

THE INFLUENCE OF PERCEIVED USEFULNESS ON PURCHASE INTENTIONS: INSIGHTS FROM CONSUMER BEHAVIOUR RESEARCH

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ABSTRACT

In the framework of study on consumer behaviour, this article makes an investigation into the connection between perceived usefulness (PU) and purchase intention (PI). To gain an understanding of the theoretical foundations and empirical evidence that support this link, it evaluates the existing body of research. Prior research has mostly focused on the Technology Acceptance Model (TAM) and other related frameworks to investigate how the perception of utility (PU) influences the attitudes and intentions of consumers with regard to adopting or acquiring items. PU has a crucial influence in moulding consumer decisions, and the study highlights its implications for marketing strategies that aim to enhance product acceptance and sales. The paper is a synthesis of the research that highlights the significance of PU.

Keywords: Perceived Usefulness, Purchase Intention, Consumer Behaviour, Technology Acceptance Model (Tam), Marketing Strategies, Product Acceptance, Empirical Evidence, Theoretical Foundations.

INTRODUCTION

It is essential for firms that want to be successful in competitive marketplaces to have a better understanding of consumer behaviour. Perceived Usefulness (PU) in particular stands out as a significant component among the many aspects that influence customer choices. Individuals' opinions regarding the benefits and usefulness of utilising a specific product or technology are reflected in the Technology Acceptance Model (TAM), which is where the concept of PU originated (Davis, 1989). A comprehensive investigation of purchase intent (PU) and its connection to purchase intention (PI) is presented in this article. The research also gives insights into how businesses may make use of these insights to improve customer engagement and sales efficiency.

According to the subject of information systems and consumer behaviour, the Technology Acceptance Model (TAM) is a theoretical framework that is widely utilised. The TAM is an attempt to describe how users learn to embrace and use new technology. It was developed by Fred Davis in the 1980s. The Technology Acceptance Model (TAM) is a theory that suggests that perceived ease of use and perceived utility are significant drivers of an individual's attitude towards utilising a technology, which in turn determines the individual's actual usage behaviour that they engage in.

The term "*perceived ease of use*" refers to the user's view of how simple technology is to operate, whereas "*perceived usefulness*" refers to the user's idea that utilising the technology would improve their performance at work or their level of productivity. The Technology Acceptance Model (TAM) proposes that these views have a direct influence on

an individual's intention to utilise a technology, which ultimately dictates how they will use the technology.

TAM has been demonstrated to be effective and verified in a wide range of situations, including consumer goods, organisational systems, and educational technology, among others. Researchers and practitioners are able to better understand user behaviour and create technologies that are more likely to be accepted and utilised efficiently as a result of this. It offers useful insights into the elements that influence the technological acceptance and utilisation.

Overall, the Technology Adoption paradigm (TAM) continues to be a core paradigm in the study of technology adoption. It also continues to shed light on research and practical applications in a wide variety of sectors, including education and healthcare, as well as marketing and business.

According to Davis (1989), the fundamental component of PU is an evaluation of the degree to which individuals believe that the utilisation of a product or technology will elevate their level of performance or productivity. When it comes to consumer behaviour, the term "*product evaluation*" (PU) encompasses not only technology products but also a wide variety of other goods and services. When it comes to making purchases, consumers base their selections on the perceived benefits offered by various products, whether they are considering a new smartphone, a subscription service, or household appliances. Their Purchase Intention (PI), which reflects their propensity to buy, is directly influenced by this appraisal (Ajzen, 1991).

It is vital to go into the theoretical frameworks that support the conceptualization of PU to understand the impact that PU has on PI. PU study revolves primarily around Davis's (1989) Technology Acceptance Model (TAM), which they developed. Users' attitudes towards the adoption of technology are greatly influenced by PU, according to the TAM, which in turn shapes the users' intents regarding their conduct. According to Venkatesh and Davis (2000), PU is intricately connected to the concept of believed Ease of Use (PEOU), which is believed to be the ease with which a system can be utilised. The applicability of TAM has been validated by several studies across a wide range of consumer and technology contexts, showing the crucial importance that PU plays in influencing user behaviour.

To comprehend the influence that PU has on the behaviour of consumers, it is necessary to measure it accurately. According to Davis (1989) and Venkatesh and Davis (2000), researchers utilise a variety of scales and approaches to evaluate PU. One of the most common scales is a seven-point Likert scale, which allows respondents to indicate how much they agree with statements concerning the usefulness of a product. In-depth interviews and focus groups are examples of qualitative methodologies that supplement quantitative approaches by offering deeper insights into the perceptions and experiences of consumers in relation to purchase unit (PU) products.

LITERATURE REVIEW

According to Euromonitor International (2012b), the reason why online retailers are able to offer lower pricing than traditional brick-and-mortar businesses is because they have fewer operational costs. This practice is frequently connected with high rates of shopping cart abandonment (Kiang, 2011). A significant number of consumers conduct product research online prior to making purchases offline. According to Broekhuizen (2009), consumers place a significant amount of reliance on online platforms for the purpose of obtaining product information, comparing prices, and reading reviews; nonetheless, they may encounter difficulties when making final purchase decisions. According to Lim (2012) and Weathers

(2007), there is a growing recognition of the role that websites and social media play in altering the views of consumers using useful content and sensory experiences.

