

# A Study on Business Use of Digital Platforms with Special Reference to Chennai City

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**Abstract:** Global economic activity is driven by business. The significant transformation in how firms across industries, inside and outside the digital economy, develop, produce, and market their goods and services is a result of the expanding use of digital technology. The major goal of this article is to identify the various digital platforms used in business development in Chennai and to assess the challenges experienced by businesspeople in implementing these platforms. Numerous businesses in Chennai cater to both locals and tourists, including clothing stores, digital marketing agencies, IT service providers, and others. 200 businesspeople from those five firms are chosen as the sample unit and size of this study utilizing a practical random method. The entire focus of this study work is description. Primary data is gathered via a well-designed questionnaire that is divided into three sections: demographics of the respondents, use of digital platforms, and issues experienced by businesspeople in Chennai City with digital platforms. Annual reports, journals, periodicals, books, and newspapers are used to gather secondary data. The gathered data were analyzed using percentage analysis, the weighted average method, and the Kruskal-Wallis test. The study's conclusions showed a strong correlation between businesspeople's investments and the extent to which they use digital platforms for their operations.

**Keywords:** Business Use of Digital Technology, Digital Economy, Digital Payments, Digital Platforms.

## 1 INTRODUCTION

Businesses use technology to develop new value for their business models, consumer experiences, and internal resources that support their core operations. The concept comprises both well-known businesses and start-ups that solely operate online and are reshaping their respective industries through the application of digital technologies [1]. Recent times have seen the introduction of the term "Platform firms" to refer to companies that connect buyers and producers in high-value transactions. Companies act as middlemen, building and running a platform for aggregating related products and services [2]. They primarily work on websites or mobile applications, and both their worth and numbers have increased dramatically in recent years. Information and interactions are their most important resources, and they also serve as the foundation for their value creation and competitive advantage.

Due to the rapid advancement of digital and mobile technologies, there has been a noticeable rise in web-based services with the common characteristic of connecting supply and demand for a particular purpose in recent years [3]. The rise of business platforms, or more specifically, new digitally enabled company models, is one of the numerous and major shifts brought about by digital and social transformation and is quickly becoming the most alluring on a worldwide scale [4]. Several business models, such as advertising, subscriptions, pay-as-you-go, and any combination of these and other business models, are used by the company that creates and maintains digital platforms to earn money [5]-[6].

## 2 REVIEW OF LITERATURE

A business platform is a hardware and software-based architecture that acts as an aggregator (hub) and organizes resources, transactions, and relationships between people and various types of entities, such as consumers-users, professionals, businesses, institutions, business partners, and so on, to co-create value in an ecosystem with network effects. Platforms can generate value and make better use of resources thanks to network effects. Indeed, network effects (demand-side economies of scale) begin to occur as new users add value to the platform's current users.

Digital business platforms (DBPs) like eBay, Google, and Uber Technologies have experienced tremendous growth. Arvind Rangaswamy et al. examine their key characteristics, the role of marketing in assisting DBPs in flourishing, and pertinent research areas for theory and practice [7]. DBPs are therefore required to carefully plan out and control user interactions on different parts of a platform. Numerous opportunities exist for scholars to reevaluate some of marketing's conventional responsibilities in the context of DBPs. Table 1 summarizes the most important definitions of digital platforms in the Business-to-business (B2B) context in the literature.

Although the variety of definitions can be seen as a strength in the dynamic field of platform research, it is also a significant weakness because it makes it impossible for industrial platform researchers to agree on the subject matter of their research. As a result, and as previously stated, different definitions exist. Some definitions have an internal perspective and view industrial platforms as shared resources and business processes within a company, such as product platforms [8], whilst others see industrial platforms as solely external issues. Others continue to emphasize the significance of taking into account both the internal and external perspectives and provide several definitions depending on the study's situation [9].

