



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Designing a Capability-Based Model of Credit Literacy for SME Sustainability:

Evidence from SME Banking Customers in Nepal

Final Assignment of

Converting Research into Practices

Submitted by

Susma Thapaliya

2526498

April 2026

Part 1: Pilot study of Research-Based Academic Article

Designing a Capability-Based Model of Credit Literacy for SME Sustainability: Evidence from SME Banking Customers in Nepal

Abstract

SME sustainability has become major issue around the world. Rising default rate has become the concern for all the Stakeholders of the business including Banks. In context of Nepal, raising default rate in SME portfolio has been highlighted as major setback for bank's performance and asset quality. The problem has been identified in different cycle of loan process including screening, processing, disbursement and mainly in post disbursement monitoring and control. The problem arises from the system which is only concern about to access to loan but not how the credit is being used. So, a Capability-Based Model for Credit Literacy is developed through this research for enhancing SME sustainability. The pilot research applied a qualitative descriptive analytical approach to collect data from total 10 SMEs of retail and service sector through a structured questionnaire. The study established relation between the capabilities including credit capability competence, risk management, capital allocation and scaling to economic sustainability components including profitability, risk resilience, decision making, growth. The relation was studied in mediation to access to credit. The statistics show credit literacy impacts SME sustainability only by integrating the capabilities. The result indicates institutions such as bank and Government organizations should focus on enhancing capabilities of SME for proper use of formal credit for SME sector sustainability.

Keywords: Credit Literacy, Capability-Based Model, Sustainability, SME, Bank and Financial Institute, Nepal

1. Introduction

1.1. Background and Context

SME comprises of total of 90 percent of estimated total number of 400 million business established globally and they contribute around 70 percent of total GDP (World Economic Forum, 2026). Considering the significance in economic contributions, the sustainability of these businesses has been key concern for all the stakeholders of the SMEs including Banks (Sebastian Rink, 2024).

Rijal (2025) states that 90 percent of estimated 0.92 million businesses established in Nepal are SME and they contribute about 22 percent of total GDP. Concern regarding sustainability of the SME has been target of the government. Hence, Nepal Rastra Bank, central bank of Nepal had implemented a regulatory requirement of directed lending to BFIs of Nepal. As per the requirement, 15 percent of the total loan portfolio of Class A commercial bank have to be extended to agriculture, energy, Micro, Cottage, Small, and Medium Enterprises/Business, Information Technology and Communications-based industries and Export industries based on domestic raw materials with a deadline set for mid-July 2028 (Nepal Rastra Bank, 2026).

In line with regulatory requirements, BFIs of Nepal invested loan aggressively, resulting into a major problem in Banking Industry as Non-Performing Assets (Default Loan with delay payment for more than 90 days) increased dramatically (Hamal et al., 2025) to 5.26 percent as per published report key financial indicator report by NRB on Mid-January 2026. To mitigate the effects of rising NPL, necessary interventions is required from Policy level-government, Institutional-BFIs and from Customer level-SME. The SME targeted programs are to be conducted by Nepal Rastra Bank, BFIs, Nepal Banking Institution, Non-Governmental Organizations and Donor Based projects from International Non-Governmental Organizations.

From institutional i.e Banks context, financial literacy which also includes credit literacy must expand its resources from just targeting to increase the financial access to building capability in customers to optimally utilize the loans to ensure business sustainability. The indication of this requirement has been established through research by (Kandel et al., 2025).

Thus, for improving performance of this SME risk asset segment, an intervention from Bank-commercial A class has been proposed by developing Capability-Based Model of Credit Literacy focusing on SME sustainability.

1.2. Problem Statement

There is a notable absence of a contextualized comprehensive and structured framework that systematically identifies and develops the capabilities required by SME owners to ensure the effective utilization of borrowed funds gearing towards sustainability, as currently credit literacy programs provided from banks are focused on increasing access to credit, rather than prioritizing on developing capabilities.

Hence, designing a model of Credit literacy based on Capability Based Approach - developed by Amartya Sen is proposed for ensuring sustainability in business financed by BFIs.

This model aims to address the major problem seen in the SME asset portfolio users are as follows:

- Selection and use of inappropriate credit facilities,
- Cash flow constraints,
- Struggle with repayment of business obligations,
- Problem in dealing with financial and market risk,
- Inappropriate investments and re-investments,
- Business minimally operated under loss,
- Business foreclosure.

1.3. Research Aim and Objectives

To develop a **capability-based credit literacy model** that can enhance **SME sustainability outcomes** among banking customers in Nepal.

- To confirm what factors, inhibit sustainable SME growth despite the access to credit.
- To determine how capability factors impact sustainability components?
- To determine if access to credit mediates between capability-based credit literacy and SME sustainability.
- To determine if and how capability-based literacy to be designed for sustainability of SMEs from retail and service sector.

1.4. Research Questions:

Based on scope of study the research questions have been listed below.

- **Main Question:**

How can capability-based approach be integrated into credit literacy for contributing to business sustainability in SME customers of BFIs in Nepal?

- **Sub Questions dealing with integration**

- What is the impact Credit Capacity Competence on Profitability?
- What is the impact of Risk Management on Firm Resilience?
- What is the impact of Capital Allocation of Decision making of the firm?
- What is the impact of Scaling on business growth?
- To what extent does access to credit mediate the relationship between credit literacy capabilities and SME sustainability?
- What is the sectorial difference between capability-based credit component required for sustainability between Retail SMEs and Service SMEs?

1.5. Significance of study:

The research is based on real time problem existing in current scenario of Nepalese banking industry regarding increase in Non-Performing Assets (NPL) in SME portfolio, which are credit with default date of more than 90 days. This not only reduces the banks performance but in turn also effects performance of businesses being financed i.e. SMEs. The problem is derived from initial credit screening, credit selection, credit processing, most importantly post credit disbursement credit monitoring and control.

The requirement solution of the problem also has theoretical grounding, backed by research done in developing countries on need to develop targeted financial literacy or credit literacy in presence of credit access from institutions which are the stakeholders of the SMEs (Pokharel, 2025) prioritizing capacity building.

So, to mitigate this problem, a capability based – credit literacy as a part of financial literacy is proposed which is based on Amartya Sen theory on what utility is derived from credit facilities.

The framework consists of set of capabilities which are necessary in term to apt SME for business sustainability especially in economic terms.

Banks can redesign their financial literacy program which can consist of customized workshop based on proposed capability set, with focus on SME business sustainability.

1.6. Structure of the Article

Since, this a research article based on pilot study, the article is based on establishing the viable framework which is developed on basis of applied business and theoretical grounding. Standard framework has been applied to introduce, contextualise, framework establishment, relationship establishments, findings, conclusion with application and scope of future research.

