Online marketplaces have different ways of operation and how they interact with vendors on their platforms. Some platforms collect goods from vendors beforehand and stock them in their warehouses, whereas other platforms collect goods from vendors as they receive the orders. Small women-owned businesses found the latter time-consuming and costly. For businesses that receive only a few orders online, packaging and sending out each product to the ecommerce platform was costly and time-consuming. Due to this, many women entrepreneurs are skeptical about selling on online marketplaces.

FWEAN has also launched its own eCommerce platform called WINBIZ for its members. Businesses who are members of the organization can list their products on the site. Similarly, FWEAN also organizes an annual expo and buyer and sellers meet event featuring businesses led by its members. These events help entrepreneurs introduce their products to new buyers and network with fellow entrepreneurs.

Recommendation:

The number of eCommerce platforms in Nepal is growing. Apart from a few popular platforms, such as Daraz, Sasto Deal, Thulo.com, new platforms are also entering the market. For existing and upcoming eCommerce platforms, it is important that they make their platforms easy to use for their vendors, including small businesses. If there are a higher number of platforms with varying services offered to vendors, entrepreneurs can enjoy the freedom to choose eCommerce most appropriate and cost-effective for their businesses.

For businesses that target the international market, online marketing similar to those businesses with high domestic demand may not work. Thus, these

businesses need to identify new platforms and promotions to reach consumers in the international market.

4.4 Resistance from staff members

Leaders, employees and organizational structures play a key role in the success of digitalization of an organization. To achieve digital transformation of a business, it is essential for leaders and employees to develop digital skills together. Any gap in interest and participation in acquiring new skills and adapting to new technology and tools among leadership and employees can lead to delays and inefficiencies in digitizing business and failures in worst case scenarios. Sometimes leaders and sometimes employees can become leading facilitators to introduce and develop new digital tools and skills. Team members across the board of a company should be willing to participate and contribute their part in such a process.

In Nepal, many women business owners are disadvantaged due to the lack of knowledge, capacity and skills required for a digital operation of their business. The disinterest of employees and reluctance among employees to adapt to the new tools can obstruct digitization efforts and investments made can go in vain. Some women entrepreneurs who have adopted new tools for business operations such as digital inventory keeping and digital payment systems have noted that their staff members find it difficult to adapt to new digital tools. Due to the inability to adapt to new tools sometimes those tools are discarded and never used again. This not only hampers the pace of digitalization but also results in a wastage of valuable resources.

Recommendation:

The digitalization of business brings forward sweeping changes in the operation of any business. Thus, it is crucial for such digitalization efforts to be planned and executed carefully. The leadership of the organization must secure a buy-in of all employees and parties affected by and involved in these processes. Leaders

should be able to communicate the need for new changes being introduced and its benefit to not only for the operation of the business but also for the staff members and their work. This can help everyone involved prepare for the adoption of new tools. Such planning requires that employees are trained well. This may require business to recruit a consultant or assign any employee or team with the task of imparting new skills to employees and provide hands-on support. Leaders should foster collaboration and encourage staff members to learn new skills and adopt new tools.

4.5 Lack of infrastructure

According to FWEAN's Advocacy Strategy Paper (2021), "procedural obstacles, logistical issues and sub-optima warehousing facilities and customs infrastructure, along with lost time and high cost are reasons behind Nepal's inability to secure enough markets." Many women entrepreneurs based in rural parts of the country are unable to access markets due infrastructural challenges, related to transmission of power supply, road connectivity and transportation, storage facilities. Such inadequate resources lead to poor market linkage severely restricting the growth of businesses, especially agricultural businesses.

The poor infrastructure in Nepal has challenged the growth of agriculture and agro-based business for many years. With the majority of male population leaving the country for overseas, women across the countryside are taking over agriculture. The participation of the female labour force in agriculture is increasing. Thus, small women entrepreneurs and farmers are most affected by such infrastructural challenges.