Table 1. Summary of existing definitions of industrial digital platforms in literature

Study	Definition of industrial platform(s)
Tee and Gawer [10]	“Industry platforms are technological building blocks that act as a foundation upon which an array of firms, organized in a set of interdependent firms [...], develop a set of interrelated products, technologies, and services” (p. 2019)
Gawer [11]	“Technological platforms can be usefully conceptualized as evolving organizations or meta-organizations that: (1) federate and coordinate constitutive agents who can innovate and compete; (2) create value by generating and harnessing economies of scope in supply or/and in demand; and (3) entail a modular technological architecture composed of a core and a periphery.” (p. 1245)
Gawer and Cusumano [12]	“We define external (industry) platforms as products, services, or technologies that [...] provide the foundation upon which outside firms (organized as a ‘business ecosystem’) can develop their complementary products, technologies, or services”. “We define internal (company or product) platforms as a set of assets organized in a common structure from which a company can efficiently develop and produce a stream of derivative products” (p. 418)
Pauli et al. [13]	“platforms that (i) collect and integrate data from a heterogeneous set of industrial assets and devices, (ii) provide this data and additional technological support to an ecosystem of third-party organizations who develop and enable complementary solutions that (iii) affect the operation of industrial assets and devices, and (iv) provide a marketplace to facilitate interactions between platform owner, third-parties and business customers.” (p. 183)
Shree et al. [14]	“These B2B digital platforms are internet-based aggregators of buyers and sellers. They serve as intermediaries and facilitate the transaction among the parties involved and enable the exchange of value alongside information” (p. 354)
Jovanovic et al. [9]	“a platform ecosystem can be viewed as an evolving meta-organizational form characterized by enabling platform architecture, supported by a set of platform governance mechanisms necessary to cooperate, coordinate and integrate a diverse set of organizations, actors, activities, and interfaces, resulting in an increased platform value for customers through customized platform services” (p. 2)
Ceccagnoli et al. [8]	“...platform as the components used in common across a product family whose functionality can be extended by applications and is subject to network effects.” (p. 263)
Thomas et al. [15]	“For the organizational platform stream, the platform is a structure that stores an organization's resources and capabilities.” “For the product family stream, the platform enables a product family and supports effective development of product variants to address different market niches.” “For the market intermediary stream, the platform enables a marketplace (typically electronic), creating market efficiencies in two-sided markets. In this stream, the market platform provides the device for connecting supply and demand and establishes and exploits market power.” “For the platform ecosystem stream, the platform is a set of shared core technologies and technology standards underlying an organizational field that supports value co-creation through specialization and complementary offerings.” (p. 201)

### 3 METHODOLOGY

#### 3.1 Problem Definition

A digital platform can be seen of as the culmination of the community that interacts with it, as well as a location where suppliers and customers can trade information, products, or services. The community is an essential part of the digital platform, and without it, the platform would be relatively limited in its intrinsic worth. As a result, this study must analyze the digital platforms that Chennai's business community uses, as well as the challenges those businesspeople confront in using them [16]-[17].

### 3.2 Objectives of the Study

- To examine the socioeconomic characteristics of businesspeople in Chennai.
- To assess the respondent's use of digital platforms for their company.
- To look into the issues that businesspeople have when using digital platforms.

### 3.3 Hypothesis of the Study

**Ho1:** There is no significant relationship between the Investment in business and the level of usage of digital platforms in their business.

**Ho2:** There is no significant relationship between the experience in business and problems faced by business people in using digital Platforms

## 4 RESEARCH DESIGN

Both primary and secondary data are used as the study's foundation. The study used a descriptive research design, which is concerned with describing a group. In a descriptive study, data are gathered without altering the environment. It can reveal details regarding a group's innately existing health status, behavior, attitude, or other traits. The questionnaire is used to get first-hand information from respondents. The questionnaire includes inquiries regarding the respondents' private information.

The study uses a simple random sampling technique. Due to the simplicity of selecting individuals, it is a statistical strategy for obtaining representative data. An exploratory design is conducted about a research problem when there are few or no earlier studies to refer to. The focus is on gaining insight and familiarity for later investigation or undertaken when problems are in a preliminary stage of investigation.

The sample size chosen for the data collected was 200 respondents from Chennai. The determination of sample size is a commercial decision that weighs the cost of a larger sample against the benefits of greater accuracy and meaningful interpretation is drawn. A descriptive investigation was conducted. The simple Random sampling method was used to gather primary data from 200 businesspeople in Chennai. To get the information, a well-structured questionnaire is used. Annual reports, journals, periodicals, books, and newspapers are used to gather secondary data. The gathered data were analysed using percentage analysis, the weighted average method, and the Kruskal-Wallis's test.