2. Literature Review:

Literature Review at Doctoral level is more than just summarizing the existing literature, it presenting informed perspective derived from analysing, critique and challenge them (Wright and Michailova, 2022) contributing towards providing applied solutions to businesses.

2.1. Capability-Based Credit literacy

The existing credit literacy are focused on access to credit as contributor of SME sustainability but recent studies including (Khanal, 2025) and (Kandel et al., 2025) converge on finding that access to credit alone is not sufficient to ensure SME sustainability, targeted credit literacy is required. The research by (Aziz et al. 2025) and (Firdaus 2024) established that capability-based financial literacy program in access to credit is required to improve business sustainability.

Capability Approach developed by Amartya Sen in 1980 can synthesize credit literacy has to be more than just commodity, it has be composite of functioning aided by capability for deriving utility which can be rephrased as business performance. The capabilities must resolve the problems as listed in problem statement section regarding problem of SMEs.

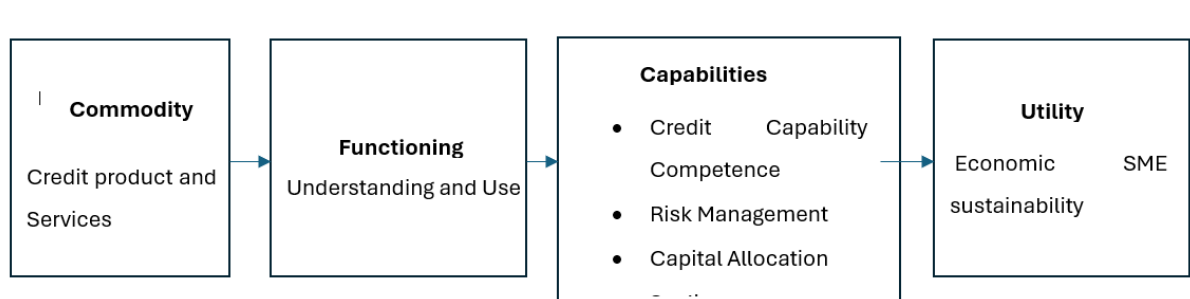


Figure 1: Synthesis from Capability approach in Credit Literacy from financial knowledge and ability

2.2. SME sustainability

SME is defined as enterprises having fixed capital for small enterprise up to NPR 150 Million, for medium enterprise from NPR 150 million to NPR 500 Million. Sustainability of SMEs can be defined on basis of triple bottom line including economic, environmental and social aspect (Zaman, Tanewski and Ekanayake, 2025). Mitropoulos (2026) has found that the economic performance has been found to be significantly related to SME sustainability. the existing literature contextualized in Nepal also converges on a theory that aspects of businesses as financial planning, investment decisions and risk management can significantly affect the SME sustainability. So, based on literature, indicator of sustainability is established as profitability, resilience, decision making and growth.

2.3. Access to Finance

The access to formal finance from BFIs can be paramount SMEs for leveraging financing requirements. But SMEs often lack expertise to distinguish the requirement, risk associated with credit restricting sustainable investment which can be a result of lack credible financial information creating information asymmetry (Nguyen and Canh, 2021). So, access to formal finance becomes the enabler for credit literacy to have an impact on SME sustainability by limiting the information asymmetry between banks and SMEs. As, existing research by (Meressa 2023) and Kalaieesan (2024) establish the mediating role of access to finance.

2.4. Sectorial Analysis

The existing literature are focus within the specific sector in SME, clearly lack the sector wise study of SME which can be retail, trade, service, manufacturing and agricultural. The problem of high default rate in SME is present in all sectors of SME, so focusing on most concentrated sectors of SME in Nepal which are trade and service, the framework is designed based on the concentration of SME lending.

The existing research establishes the impact of financial literacy, credit literacy termed as debt literacy, credit management literacy on SME performance and sustainability but mention the need of targeted literacy programs for SME focusing on capability building rather than just enhancing access. The impact of credit knowledge, management and ability is analysed individually, but a adaptable model for credit literacy has not been developed yet which looks into all scope of this research.

3. Conceptual Framing of the Study

3.1. Theoretical Foundations

The capabilities model of Credit Literacy has been developed based on Amartya Sen approach to Capability by merging three components of financial literacy which are financial knowledge, behaviour and attitude. The components are synthesized into capabilities supporting functioning's for SME sustainability.

3.1.1. Credit Capacity Competence

The credit capacity competence is capability derived from firms' ability to understand credit products and services, understand business financial position including cashflow tranching, align credit with business position ensuring repayment while ensuring business profitability. The credit capacity competence is how capability sequenced from forementioned functioning. Credit literacy will incorporate this capability as the component to ensure profitability of business.

3.1.2. Risk Management

Risk management is capability derived from functioning of firm's ability to identify, assess and manage risks. It is related to enterprise risk management theory. The credit literacy can help to identify financial risk, assess them and create ability to minimize them to a manageable level, which will result in resilience in SMEs.

3.1.3. Capital Allocation

Capital Allocation is a capability derived from functioning derived of ability to make right investment. Credit literacy with access to finance provide SME with financial capital to make strategic investment for business sustainability through high return or competitive advantage through innovation.

3.1.4. Scaling

Scaling is a capability derived from functioning to reinvest in business product and service for business revenue growth. Credit literacy with availability of access to finance can facilitate for business growth in terms of profitability.

Sustainability is based on triple bottom line a framework developed by John Elkington in year 1994 which comprises of social responsibility, Environmental stewardship and Economic viability. The scope of the research is based on impact on Economic viability of SME because bank as a stakeholder on SME it is financing is dependent on SME sustainability in terms of finance.

3.1.5. Profitability

SME operation needs to be profitable to manage loan repayment, working capital and repay business obligations. This ensures the financial sustainability of firm utilizing formal credit. The credit capacity competence developed from credit literacy is associated to profitability of firm.

3.1.6. Resilience

SME face several risks including market, environmental, social and most importantly for our research which is financial risk. The firm need to be able to face financial shocks and sustain its business.

3.1.7. Decision Making

Based on normative theory, decision making is focused on return from investment from strategic decision making based on return expected from the investment. The business needs managerial capability based on capital allocation to make right investment to derive desired return.

3.1.8. Growth

Growth is measured in terms of innovation of product and services through reinvestment of profit and credit to ensure competitive advantage or economies of scale. Financial growth theory is adapted to define growth and its components which measures profitability and innovation in SME. Scalability in context of sustainable revenue growth promoting innovation has been assumed as capability impacting Growth.

Access to finance is based on theory of information asymmetry bridging the gap between information availability of banks and customer. Access to finance mediates the relationship forming as a base for capability-based model to ensure sustainability in SMEs.