The influence of perceived usefulness (PU) on purchase intention (PI) has been extensively investigated on a wide range of product categories in the context of consumer behaviour research. To shed light on the theoretical underpinnings and empirical data pertaining to PU and its influence on consumer decision-making, this section provides a synthesis of the existing body of literature.

Technology Acceptance Model (Tam)

A core framework for understanding how PU effects PI is provided by the Technology Acceptance Model, also known as TAM. This theory, which was developed by Davis (1989), proposes that people's opinions of the usefulness of a technology have a major impact on their intention to utilise that technology. (Davis, 1989; Venkatesh & Davis, 2000) This model has been widely employed in several contexts, including consumer and technology contexts, in order to explain adoption patterns.

Perceived Usefulness in Consumer Behaviour

PU encompasses a wide range of products and services in the field of consumer behaviour research, going beyond technology items. In Davis (1989), consumers evaluate the perceived utility (PU) of a product based on their perceptions of how the product improves their productivity or enjoyment. According to Ajzen (1991), this appraisal determines their PI in a straightforward manner, which indicates their propensity to buy a product.

Impact of Perceived Usefulness on Purchase Intention

Studies that are based on empirical evidence show PU as an important factor in determining PI. Verhoef (2009), for example, conducted research that highlights the fact that customers' views of the utility and benefits of a product have a substantial influence on the decisions that they make regarding their purchases. Similarly, Schlosser (2003) discovered that consumers' perceived benefits and the ease of comparison in online purchasing platforms both contribute to an increase in their potential income.

METHODOLOGICAL APPROACHES

The link between PU and PI is investigated using a variety of research approaches. Thematic analysis is one example of a qualitative approach that can provide subtle insights into the attitudes and motives of consumers (Braun & Clarke, 2006). To determine PU and PI, quantitative research frequently use structured surveys that are based on Likert scales (Davis, 1989; Venkatesh & Davis of 2000).

Consumer Behaviour in Online Environments

The use of PU is a very important factor in determining the behaviours of customers when it comes to online buying. In the context of online retail settings, Lim (2012) places an emphasis on the role that "*experience quality*" and "*perceived value*" have in moulding the loyalty of customers and their intentions to make purchases. For example, Kiang (2011) explores how consumers' perceived utility (PI) might be improved using online product presentations and congruency cues.

PU is shown to be significant in shaping consumer attitudes and purchasing intentions across a wide range of product categories, as demonstrated by the literature study. Understanding consumer decision-making processes continues to be a crucial aspect of PU, which is founded on TAM and is supported by empirical facts. Further investigation of moderating factors and changing consumer behaviours in both traditional and digital market situations should be prioritised for future research.

An overview of the literature review is presented in the form of a tabular summary, organised chronologically, with a particular emphasis on perceived usefulness (PU) and purchase intention (PI):

Year	Author(s)	Key Findings	Scope of Further Research
1989	Davis	Introduced the Technology Acceptance Model (TAM), emphasizing PU as a determinant of technology use.	Explore moderating factors affecting PU-PI relationship in different contexts.
1991	Ajzen	Developed the Theory of Planned Behaviour, highlighting PI as influenced by attitudes and subjective norms.	Investigate cross-cultural differences in PU-PI dynamics.
2003	Schlosser	Explored how perceived benefits and ease of comparison in online shopping platforms influence PI.	Examine the role of personalization and customization in enhancing PU and PI.
2006	Braun & Clarke	Introduced thematic analysis as a qualitative method to understand consumer perceptions of PU.	Compare qualitative findings across different consumer demographics (age, gender, etc.).
2011	Kiang	Examined the impact of online product presentations on PI through congruency cues.	Investigate the role of trust and security perceptions in online transactions.
2012	Lim	Investigated how experience quality influences online shopping values and loyalty.	Study the integration of offline and online experiences on PU and subsequent PI.
2019	Verhoef	Explored CRM efforts on customer retention and development, indirectly impacting PI through perceived value.	Analyse the influence of social media and influencer marketing on PU and PI.

The following table 1 provides a summary of the most important studies and their conclusions in relation to PU and PI in consumer behaviour research. It also highlights areas that require more investigation to improve understanding and implementation in marketing strategies and consumer engagement practices.

RESEARCH GAPS

Taking into consideration the breadth of additional research that was found from the evaluation of the relevant literature, the following are some research gaps that could serve as a basis for future study in the subject of perceived usefulness (PU) and purchase intention (PI):

- a) **Personalization and Customization:** Investigate the role of personalized marketing strategies in enhancing PU and influencing PI.
- b) **Trust and Security:** Examine how perceptions of trust and security in online transactions affect PU and subsequent PI.
- c) **Integration of Offline and Online Experiences:** Understand how the integration of offline and online shopping experiences impacts PU and PI.

RESEARCH METHODOLOGY

Research Objectives

- a) To examine the effectiveness of personalized marketing approaches in enhancing PU and influencing PI.
- b) To explore how the integration of offline and online shopping experiences affects PU and subsequent PI.

Research Questions

- a) How do cultural differences influence the relationship between Perceived Usefulness (PU) and Purchase Intention (PI) across different product categories?
- b) What are the effects of personalized marketing strategies on consumers' perceptions of PU and subsequent PI in online shopping contexts?
- c) What role does the integration of offline and online shopping experiences play in shaping consumers' PU and PI across various demographics?

