

# Study on Artificial Intelligence in Cashless Payment System with Special Reference to Tiruchirappalli District

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## Abstract

This section makes sense of the idea of the payment framework, the foundation of the payment frameworks all over the planet, credit-only payment frameworks, techniques for the credit-only payment frameworks, and customers' discernment towards the credit-only payment frameworks. It additionally presents the hypothetical system of the review, specifies the functional meanings of factors, portrays the issue explanation, brings up the meaning of this review, and demonstrates the exploration questions, research goals and examination worldview.

Keywords: credit-only payment, buyers' discernment

## Introduction

Since its origin, cash has existed in different shapes, sizes, and structures for exchange and instalment. The exchange of instalments from the deal framework to the symbolic framework, the symbolic framework to the money framework, and the money framework to the credit-only framework. Cash, checks, direct credit, and charge moves were the customary techniques for instalments. Yet, as the web and electronic exchanges multiplied, other new instalment structures showed up. An age that has been vigorously impacted by innovation, with shopping propensities and wants that are moulded by phones, the web, and present-day comforts. Quicker, more secure, and more helpful instalment choices are important to the two buyers and organizations. Advanced instalment strategies are the fate of 5 millennial-driven utilization as money becomes outdated, creating the sort of moment delight that the cutting edge is requesting. A couple of instalment instruments have been made because of the start of electronic business to advance the utilization of business exchanges through the Web. Computerized payment frameworks give benefits over regular money frameworks, including financially savvy arrangements, secure payment passages, an assortment of payment acknowledgement techniques, and solid mechanical starting points for speedier joining with internet business sites. Numerous mechanical new companies are proposing fresher payment choices to wean

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buyers off of paying money for online buys while likewise investigating issues with advanced instalment frameworks and computerized cash, considering these benefits.

The present instalment frameworks are effectively developing their relationship with their clients. Clients depend on payment for each aspect of cash. payment plans for supporter nearby associations and worthwhile exercises for the overall population were previously on the show. From the get-go, making payment ought to have been an exceptionally distressing errand. Previously, making payment and settling accounts required continuous visits from the purchasers. It has eventually turned into significantly more straightforward and less dreary over the long haul. Clients might finish any payment exchange with only a mouse click while at home, before a PC or other web-associated electronic gadget, because of the cutting-edge segment strategy known as Computerized payment Frameworks. Computerized instalment framework specialist co-ops are offering their clients different benefits because of the developing rivalry in this market. Clients' lives have been more straightforward and less demanding because of the advancement of different instalment strategies, for example, check cards, Visas, computerized wallets, Brought together instalment points of interaction, web banking, versatile banking, and computerized instalment bank administrations.

Indeed, even in rustic regions, shoppers can utilize broadly acknowledged advanced payment frameworks. The other six financial administrations incorporate a computerized wallet, versatile banking, and a brought-together payment interface. While these administrations are not notable to the overall population, they are useful in the ongoing time of trade. The advanced payment frameworks give different motivations to the shoppers as well as getting and sending payment. Advanced payment stages like Google Pay, which accomplices with HDFC Bank, ICICI Bank, Government Bank, and Kotak Mahindra Bank give clients reaffirmed, prompt credits, and let clients get advances.

## **Advancement of Payment Frameworks in India**

A country's payment framework gives the fundamental channels to just and successfully coordinating trade, business, and other monetary exercises. An payment framework does not just go about as oil to accelerate the progression of liquidity in the economy, but it likewise supports the money-related development of the country. The payment interaction is a vital part of monetary intermediation since it empowers the age and trade of liquidity across various monetary experts. A solid, productive payment instrument wipes out fundamental dangers and guarantees the compelling