3.2. Conceptual Mapping:

The conceptual map in-relation of design of capability-based model is presented below:

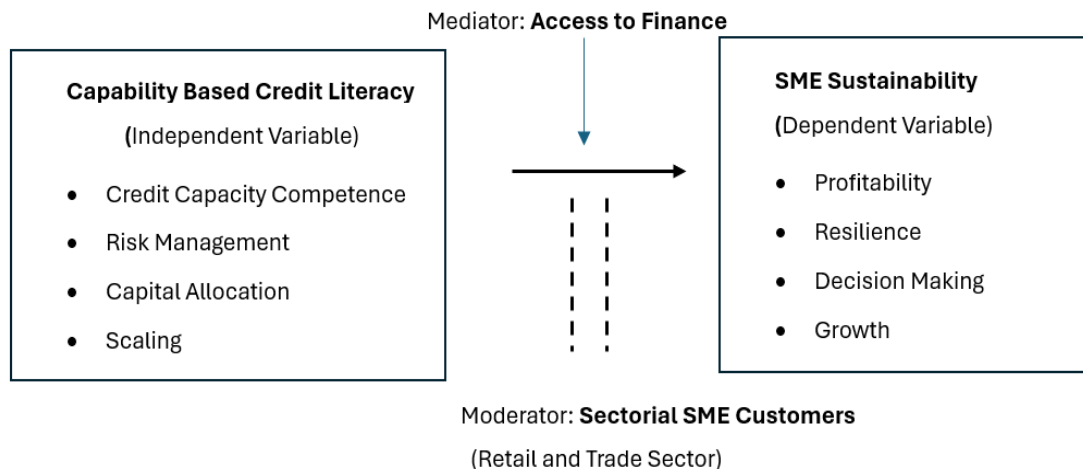


Figure 2: Conceptual mapping of capability-based model of credit literacy

3.3. Link Between Conceptual Framework and Research Questions

Research hypothesis has been developed linking interpreting conceptual mapping and linking it research questions. The research hypothesis has been listed as below:

H1: Capability based credit literacy positively impact SME sustainability

H2: Credit Capacity Competence has significant positive effect on firm profitability

H3: Risk Management significantly enhance SME resilience

H4: Capital allocation capability has significant positive effect on strategic capital investment

H5: Scaling capability has significant positive impact on business growth in revenue.

H6: Access to credit mediated the positive relationship between credit literacy capabilities and SME sustainability.

H7: Composition of capability-based credit components required for SME sustainability differ significantly between retail SMEs and service SMEs.

4. Methodology

4.1. Research Philosophy:

The key vectors of research philosophy are presented below:

- **Ontology**

The scope of the research is based on the real time problem of high default rate in SME portfolio of Banks. But there is no such framework that integrates all capabilities needed for SME sustainability. So, research is geared towards providing banks, a set of capabilities to be integrated in their literacy program for increasing their finance SMEs economic sustainability.

- Epistemology

Existing literature identifies the need for targeted capability-based framework for financial and credit literacy to develop SME for disciplined repayment and business development. Along with this, rise in default problem which has been significant due to unresearched mandatory enforcement from policy level, and due enforcement by institutions undermining quality of the assets has been pinpointed by published financial indicator report of banks through central level and individual banks annual report.

- Axiology

The research will be based on consented data collected from SME customer level. The research will have mutual contributions to institution and SME themselves.

- Methodology

The research will be qualitative in nature where impact of capability-based framework and its components will be assessed on sustainability. Since, this pilot testing data from SME customers will be obtained through structured questionnaire and result will interpret to present validity of research.

4.2. Research Design

The research conducted is as pilot study to established preliminary validation of the framework. Model design is based on experience and requirement pinpointed by existing literatures. The research conducted to establish capabilities component in relation to their impact on SME sustainability components.

4.3. Research Approach

The research is exploratory in nature with seeks to establish relationships between variables. The research defines the components of the independent variables, dependent variables, mediating variables and moderators providing descriptive analysis rather than quantitative analysis.

4.4. Sampling Strategy and Participants

The total sample taken for the pilot testing is total 10 customers form each Retail and Service sector SMEs which are majority segment of the SME customers in Nepalese Banks which are financed. Stratified random sampling is used based on SME which are established for more than 3 years and have been using financial services from bank for more than 2 years. The data with consent will be collected from SME owners and biasness will be minimized.

4.5. Data Collection Method

Since data is collected from the SMEs, the semi-structured questionnaire from Google Survey. The questionnaire will include general demographics of respondents and variable specific Likert scale questions with scale range from (1-5) for the measure of variables. Some of the questions will be kept open-ended to incorporate respondent opinion. Questionnaire is designed by stay neutral to biasness arising institutional and customer level.

4.6. Data Analysis Techniques

Since the data collected for pilot study, google charts and spreadsheet will be used for interpretation of the data. analysis of customer demographics and variable analysis will be derived to establish the components and their relationship.

4.7. Ethical Considerations

The sample selection, questionnaire design is based on neutrality avoiding biasness based on customer and institutional perception. Consent will be obtained from respondent on use and confidentiality of data. Data analysis will be made to represent the true finding from the data and subjective interpretation will be mitigated.

4.8. Research Limitation

The research is based on pilot study so sample size is only 10, despite total sample of 180 will be taken for full-fledged study. The data collection is to be made from institutional-bank side also for gathering institutional perception on required capability development. Data are to be analysed using SEM analysis to establish precise relationship between variable than descriptive analysis of variables relationships. The scope of research can be further developed through above mentioned changes in methodologies.

5. Data Analysis and Findings

5.1. Demographic condition

The demographic characteristics of respondent include nature of business, legal business status, years of business establishment, bank loan availed years, total capital investment, nature of loan, total business loan, revenue period and previous participation in literacy programs.

Table 1: Demographic condition of respondents

Respondent	Reponses	Percent
<i><u>Nature of Business</u></i>		
Retail	5	50
Service	5	50
<i><u>Legal Business Status</u></i>		
Sole Proprietorship	4	40
Partnership	4	40
Company	2	20
<i><u>Year of Business Establishment</u></i>		
3-5 years	1	10
5-10 years	7	70
10-15 years	2	20
15 years and above	0	0
<i><u>Bank Loan Years</u></i>		
Up to 2 years	3	30

Above 2 to up to 5 years	5	50
Above 5 to Up to 10 years	2	20
Above 10 years	0	0
<i><u>Nature of Loan</u></i>		
Cash Credit	6	60
Demand Loan	2	20
Term Loan	1	10
Vehicle Loan	1	10
Non-Funded Loan	0	0
Respondent	Reponses	Percent
<i><u>Total Capital Investment</u></i>		
Up to NPR 150 million	6	60
Above NPR 150 million Up to NPR 500 million	4	40
<i><u>Turnover/ Revenue Period</u></i>		
Annual	7	70
Seasonal	3	30
<i><u>Participated in previous literacy programs</u></i>		
Yes	3	30
No	7	70

The demographic condition of the respondent among SME business have mostly been proprietorship and partnership, while only 2 were company. The 70 percent of the companies had been established for 5 to 10 years with loan taken were of 2 to 5 years. Maximum loan availed concentrated towards cash credit, focus on operational finance management. The capital investment was in majority less than NPR 150 million and revenue spanning in whole year. Only 3 SME had access to former literacy program, and rest 7 were had not participated in literacy-based program.