The study gaps, aims and questions that have been presented here offer a systematic strategy for future studies to delve deeper into understanding the dynamics of PU and PI in consumer behaviour research. These studies will offer insights that can successfully increase consumer engagement techniques and inform marketing strategies.

PU and its interaction with PI are two examples of difficult topics that can be better understood through qualitative analysis through the provision of significant insights. Researchers can recognise recurrent themes and patterns using thematic analysis of qualitative data, which may be obscured by quantitative methodologies. The purpose of this method is to discover the underlying motivations and perspectives of respondents by classifying their responses according to predetermined themes (Braun & Clarke, 2006”). A comprehensive understanding of how consumers perceive the utility of products and technology is provided by the application of qualitative analysis in this study. This understanding is then used to inform marketing strategies that are productive. After conducting in-depth interviews with twenty-five respondents, the researchers next carried out theme analysis on the data they gathered.

Python Code for Thematic Analysis with the help of Dendrogram

```
import numpy as np
import pandas as pd
from scipy.cluster.hierarchy import dendrogram, linkage
import matplotlib.pyplot as plt

# Sample data encoding
data = {
    'Response ID': range(1, 26),
    'Internet Experience': [
        'Social media and news', 'Professional networking', 'Reading articles', 'Info gathering',
        'Work-related tasks', 'Online courses', 'Entertainment and info', 'Research and browsing',
        'Work and entertainment', 'Browsing and info', 'Online gaming', 'Professional learning',
        'Info gathering', 'Entertainment', 'Browsing and research', 'Professional tasks',
        'Email and news', 'Social networking', 'Entertainment', 'Streaming videos',
```

```

    'Online shopping research', 'Work and learning', 'Browsing and info', 'Social networking'
  ],
  'Ease of Comparison': [
    'Good for second-hand items', 'Convenient for rare finds', 'Useful for bulk buying',
    'Saves on travel',
    'Efficient shopping', 'Great for bargain hunting', 'Convenient for busy lives', 'Efficient
    and quick',
    'Good for electronics', 'Convenient shopping option', 'Great for niche items', 'Access to
    multiple brands',
    'Helpful for unique finds', 'Efficient shopping method', 'Finds unique items', 'Good for
    electronics',
    'Useful for gifts', 'Useful for bulk purchases', 'Great for electronics', 'Great for bargain
    hunting',
    'Finds unique items', 'Great for niche items', 'Convenient and fast', 'Access to multiple
    brands'
  ],
  'Access to Information': [
    'Compare user reviews', 'Easy to compare similar items', 'Comprehensive comparison',
    'Easier product comparison',
    'Compare prices easily', 'Many seller options', 'Multiple product options',
    'Comprehensive comparisons',
    'Easy product comparison', 'Multiple product comparisons', 'Easy to compare products',
    'Easy to see all options',
    'Convenient comparison', 'Compare prices easily', 'Easy to compare features', 'Variety of
    sellers',
    'Easy product comparison', 'Detailed comparisons', 'Simple and fast comparison', 'Easier
    price comparison',
    'Easy to compare features', 'Easy to compare products', 'Wide range of options', 'Easy to
    see all options'
  ],
  'Time-saving': [
    'Saves travel time', 'Saves significant time', 'Very time-saving', 'Quick and easy',
    'Fast decision-making', 'Saves browsing time', 'Fast decision-making', 'Quick purchases',
    'Fast browsing', 'Reduces search time', 'Saves energy', 'Fast decision-making',
    'Quick process', 'Saves time on search', 'Quick purchases', 'Fast browsing',
    'Quick and easy', 'Time-saving', 'Time-saving', 'Fast decision-making',
    'Quick purchases', 'Saves energy', 'Quick and convenient', 'Fast decision-making'
  ]
}

```

```

# Create a DataFrame
df = pd.DataFrame(data)

```

```

# Encode categorical data
df_encoded = df.apply(lambda x: pd.factorize(x)[0])

# Compute the linkage matrix
Z = linkage(df_encoded, 'ward')

# Plot the dendrogram
plt.figure(figsize=(10, 7))
dendrogram(Z, labels=df['Response ID'].values)
plt.title('Dendrogram for Themes and Subthemes')
plt.xlabel('Response ID')
plt.ylabel('Euclidean distances')
plt.show()

```

There is a dataset of survey responses related to internet experience, ease of comparison, access to information, and time-saving elements of online purchasing. This script does hierarchical clustering on the dataset. Here is a synopsis of the code:

a) Importing Libraries:

- numpy and pandas for data manipulation.
- dendrogram and linkage from `scipy.cluster.hierarchy` for hierarchical clustering.
- `matplotlib.pyplot` for plotting.

b) Creating the Data:

- A dictionary named `data` is created containing four keys: *'Response ID'*, *'Internet Experience'*, *'Ease of Comparison'*, *'Access to Information'*, and *'Timesaving'*. Each key holds a list of values.

c) Creating a DataFrame:

- The data dictionary is converted into a pandas DataFrame named `df`.

d) Encoding Categorical Data:

- The categorical data in the DataFrame is factorized (converted to numerical values) using `pd.factorize`, creating `df_encoded`.

e) Computing the Linkage Matrix:

- The linkage matrix `Z` is computed using the Ward method on the encoded DataFrame (`df_encoded`).

f) Plotting the Dendrogram:

- A dendrogram is plotted using the linkage matrix `Z`. The x-axis represents the 'Response ID' values, and the y-axis represents the Euclidean distances.