utilization of exceptional resources. India's payment frameworks and strategies have seen huge changes over the course of time. Coins that were punch-checked or projected in silver and copper made up the early payment frameworks, and nearby money markets utilized the credit structure, which additionally included bills of trade. Thus, confidential banks made other payment frameworks for the currency market. The check-going-through method was achieved by the limitations associated with the security of checks. To settle issues, the banks that offered a check office and a going through technique grouped into unmistakable affiliations; by and by, the way that clearing affiliations worked changed. The essential downside of interest drafts and checks is the requirement for actual conveyance, which could bring about payment delays. Cash orders and postal orders, two popular types of payment in India, were first settled by the Division of Posts and Broadcasts. The purchaser used these gadgets to communicate cash through the mail centre's administration. Since that time, there have been huge turns of events and progressions in Indian payment techniques after some time. The progress of payment frameworks frequently relies on how successfully they fulfill the country's developing requests. The clients' fulfillment and happiness are the main elements in their eyes. Eventually, the upgrade and remaking of the payment frameworks were finished with care to oblige the country's residents' continually developing requests.

# **Computerized Payment Modes in India**

The BHIM application and Bound together payments Connection point (UPI) trades arrived at 1 trillion rupees in worth and 913 million in amount, up from a negligible 7 million volume in April 2017, as per information from the Public payments Enterprise of India (NPCI). Around then, one might expect that the expanded utilization of electronic payment techniques has caused a reduction in the utilization of cash. Be that as it may, as per information from the RBI, the all-out cash accessible for use on Walk 9 was 18.13 trillion rupees, which was a huge increment from the 17.97 trillion rupees on November 8, 2016. By and large, cash overwhelms the payment scene, and just a limited quantity of cash is utilized for computerized payments. One of the inspirations for the demonetization plan, as per the Indian government, was reinforcing advanced payments. To give a predictable payment strategy, it made a superior modernized premise and high-level different settlement ahead of time techniques. It did so because refined payment structures are simpler to oversee and screen, permitting the assembly to all the more battle coercion, cash capacity, and tax avoidance. Clients in the end benefit too by breaking their reliance on cash. By taking on credit only strategies, individuals might get rid of conveying enormous bills of money. The way that they are not truly present when it is much more

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amazing to make payments! Unrivalled simplicity has without a doubt arisen as the top advantage of settlement ahead-of-time arrangements. Also, because all carefully finished exchanges are precisely recorded and might be utilized as evidence of payment, these payment strategies are more dependable than cash trades. An advantage of settlement ahead of time is that they permit individuals to monitor their spending, which is useful for planning and computing compensation evaluations. This information can assist individuals with making sense of their funds and uses in the circumstance that is under audit. Different computerized payment arrangements are accessible in India as a piece of creating credit only exchanges and making the country a credit-only economy.

## **Statement of the Problem**

India's economy depends on cash. Debatable instruments, for example, checks and request drafts, were utilized to make payments and settle enormous worth of exchanges. The huge worth of exchanges utilizing the web payment procedures like NEFT and RTGS. Shoppers regularly use cash as a type of payment for little buys. Most money exchanges are a problem for the typical individual. Little worth exchanges utilizing retail location payment techniques. Following specialized headways in payment frameworks, the utilization of computerized payment strategies has developed. In 2008, the Public payments Partnership of India was laid out. Yet, as of late, with the appearance of state-of-the-art payment frameworks like UPI, BHIM, RuPay, and Pixies, the significance has developed due to various stresses over advanced payments, and customers were reluctant to embrace the credit-only method overpayment. The well-being and security of exchanges are the fundamental client concerns. NPCI is presently attempting to give a safer and safe climate for payments. NPCI has extended abroad because of UPI and RuPay's prosperity. This study plans to assess the viability of NPCI and its bearing on credit-only exchanges.

## **Objectives of the Study**

- 1. To investigate different computerized payment modes among ages.
- 2. To grasp the degree of fulfillment in utilizing different payment frameworks.

