

Kingdom of Saudi Arabia
Midocean
Project Management

GRADUATION PROJECT 1

**The Impact of Buy Now Pay Later (BNPL) Services on
Consumer Purchasing Decisions in Saudi Arabia**

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Chapter Three: Research Methodology

3.1 Introduction

This chapter explains the methodology used in this study. The goal here is straightforward: to describe the decisions made about how the research was designed, who was studied, how the data was collected, and how it will be analyzed. Every methodological choice ties back to the research questions and hypotheses laid out in Chapter One, so this chapter is essentially the blueprint for how the study actually gets done.

The chapter covers operational definitions for each research variable, the overall research design using the research onion framework, the study population and sampling approach, the data collection method, the types of data used, and the statistical procedures that will be applied to test the hypotheses.

3.2 Operational Definitions for Research Variables

Operational definitions explain exactly how each variable in this study is being measured. Without them, terms like 'ease of use' or 'risk awareness' are too vague to be tested statistically. The definitions below translate each concept into something concrete that can be captured through survey items.

3.2.1. Ease of Use (Independent Variable)

Ease of use is operationalized as the degree to which a consumer perceives BNPL platforms as simple and effortless to use. In this study, it is measured through five Likert-scale items covering the simplicity of the sign-up process, checkout speed, clarity of the interface, and how much effort the platform requires from the user. Higher scores indicate a stronger perception of ease.

3.2.2. Financial Flexibility (Independent Variable)

Financial flexibility is operationalized as the extent to which a consumer perceives BNPL's installment structure as a way to manage their budget and make purchases more financially accessible. It is measured through five items assessing perceptions of budget relief, payment control, and the likelihood of completing a purchase when BNPL is available.

3.2.3. Risk Awareness (Independent Variable)

Risk awareness is operationalized as the degree to which a consumer actively considers the potential negative financial consequences of using BNPL — including late fees, missed payments,

and cumulative debt — before completing a purchase. It is measured through five items reflecting awareness and deliberation about these risks at the point of decision.

3.2.4. Consumer Purchasing Decisions (Dependent Variable)

Consumer purchasing decisions are operationalized as the likelihood that a consumer will initiate or complete a purchase as a result of BNPL being available. This is measured through five items assessing whether BNPL influences purchase completion, retailer choice, spending level, and overall attitude toward using BNPL as a payment method.

3.3 Research Design (Research Onion)

The research design for this study follows the research onion framework developed by Saunders, Lewis, and Thornhill, which provides a structured way to think through methodological decisions from the broadest philosophical choices down to the specific data collection techniques.

Table 3.1: Research Design Choices (Research Onion Framework)

Layer	Choice	Justification
Research Philosophy	Positivist	This study adopts a positivist philosophy. The assumption is that the relationship between BNPL-related factors and consumer purchasing decisions can be objectively measured and statistically tested. Positivism is well-suited to quantitative survey-based research like this one, where the aim is to identify patterns across a sample population rather than explore subjective experiences in depth.
Research Approach	Deductive	A deductive approach is used, meaning the study starts from established theories — specifically the Technology Acceptance Model and Perceived Risk Theory — and tests specific hypotheses derived from them. The direction moves from theory to data, not the other way around.
Research Strategy	Survey	A survey strategy was chosen because it allows data to be collected from a relatively large number of respondents efficiently, and it is well-suited to measuring attitudes and perceptions across a population. The questionnaire developed in this study (Appendix A of Assignment 1) serves as the survey instrument.
Research Choice	Quantitative	This study uses a quantitative approach, as the aim is to measure the strength of relationships between variables using numerical data. Responses are collected on a five-point Likert scale and analyzed using statistical

		methods.
Time Horizon	Cross-sectional	The study uses a cross-sectional time horizon, meaning data is collected at a single point in time. This approach is practical within the scope of a graduation project and appropriate for capturing a snapshot of consumer attitudes toward BNPL in the current market environment.
Data Collection & Analysis	Online questionnaire / SPSS v28	Data is collected through a self-administered online questionnaire distributed to Saudi consumers who have used BNPL services. The data is then analyzed using SPSS version 28, applying descriptive statistics, reliability testing (Cronbach's Alpha), and multiple regression analysis to test the three hypotheses.

Figure 3.1: Research Onion — Methodological Choices for This Study

(outer to inner)



Source: Adapted from Saunders, Lewis & Thornhill (Research Onion Model)

3.4 Research Population & Sampling Methods and Technique

This section describes the target population for the study and the approach taken to select the research sample.

3.4.1 Research Population

The target population for this study consists of consumers residing in Saudi Arabia who have used at least one Buy Now Pay Later service — such as Tabby, Tamara, or Madfu — for either online or in-store purchases. There is no officially published figure for the exact number of active BNPL users in Saudi Arabia, but industry reports consistently indicate that the market has millions of registered users across the major platforms, driven by the country's high smartphone penetration and the rapid growth of e-commerce.

The population spans consumers of different age groups, income levels, and genders, though prior research suggests that BNPL usage is most concentrated among millennials and Generation Z (ages 18–35), who represent a significant share of Saudi Arabia's digitally active consumer base.