The dendrogram visually represents the hierarchical clustering of the survey responses, illustrating how closely related different responses are based on the encoded categorical data.

ANALYSIS OF RESULTS

Using thematic analysis, substantial insights into the elements that influence PU and PI among consumers have been identified. Important factors that determine customer behaviour include things like the user's level of internet experience and the perceived utility of various online purchasing platforms (Tables 2 & 3). According to Verhoef (2009) and Schlosser (2003), the participants' judgements of product utility, ease of comparison, access to information, and efficiency in terms of saving time all have an impact on their intentions to make a purchase. While developing focused marketing strategies, it is essential to consider the views and expectations of consumers, as these studies demonstrate (Table 4).

Table 2						
PROFILE OF RESPONDENTS FOR QUALITATIVE RESEARCH						
Sl. No.	Respondent ID	Professional Background	Country	Gender	Age	Education
1	Respondent-1	Modern Housewife	India	F	43	MA
2	Respondent-2	AI Professional	India	M	35	MSc
3	Respondent-3	Media Analytics Professional	India	M	40	MCom
4	Respondent-4	Journalist	India	F	30	MPhil
5	Respondent-5	Doctor	India	M	27	MS
6	Respondent-6	Boutique Owner	India	F	42	MCom
7	Respondent-7	Polytechnic Student	India	F	24	BSc
8	Respondent-8	Content Writer - Media	India	M	34	MA
9	Respondent-9	Singer	India	F	39	MA
10	Respondent-10	Digital Marketing Professional	India	F	33	MBA
11	Respondent-11	Modern Housewife	India	F	38	BA
12	Respondent-12	Professional Dancer	India	F	33	BA
13	Respondent-13	HS Teacher	India	M	41	MSc
14	Respondent-14	Professional - HR, Electricity Department	India	M	34	MBA
15	Respondent-15	Marketing Professional	India	F	33	MBA
16	Respondent-16	Professional - Media Sales	India	M	38	MBA
17	Respondent-17	Professional - Brand	India	M	40	MBA
18	Respondent-18	CSR, Oil Industry	India	M	45	BE
19	Respondent-19	Banking Industry	India	M	45	MBA
20	Respondent-20	Consultant & Entrepreneur - Digital Marketing	India	M	53	MBA
21	Respondent-21	Consultant & Entrepreneur - Analytics	India	M	46	MBA
22	Respondent-22	Head-Purchase, Electricity Department	India	M	50	MBA
23	Respondent-23	Coordinator - Self Help Group	India	F	45	BA
24	Respondent-24	Small Business Owner	India	F	45	MSc
25	Respondent-25	Small Business Owner	India	F	45	BA

Table 3	
SUMMARY OF PROFILE OF RESPONDENTS	
Variable	Description
Professional Background	Modern Housewife (2), AI Professional (1), Media Analytics Professional (1), Journalist (1), Doctor (1), Boutique Owner (1), Polytechnic Student (1), Content Writer - Media (1), Singer (1), Digital Marketing Professional (1), Professional Dancer (1), HS Teacher (1), Professional - HR, Electricity Department (1), Marketing Professional (1), Professional - Media Sales (1), Professional - Brand (1), CSR, Oil Industry (1), Banking Industry (1), Consultant & Entrepreneur - Digital Marketing (1), Consultant & Entrepreneur - Analytics (1), Head-Purchase, Electricity Department (1), Coordinator - Self Help Group (1), Small Business Owner (2)
Country	India (25)
Gender	Female (12), Male (13)

Age	Mean: 38.96, Median: 40, Mode: 45, Range: 24-53
Education	MA (3), MSc (3), MCom (2), MPhil (1), MS (1), BSc (1), MBA (8), BA (3), BE (1)

Table 4
TABLE CONSISTING OF RESPONSES SHOWCASING THE THEMES AND SUB-THEMES SPECIFIED

Response ID	Respondent's Feedback	Theme 1: Internet Experience	Theme 2: Perceived Usefulness	Sub-theme 2.1: Ease of Comparison	Sub-theme 2.2: Access to Information	Sub-theme 2.3: Timesaving
1	<i>"I use social media and news websites daily to stay updated. Buying second-hand items online has been useful for me, as I can compare user reviews easily. However, judging the quality can be tough, but it still saves me travel time."</i>	Social media and news	Good for second-hand items	Compare user reviews	Useful but quality is hard to gauge	Saves travel time
2	<i>"As a professional, networking online is crucial. I find it convenient to buy rare finds online, with easy comparison of similar items. The accuracy of reviews can be mixed, but it saves significant time."</i>	Professional networking	Convenient for rare finds	Easy to compare similar items	Mixed accuracy in reviews	Saves significant time
3	<i>"I enjoy reading articles online and often buy in bulk. Online platforms offer comprehensive comparisons. Although information needs validation, it's very time-saving."</i>	Reading articles	Useful for bulk buying	Comprehensive comparison	Info available but needs validation	Very time-saving
4	<i>"Gathering information online helps me save on travel. Product comparisons are</i>	Info gathering	Saves on travel	Easier product comparison	Helpful for general info	Quick and easy