#### **Scope of the Study**

The possibility of a credit-only economy is novel in India. Individuals presently utilize an assortment of electronic payment techniques. To battle defilement and dark cash, be all the more harmless to the ecosystem, and oversee jobs, banks and other monetary associations are giving credit-

only payment arrangements. Subsequently, fewer arranging apparatuses like checks, promissory notes, bills of trade, and so forth are utilized. Credit-only exchanges are liked as a method for lessening tax evasion and advance monetary consideration. The US, UK, Australia, and Canada are among the countries that are as of now acquainted with this technique for payment. An association called NPCI attempts to propel all retail payments in India. Visas, charge cards, prepaid bank cards, versatile/E-wallets, ATM cash moves, web banking moves, aadhar Empowered payment Framework (AEPS), Brought together payment Connection point (UPI), checks, request drafts, NEFT and RTGS moves, gift vouchers, bank applications, Bharat/India QR code, Unstructured Beneficial Help Information (USSD), and E-cash coupons are only a couple of the various ways of making credit only payments in India. Notwithstanding these payment choices, a few confidential entertainers are making their payment frameworks work with exchanges. Area of the Study refers to **Tiruchirappalli District** 

#### **Research Methodology**

For the purpose of the study 150 respondents were collected. Random sampling method is administered in the study. The study will be based on the primary data. The primary data was collected through the issue of structured questionnaires to the respondents. The data were collected from magazines, websites, journals, books.

#### **Tools for Analysis**

For the analysis purpose the following tools to be used on Simple percentage analysis and Chisquare analysis

#### Limitations of the Study

The study is limited only to **Tiruchirappalli District.** The data is collected only from 50 respondents.

## **Review of Literature**

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evasion and advance monetary consideration. The US, UK, Australia, and Canada are among the countries that are now acquainted with this technique for payment. An association called NPCI attempts to propel all retail payments in India. Visas, charge cards, prepaid bank cards, portable/E-wallets, ATM cash moves, web banking moves, AADHAR Empowered payment Framework (AEPS), Bound together payment Connection point (UPI), checks, request drafts, NEFT and RTGS move, gift vouchers, bank applications, Bharat/India QR code, Unstructured Valuable Help Information (USSD), and E-cash coupons are only a couple of the various ways of making credit only payments in India. Notwithstanding these payment choices, a few confidential entertainers are making their payment frameworks work with exchanges.

#### **All About Digital Payments**

Even payment systems have altered how they operate to keep up with the pace of business in the internet age. With the advent of the internet came digital payments. If the internet didn't exist, there wouldn't be any e-services or online shops. Digital payment is unquestionably not a single tool, but rather an umbrella phrase that refers to a variety of tools used in various contexts. It may be described as a way to pay for services or goods using an electronic media without using cash or checks. The electronic payment framework or e-payment is another name for it. Online payment frameworks initially needed specialised training in information interchange norms and were difficult to grasp. A payment method known as an Electronic Funds Transfer System (EFTS) allows money to be sent between corporate or personal accounts without the need for paper money to pass hands. All types of payments use electronic fund transfer systems. When payment is done through digital methods, it is often referred to as electronic payment or digital payment. In a digital transaction, both the payer and the payee use digital methods to transfer and receive money. The digital payment excludes any hard commerce. Every electronic transaction is conducted online.

## **Digital Payment Systems in the World**

The widespread use of e-banking in the middle of the 1990s encouraged people in industrialised nations to conduct non-cash transactions. Even other countries began employing digital methods of conducting transactions in 2000, and by 2010, digital payment systems had been widely used worldwide. Some nations provide incentives for consumers and businesses to support electronic payment systems. The emergence of digital wallets, Unified Payment Interface technology, National Electronic Funds Transfer, internet banking, and mobile banking will undoubtedly play a crucial role

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in determining whether non-cash payments will eventually outnumber cash payments. The use of digital payment methods by customers worldwide has grown rapidly, especially during the past ten years. Asian nations are growing less slowly than their European counterparts, mostly because of a lack of knowledge and a lack of infrastructure. However, as nations like China and India record impressive growth rates for digital payments, the situation is gradually shifting.