Similarly, digital infrastructure, such as the broadband internet, is not easily accessible throughout the country. Many parts of the country have limited access to infrastructure such as internet service providers and broadband connections. According to Financial Access in Nepal Report by Nepal Rastra Bank (NRB), the urban population has greater access to financial services than the rural population. The study also shows the access to financial resources to the female population from rural areas are inadequate and the gender gap

in financial access exists in all provinces and local levels. In absence of these services, selling products on digital platforms remains a pipe dream for many women entrepreneurs.

Recommendation:

Robust infrastructures and resources are fundamental for business growth. The government needs to prioritize investment in agricultural infrastructure, including in road connectivity and transportation, and warehouse facilities. FWEAN's Policy Priorities Paper (2020) stresses the need to undertake a value chain analysis to improve micro-meso-macro linkages to identify opportunities for women's broader participation in markets. In the past, interventions in value chain development have been designed and implemented with the support of international aid agencies and organizations in different parts of the country. For example, UNDP Nepal is currently implementing value chain development of fruit and vegetables projects in 37 different local governments in Bagmati and Gandaki Province. A study on the performance and results of similar value chain interventions can yield helpful insights for development of market linkages to aid women entrepreneurship in Nepal.

With regards to improving the availability of digital infrastructures and services in the country have been far and few. The government's efforts and investments in the development of information and communication technology and financial services needs to prioritize the rural parts of the country.

To spur investment in networks, policymakers should remove barriers to investment and improve competition in order to increase the number of service providers. For that, regulatory barriers that should be removed for example: simplifying licence requirements, removing regulatory uncertainty, and facilitating efficient access to rights of way can all help spur investment. (OECD Digital Economy Outlook, 2020)

Financial service providers, including banks and financial institutions, and payment service providers also need to partner with government bodies, local

governments, development partners and the business community to expand their services in the country. For example, UKaid Access to Finance programme has partnered with eSewaFonepay Pvt. Ltd. to design, develop and launch cash points in selected districts.

Local governmental bodies should also take initiative in developing needful digital technologies in their area. They should develop separate local digital infrastructure plans and policies and include digital infrastructure in local and regional development plans.

4.6 Back-end digitalization

Digitalization of businesses getting much-needed attention. However, the efforts of business digitalization are more focused on the front-end of the business, such as the marketing of goods and services, and customer relationship management. The digitalization of any business should not overlook the corresponding back-end of the business, including the sourcing, production, inventory management, bookkeeping, among others. Every business is unique in its ways of operation and requires different degrees of digitalization in different stages of its production and service delivery.

However, many businesses do overlook the digitalization of its operation. Due to the acute lack of resources experienced by women owned businesses, many businesses are unable to hire skilled personnel and software. Many businesses make minimal use of digital tools in keeping track of their businesses exchanges and transactions. Similarly, in case of the SMEs, ordering and tracking of its inventory is not digitized. Such practices affect business productivity and can upend the front-end digitalization practices.

Another major barrier to the back-end business digitalization is the cost. The recruitment of skilled personnel is not affordable for many businesses. While some businesses may introduce new tools and hire experts to train their staff, they struggle to retain skilled staff and continue to pay for maintenance of the tools. Due to which, even entrepreneurs who have adopted specialized tools are

forced to discard them and return to manual ways of doing business, including use of books and Excel sheets.

Recommendation:

Women entrepreneurs, organizations offering training on digitalization and business development need to include backend digitalization in their training. Businesses also need to take time to explore free and open source tools. Similarly, investors and business incubators need to prioritize investment in the development of the back-end of the business and offer operational support to entrepreneurs they work with.

4.7 Dependence on cash

The use of cash remains prevalent in MSMEs. Although many digital payments are becoming more popular, in ecommerce platforms, the majority of business transactions are done in cash. As transactions in MSMEs consist mainly of small value transactions, the use of cash is more popular and large amounts are handled through cheques. Online banking and mobile banking services are rarely or never used by older generational women entrepreneurs.