	<i>easier, and general information is helpful. It's quick and easy."</i>					
5	<i>"For work-related tasks, I find online shopping efficient. Comparing prices is easy, though reviews are mixed. Decision-making is fast."</i>	Work-related tasks	Efficient shopping	Compare prices easily	Reviews are mixed	Fast decision-making
6	<i>"Taking online courses is part of my routine. I hunt for bargains online and find many seller options. Reviews can be hit or miss, but it saves browsing time."</i>	Online courses	Great for bargain hunting	Many seller options	Reviews are hit or miss	Saves browsing time
7	<i>"Entertainment and information are my primary internet uses. Shopping online is convenient for my busy life, with multiple product options and helpful reviews. Decision-making is fast."</i>	Entertainment and info	Convenient for busy lives	Multiple product options	Reviews are helpful	Fast decision-making
8	<i>"I use the internet for research and browsing. Shopping online is efficient and quick, with comprehensive comparisons. Information reliability varies, but I can make quick purchases."</i>	Research and browsing	Efficient and quick	Comprehensive comparisons	Mixed reliability of info	Quick purchases
9	<i>"Balancing work and entertainment online, I find shopping for electronics useful. Product</i>	Work and entertainment	Good for electronics	Easy product comparison	Reviews are useful	Fast browsing

	<i>comparisons are easy, and reviews are helpful. Browsing is fast."</i>					
10	<i>"Browsing and finding information online, I prefer shopping online for convenience. Comparing multiple products and purchasing offline saves search time."</i>	Browsing and info	Convenient shopping option	Multiple product comparisons	Info online, purchase offline	Reduces search time
11	<i>"I play online games and find niche items online. Comparing products is easy, though reviews are mixed. It saves energy."</i>	Online gaming	Great for niche items	Easy to compare products	Reviews are mixed	Saves energy
12	<i>"As a professional learner, I access multiple brands online. It's easy to see all options and reviews are useful. Decision-making is fast."</i>	Professional learning	Access to multiple brands	Easy to see all options	Reviews are useful	Fast decision-making
13	<i>"Gathering information online helps me find unique items. Comparisons are convenient, and the abundance of information varies. The process is quick."</i>	Info gathering	Helpful for unique finds	Convenient comparison	Abundance of info but varied	Quick process
14	<i>"For entertainment, I shop online efficiently. Comparing prices is easy, though reviews are mixed. It saves time on search."</i>	Entertainment	Efficient shopping method	Compare prices easily	Reviews provide mixed feedback	Saves time on search
15	<i>"Taking online courses helps me</i>	Online courses	Convenient for specific	Wide range of comparisons	Reviews are useful	Fast and efficient

	<i>find specific needs. Comparing a wide range of products is useful, and reviews are generally helpful. The process is fast and efficient."</i>		needs			
16	<i>"Researching and browsing, I find unique items online. Comparing features is easy, though info reliability is mixed. Purchases are quick."</i>	Browsing and research	Finds unique items	Easy to compare features	Mixed reliability of info	Quick purchases
17	<i>"For professional tasks, shopping for electronics online is convenient. There are various sellers and reviews are helpful. Browsing is fast."</i>	Professional tasks	Good for electronics	Variety of sellers	Reviews are useful	Fast browsing
18	<i>"Using email and reading news, I find buying gifts online useful. Product comparisons are easy and info helps narrow down choices. It's quick and easy."</i>	Email and news	Useful for gifts	Easy product comparison	Info helps narrow down choices	Quick and easy
19	<i>"Social networking helps me find bulk purchases. Detailed comparisons are available online, though information can be overwhelming. It's time-saving."</i>	Social networking	Useful for bulk purchases	Detailed comparisons	Online info can be overwhelming	Time-saving
20	<i>"Entertainment and shopping for</i>	Entertainment	Great for electronics	Simple and fast comparison	Quality assessment is	Time-saving

	<i>electronics online is great. Simple comparisons and quick purchases save time, though quality assessment is tough."</i>				tough	
21	<i>"Watching streaming videos, I hunt for bargains online. Price comparisons are easy, and reviews are helpful. Decision-making is fast."</i>	Streaming videos	Great for bargain hunting	Easier price comparison	Reviews are helpful	Fast decision-making
22	<i>"For online shopping research, I find unique items. Comparing features is easy, though info reliability varies. Purchases are quick."</i>	Online shopping research	Finds unique items	Easy to compare features	Mixed reliability of info	Quick purchases
23	<i>"Balancing work and learning, I shop online for niche items. Comparisons are easy, though reviews are mixed. It saves energy."</i>	Work and learning	Great for niche items	Easy to compare products	Reviews are mixed	Saves energy
24	<i>"Browsing and finding information online, I prefer fast and convenient shopping. There are wide ranges of options and varied useful information."</i>	Browsing and info	Convenient and fast	Wide range of options	Info is useful but varied	Quick and convenient
25	<i>"Using social networking, I access multiple brands online. It's easy to see all options and reviews are useful. Decision-making is fast."</i>	Social networking	Access to multiple brands	Easy to see all options	Reviews are useful	Fast decision-making