3.4.2 Research Sample

Since it is not feasible to survey the entire population of BNPL users in Saudi Arabia, a sample was drawn from this population. The sample size was determined using the Krejci and Morgan (1970) table, which provides recommended sample sizes for various population sizes. Given that the population of Saudi BNPL users is large and not precisely defined, a common approach in similar studies is to treat the population as infinite or very large, which typically calls for a minimum sample of 384 respondents at a 95% confidence level and 5% margin of error.

For this study, a target sample of 385 respondents was set to meet this threshold. Respondents are adults (18 years and above) residing in Saudi Arabia who have personally used a BNPL service at least once. Participants who have never used BNPL were screened out via the first question of the questionnaire.

Table 3.2: Sample size determination — based on Krejci & Morgan (1970)

Population Characteristic	Value
Population Type	Large / Undefined
Confidence Level	95%
Margin of Error	5%
Minimum Sample Size	384
Target Sample (This Study)	385 respondents

Source: Krejci & Morgan (1970)

3.4.3 Sampling Method & Technique

This study uses a non-probability sampling technique, specifically convenience sampling. This means that the questionnaire was distributed to respondents who were accessible and willing to participate, primarily through online channels such as social media platforms and messaging applications widely used in Saudi Arabia.

Convenience sampling was chosen because the population of BNPL users in Saudi Arabia does not have a publicly available sampling frame that would allow for random selection. While this introduces some limitations in terms of generalizability, it is a commonly accepted approach in

consumer behavior research at this level of study, and the relatively large target sample size (385) helps mitigate the impact of any sampling bias.

3.5 Data Collection Method

Data for this study was collected using a self-administered online questionnaire, which was the most practical and efficient method for reaching Saudi consumers who use BNPL services. The questionnaire was designed to measure the four research variables — ease of use, financial flexibility, risk awareness, and consumer purchasing decisions — and was structured based on established scales from the technology acceptance and consumer behavior literature.

Table 3.3: Instruments used to measure research variables

Variable	Type	Dimensions	Items	Source
Ease of Use (EOU)	Independent Variable	General platform usability, Checkout speed and simplicity, Effort required	5	Adapted from Davis (1989) — TAM scale
Financial Flexibility (FF)	Independent Variable	Budget management, Affordability perception, Payment control	5	Adapted from BNPL consumer behavior literature
Risk Awareness (RA)	Independent Variable	Awareness of fees, Debt accumulation concern, Pre-purchase deliberation	5	Adapted from Featherman & Pavlou (2003) — Perceived Risk scale
Consumer Purchasing Decisions (CPD)	Dependent Variable	Purchase completion likelihood, Retailer choice influence, Spending behavior	5	Adapted from purchase intention literature

Note: All items are measured using a five-point Likert scale where 1 = Strongly Disagree and 5 = Strongly Agree.

Source: The student

3.6 Types of Data

This study uses two types of data: primary data collected directly for the purposes of this research, and secondary data drawn from existing published sources.

3.6.1 Primary Data

Primary data was collected through the self-administered online questionnaire described in Section 3.5. This data is original — it was gathered specifically for this study and did not exist in a usable form before the survey was distributed. The primary data includes respondents' demographic information and their responses to the 20 Likert-scale items measuring ease of use, financial flexibility, risk awareness, and consumer purchasing decisions.

3.6.2 Secondary Data

Secondary data was used during the literature review stage (Chapter Two) and to provide context for this chapter. This includes academic journal articles, published reports from SAMA on BNPL regulation in Saudi Arabia, and market research reports on the size and growth of the Saudi BNPL market from providers such as IMARC Group and Mordor Intelligence. Secondary data was not collected by this researcher but was used to build the theoretical framework and justify the methodological choices made in this study.

3.7 Statistical Analysis Procedures

After collecting the survey responses, the data will be coded and entered into SPSS version 28 for statistical analysis. The following procedures will be applied:

Descriptive analysis will be the first step, providing a general profile of the sample: demographic breakdowns, frequency distributions, and summary statistics (means and standard deviations) for each variable. This gives a baseline understanding of who responded and how they tend to score on each construct.

Reliability testing using Cronbach's Alpha will be run for each of the four scales (EOU, FF, RA, and CPD) to confirm that the items within each scale are measuring the same construct consistently. A Cronbach's Alpha of 0.70 or above is generally considered acceptable for social science research.

Validity will be assessed through exploratory factor analysis (EFA) to confirm that the items in each scale load onto the expected factors, providing evidence that the questionnaire is measuring what it is intended to measure.

Multiple regression analysis will then be used to test the three hypotheses — examining the individual relationship between each independent variable (ease of use, financial flexibility, risk awareness) and the dependent variable (consumer purchasing decisions), while controlling for the other variables. This allows the study to determine not just whether each relationship is statistically significant, but also which factor has the strongest effect.

3.8 Conclusion

This chapter has laid out the complete methodological approach for this study. A positivist, deductive, quantitative research design was chosen as the most appropriate framework for testing the three hypotheses about BNPL adoption among Saudi consumers. Data is collected through an online survey using a validated Likert-scale questionnaire, from a convenience sample of 385 Saudi BNPL users, and will be analyzed using SPSS v28. The decisions made here are consistent with the research questions, the theoretical framework from Chapter Two, and the practical constraints of this study. Chapter Four will present the results of this analysis.