## 5 RESULTS AND DISCUSSIONS

### 5.1 Socio-Economic Profile of the Respondents

The present study confines the Demographical profile of 200 respondents are Gender, Age, Educational Qualification, Monthly Income, Type of Business, Business Experience, and Investment in Business. Parameters, frequencies, and percentages of different variables are tabulated in Table 2. Table 2 reveals that Male respondents (58.0%) are higher than Female respondents. The majority of the respondents are in the Age group of 31- 40 (41.0%). Most of the respondents are Graduated (58.0%) as compared to other educational groups. Majority of the respondent's monthly Income fall under Rs. 20,000–Rs. 30,000 (46.0%). The majority of the respondents have supermarkets (49.0%). The majority of the respondents have 11-15 Years of experience (31.5%). Most of the respondents have invested below 10 Lakh (31.0%) in their business.

### 5.2 Level of usage on digital platforms

Table 3 shows the different Digital platforms and their level of usage. Table 3 shows that most of the respondents have a high level of usage on social media platforms (mean score 2.350). Followed by Service-oriented platforms (mean score of 2.265), Knowledge platforms (mean score of 1.815), and Media sharing platforms (mean score of 1.610) are getting subsequent mean scores in the level of usage of Digital Platforms in Chennai City.

### 5.3 Relationship between the Investment of businessmen and the level of usage of digital platforms in their business (Kruskal Wallis Test)

Table 4 shows the results of the Kruskal Wallis test about the investment of businessmen and the level of usage of digital platforms in their business in Chennai City. Table 4 shows that the H value (0.0321) is less than 0.05. Therefore, the null hypothesis is rejected. Hence, there is a significant relationship between the Investment of businessmen and the level of usage of digital platforms in their business.

### 5.4 Problems faced by businesspeople in using digital Platforms

Table 5 explains the Problems faced by businesspeople in using digital Platforms. Table 5 shows that 'Complex Software & Technology' got a high mean and first rank in Problems faced by businesspeople in using digital Platforms. 'Security Concerns' got the second mean score and rank and 'Driving Adoption of New Tools & Processes' got the third mean score and ranking Problems faced by businesspeople in using digital Platforms.

Table 2. Socio-Economic Profile of the Respondents

S. No.	Variables	Parameters	Frequency	Percentage (%)
1.	Gender	Male	116	58.0
		Female	84	42.0
		<b>Total</b>	<b>200</b>	<b>100</b>
2.	Age	21-30	24	12.0
		31-40	82	41.0
		41-50	66	33.0
		Above 50	28	14.0
		<b>Total</b>	<b>200</b>	<b>100</b>
3.	Education	Illiterate	04	2.0
		Primary level	09	4.5
		High school	24	12.0
		Graduate	116	58.0
		Postgraduate	47	23.5
		<b>Total</b>	<b>200</b>	<b>100</b>
4.	Monthly Income	Up to 20000	57	28.5
		20000-30000	92	46.0
		30000-40000	32	16.0
		40000- 50000	15	7.5
		Above 50000	04	2.0
		<b>Total</b>	<b>200</b>	<b>100</b>
5.	Type of Business	Textile Shop	29	14.5
		Dairy Shop	15	7.5
		Super Market	98	49.0
		Beauty Parlor	38	19.0
		Hotels	20	10.0
		<b>Total</b>	<b>200</b>	<b>100</b>
6.	Business Experience (in Years)	0 – 5 Years	26	13.0
		6 – 10 Years	51	25.5
		11 – 15 Years	63	31.5
		Above 15 Years	60	30.0
		<b>Total</b>	<b>200</b>	<b>100</b>
7.	Investment in Business (Rs)	Below 10 lakh	62	31.0
		10- 20 lakh	42	21.0
		20 lakh- 30 lakhs	34	17.0
		30 lakh- 40 lakhs	38	19.0
		40 lakh- 50 lakhs	15	07.5
		Above 50 lakhs	09	04.5
		<b>Total</b>	<b>200</b>	<b>100</b>

Table 3. Level of usage on digital platforms

Digital platforms	Highly Used	Used	Not Used	Total Score	Mean/ Rank
Social media platforms	114 (342)	42 (84)	44(44)	470	2.350 – I
Knowledge platforms	61(183)	41(82)	98(98)	363	1.815 – III
Media sharing platforms	34(102)	54(108)	112(112)	322	1.610- IV
Service-oriented platforms	95(285)	63(126)	42(42)	453	2.265 – II

Table 4. Relationship between Investment and level of usage on digital platforms in their business – Result of Kruskal Wallis test

Particulars	Level of Respondents
Calculated Value	31.237
H -value	0.0321
Significant level	5%
Ho	Rejected
Inference	Significant

