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Digital Payment Convenience and Student Personal Financial Management: The Tap- To- Pay Trap

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Abstract
This book chapter was driven by the need to undertake an extensive study on digital payment convenience and student personal financial management, with special focus on the Tap- o- Pay Trap. The contention of this study is that the shift towards a cashless economy has transformed financial transactions globally, influencing spending habits among university students. This study explores the impact of digital payments on the economic behavior of students at Meru University of Science and Technology. The research examines how the ease of cashless transactions affects budgeting, impulse spending, peer-influenced expenditures, and subscription-based spending. Additionally, it assesses the advantages and disadvantages of a cashless campus and suggests financial management strategies. The findings indicate that while digital payments offer convenience, they also pose challenges in financial discipline, necessitating awareness and budgeting measures for responsible spending.

Key words: Digital Payment, Cashless system, Personal Financial Management

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Introduction

The transition to a cashless economy is reshaping how university students manage their finances. Cash transactions have been replaced by tap to pay payment options such as mobile money, digital wallets and debit cards among students at Meru University of Science and Technology.

Although these contemporary modes of payment are convenient for settling transactions, they pose various challenges such as high transaction costs, encourage impulse buying and peer driven spending. This study seeks to establish the relationship between digital payment spending habits among students at Meru University of Science and Technology.

Background of the Study

Growing innovative methods of payment coupled with the ever-increasing preference for easy and convenient modes of payment have encouraged the acceptance of digital transactions in Meru University and beyond. In Kenya, mobile money services like M-Pesa have revolutionized financial transactions, making it easier for individuals, including students, to send, receive, and manage money.

Safaricom added 500,000 new subscribers to its mobile money platform M-Pesa between October and November 2024 to hit 34 million users, marking a 1.5 percent jump from the 33.5 million active subscribers it had reported as of September. (Business Daily 2024). As of December 2023, Kenya had some 77.3 million registered mobile money accounts, slightly increasing from 77.1 million in the previous month. Since January 2021, the number of accounts in the country has overall increased, despite some fluctuations. The number of registered mobile money accounts has already surpassed the population of Kenya, estimated at 51.5 million people in 2023. (Statista 2024). Universities and businesses have adapted to this trend by implementing digital payment systems. However, the shift raises concerns regarding financial management, spending habits, and economic discipline, particularly among young adults who are still developing financial literacy skills.

2.0 Review of Relevant Literature

Several studies have explored the effects of cashless transactions on consumer spending behavior. According to Soman (2001), digital payments reduce the "pain of paying," leading to increased spending compared to cash transactions. A study by Prelec & Loewenstein (1998) found that credit card users are more likely to make impulse purchases due to the deferred nature of payments. Similarly, a report by the Central Bank of Kenya (2021) highlights that mobile money has increased financial accessibility but has also contributed to higher consumption rates among youth. These findings suggest that while digital payments offer convenience, they can influence spending behaviors, particularly among university students who may not have well-developed budgeting strategies. Theories explaining the trend include;

2.1 Prospect Theory

According to prospect theory (Kahneman & Tversky, 1979), people perceive losses and gains differently. Digital payments, such as those made via mobile money, reduce the "pain of paying" because money is not physically handed over. This theory suggests that students are likely to spend more when using digital payments because they don't experience the same immediate psychological discomfort that they would if they were using physical cash. The ease of mobile transactions for things like food, entertainment, and social activities makes spending feel less significant, leading to higher discretionary spending.

The widespread use of mobile money services like M-Pesa, which had over 30 million transactions daily by 2014, has made digital payments more accessible to students. However, this accessibility may encourage higher consumption and lower sensitivity to spending, as students can quickly pay for items without considering the long-term financial impact.

2.2 Mental Accounting Theory

Mental accounting theory (Thaler, 1985) suggests that people treat money differently depending on its source or intended use. Students may mentally categorize their mobile money funds as "spending money" rather than funds meant for more essential purposes. For example, when students receive money for meals or discretionary expenses via mobile money, they may view it as "extra" money that can be spent freely, rather than as part of their overall financial plan.

2.3 Hyperbolic Discounting

Hyperbolic discounting refers to the tendency for individuals to prefer smaller, immediate rewards over larger, delayed ones. In the context of cashless transactions, students may prioritize immediate desires, such as buying fast food or attending a concert, because these transactions are quick and convenient through digital platforms. The immediate availability of funds through mobile money increases the likelihood of spending impulsively, without consideration of long-term financial needs.

3.0 Overview of the Study

The study highlights the effect of digital payments on personal financial management of students in meru university of science and technology

3.1 The Rise of Cashless Transactions Among Students

With the widespread use of mobile money services like M-Pesa and digital banking, students at Meru University find it easier to pay for tuition, meals, and entertainment. The availability of contactless payment options in campus cafeterias, bookstores, and local businesses has further accelerated this trend.