5.2. Descriptive Statistics:

The capabilities of credit literacy program have been assessed in SME business with following bar graph and table with Likert scale ranging from 1-5 from strongly disagree to strongly agree.

5.2.1. Credit Capability Competence

The SME business indicate they have relative understanding of business financial, can manage the cash flow but the data shows the credit product and services availed are not as per business requirements and revenue cycle.

The retail industry shows higher level of credit capacity competence than service industry, while 50 percent of the service SME are found to have problem in matching business and revenue cycle to availed credit products and services.

For credit capacity competence to be component to be effective requires focus on developing capability to match business cycle and revenue cycle with credit products and services by bridging the gap between

understanding by banks in coordination to SME customers on need of customizable credit product and services which match their revenue cycle.

Sector	Turnover/ (Revenue) Period	Our business has optimum cash flow to cover the business's short-term obligations and long-term obligations, including the bank's obligations.	We understand terms and conditions of the credit product and services used by our business; it matches to our business's nature and revenue cycle	We understand our business's financial position, including key profitability ratios generated from our internal records and regulatory financial statements.
Retail (Trade)	Annual	5	5	4
Retail (Trade)	Annual	2	4	4
Retail (Trade)	Annual	5	5	5
Retail (Trade)	Seasonal	3	3	4
Retail (Trade)	Annual	4	2	3
Service	Seasonal	4	2	4
Service	Annual	4	3	4
Service	Annual	3	4	5
Service	Annual	4	4	4
Service	Seasonal	5	2	4

Table 2: Sector wise Credit Capability Competence of SME.

5.2.2. Risk Management

The SME from service sector have been managing risk through manual analysis of market than using proper tools to identify, assess and manage risk. They lack the proper knowledge of risk management tools. Identifying the financial risk is needed based on proper risk identification tool rather than identifying risk just based on market stipulations. This will help business to avail and process for right credit product and services to manage the possible losses or interruption in operations. The literacy program aimed at service sector especially require the financial management capability building, which highly volatile nature of service disrupted by technological advancements.

Nature of Business	Total capital investment	Total Business Loan	Have participated in literacy campaigns organized by Banks	We are able to analyse possible financial risks and keep a financial buffer to protect regular business operations and profitability.	We use proper risk management tools (e.g., financial forecasting, risk analysis) to foresee possible financial risks
Retail (Trade)	Above NPR 150 – Up to NPR 500 million	Above NPR 50 to NRP 100 million	Yes	5	4
Retail (Trade)	Up to NPR 150 million	Above 5.0 o NPR 10.0 million	No	5	4
Retail (Trade)	Above NPR 150 – Up to NPR 500 million	Above NPR 50 to NRP 100 million	No	4	4
Retail (Trade)	Up to NPR 150 million	Above 5.0 to NPR 10.0 million	No	4	3
Retail (Trade)	Up to NPR 150 million	From NPR 1.0 to NPR 5.0 million	Yes	2	2
Service	Above NPR 150 - Up to NPR 500 million	Above NPR 10.0 to NPR 50 million	No	4	3
Service	Above NPR 150 – Up to NPR 500 million	Above NPR 50 to NRP 100 million	No	5	3
Service	Up to NPR 150 million	Above NPR 10.0 to NPR 50 million	No	3	1
Service	Up to NPR 150 million	Above NPR 10.0 million to NPR 50 million	No	3	3
Service	Up to NPR 150 million	From NPR 1.0 million to NPR 5.0 million	Yes	2	1

Table 3: Sector wise Risk Management Capability of SME.

5.2.3. Capital Allocation

The business needs the capacity to make right investment to earn maximum return. The data show even though businesses have mentioned they make informed investment decision; the decision seem to be from experience and market analysis of opportunity. The SMEs lack the capability to seek the opportunities-based on analysis market data and information.

So, for long term business return, programs focusing on business ability to make investment based on actual data-based analysis is needed

Nature of Business	Total capital investment	Total Business Loan	Have participated in literacy campaigns organized by Banks	We make informed investment decisions that give maximum return from credit available to us.	Our investment decision is data-driven rather than based on market stipulation.
Retail (Trade)	Above NPR 150 million - Up to NPR 500 million	Above NPR 50 to NPR 100 million	Yes	5	3
Retail (Trade)	Up to NPR 150 million	Above NPR 5.0 to NPR 10.0 million	No	5	2
Retail (Trade)	Above NPR 150 million – Up to NPR 500 million	Above NPR 50 to NRP 100 million	No	5	3
Retail (Trade)	Up to NPR 150 million	Above 5.0 million to NPR 10.0 million	No	4	2
Retail (Trade)	Up to NPR 150 million	From NPR 1.0 to NPR 5.0 million	Yes	3	2
Service	Above NPR 150 million - Up to NPR 500 million	Above NPR 10.0 to NPR 50 million	No	4	4
Service	Above NPR 150 million – Up to NPR 500 million	Above NPR 50 to NPR 100 million	No	5	3
Service	Up to NPR 150 million	Above NPR 10.0 to NPR 50 million	No	4	2
Service	Up to NPR 150 million	Above NPR 10.0 to NPR 50 million	No	4	4
Service	Up to NPR 150 million	From NPR 1.0 to NPR 5.0 million	Yes	4	2

Table 4: Sector wise Decision-making Capability of SME.