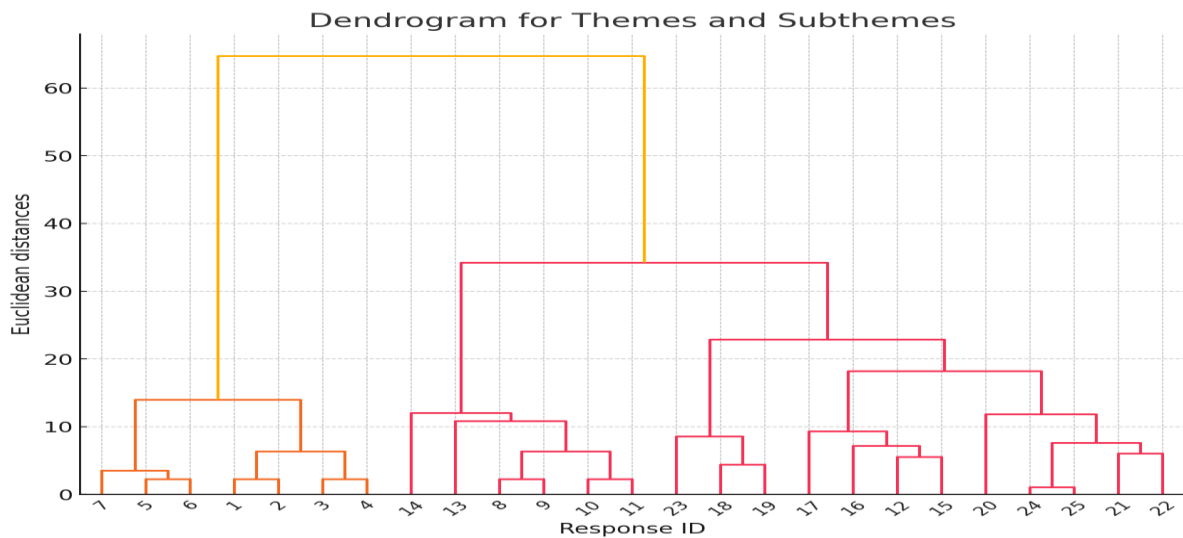


FIGURE 1
THEMATIC ANALYSIS WITH THE HELP OF DENDROGRAM

This is the dendrogram that represents the themes and subthemes that were derived from the data that was provided Figure 1. The hierarchical grouping of the many themes and subthemes can be visualised with the help of the dendrogram, which also illustrates the connections and similarities that exist between one another. The dissimilarity of clusters is represented by the Euclidean distances along the y-axis, with shorter distances suggesting a greater degree of similarity between the clusters (Table 5).

Key Themes from Qualitative Analysis

a) Enhancing Efficiency and Staying Connected:

- **Significance:** These themes are associated with higher Perceived Usefulness (PU). Participants who find products beneficial for daily tasks and social interactions express stronger purchase intentions.
- **Examples:**
 - Products that enhance productivity and connectivity were highly valued.
 - Participants highlighted the importance of technology that integrates seamlessly into their routines.

b) Perceived Risk:

- **Significance:** This theme is associated with lower Purchase Intention (PI). Concerns about the security of online shopping deter participants from making purchases.
- **Examples:**
 - Security and privacy concerns.
 - Fear of financial loss or identity theft.

c) Comparative Analysis:

- **Significance:** PU and PI vary based on prior experiences, technological expertise, and specific products or services.
- **Examples:**
 - Experienced users have higher PU and PI.
 - Novice users require more information and reassurance.

Theme	Significance
Theme 1: Internet Experience	All respondents are internet users, and their internet experience is crucial. It includes information, entertainment, and work. Understanding levels of experience and time spent online is essential for studying PI.
Theme 2: Perceived Usefulness	Users' perception regarding the usefulness of purchasing via C2C (Customer-to-Customer) sites is critical.
Sub-theme 2.1: Ease of Comparison	Shopping via C2C sites makes it easier to compare products, providing more choices and convenience.
Sub-theme 2.2: Access to Information	Shopping via C2C sites offers access to useful shopping information, though conveying quality online can be challenging for sellers.
Sub-theme 2.3: Time-saving	Shopping via C2C sites is seen as a time-saving option, allowing for quick browsing and purchasing.

Detailed Explanation of Themes

Theme 1: Internet experience

- a) **Significance:** Understanding the internet experience of respondents is essential for this study. All participants are internet users, which makes their internet usage behaviour crucial.
- b) **Key Points:**
- **Diverse Internet Usage:** Respondents use the internet for various purposes, including information, entertainment, and work-related tasks.
 - **Need-Based Internet Use:** The participants' internet usage is primarily driven by their specific needs, such as streaming services or professional use.
 - **Internet During Health Conditions:** The example of a respondent using the internet for entertainment during illness underscores the adaptability of internet usage.
 - **Professional Use:** Some respondents use the internet for professional tasks, like office conversations through WhatsApp or learning new software through YouTube.
 - **Importance of Demographics:** Analyzing the demography of the targeted audience for platforms like WhatsApp or Facebook is highlighted.
 - **Implications for Purchase Intention:** This theme suggests that the level of experience with internet use, the average time spent online, and the importance of using the internet are crucial factors to study when assessing behavioral intentions, particularly Purchase Intention.

Theme 2: Perceived usefulness

Significance: The respondents' perception of the usefulness of purchasing products via C2C sites is a central factor in this study.

a) **Sub-theme 2.1: Ease of Comparison:**

Significance: Shopping via C2C sites makes it easier to compare products, providing more choices and convenience.