One significant factor in this transition is the Higher Education Loans Board (HELB), which disburses student loans directly into bank accounts and mobile wallets. This ease of access allows students to receive funds without long queues or paperwork. However, the instant availability of money through digital channels has led to challenges in financial discipline, as students may overspend or exhaust funds faster than expected.

3.2 How Going Cashless Affects Spending Habits

While going cashless is a great innovation that should be widely embraced it has various effects as follows.

3.2.1 Increased Impulse Spending

The ease of digital transactions encourages students to spend without much thought. Unlike cash, which requires physical handling, swiping a card or using mobile money feels less tangible, leading to higher discretionary spending on non-essentials like fast food, streaming services, and entertainment.

3.2.2 Subscription and Auto-Payment Traps

Many students subscribe to online services such as Netflix, Spotify, and mobile data plans. Since payments are automatic, they may not actively track how much they are spending monthly, leading to financial strain over time.

3.2.3 Budgeting Challenges

Cash-based transactions make it easier to see how much money remains, while digital transactions can create a false sense of financial security. Without proper tracking, students may unknowingly exceed their budgets before the semester ends. This is particularly evident with HELB loan recipients, where some students mismanage the funds shortly after disbursement, struggling financially later in the semester.

4.0 Methodology

The study was actualized by use of the following methodology;

4.1. Research Design

This study adopted a descriptive research design to examine the influence of cashless transactions on the spending behavior of students at Meru University. The design facilitated the collection of both qualitative and quantitative data, providing a comprehensive understanding of students' financial habits in a cashless environment.

4.2. Population and Sampling

Target Population: The study focused on undergraduate students at Meru University who actively engaged in digital payment transactions.

Sampling Technique: A stratified random sampling technique was used to ensure diversity in the sample. The student population was divided into strata based on their year of study, and random sampling was conducted within each stratum.

Sample Size: The study employed stratified random sampling to ensure representation

The sample size was determined using Yamane's formula for sample size calculation:

n=N/ (1+N (e*2)

Where:

(i) N= 10,000 (estimated total student population)
(ii) e = margin of error (set at 6%)

Based on an estimated population of 10,000 students at Meru University, the sample size is calculated as follows:

The required sample size for a population of approximately 10,000 students with a 6% margin of error is 270 students. This ensures that the sample is representative of the entire population while maintaining statistical accuracy.

A total of 249 students participated in the study, with an even distribution across different academic years. Accuracy Comparison: The actual sample size of 249 students is 92.2% of the target (270 students), resulting in a slightly higher margin of error (6.26% vs. 6%). This difference is minor and unlikely to significantly affect the study's validity or generalizability. The table below illustrates the distribution of the participants.

Year of Study	Total Students	Male	Female
1	50	27	23
2	57	30	27
3	72	43	29
4	70	39	31
Total	249	139	110

The sample distribution is valid and representative of the student population at Meru University. Minor differences in gender and academic year proportions reflect demographic and behavioral patterns in digital payment usage, not a sampling error.

4.3. Data Collection Methods

Both primary and secondary data was embraced as follows;

4.3.1 Primary Data:

Survey: A structured survey was administered to gather insights into students' use of digital payment methods, spending behaviors, and financial management practices. The survey contained both closed and open-ended questions and was distributed online and in physical format to accommodate varying levels of internet access among students.

Interviews: In-depth, semi-structured interviews were conducted with 20 selected participants to explore their experiences, motivations, and challenges related to digital transactions. Interviews were conducted both face-to-face and via online platforms.

4.3.2 Secondary Data:

Literature Review: Relevant studies, reports, and statistical data on cashless transactions, behavioral finance, and student financial habits were reviewed to provide context and support the findings.

4.4. Data Analysis

Quantitative Data: The survey responses were analyzed using descriptive statistics, including frequencies, percentages, and mean scores, to summarize trends in digital payment usage and spending behaviors. Excel for statistical analysis.

Qualitative Data: Responses from the open-ended survey and interview transcripts were analyzed using thematic analysis. Recurring themes related to financial challenges, impulse spending, and digital payment convenience were identified and categorized.

4.5. Ethical Considerations

Informed Consent: All participants were informed of the study's purpose, assured of anonymity, and provided with the option to withdraw at any stage.
Confidentiality: The data collected was stored securely, and personally identifiable information was not shared.
Voluntary Participation: Participation was entirely voluntary, and no incentives were offered to ensure unbiased responses.