According to the Labor Bylaw, 2018 “all kinds of employment agencies, companies or individuals engaged in any sector have to compulsorily pay the salary of their staffers through the banking system” (The Himalayan Times, 2018). Many employers have taken it upon themselves to set up bank accounts for their employees and teach them to use the banking system. A number of entrepreneurs continue to pay their staff in cash.

In addition, women entrepreneurs are hesitant to use digital payment systems due to lack of digital confidence in Nepal’s digital payment system. Entrepreneurs are unsure on how to handle problems occurring while transferring money to a certain vendor or person through an online medium. While payment service providers have a complaint section on their apps or websites to receive and

process complaints regarding transactions, however users who are new to using digital payments. While there is little clarity around how long processing a complaint takes, prompt response and clear instructions need to be laid out to users. Due to lack of such clarity, many users, including women entrepreneurs, are skeptical about conducting large-scale transactions online, large scale transactions are usually conducted through cheques.

Recommendation:

- The cost of operations on debit cards and credit cards can be lowered in order to increase cashless transactions.
- Payment service providers can run money-back schemes on transactions.
- Limits on transactions with cards, mobile wallets, and internet banking must be extended over time so that large transactions can be held online with ease.
- Financial service providers and payment service providers can partner with women entrepreneurs and their associations to offer training on how digital banking operates and security measures to women entrepreneurs.
- Payment service providers need to offer easy-to-use, responsive, and prompt services to process complaints from users on their apps or websites so that users feel confident and comfortable using their platforms.

4.8 Sale of counterfeit goods

For example, for entrepreneurs in the handicraft sector, the uniqueness of the design of their products is a key selling point. Entrepreneurs noted that being on an eCommerce platform exposed them to the risk of theft of product design. Other producers could copy their products and sell products. An entrepreneur note that experiencing such theft in the initial days of the adoption of online

marketing was discouraging.

Similarly, the majority of buyers of handicraft products are outside the country and the domestic demand for these products is very low. While entrepreneurs may sell a few products through online marketplaces, domestic sales make up a smaller part of their revenue. Due to the fact that the majority of their customer base are in the international market, entrepreneurs find advertising and selling products online as beneficial.

Nepal's Intellectual Property (IP) laws and rules are ineffective, outdated and only enforced sporadically. Enforcement officials do not have enough and adequate training on copyright issues. Nepal faces serious challenges in preventing the sale of counterfeit goods.

Recommendation:

Given the weak IP regime in Nepal, taking legal action against producers and sellers of counterfeit goods is not effective for most businesses. Aside from legal actions, businesses owners need to keep a vigilant watch on other sellers of similar goods on ecommerce, social media platforms, among others. If they encounter any such case, businesses must actively inform their consumers of counterfeit products and warn against purchasing these goods.

Ecommerce platforms also need to establish mechanisms to report the sale of counterfeit goods on their platforms and penalise sellers for such actions.

Digitalization for Women Entrepreneurs in Nepal

5.1 Promises of business digitalization

Women entrepreneurship is currently a concept that is gaining momentum in Nepal. According to the recent National Economic Census published by the Central Bureau of Statistics (CBS) women-owned 29 percent of establishments out of a total of 922,356 establishments.(Central Bureau of Statistics, 2021). The FWEAN states that currently there are 500,000 self employed women entrepreneurs throughout Nepal, these women entrepreneurs currently provide 50,000 employment opportunities (The Kathmandu Post, 2021) . These data show a significant presence of women entrepreneurs in Nepal.

As the Nepali market leaps forward in the digital transformation, these women entrepreneurs ought to benefit from the incredible advantages from the said transformation. Aside from removing policy barriers and regulatory burden, MSMEs need to take steps toward business digitalization in order to benefit from the opportunities offered by digitalization. Studies show digitalization is key to achieving better business results for women-owned MSMEs. Digitalized businesses perform better in product and service quality, product and service development capacity, productivity, and overall performance in favor of companies that have been undergoing digital transformation for more than two years compared to the companies in the initial stages of digital transformation (Sanja et al., 2019).