5.2.4. Scalability

Nature of Business	Years of business establishment	Total capital investment (Amount in Million)	Nature of loan (Amount in Million)	Total Business Loan	Have participated in literacy campaigns organized by Banks	We can make reinvestment decisions that increase return to the business through product/service innovation for increasing profitability.	We can make reinvestment decisions that increase return to the business through product/service differentiation by either increasing competitiveness or reducing cost as per market demand.
Retail (Trade)	10-15 years	Above NPR 150 - Up to NPR 500	Demand Loan	Above NPR 50 to NPR 100	Yes	4	3
Retail (Trade)	3- 5 years	Up to NPR 150	Cash Credit	Above NPR 5.0 to 10.0	No	4	3
Retail (Trade)	5-10 years	Above NPR 150 - Up to NPR 500	Cash Credit	Above NPR 50 to NRP 100	No	3	3
Retail (Trade)	5-10 years	Up to NPR 150	Cash Credit	Above 5.0 to NPR 10.0	No	4	2
Retail (Trade)	5-10 years	Up to NPR 150	Cash Credit	From NPR 1.0 to NPR 5.0	Yes	2	2
Service	5-10 years	Above NPR 150 – Up to NPR 500	Cash Credit	Above NPR 10.0 to NPR 50	No	4	4
Service	10-15 years	Above NPR 150 – Up to NPR 500	Demand Loan	Above NPR 50 to NRP 100	No	4	4
Service	5-10 years	Up to NPR 150	Cash Credit	Above NPR 10.0 to NPR 50	No	3	3
Service	5-10 years	Up to NPR 150	Term Loan	Above NPR 10.0 to NPR 50	No	4	2
Service	5-10 years	Up to NPR 150	Vehicle Loan	From NPR 1.0 to NPR 5.0	Yes	4	4

Table 5: Sector wise Scalability Capability of SME

The SME are more focused on growth through product innovation rather than differentiation. But, despite the credit access the business seem to lack strong affinity to innovate and differentiate the product.

5.2.5. Sustainability

The sustainability components are measured in link with capability components with Hypothesis H2 to H6

We have been able to maintain satisfactory profitability for the last 3 years with credit funds.
10 responses

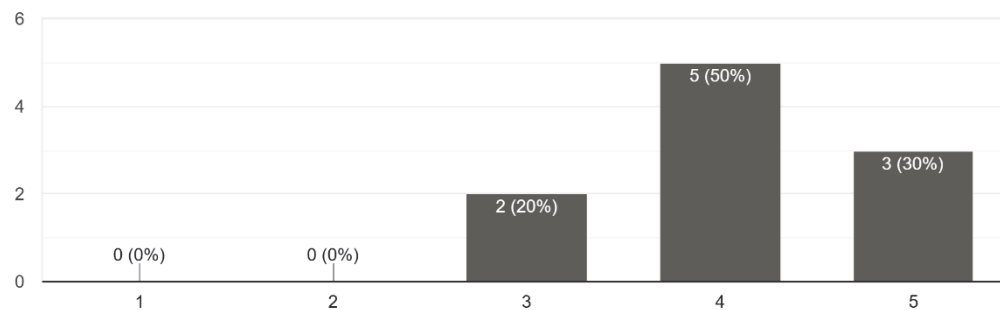


Figure 3: Profitability component in link to credit capacity competence

Although SME are seen to have profitable business, SME highlight the need to match credit funds to business cycle and revenue cycle, by enhancing capability to analyse and sync credit obligations to revenue period enabling cash flow tranching.. So, the overall credit capability competence has positive impact on business profitability proving assumption H2

As for risk resilience although businesses seem to manage short-term effect of the risk to a extent, the table number 6 presented below proves the business confidence to develop a risk resilience level is insufficient to tackle long term financial risk with revenue dips, proving relationship as per hypothesis H3.

The service sector SMEs have less risk resilience in comparison to retail sector of SMES adding up to H7

Nature of Business	Years of business establishment (in year)	Total Business Loan (in Million)	Have participated in literacy campaigns organized by Banks	We have sufficient liquidity to survive prolonged revenue dips with risk management practise
Retail (Trade)	10-15 years	Above NPR 50 to NRP 100	Yes	3
Retail (Trade)	3- 5 years	Above 5.0 to NPR 10.0	No	4
Retail (Trade)	5-10 years	Above NPR 50 to NRP 100	No	3
Retail (Trade)	5-10 years	Above 5.0 to NPR 10.0	No	4
Retail (Trade)	5-10 years	From NPR 1.0 to NPR 5.0	Yes	4
Service	5-10 years	Above NPR 10.0 to NPR 50	No	2
Service	10-15 years	Above NPR 50 to NRP 100	No	3
Service	5-10 years	Above NPR 10.0 to NPR 50	No	2
Service	5-10 years	Above NPR 10.0 to NPR 50	No	3
Service	5-10 years	From NPR 1.0 to NPR 5.0	Yes	2

Table 6: Risk resilience of the SME

The SME relatively make capacity allocation decision based for investment with credit funds generating return which are based on market stipulations, so capability for analysis data driven investment strategies required for long term sustainable return proving relation of H4.

The businesses tend to be less inclined to increasing reinvestment for product differentiation and innovating new product and services despite the availability of fund, SME need capability of scaling for sustainable revenue growth or competitive ability establishing relation as per H5

Nature of Business	Legal Business Status	Years of business establishment	Total capital investment (Amount in Million)	Total Business Loan (Amount in Million)	Have participated in literacy campaigns organized by Banks	We regularly make strategic decisions for right capital allocation, ensuring maximum return.	We have a business revenue growth from reinvesting in product/service innovation and differentiation through the use of available external funds.
Retail (Trade)	Partnership	10-15 years	Above NPR 150 - Up to NPR 500	Above NPR 50 to NRP 100	Yes	4	3
Retail (Trade)	Sole Proprietorship	3- 5 years	Up to NPR 150	Above 5.0 to NPR 10.0	No	4	2
Retail (Trade)	Partnership	5-10 years	Above NPR 150 - Up to NPR 500	Above NPR 50 to NRP 100	No	3	3
Retail (Trade)	Sole Proprietorship	5-10 years	Up to NPR 150	Above 5.0 to NPR 10.0	No	4	2
Retail (Trade)	Sole Proprietorship	5-10 years	Up to NPR 150	From NPR 1.0 to NPR 5.0	Yes	2	2
Service	Partnership	5-10 years	Above NPR 150 - Up to NPR 500	Above NPR 10.0 to NPR 50	No	4	3
Service	Sole Proprietorship	10-15 years	Above NPR 150 - Up to NPR 500	Above NPR 50 to NRP 100	No	4	3
Service	Partnership	5-10 years	Up to NPR 150	Above NPR 10.0 to NPR 50	No	4	4
Service	Sole Proprietorship	5-10 years	Up to NPR 150	Above NPR 10.0 to NPR 50	No	3	3
Service	Partnership	5-10 years	Up to NPR 150	From NPR 1.0 to NPR 5.0	Yes	2	2

Table 7: Decision making and growth of the SME

5.2.6. Access to credit

The access to credit although available to all SMEs, they seem to not comprehend the requirements of SMEs and be provided with complete information. So, developing capabilities to assess the product and services and make optimal use is required. So, access to credit is seen to play mediating role between credit literacy and SME sustainability establishing H6

Credit products and services are provided by banks with full information at competitive interest rates and favorable repayment terms.