4.6. Limitations of the Study

Sampling Bias: Although efforts were made to ensure representativeness, the sample may have been skewed toward students more engaged with digital financial services.
Self-Reported Data: Since participants provided information about their spending behaviors, there was a potential for social desirability bias.
Data Collection Constraints: Some students had limited access to internet services, which may have affected the completeness of online survey responses.

4.7 Discussion of findings

The analysis focused on a survey of 249 students, examining their financial behaviors, including digital payment frequency, impulse spending, budgeting app usage, and financial literacy levels. The data revealed patterns in how these factors interact, providing insights into student spending habits.

4.7.1 Distribution of Key Variables

The survey showed a strong reliance on digital payments, with 75.5% of students using them daily. Impulse spending was common, with 37.0% often engaging in it. Financial literacy varied, with 41.8% at a moderate level and 34.9% at a high level.

4.7.2 Relationships and Insights

4.7.3 Financial Literacy and Impulse Spending:

Students with high financial literacy had a lower rate of more impulsive spending (72.73%) compared to those with low (83.33%) or moderate (82.14%) literacy, suggesting better financial management with higher literacy.

4.7.4 Budgeting Apps and Fund Exhaustion:

Students using budgeting apps were more likely to exhaust funds early (45%) compared to non-users (39.64%), indicating app usage might be a response to financial challenges.

4.7.5 Financial Literacy and Fund Exhaustion:

Higher financial literacy was associated with a lower likelihood of exhausting funds early, with 40% of high-literacy students doing so, compared to 68% of low-literacy students.

Table 1: The Influence of Payment Methods on Impulsive Purchases

Payment Method	Average Weekly Spend (KES)	Impulse Purchases (%)
Mobile Money	3500	68%
Debit/Credit Card	4200	72%
Cash	2300	45%

Source: Primary Data 2024

Table 2: Digital Payment Adoption Influence on Borrowing Habits

Digital Payment Adoption	% of Students Using Daily	% Who Have Taken Digital Loans
Mobile Money	85%	40%
Card Payments	62%	15%

Source: Primary Data 2024

From table 2, it is evident that major transactions by the students are made through Mobile money platforms daily, aligning with the Digital Financial Services Association of Kenya (DFSAK), which revealed that Kenyans borrow approximately $3.85 million (Ksh 500 million) every day through digital lending platforms. This translates to a staggering $115.38 million (Ksh 15 billion) per month, highlighting the rapid growth of mobile and online lending in the country (Fintech Magazine Africa, 2025)

5.1 Conclusion

The shift from conventional payment methods to a cashless campus at Meru University of Science and Technology has rationalized financial transactions, however, this move poses significant risks to students' financial prudence. While digital payments offer convenience, they encourage impulsive and excessive spending, particularly among those with limited financial literacy. To alleviate these challenges, universities must actualize financial literacy programs, promote prudent financial management tools, and explore hybrid payment options to foster responsible spending habits. By addressing these issues, institutions can empower students to balance the benefits of digital convenience with the discipline needed for long-term financial stability in a cashless economy.

5.2 Recommendations

The study recommends the following;

5.1.1 Seminars and Workshops

Universities should organize regular, interactive seminars and workshops to sensitize students about the risks of digital payment convenience. These sessions should highlight how tap-and-pay methods can lead to overspending by making transactions feel less tangible, using real-world examples like the study's finding of higher weekly spending with debit/credit cards (KES 4,200) versus cash (KES 2,300). Facilitators can employ case studies, such as students exhausting HELB funds early due to impulse purchases, to illustrate the consequences of unchecked digital spending.

5.1.2 Personal budgeting application

To help limit impulse buying and promote better financial discipline, it is highly advisable to use a personal budgeting app. These apps offer key features that support mindful spending, such as establishment of daily expenditure targets. Users can set daily spending limits based on their income and financial goals. The app tracks expenses in real time and notifies the user when they are nearing or exceeding the daily limit, encouraging more thoughtful spending. Excessive Spending Alerts is another recommendation. The app sends instant warnings when purchases exceed pre-set budgets in specific categories like food, entertainment, or shopping, helping users become more cognizant of impulsive buying behaviors. The students also should be encouraged to use the application for weekly and monthly summaries: Detailed reports on weekly and monthly spending patterns help users understand consumption habits, identify spending trends, hence helping to make informed adjustments to their budget.

Popular applications like Mint and YNAB (You Need a Budget) provide these features and can be synced with bank accounts for automatic tracking. By consistently using a budgeting application, individuals can build healthier financial habits and reduce unnecessary spending over time.

5.1.3 Curriculum Integration

Embed modules on digital financial management within orientation programs and academic curricula, focusing on the psychological triggers of cashless transactions. Topics should include recognizing the "invisibility" of digital money, setting spending limits, and avoiding subscription traps, which the study identifies as a source of financial strain.

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