5.2 The role of access to financial services in digital transformation

Despite its promises, digitalization of businesses remains challenging from women entrepreneurs due to factors such as resource constraints, lack of digital literacy, policy hurdles, and socio economic barriers. Due to such challenges these businesses have been unable to be part of the evolving digital ecosystem.

One of the most challenging problems women entrepreneurs face is the lack of access to finance. Banks and financial institutions have limited financial products and schemes targeted towards women entrepreneurs and their collateral based financing is very inaccessible to most women entrepreneurs. In a country where only 26 percent of women have access to property rights, such traditional financing cannot meet the needs of women entrepreneurs. FWEAN's Advocacy Strategy Paper shows that lack of collateral is one of the major barriers in accessing financing from banks. The same study shows other than banks, self financing and cooperatives were two major sources of funds for women. The lack of financial services and products that are more accessible to women also makes it difficult for women entrepreneurs to develop their business, including digitalization. Access to finance underpins most of the practical challenges identified in the previous chapter.

In order to meet the financing needs of businesses, various ministries have launched funds and schemes targeted at women entrepreneurs. The table below offers an overview of various funds and credit schemes:

Table No. 3: Credit funds and schemes for entrepreneurs in Nepal

SN	Administering institution	Fund/Schemes	Credit disbursement range
1	Ministry of Industry, Commerce and Supplies	Women Entrepreneurship Development Fund	<ul style="list-style-type: none"> • NRs 100,000 to NRs 500,000 • Six percent per annum with three years repayment period
2	Department of Small and Cottage Industries	Micro Cottage and Small Industries Fund	<ul style="list-style-type: none"> • NRs 10,000 to NRs 60,000
3	Ministry of Youth and Sports	Youth and Small Entrepreneur Self-Employment Fund	<ul style="list-style-type: none"> • NRs 200,000 and a group of 25 people can receive up to NRs 5,000,000 • Collateral free with 10 percent per annum

4	Nepal Rastra Bank	Rural Self Reliance Fund	Up to NRs 90,000 per borrower as micro-credit and a group loan up to NRs 150,000
5	Banks & Financial Institutions	Collateral free loan with six percent interest subsidy for women entrepreneurs	Up to NRs 1,500,000 per borrower

5.3 Digital Nepal: Plans and Prospects

The 2019 Digital Nepal Framework launched by the Ministry of Communication and Information Technology offers a blueprint on the development of digital initiatives. The ambitious framework encompasses 80 digital initiatives. Although it remains to be seen how these initiatives will be executed, with better administration, it will guide Nepal towards attaining the dream of becoming a digital state (Shrestha, 2021).

Similarly, the National ICT Policy introduced in 2015 seeks to enhance the vision of transforming Nepali society into knowledge and information-based society by harnessing rapid advances in the ICT sector. The National Broadband Policy announced in 2016 puts forth a framework for stimulating broadband access and availability across the country. In addition, the Government Enterprise Architecture and Nepal e-Governance Interoperability Framework which mark some of the foundational initiatives for enabling roll-out of citizen centric digital services and systems that are interoperable and provide a framework for seamless integration.

The advantages of these plans, frameworks and policies for women entrepreneurs and their businesses depends on how inclusive was the process of making. Another significant barrier is the exclusion of women from the planning and developing of ICT policies. Due to the lack of female representation in institutions and lawmaking processes, ICT policies often are created with limited input from relevant stakeholders, including women entrepreneurs. This exclusionary process perpetuates the digital gender gap.