Table 5. Problems faced by businesspeople in using digital platform

Problems	Highly Agree	Agree	Moderate	Dis agree	Highly Disagree	Total Score	Mean/ Rank
Lack of Change Management Strategy	290 (58)	200 (50)	84 (28)	68 (34)	30 (30)	672 (200)	3.360 VI
Complex Software & Technology	390 (78)	248 (62)	45 (15)	50 (25)	20 (20)	753 (200)	<b>3.765 I</b>
Driving Adoption of New Tools & Processes	340 (68)	264 (66)	48 (16)	58 (29)	21 (21)	731 (200)	3.655 III
Continuous Evolution of Customer Needs	240 (48)	288 (72)	75 (25)	70 (35)	20 (20)	693 (200)	3.465 V
Lack of a Digital Transformation Strategy	330 (66)	228 (57)	96 (32)	52 (26)	19 (19)	725 (200)	3.625 IV
Security Concerns	380 (76)	236 (59)	60 (20)	48 (24)	21 (21)	745 (200)	3.725 II

### 5.5 Relationship between the experience in business and problems faced by businesspeople in using a digital platform

Table 6 shows the results of the Kruskal Wallis test about the experience of businessmen and problems faced by businesspeople in using digital Platforms in Chennai City. Table 6 shows that the H value (0.232) is greater than 0.05. Therefore, the null hypothesis is accepted. Hence, there is no significant relationship between the experience in business and problems faced by businesspeople in using digital platforms.

Table 6. Relationship between the experience in business and problems faced by the businesspeople in using digital Platforms – Result of Kruskal Wallis test

Particulars	Level of Respondents
Calculated Value	11.368
H -value	0.232
Significant level	5%
Ho	Accepted
Inference	Not Significant

### 5.6 Practical Implications

For those working in the sector, the conclusions of this study on business models for digital platforms have several management ramifications. Managers and leaders can use the study's insights to help them create and put into practice efficient strategies for utilizing digital platforms in their organizations. We specifically call out three important contributions.

First, managers may better grasp the dynamics of industrial digital platforms and create their business models by identifying important elements of value creation, value delivery, and value capture on those platforms. It is crucial to recognize that business logic for Business-for-customer (B2C) platforms and those used in the B2B environment are very different. As a result, while B2C platforms offer ideas for platforms' potential, the nature and economic models of a digital platform are very different. The study's findings provide crucial managerial lessons. For instance, managers can find possibilities to innovate and differentiate their services to match the needs of industrial clients by understanding how value is created on industrial digital platforms.

Managers may oversee complement and customer interactions on the platform and optimize their operations by having a clear understanding of how value is delivered. Managers may develop pricing and monetization strategies that complement the distinctive features of digital platforms in the industrial setting by having a clear understanding of how value is captured.

### 5.7 Limitations

Although this prospective evaluation offers insightful analysis of the industrial digital platform business models, several limitations should be acknowledged. First, because technology and digitalization are continually advancing, the landscape of industrial digital platforms and the related body of research are always changing. This could eventually affect the findings' relevance and applicability. Future research should therefore keep an eye on and adjust to the growing body of literature on industrial digital platforms.

### 5.8 Recommendations

A Digital Platform approach to market entry focuses on enabling one group of participants to profit from the presence or activity of others. The idea is that customers can choose whether they wish to pay for a service or product on their own. Platforms, on the other hand, can challenge this idea because a user segment's participation depends on their choices. To help business owners and managers create and capture value, developing a business platform strategy involves using slightly different solutions. To enter the internet market, a platform approach focuses on enabling one group of players to profit from the presence or activity of others. Clients are traditionally assumed to be able to determine their desire to pay for a service or product on their own.



## 6 CONCLUSIONS

Two important goals are met by a successful digital platform: it makes it easier to exchange commodities, services, or information. utilizes the neighborhood to maximize the value offered to all ecosystem players. The development of a digital platform is a tangible objective to pursue through digital transformation. Every company has a unique set of goals, thus digital transformations appear different for every organization. Despite the wide variety of digital platforms available, there is still potential for innovation and specialist solutions that keep clients waiting for the day when their needs are met.

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## ETHICS STATEMENT

This study did not involve human or animal subjects and, therefore, did not require ethical approval.

## STATEMENT OF CONFLICT OF INTERESTS

The authors declare no conflicts of interest related to this study.

## LICENSING

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