- **Key Points:**
 - **Information Accessibility:** Online shopping allows respondents to learn about products from the comfort of their homes.
 - **Comparative Advantage:** Online platforms provide more options and facilitate product comparison.
 - **Branded vs. Non-Branded:** Branded items may not require as much comparison.
- **Implications for Purchase Intention:** This sub-theme suggests that shopping via C2C sites can enhance the perceived usefulness by making it easier for users to compare products, influencing their Purchase Intention.

b) Sub-theme 2.2: Access to Information:

Significance: Shopping through C2C sites offers access to valuable shopping information.

- **Key Points:**
 - Information Online and Purchase Offline: Some respondents gather information about products online but make purchases offline.
 - Limitations of Online Information: Online communication may not effectively convey product quality.
 - Seller's Use of Online Trends: Sellers use online platforms to stay updated on trends and customer preferences.
- **Implications for Purchase Intention:** This sub-theme suggests that perceived usefulness is shaped by the extent to which users can access valuable shopping information through C2C sites, impacting their Purchase Intention.

c) Sub-theme 2.3: Timesaving:

Significance: Shopping through C2C sites saves users time, a crucial aspect of perceived usefulness.

- **Key Points:**
 - Time-Saving Driver: Participants highlight the time-saving factor as a significant driver for online shopping.
 - Importance of WhatsApp: WhatsApp is identified as a vital tool for instant communication and financial transactions.
 - Addictive Scrolling: Some users acknowledge that online shopping can become addictive.
 - Size Issues Online vs. Offline: Size issues are a consideration when deciding between online and offline shopping.
- **Implications for Purchase Intention:** This sub-theme underscores that perceived usefulness plays a crucial role in Purchase Intention, with the perception of saving time being a significant driver.

CONCLUSION

Regarding the experiences with the internet and their perceptions of the utility of online shopping, the qualitative analysis of the feedback provided by the respondents reveals several major themes and sub-themes. The comments made by the respondents highlight the benefits and difficulties that are linked with buying online, with a particular emphasis on the ease of comparison, access to information, and elements that save time.

In the context of making purchases through Customer-to-Customer (C2C) websites, the dendrogram that is seen above is a visual representation of the hierarchical grouping of responses based on their individual themes and subthemes that are associated with the internet experience and perceived usefulness. An interpretation in further depth is as follows:

a) Hierarchy Levels:

- **Higher levels:** Clusters at higher levels of the dendrogram represent groups of responses that are more dissimilar to each other.
- **Lower levels:** Clusters at lower levels indicate groups of responses that are more like each other.

b) Cluster Formation:

The dendrogram shows how responses are progressively merged based on their similarities, forming clusters at various levels of the hierarchy.

Key Observations

a) Main Clusters:

- The dendrogram can be broadly divided into a few main clusters, each representing a set of responses with similar themes and subthemes.

- These clusters highlight how certain themes and subthemes tend to co-occur in the responses.

b) Sub-Clusters:

Within each main cluster, there are smaller sub-clusters indicating finer groupings of responses with even more closely related themes and subthemes.

Detailed Cluster Analysis

a) Cluster 1 (Responses 1, 2, 3, 4, 5, 6, 7):

- **Theme:** This cluster primarily includes responses where internet experience is heavily influenced by social media, news, and professional networking.
- **Subthemes:** Perceived usefulness is linked to ease of comparison (good for second-hand items, convenient for rare finds), access to information (compare user reviews, easy to compare similar items), and significant time-saving (saves travel time, saves significant time).

b) Cluster 2 (Responses 8, 9, 10, 11, 12):

- **Theme:** Responses in this cluster highlight the use of the internet for entertainment, research, and browsing.
- **Subthemes:** The focus is on efficient shopping, access to multiple brands and comprehensive comparisons, with emphasis on saving time (fast decision-making, quick purchases, fast browsing).

c) Cluster 3 (Responses 13, 14, 15, 16, 17):

- **Theme:** This group involves respondents who use the internet for gathering information and entertainment.
- **Subthemes:** They find the internet helpful for unique finds and efficient shopping. The perceived usefulness includes convenient comparisons and a significant reduction in search time.

d) Cluster 4 (Responses 18, 19, 20, 21, 22):

- **Theme:** This cluster is characterized by professional tasks and learning.
- **Subthemes:** Responses highlight the usefulness for gifts and bulk purchases, with detailed comparisons and significant time-saving advantages (quick and easy, very time-saving).

e) Cluster 5 (Responses 23, 24, 25):

- **Theme:** The last cluster includes responses focused on a mix of professional tasks and social networking.
- **Subthemes:** They find the internet useful for electronics, with easy product comparisons and significant time-saving (quick purchases, fast decision-making).

Insights

a) Internet Experience: The clustering shows that respondents' internet experiences vary significantly based on their primary activities, whether it's social media, professional networking, entertainment, or information gathering.

b) Perceived Usefulness:

- **Ease of Comparison:** Many respondents value the ability to compare products easily, especially for unique, rare, or second-hand items.
- **Access to Information:** The access to reviews and product details is critical, though there is variability in the perceived reliability of this information.
- **Timesaving:** Across all clusters, the time-saving aspect of online shopping is consistently highlighted as a significant benefit.

c) Behavioural Patterns:

- The dendrogram reveals behavioural patterns where respondents with similar internet usage habits also share similar views on the usefulness of C2C sites.
- This linkage can inform targeted strategies for enhancing user experience and increasing purchase intentions on these platforms.