5.4 Notable Interventions in Digital Inclusion and Lessons for Nepal

The Covid-19 pandemic has affected businesses across the world. Many MSMEs have been pushed to the brink of bankruptcy and closure. Business owners are struggling to maintain sound cash flow, make payments on their loans, and pay their employees, among other hardships caused by the pandemic. In order to aid entrepreneurs in such dire conditions, different interventions have been introduced in different countries. Here are a few interventions that could be relevant to Nepal:

Burundi, Ethiopia and Haiti

To implement hybrid strategies where traditional business approaches are combined with new digital approaches, the Enhanced Integrated Framework in collaboration with International Telecommunications Union has launched a programme called 'Tech as a Driver of Women's Economic Opportunities in Burundi, Ethiopia and Haiti' with the objective of building digital skills for women and closing the digital gender gap. The programme aims to increase women's economic opportunities in the textile and apparel industry as well as the coffee and cocoa value chains (International Telecommunications Union, 2020).

The project will focus on nationwide fieldwork, specifically:

- Working with governments and other decision-makers to ensure that digital economy policies are gender-responsive;
- Working with organizational partners and other members of the local ecosystem to prepare working-age women to navigate in the digital world; and
- Working with the private sector to create economic opportunities for working-age women in the digital world.

India

The growth of women entrepreneurs in India is highly plausible. With new entrepreneurial startups growing by the day that are mostly owned by women, the Indian government has brought various policies supporting women entrepreneurs such as the Entrepreneurship Development programmes to support potential women entrepreneurs who may not have adequate educational background and skills, making women the primary recipients in major funding schemes. The Government of India more recently launched a digital portal to support women entrepreneurs in India where they can sell their products such as handicrafts, home decor and other directly to Government ministries, departments and institutions (Dharmaraj, 2019).

The government of Nepal can also introduce similar interventions for women entrepreneurs and integrate their business in the digital ecosystem. Similarly, the government needs to acknowledge the efforts made by the private sector to promote digital literacy as well as creating a digital ecosystem and facilitate such efforts. The government should be proactive in implementing policies that promote businesses to adopt digital approaches. Though various efforts have been made in the country to promote entrepreneurship not much has been achieved. However, in recent days, with the increasing number of educated and skilled human resources in the country, the policies brought forward to digital entrepreneurship can help accelerate economic development.

Conclusion and Summary of Issues and Recommendations

The Covid-19 pandemic has exacerbated the already existing problems women entrepreneurs faced in leveraging digital technology in their business. While MSMEs are struggling to stay afloat, it is important to recognize that several challenges they currently face are the results of years long policy barriers and regulatory burden as well as operational challenges. On the other hand, the pandemic and the multitude of challenges it has brought forward also presents an opportune time for both the government and the private sector to review the digitization efforts undertaken so far. This will be helpful to all stakeholders to find the way forward in creating a digital Nepal, where Nepali citizens can enjoy the benefits of digital transformation.

For the convenience of readers, the issues and challenges discussed in this paper and the recommendations made have been summarized in the table below:

Table No. 4: Summary of Issues and Recommendation

S.N	Topic	Issue	Recommendation
1	Policy issues		
1.1	E-commerce Policy:	Lack of proper definitions separating intermediaries and sellers, absence of standard definitions problems of determination of liabilities will arise in the future, it could further ensure in court battles costing intermediaries and sellers large sums of money.	Legislation needs to differentiate between intermediaries and sellers and provide clear definitions that respond to the different nature of both businesses. A
		Section 4 Subsection (1) of the eCommerce bill states that all E-commerce businesses should establish	Provision regarding mandatory availability of the website for eCommerce should be removed as there are many

		a prescribed website or electronic platform connected to computer networks.	businesses that operate their business through social media. Having a website is not sufficient to ascertain whether any business is legitimate or fraudulent and nor does it ensure that new social media platform native businesses are registered according to the law and paying taxes.
1.2	Consumer Protection:	There are various concerns and complaints raised by consumers while performing online transactions. In order to deal with those problems, the Consumer Protection Act envisioned a Consumer Court, where issues faced by consumers during transactions of goods and services are resolved. However, the Act does not elaborate on how such complaints will be handled and so far the court has not come into operation	Implementation of distress settlement and readdress framework in the act along with Consumer Court should be assured.
			Sellers must invest time and effort to inform and educate consumers and vendors on the terms and conditions of the transactions in a marketplace
			Marketplaces can open their own process for internal complaints handling where consumers can resolve disputes directly with the businesses involved so that some issues can be solved without going to the court.
		Information Communication and Technology bill issues a fine of NRs 100,000 for untimely delivery and delivery of the wrong product. However, this provision does not consider the logistical hassles involved in making timely	The provision needs to include Force Majeure as a means to be exempt from contractual liability under agreements concluded at the time of trade over the internet.