10 responses

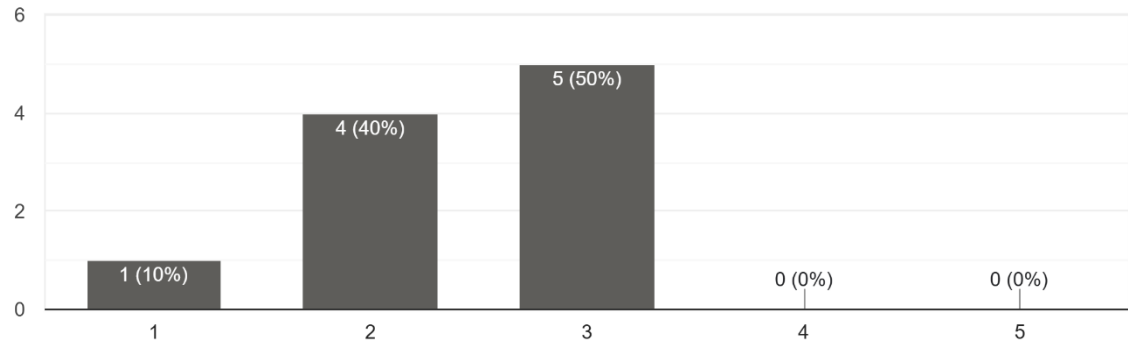


Figure 4: Access to credit

5.2.7. Credit-Based Capability to Sustainability

The SME customers have put strong agreement on need of capability-based credit literacy program that can develop business performance to sustain business during uncertainties. The direct impact of capabilities on sustainability is established in aggregate of component on sustainability establishing H1 hypothesis.

Developing the capabilities of our business will sustain our business regardless of external uncertainties.

10 responses

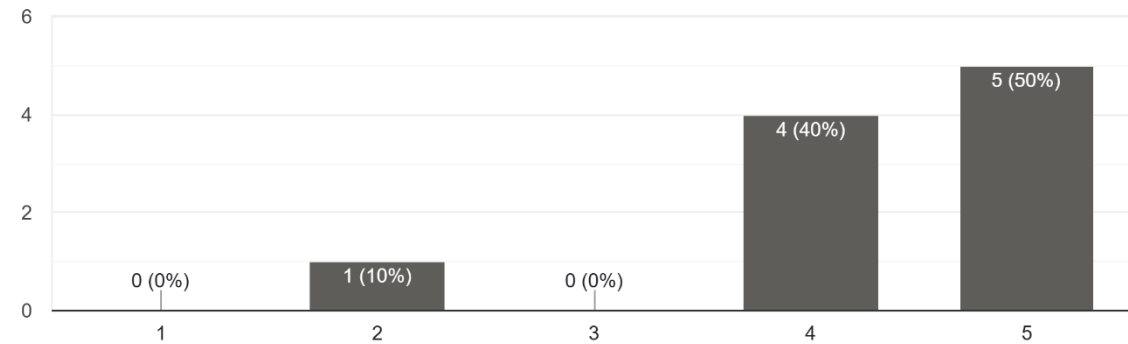


Figure 5: Capability based - credit literacy to sustainability

5.2.8. Synthesis of Findings

From the analysis of data, components of capabilities model of credit literacy have been established as impacting the subsequent sustainability components.

The credit capability competence impacts profitability, risk management affects risk resilience, capital allocation impacts decision making while scalability impacts firm financial growth.

Access to finance mediate the impact of credit literacy on SME sustainability but level of impact and level of mediation needs to be tested with larger samples and statistical tool.

Sectorial differentiation is seen with focus on risk management capability including knowledge of risk management tool needed for Service, while credit capacity competence with product and service syncing with revenue cycle needed for retail SME. Requirement of capital allocation and scaling capability is seen similar in both retail and service businesses.

So, only by integrating capability-based model with access to finance ensures SMEs can increase their business performance ensuring economic sustainability.

6. Implications of Research

6.1. Theoretical Implications

This research with combined interdisciplinary theory provides a foundational framework of integrating capabilities into credit management/debt literacy for economic sustainability. It addresses the need of credit literacy which includes capabilities development.

6.2. Practical Implications

This research can be used by Banks to enhance their credit literacy subset of financial literacy program.

It will provide a model to integrate capability building into literacy program, that equips SMEs to utilize loan sustainably. As a result, in long run the default rate will decrease, increasing the quality of SME portfolio.

6.3 Policy and Regulatory Implications

Government level literacy model can adapt the framework to build capabilities to general SMEs encouraging use of formal finance for business growth and expansion

7. Limitation of Study and recommendation for future research

Since, this is a pilot study, the research has been based on only 10 sample size for testing the applicability of research, at least sample size of 120 SME customers is to be taken. Analysis tool of SEM is still be used for finding the significance of relationships between variables. The future research can include other sectors of SME including manufacturing, agriculture, etc to

Increase the generalizability of research. Dual mediation model can be used to link credit literacy and SME Sustainability. Digital adaptation can also be used to frame a capability, and environment and social aspect of Sustainability can also be researched, adding to the framework.

8. Conclusion

The research is based on existing problem of high default rate in SME portfolio of Nepalese Banking Industry. The model adds capabilities based on Amartya Sen, capability approach which speaks only providing access to credit is not enough, its use to sustainability is required. So, since bank and SMEs are dependent on each other, enhancing capabilities has to be kept in fore font to ensure viable business.

References (Harvard Style)