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	Demographic factor	Number of respondents	Percentage (%)
	Male	63	42
Gender	Female	87	58
	Total	150	100
Age	up to 18 years	03	2%
	18 to 25 years	108	72%
	25 to 30 years	33	22%
	31 to 35 years	6	4%
	Total	150	100
Education	up to school level	Nill	Nill
	Degree/Diploma	120	80
	Master degree	15	10
	professionals	15	10
	Total	150	100
Occupation	self employed	15	10
	Salaried	30	20
	Home makers	Nil	Nil
	Student	105	70
	Total	150	100

# **Percentage Analysis**

Table-1

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	Demographic factor	Number of respondents	Percentage (%)
	Married	24	16
Martial	Unmarried	126	84
	Total	150	100
	up to 2	3	2
	2 to 3	54	36
Size of family	above 3	186	62
	Total	50	100
	Cash	6	4
Mode of payment in	Digital Mode	39	26
daily transaction	Both	105	70
	Total	150	100
	Daily	66	44
	Weekly	57	38
Frequency of digital payment	Monthly	21	14
puyment	whenever necessary	6	4
	Total	150	100
	Highly Satisfied	39	26
Satisfaction towards to Digital Payment	Satisfied	102	68
	Normal	9	6
	Not Satisfied	Nil	Nil
	Total	150	100
	Yes	12	8
Faced any of problems in Digital payment	No	138	92
8 Pwy	Total	150	100

	Demographic factor	Number of respondents	Percentage (%)
	Yes	129	86
Comfortability in digital Payment Options	No	21	14
	Total	150	100
Replacement of Cash in Next Gen Payment System	Yes	96	64
	No	54	36
	Total	150	100

The above table reveals a clear explanation of percentage variables included in this study. It contains descriptive statistics of Gender, Age, Educational qualification, Occupation, Marital Status, Size of family, Mode of payment in daily translation, Frequency of digital payment, Place of usage, Mode of payment, Reason for choosing digital payment, Satisfaction towards Digital Payment, Faced with any of problems in Digital payment. Majority 58% of respondents were female, majority 72% age of respondents were between 18 to 25 years old, majority 80% of respondents were degree holders, majority 70% of responder were students, majority 84% of respondents were unmarried person, majority 62% of respondent's family members were above 3, majority 70% of respondents were using both payment options like cash payment and digital mode option, most 44% of respondents were using digital mode of payment daily in their life, majority 68% of respondents were satisfied while using digital mode of payment, majority 92% of respondents were not facing any problems, majority 86% of respondents felt comfort by using digital payment, majority 64% of respondents were accepting the next generation payment system instead of cash payment.

usage	Respondent	Per cent
Debit	96	28.6%
Credit	15	4.5%
Internet	30	8.9%
Mobile	57	17.0%
Digital	21	6.2%
Upi	117	34.8%
Total	150	100

Table-2: Frequency analysis on us
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# Table-3: Chi-square Tests on Occupation and Level of Satisfaction on digital payments

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.483 <sup>a</sup>	4	.050
Likelihood Ratio	8.573	4	.032
Fisher's Exact Test	7.411		
Linear-by-Linear Association	1.446 <sup>c</sup>	1	.229
N of Valid Cases	150		

Ho: There is no a significant association between occupation and satisfaction level

The chi square result indicates that at 5 % level of significance the p value is 0.05, thus there exists no relationship between occupation and satisfaction level.

# Conclusion

It is clear from analysing these appraisals that the payment framework is fundamental for managing all payment and settlements in India. The association NPCI is responsible for saving payment and settlements in India. In India these days, the utilization of credit only exchanges is being advanced further. Accordingly, NPCI additionally turned out to be more applicable. The public authority can diminish the equal economy, forestall tax avoidance, decrease extortion, increment monetary incorporation, and so forth by examining the use of credit-only exchanges. NPCI has sent off a few administrations. Every one of them adds to working on the credit-only economy.

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