		deliveries in Nepal such as limited house numbering, preferences of cash on delivery and the Force Majeure i.e., factors beyond human control such as civil unrest, natural calamity, etc., which results in untimely delivery. Thus, the bill seems to be harsh on online business	
1.3	Data Protection:	The tabulated ICT bill in the parliament is still filled with a lot of problems and errors related to undefined jargon, vague provisions and will prove inadequate to meet the data protection needs of the country.	The ICT must address clearer provisions on data protection, involving all stages of the life cycle of any data.
		The ICT bill does not respond to the needs of domestic markets	A wide public discussion of the legislative and institutional framework for data protection in Nepal could be useful. A public hearing on the bill, where civil society actors, the local business community, and private citizens can air their needs and concerns will help in identifying regulatory approaches suitable for the Nepali market.
			The bill will require an overhaul to respond to the existing needs for data protection and future developments in this avenue.

1.4	Electronic Payments:	The growth of fintech services in Nepal faces considerable challenges in terms of regulatory restrictions and attitudinal barriers among users.	The NRB needs to provide avenues for these firms to test new products and service models while attending to the regulatory needs of the fintech landscape.
1.5	Electronic Signatures	The ICT bill has recognized the legality of e-signatures. However, the bill does not distinguish between a digital and an electronic signature.	The bill needs to be amended with definitions and provisions for both digital signature and electronic signature.
2	Practical Issues		
2.1	Acquiring digital skills	Due to the changing social media trends, complex digital skills, and the responsibility of managing a whole business, women entrepreneurs usually do not have time to learn new digital skills in order to tap the digital opportunities.	Women entrepreneurs can hire young and new staff that are digitally skilled in order to maintain a presence in social media and other digital platforms.
		Women entrepreneurs who lie in an older demographic have a hard time acquiring the basic skills required for digitalization.	Digital literacy training is must for women entrepreneurs. Organizations that work with women entrepreneurs should invest more in training and mentorship programs.
2.2	Recruitment of new staff	Hiring new staff exclusively for managing the digital part of the business become expensive for entrepreneurs	There are various digital marketing organizations that provide services required by women entrepreneurs. Providing such services at an affordable rate for small and medium businesses for women-led businesses could be an untapped opportunity for marketing agencies.

			They could also roll our schemes targeted at a group of small businesses with flexibility on services offered and corresponding fees.
		The busy schedule of entrepreneurs prevents them from working closely with digital experts and supervising them even when they hire people.	Council for Technical Education and Vocational Training (TEVT), a body responsible for offering programs on TEVT, can add short-term courses on business digitalization, information technology, digital marketing, and other digitalization-related courses to their current curriculum.
2.3	Barriers in the adoption of digital platforms and tools	For small women-owned businesses working with some eCommerce marketplaces become costly rather than cost-effective, For businesses that receive only a few orders online, packaging and sending out each product to the eCommerce platform was costly and time-consuming. Since they do not reap many benefits out of it many women entrepreneurs are skeptical about selling on online marketplaces.	The number of eCommerce platforms in Nepal is growing. It is important for new platforms to make their platforms easy to use for their vendors, including small businesses.
			Increased competition among eCommerce platforms with new platforms entering the market can help entrepreneurs have the freedom to choose eCommerce most appropriate and cost effective for their businesses.
		Handicraft businesses that have a larger international market rather than a domestic market do not see much advantage in displaying their products in	Businesses that target the international market, need to identify new platforms and promotions to reach consumers in the international market.