- Aziz, S.R., Ahmad, K. and Ali, A. (2025) 'Financial Stability, Credit Access, and the Paradox of Literacy: SME Performance in Pakistan's Economic Recovery', *Journal Name* (ISSNs provided), pp. 1-19.
- Firdaus, C.B. (2024) 'Building financially sustainable MSMEs: Sequenced capability bundles that cut APR, lift liquidity, and truncate downside risk', *Central Community Development Journal*, 4(2). doi:10.55942/ccdj.v4i2.810.
- Hamal, J. B. (2025) "Non-Performing Loan in Nepalese Commercial Banks: The Role of Internal and External Factors", *Nepal Journal of Multidisciplinary Research*, 8(3), pp. 13–32. doi: 10.3126/njmr.v8i3.76397.
- Kalaieesan, K. (2024) 'Access to finance as a moderator between financial literacy and debt level of micro and small enterprises in the Northern Province of Sri Lanka', *NIBM Journal of Knowledge Innovation*, pp. 1-14.
- Kandel, U. (2025) "Financial Literacy for Business Sustainability: A Case of Lekhnath, Kaski, Nepal", *Journal of Development and Administrative Studies*, 33(2), pp. 43–58. doi: 10.3126/jodas.v33i2.92314.
- Khanal, R. (2025) Financial literacy and the sustainability of rural SMEs in Nepal: Examining the mediating effects of access to finance and risk attitude. *NPRC Journal of Multidisciplinary Research*, 2(12), pp. 81–112. <https://doi.org/10.3126/nprcjmr.v2i12.86962>
- Meressa, H.A. (2023) 'Entrepreneurial financial literacy - small business sustainability nexus in Ethiopia', *Cogent Business & Management*, 10(1), p. 2218193. doi:10.1080/23311975.2023.2218193.
- Mitropoulos, P. (2026) *Assessing the sustainability performance of SMEs across countries and sectors. Environmental Impact Assessment Review*, 116, 108104.
- Nguyen, B. and Canh, N.P. (2021) 'Formal and informal financing decisions of small businesses', *Small Business Economics*, 57(3), pp. 1545–1567. doi: 10.1007/s11187-020-00361-9.
- Nepal Rastra Bank (2026) Circular No. 12 dated 17 March 2026, amending *Unified Directive 2082 applicable to Class "A", "B", and "C" licensed Banks and Financial Institutions (BFIs)*. Kathmandu: Nepal Rastra Bank
- Pokharel, S. (2025) "Financial Literacy and SME Sustainability in Chitwan and Nawalparasi: A Mediation Analysis", *BMC Journal of Scientific Research*, 8(1), pp. 99–111. doi: 10.3126/bmcjsr.v8i1.87912.
- Rijal, U. (2025) 'Small and Medium Enterprises (SME) Backbone of Nepalese Economy', *The Nepal Chartered Accountant*, 28(1), pp. 12-15. Available at: <https://en.ican.org.np/en/> (Accessed: 11 April 2026).
- Sebastian Rink (2024) 'Sustainable small business lending', *Sustainable Futures*, 8, p. 100292. <https://doi.org/10.1016/j.sftr.2024.100292>
- World Economic Forum (2026) *Driving global growth through the power of small business*, 13 January. Available at: <https://www.weforum.org/stories/2026/01/driving-global-growth-through-the-power-of-small-business/> (Accessed: 11 April 2026 and 13 April 2026)

Wright, A. and Michailova, S. (2022) 'Critical literature reviews: A critique and actionable advice', *Management Learning*, 1–21.
<https://doi.org/10.1177/13505076211073961>

Zaman, M., Tanewski, G. and Ekanayake, G. (2025) 'What does sustainability mean for small and medium enterprises: A systematic literature review', *Journal of Cleaner Production*, 492, p. 144830.

Appendices

Appendix A: Abbreviations

SME: Small and medium-sized Enterprises

GDP: Gross Domestic Product

NRB: Nepal Rastra Bank

BFI : Banks and Financial Institutions

Appendix B: Survey Questionnaire

SME Survey

This questionnaire is developed by Susma Thapaliya, a DBA student at UWTSD, for designing a capability-based credit literacy program for small and medium enterprises of Nepal.

This survey will only take 3 minutes to complete the form.

The data provided herewith in the survey are used for only academic purposes.

** Indicates required question*

1. I provide my informed consent to use enterprise data for academic use in research only.

Mark only one oval.

Yes

No

Demographic questions

General questions relating to SME

2. Name of Enterprise *

3. Are you owner or key personnel of the business?

Mark only one oval.

Yes

No

4. Nature of Business *

Mark only one oval.

Wholesale(Trade)

Retail (Trade)

Service

Manufacturing

Agriculture

Other:

5. Legal Business Status

Mark only one oval.

Sole Proprietorship

Partnership

Joint Venture

6. Years of business establishment *

Mark only one oval.

3- 5 years

5-10 years

10-15 years

15 years and above

7. Bank Loan Experience *

Mark only one oval.

Up to 2 years

2-5 years

5 -10 years

Above 10 years

8. Total capital investment *

Mark only one oval.

Up to NPR 150 million

Above NPR 150 million – Up to NPR 500 million

9. Nature of loan *

Mark only one oval.

Cash Credit

Demand Loan

Term Loan

Vehicle Loan

Non-Funded loan: Letter of credit, BG

Other:

10. Total Business Loan *

Mark only one oval.

From NPR 1.0 million to NPR 5.0 million

Above 5.0 million to NPR 10.0 million

Above NPR 10.0 million to NPR 50 million

Above NPR 50 million to NRP 100 million

11. Turnover/(Revenue) Period *

Mark only one oval.

Annual

Seasonal

Other:

12. Have participated in literacy campaigns organized by Banks *

Mark only one oval.

Yes

No

Specific questions

Please use the following references for the answer.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Capabilities-based Components

Credit Capacity Competence

13. Our business has optimum cash flow to cover the business's short-term obligations and long-term obligations, including the bank's obligations.

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

14. We understand terms and conditions of the credit product and services used by our business; it matches our business's nature and revenue cycle

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

15. We understand our business's financial position, including key profitability ratios generated from our internal records and regulatory financial statements.

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

Risk Management

16. We are able to analyze possible financial risks and keep a financial buffer to protect regular business operations and profitability.

*

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

17. We use proper risk management tools (e.g., financial forecasting, risk analysis) to foresee possible financial risks

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

Capital Allocation

18. We make informed investment decisions that give maximum return from credit available to us.

*

Mark only one oval.

1 2 3 4 5

STRONGLY DISAGREE ☐ ☐ ☐ ☐ ☐ STRONGLY AGREE

19. Our investment decision is data-driven rather than based on market stipulation. *

Mark only one oval.

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

— STRONGLY DISAGREE — STRONGLY AGREE

Scalability

20. We can make reinvestment decisions that increase return to the business through *
product/service innovation for increasing profitability.

Mark only one oval.

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

STRONGLY DISAGREE — STRONGLY AGREE

21. We can make reinvestment decisions that increase return to the business through *
product/service differentiation by either increasing competitiveness or reducing cost as per market demand.

Mark only one oval.

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

STRONGLY DISAGREE — STRONGLY AGREE

Access to credit

Credit products and services from the commercial class— A banks

22. We can access a variety of banks' credit products as per our need and time of genuine requirement.

*

Mark only one oval.

	1	2	3	4	5
	☐	☐	☐	☐	☐
—	STRONGLY DISAGREE			STRONGLY AGREE	

23. Credit products and services are provided by banks with full information at competitive interest rates and favorable repayment terms.

*

Mark only one oval.

	1	2	3	4	5
	☐	☐	☐	☐	☐
STRONGLY DISAGREE				STRONGLY AGREE	

Profitability, Resilience, decision-making, and growth

24. We have been able to maintain satisfactory profitability for the last 3 years with credit funds.

Mark only one oval.

	1	2	3	4	5
	☐	☐	☐	☐	☐
STRONGLY DISAGREE					

25. We have sufficient liquidity to survive prolonged revenue dips with risk management practise

Mark only one oval.