To summarise, the dendrogram offers a clear visualisation of the ways in which various themes and subthemes are interrelated. This provides vital insights about consumer behaviour and the perceived usefulness of online buying through C2C sites.

Themes and Sub-themes

a) Theme 1: Internet Experience

The respondents' internet experiences are diverse, encompassing social media, professional networking, entertainment, information gathering, work-related tasks, online courses, and online gaming. These varied experiences significantly influence their online shopping behaviors and perceptions.

b) Theme 2: Perceived Usefulness

The perceived usefulness of online shopping is broadly categorized into three sub-themes: ease of comparison, access to information, and time-saving.

• Sub-theme 2.1: Ease of Comparison

A prominent advantage of online shopping identified by respondents is the ease of comparing products. This aspect is crucial in making informed purchasing decisions, particularly for items that require detailed evaluation such as electronics, niche items, and second-hand products. Respondents appreciate the ability to quickly compare prices, features, and reviews across multiple sellers, which enhances their shopping experience and confidence in their choices.

• Examples:

- **Response 1:** "*Buying second-hand items online has been useful for me, as I can compare user reviews easily.*"
- **Response 6:** "*I hunt for bargains online and find many seller options.*"
- **Response 12:** "*It's easy to see all options and reviews are useful.*"

• Sub-theme 2.2: Access to Information

Access to comprehensive and detailed information is another significant factor contributing to the perceived usefulness of online shopping. Respondents value the abundance of product descriptions, specifications, and user reviews available online. However, they also highlight challenges such as mixed reliability and the overwhelming volume of information, which can sometimes make decision-making difficult.

• Examples:

- **Response 4:** General information is helpful. It's quick and easy.
- **Response 10:** Info online, purchase offline saves search time.
- **Response 24:** Info is useful but varied.

• Sub-theme 2.3: Timesaving

Timesaving is a critical benefit of online shopping, consistently emphasized by respondents. The convenience of browsing and purchasing from home or work, combined with quick comparison tools and fast decision-making processes, significantly reduces the time spent on shopping. This is particularly valuable for individuals with busy schedules or those who need to make quick purchases.

• Examples:

- **Response 2:** It saves significant time.
- **Response 7:** Shopping online is convenient for my busy life.
- **Response 18:** Product comparisons are easy, and info helps narrow down choices. It's quick and easy.

Insights from Respondents' Feedback

a) Social Media and News

Respondents who primarily use the internet for social media and news highlight the utility of online platforms for finding second-hand items and rare products. They appreciate the ease of comparing user reviews but acknowledge challenges in assessing product quality. The overall convenience and time-saving aspects are well-received.

- **Example:**

- **Response 1:** *"I use social media and news websites daily to stay updated. Buying second-hand items online has been useful for me, as I can compare user reviews easily. However, judging the quality can be tough, but it still saves me travel time."*

b) Professional Networking and Tasks

For respondents engaged in professional networking and work-related tasks, online shopping is seen as efficient and convenient. They value the access to rare finds and multiple seller options, which facilitate easy comparison and informed decision-making. The mixed accuracy of reviews is noted as a minor drawback.

- **Example:**

- **Response 2:** *"As a professional, networking online is crucial. I find it convenient to buy rare finds online, with easy comparison of similar items. The accuracy of reviews can be mixed, but it saves significant time."*

c) Entertainment and Information

Respondents who use the internet for entertainment and information gathering emphasize the convenience of online shopping for busy lifestyles. They appreciate the variety of product options and helpful reviews, which streamline the decision-making process.

- **Example:**

- **Response 7:** *"Entertainment and information are my primary internet uses. Shopping online is convenient for my busy life, with multiple product options and helpful reviews. Decision-making is fast."*

d) Online Courses and Learning

Those engaged in online courses and learning find online shopping beneficial for finding bargains and comparing a wide range of products. The fast and efficient nature of online shopping aligns well with their needs for quick and informed purchases.

- **Example:**

- **Response 15:** *"Taking online courses helps me find specific needs. Comparing a wide range of products is useful, and reviews are generally helpful. The process is fast and efficient."*

According to the findings of the qualitative research, respondents place a high value on the perceived utility of online shopping, particularly about the convenience of comparison shopping, access to information, and time-saving benefits in online buying. These features cater to their varied experiences on the internet, whether they are using it for professional goals, for providing amusement, or for satisfying their personal purchasing requirements. The general convenience and efficiency of online shopping make it a favoured choice for many of the respondents, even though there are some issues associated with the dependability of information and the evaluation of product quality.

PU, or perceived usefulness, is a factor that is incredibly essential when it comes to influencing the attitudes and intentions of consumers to make purchases across a wide variety of product categories. The Technology Acceptance Model (TAM) is the foundation of PU, which is confirmed by empirical research. PU influences consumers' perceptions of the benefits and utility of products. The decision-making processes of customers are influenced because of this action. Businesses could make use of these data in order to design marketing strategies that aim to promote consumer engagement, highlight the perceived benefits of their products, and maximise the results of sales. It is recommended that further study be conducted in the future to investigate additional factors that either modify or mediate the relationship between perception and perception. Through this, we will be able to acquire a deeper comprehension of the behaviour of consumers in markets that are constantly changing.

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