**CASE STUDY**

**ATM SYSTEM**

**Executive Summary:**

These is the case study for the ATM system which stands for the automatic trailer machine. It is the electronic banking outlets that allow people to complete transactions without going into a branch of their bank. Some ATMs are simple cash dispensers, while others allow a variety of transactions such as check deposits, balance transfers, and bill payment. The first ATMs was established in the mid- to late 1960s and has grown in number to more than 2 million worldwide.

An automated teller machine (ATM) is an electronic banking outlet that allows

customers to complete basic transactions without the aid of a branch representative

or teller. Anyone with a [credit card](https://www.investopedia.com/terms/c/creditcard.asp) or [debit card](https://www.investopedia.com/terms/d/debitcard.asp) can access cash at most ATMs,

either in the USA or abroad.

ATMs are convenient, allowing consumers to perform quick self-service transactions

such as deposits, cash withdrawals, bill payments, and transfers between accounts.

Fees are commonly charged for cash withdrawals by the bank where the account is

located, by the operator of the ATM, or by both. Some or all of these [fees can be avoided](https://www.investopedia.com/best-checking-accounts-with-no-atm-fees-5079489) by using an ATM operated directly by the bank that holds the account. Using an ATM abroad can cost more than using one in the USA.

ATMs are known in different parts of the world as automated bank machines (ABMs) or cash machines.

**Background**

Before the invention of ATM System, People used to withdraw money by depositing a check at the Bank’s teller (also called Cashier).On September 2, 1969, America’s first automatic teller machine (ATM) makes its public debut, dispensing cash to customers at Chemical Bank in Rockville Centre,New York. ATMs went on to revolutionize the banking industry, eliminating the need to visit a bank to conduct basic financial transactions. By the 1980s, these money machines had become widely popular and handled many of the functions previously performed by human tellers, such as check deposits and money transfers between accounts. Today, ATMs are as indispensable to most people as cell phones and e-mail.

Several inventors worked on early versions of a cash-dispensing machine, and some existed as early as 1967 in other countries. Don Wetzel, an executive at Docutel, a Dallas company that developed automated baggage-handling equipment, is generally credited as coming up with the idea for the modern ATM. Wetzel reportedly conceived of the concept while waiting on line at a bank. The ATM that debuted in New York in1969 was only able to give(ABHSIHEK BHATTARAI).

outNewcash,but in 1971, an ATM that could handle multiple functions, including providing customers’ account balances, was introduced.

ATMs eventually expanded beyond the confines of banks and today can be found everywhere from gas stations to convenience stores to cruise ships. There is even an ATM at McMurdo Station in Antarctica. Non-banks lease the machines (so-called “off premise” ATMs) or own them outright.

Today there are well over 1 million ATMs around the world, with a new one added approximately every five minutes. It’s estimated that more than 170 million Americans over the age of 18 had an ATM card in 2005 and used it six to eight times a month. Not surprisingly, ATMs get their busiest workouts on Fridays.

Automated teller machines (ATMs) have a long and complicated history. John Shepherd-Barron, an English inventor, invented the ATM in 1967. ATMs have been an essential component of our banking systems all over the world since then. ATMs have made it easier than ever for us to withdraw money from banks, and they have revolutionized the way we bank. The Himalayan Bank introduced Nepal’s first ATM service in 1995. Banking as a whole was just getting started, and it would only get worse before it got better. Everest Bank installed five cash deposit machines in Nepal’s Kathmandu Valley, the first such installation in the country. Everyone in Nepal now has the opportunity to manage their finances in this convenient and efficient manner.

In the 1990s, banks began charging fees to use ATMs, a profitable move for them and an annoying one for consumers. Consumers were also faced with an increase in ATM crimes and scams. Robbers preyed on people using money machines in poorly lit or otherwise unsafe locations, and criminals also devised ways to steal customers’ PINs (personal identification numbers), even setting up fake money machines to capture the information. In response, city and state governments passed legislation such asYork’s ATM Safety Act in 1996, which required banks to install such things as surveillance cameras, reflective mirrors and locked entryways for their ATMs.(ABHISHEK BHATTARAI).

**Case Evaluation**

For the case study I want to focus on ATM Fraud in developing county like Nepal. In the context of Nepal, derived of new technology are not just into the hype. Usage of ATM by the customer are growing in the trend but it’s not as it has to be. Nepal as the very small market size and the electronic payment penetration are just around 65%. Any bank in today’s context need to think twice for the setup of ATM booth due to:

a. Transaction average hits are minimal

b. The overall expenditure is hard to cover in this regard for bank

c. Commission fees are extremely higher, with international network

d. Banks particularly need to invest more on infrastructure and all

Though, they are the major consequence for any bank to set up ATM booths. Such challenges lead to the compromise in major technical issues. Bank needs to invest more on technological aspect, which is extremely difficulties due to much expensive of the services.

Even hackers prefer Nepalese ATM’s booth due to weakness of Banking System like-

* Nepalese ATMs are guided with low technology, easily breakable software and so on
* Investment into the cyber securities are very minimal so which can be easily hackedby anyone
* Old tedious software is in use, which can be shut down at any notice of time(ABHISHEK BHATTARAI).
* It’s hard for Nepalese bank to use the technology uses by VISAs, Mastercard, American Express. Which are absolutely higher expensive software.

**Proposed Solution**

ATM System in Banking in context to Nepal has several problems and will take lot of effort, cost and time to solve them.

One of the major problem which I have already mentioned i.e. ATM fraud which is growing day by day in Nepal must be stopped.

As per my opinion, it is true that country like Nepal have much problems in terms of investment but that not limit with investment only in today’s global context. It’s all about approaching the right thing, central Bank in Nepal is not much serious on this regard in spite of surrounded with Donor Agencies or any. Nepal Rastra Bank is completely not serious to take the cyber securities, Data fraud and so on issues as the future problems. They are taking it lightly which creates much motivated to hackers and they are more interest on Nepalese banking sectors.(ABHISHEK BHATTARAI)

**Conclusion**

In conclusion, we see that ATMs have multiplied the accessibility and convenience of the people. It helps people to have cash in times of urgent need. It is useful especially when you are not at the place of your bank branch where you hold an account or when banks are closed. You can withdraw cash even on bank holidays or after work timings because you are not dependent on them.(ABHISHEK BHATTARAI).

ATM system In Nepalese context location of ATM has higher relationship with customer satisfaction. Availability of cash has highest impact on customer satisfaction. Security & privacy and fees charge for using other bank’s ATM have less impact oncustomer satisfaction and which are the most significant factors have overall lower satisfaction level. The rapid growth in use of ATMs in Nepal provides opportunities to the banks in innovative service for strategic advantage.(ABHISHEK BHATTARAI).

**Recommendations**

In my opinion and my recommendations to the Bank to solve ATM Fraud is that:

* Banks must regulate standard format laws on cyber securities and fraud cases. Which must be very punishable laws to those hackers of frauds.
* Invest very wisely on technology because it’s the investment for future.
* Need to learn the lesson from past frauds and prepare for the future in terms of any conditions.(ABHISHEK BHATTARAI).

**Implementation**

Required training and facilities must be given to the employee regarding cyber safety. Well trained skilled cyber securities experts, Data scientist and IT expert must be hired. Proper investment on latest technologies must be done.(ABHISHEK BHATTARAI).

**References**

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**(ABHISHEK BHATTARAI)**

**(ROLL NO:01)**