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

26. We regularly make strategic decisions for right capital allocation, ensuring maximum return.

Mark only one oval.

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

— STRONGLY DISAGREE — STRONGLY AGREE

27. We have a business revenue growth from reinvesting in product/service innovation and differentiation through the use of available external funds.

*

Mark only one oval

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

SME sustainability

28. Developing the capabilities of our business will sustain our business regardless of external uncertainties.

Mark only one oval.

	1	2	3	4	5
☐	☐	☐	☐	☐	
STRONGLY DISAGREE			STRONGLY AGREE		

29. What is the most important capability that would improve your business's ability* to use credit for sustainable growth?

Part 2: Reflective Account

9.1. Introduction to Reflection

Doctoral research is conducted to develop applied research which can be used by businesses, as research deals with providing solutions existing to the problem. This pilot study of my research is based on providing model for developing credit literacy targeted towards SME economic sustainability. This reflection includes from where my research motive was derived from, development of theories and analysis of existing research associated with scope of research, research, research methodology, challenges faced and learning curve. This reflection is on how pilot study has been completed.

9.2. Topic selection and professional context:

My professional experience stems from years of experience in credit department and credit front line. I have been involved in all process related credit including screening to most importantly post disbursement monitoring and control. I have seen how mandatory compliance to regulatory requirement has brought on below par lending and increased default rate especially in SME segment. So, to solve the issue of misallocation of credit product and services, a program redirecting the proper use of fund while equipping SMEs with capabilities for businesses' economic sustainability is required. The solution must stem from reinvesting process of credit especially post disbursement credit monitoring and control.

The existing literature also converges on a need of targeted capability building program from institutional level. Hence research is undertaken by me on developing a capability-based model for credit literacy.

The main aspect of capability was visioned from capability approach, which is inter-disciplinary, which was based on how the utility is derived from resource. Multiple application of approach was evaluated including business applications. This synthesis of this theory was made considering institute as well as SME perspective with sustainability in mind.

9.3. Engagement with Literature

Recent published research articles consisting extensive knowledge on variables, theories, contextual relationship between variables along with development had been reviewed. Components were added up with evolving concepts and indication of requirements. Major articles have been referenced, and base of existing literature has been taken for developing a conceptual mapping. The content development, evaluation of method of analysis tools and method of finding synthesis was adapted from basis of existing literature. Contextualization of research problem was also evident in several countries with solution in terms of credit management literacy, debt literacy combining skills, knowledge and ability.

9.4. Research Design, Methodological choices and Data Collection

Explorative research has been conducted to design a new framework.

Since, this only pilot study a base of total 10 sample SME customers has been considered from retail and service sector. Structured questionnaire using closed ended likert scales was used, as data collection was made from SME customers through google form.

Capabilities defining questions as well as thematic questions were surveyed to extract SME owners understanding and use.

Data was analysed based on charts and excel database. Synthesis of data was made into findings establishing variables and their relationship. But, for full fledge research, actual degree of impact will be measured using SEM method and data will also be collected and analysed to develop a holistic framework.

8.5 Data Collection and Analysis Experience

The google form with survey questionnaire was sent through email. The data was collected through survey. The questions were designed in simple terms for greater understanding of SME owners, who were the main respondents. Analysis was planned through chart generated from google survey, but since the scope of this research also includes finding the difference between Retail and Service sector, data from google sheets were also used. The knowledge and ability were analysed within capabilities; variable were established henceforth. The relationship between variable of were also seen between components of capability and determinants of sustainability. Although, relation was seen, level of significance of relationship could not be established. Full-fledged research with data analysis from at least 120 SMEs customer with SEM model will show significance.

9.5. Challenges Encountered and Solutions

Since, this research includes new frameworks, developing a set of capabilities which encompass all the economic variable was difficult. Since, the existing in relation to credit literacy/debt literacy/credit management literacy is very limited. Even, challenging was finding article which included all scope of research. The sustainability variable was included many factors such as social and environmental, drilling down to economic factors only was a challenge.

As for data analysis, the extent of relationship can only be determined by using SEM modelling. Digital adaptability was seen as tool for enhancing capabilities, considering the context of Nepal, especially in credit. Adaption is still in early stage.

So, multiple references were taken from cross-discipline journal, and various fundamental articles were analysed for developing concepts. Relationship was established but significance of relationship can only be set through analysis of data from larger sample size. Generalizability of finding can only be assumed by increasing sample size, sample category.

Since, I am a banking professional, minimizing biasness was also challenging, but same was overcome with integrating view from SMEs.

9.7. Reflection on Academic Writing and Publishing

The academic writing is more than just a testing of concept, it is in-depth analysis, interpretation and synthesis. Each line must be carefully structured to clarify the findings and interpretation. Any concept must be backed by review on their existing literature related to development, theories and contradictions. Since, this pilot study forms a base for doctoral level thesis, the scope of research leans towards application side rather than just theory testing. So, the pilot test was done to design and test variables. The process and structure is also very important in research writing as sequential development of framework was established from contextualization of problem to finding form research to most importantly implications of research. Since, this research is only pilot study, for publishing full-fledged research must be conducted with development of more holistic framework, tested with acceptable same size and actual analysis tool.

The value of the research must be determined, and publishing has to be done after peer-review to establish the unbiased view.

9.8. Learning Outcomes and Research Development

Conducting pilot test especially developing model was the most challenging while main learning curve of this research. Multiple context and theories were studied for establishing capabilities and component of sustainability. A strong and applicable research needs to examine multiple perspective and develop a holistic approach to incorporate recent developments. The research needs to be contributory or applicable, to be valuable. The research needs to justify the undertaking and needs to be fair representation of the outcome. Biasness needs to be minimized considering the true representation of research.

The pilot testing has ensured the establishment of variables and relationships, with development solutions based on problematization and established a feasibility of the research. The research is developed to be illustrative with clear conceptual map, data based and academically backed. The model will further develop using multiple mediation and adding to component set of technology for accommodating to recent research.

The data has to be collected from banking professionals including personnel from department as well as front-line branch level credit officers to find, comprehend and include the whole capabilities set.

9.9. Conclusion of Reflection

The importance of conducting pilot test to establish validity of research is realized. This pilot study has helped set foundation for full research on the set topic. Undergoing the process of research, which has to be on doctoral level, has set standard for actual applicable business research. Research is more about developing a new concept for a existing problem, which needs to be applicable.

Reflection is my take on research journey conducted including source of research idea, development of topic, establishing context, designing model and testing it. The research has tried to be objective and minimize the biasness as much as possible with base of existing research with references, international reports and national level published data from authorized sources.

There is a need for improving various parts of research including conceptual mapping, methodology and most importantly analysis for making research on contributory level.