		domestic eCommerce platforms	
2.4	Resistance from staff members	There is disinterest and reluctance among employees to adopt and adapt to new technologies.	Digitalization or the introduction of new digital tools and the process of their adaptation should be carefully planned and executed.
			Leaders should foster collaboration and encourage staff members to learn new skills and adopt new tools.
			Leaders should convince embers to adopt new changes by showing their benefit for them.
			Businesses may recruit a consultant or assign any employee or team with the task of imparting new skills to employees and provide hands-on support.
2.5	Lack of infrastructure	Digital infrastructure such as broadband connections, Internet Service Providers which are an essential base for digitalization is not available throughout the country in all the rural areas.	The government should prioritize the development of information and communication technology to the rural parts of Nepal.
			Financial service providers, including banks and financial institutions, and payment service providers need to partner with government bodies, local governments, development partners, and the business community to expand their services in the country

			<p>To increase investment in networks, policymakers should remove barriers to investment and improve competition in order to increase the number of service providers.</p>
			<p>Local governmental bodies should also take initiative in developing needful digital technologies in their area. They should develop separate local digital infrastructure plans and policies and include digital infrastructure in local and regional development plans.</p>
2.6	Back-end digitalization	<p>Women entrepreneurs overlook the digitalizing of the back-end part of the business which includes sourcing, production, inventory management, booking among others.</p>	<p>Organizations offering training on digitalization to women entrepreneurs should include back-end digitalization training.</p>
		<p>Women entrepreneurs are unable to afford expert personnel for designing, producing, and maintaining customized software for the business.</p>	<p>Businesses need to explore open-source tools that could help manage the back end of their business.</p>
			<p>Investors and business incubators need to prioritize investment in the development of the back-end of the business and offer operational support to entrepreneurs they work with</p>

2.7	Dependence on cash	Cash transactions remain prevalent among MSMEs. Small transactions are handled through cash whereas larger transactions are handled through cheques	The cost of operations on debit cards and credit cards can be lowered in order to increase cashless transactions.
			Payment service providers can run money-back schemes on transactions.
			Limits on transactions with cards, mobile wallets, and internet banking must be extended over time so that large transactions can be held online with ease.
		Online and mobile banking services are rarely used by older generational women entrepreneurs	Financial service providers and payment service providers can partner with women entrepreneurs and their associations to offer training on how digital banking operates and security measures to women entrepreneurs.
			Payment service providers need to offer easy-to-use, responsive, and prompt services to process complaints from users on their apps or websites so that users feel confident and comfortable using their platforms.
2.8	Sale of counterfeit goods	Products of handicraft entrepreneurs face the risk of design theft while selling their products online.	Ecommerce platforms also need to establish mechanisms to report the sale of counterfeit goods on their platforms and penalize sellers for such actions.

		Due to ineffective Intellectual Property law and lack of adequate training on copyright issues among enforcement officials taking legal against producers of counterfeit goods is not effective	Aside from legal action, businesses should keep a vigilant watch on sellers of similar products on digital platforms and if they encounter any such products should immediately inform and warn their consumers on purchasing counterfeit goods.
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List of stakeholders

S. N	Name	Organization
1	Jyoti Thapa	Swaad Aachar Udhyog
2	Sitara Rajbhandari	Spicy Home Pvt. Ltd
3	Basu Maya Tamang	Maan Udhyog
4	Rama Devi Shrestha	Everest Dairy
5	Sumitra Palanchowke	DRK Enterprise
6	Shanta Banskota	Kanchanjungha Tea State
7	Sharada Rijal	Milan Garment
8	Sunita Vaidya	Candles and craft
9	Rita Bhandari	Nepal Paper Craft
10	Utpala Tuladhar	Yachu Cleaners
11	Reeta Simha	Aama Impex
12	Anuja Rajbhandari	Ekadeshma
13	Aarati Nepal	Nepal Paper Craft
14	Alok Subedi	Mero Adda
15	Sagar Bhatta	Kirana

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