

FACTORS IMPACTING ADOPTION OF MOBILE TECHNOLOGY IN ASSET FINANCING INDUSTRY - A CASE STUDY

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Abstract

Customer Acquisition System (CAS) is the key driver for smooth onboarding of customers in retail finance companies. A simplified acquisition system in a Mobile platform brings speed and scalability to operation. However, companies often face challenges of technological adoption and seamless transition to new platform.

Through a real-life case study, this paper investigates the factors that impacts adoption of Mobile Technology especially by the employees in a customer facing role in an asset finance company of India. In this study, the role of training vis-à-vis other factors in quick adoption of technology is explored and explained. The study spans over a time from launching a mobile technology for loan processing to its successful implementation. Pilot projects were rolled out in different locations. Post adoption behaviors were studied for each of the pilot group to ascertain what is working and what is not. Also, line managers of specific groups were interviewed to find out the reasons of low adoption at specific locations.

The study revealed that there are multiple factors with different degree of proportion that impact technology adoption. Even though training played a significant role in dissemination of knowledge among employees, usage of new platform depended upon other factors such as: (a) ease and convenience of using new platform (b) involvement of line manager in driving the change (c) IT support system in resolving technical issues in the new platform (d) motivation of employees through introduction of incentive for early adoption.

The study was limited to an India based Asset Finance company with 5000+ employees spread across the country. However, the findings from this study were implemented in subsequent roll out of changes in technology and had its pie of success.

Keywords—Adoption, Technology, Complaint Resolution, Training

I. INTRODUCTION

With changing times, technology is getting pervasive in every walk of life to enhance efficacy. Mobile phones are playing indispensable role in every transaction of our life, whether it is about banking, booking tickets and hotels, ordering food, socializing, entertainment, making utility bill payments, and list can go endless. Usage of mobile is not limited to individuals. Even organizations are leveraging mobility devices to make their people and systems more effective by putting more real time data like Human Resource Information System (HRIS), emailing, inventory management, learning and development interventions, etc.

Like other industries, asset finance industry is equally affected such technological advancements. Arrival of “FinTech” companies have redefined the ruled of banking and lending. These Fintech companies are using mobile platform to provide banking and financial services to their customers. Now loans are quickly processed using Mobile apps both by lender and borrower.

Since the Fintech companies are rapidly eating out the pie of traditional banks and Non-banking financial companies (NBFCs), they are in a hurry to leverage mobile technology to be relevant in current market. However, the biggest challenge being faced by traditional players is the shift in the mindset of people to adopt mobile technology.

Current study is an empirical evidence of this challenge and it explores on the factors that impact technology adoption and explain how this challenge can be overcome. Hence, it is an important research not only for organizations which are currently facing this challenge, but also for organizations that provide such technology platforms, researchers and academicians.

This paper highlights how an empirical research on adoption of mobile technology in an Indian asset finance company is carried out, what are the factors that impact adoption of mobile technology other than training of people and how each factor is related with successful adoption of mobile technology. Findings of the study have significance not only for the organization under study, instead are beneficial for any organization that is struggling with the challenges of technology adoption. Moreover, this study is useful for researchers looking for empirical evidences in the area of technology adoption.

II. REVIEW OF LITERATURE

The history of mobile technology in BFSI industry can be traced back to nineties when Deutsche Bank launched its mobile banking services with the help of a technology company called "Paybox" (Shaikh & Karjaluo, 2015). Since then it is expanding from developed economies to developing and underdeveloped economies in the world. Since people in advanced countries are used to different facets of technology in their routine life, there was little challenge of adoption of technology. The real challenge lies in case of developing countries (Ejiaku, 2014).

Use of mobile technology in Indian BFSI industry have a special significance considering the size of its population residing in remote or rural areas as banking and lending infrastructure is clustered mostly in urban area. This divide can be plugged through effective use of mobile technology by service providers as well as consumers of financial services. As more and more people will access banking through their mobiles, mobile technology playing a crucial role in advancement of Indian economy. For people to adopt to mobile banking it is important for BFSI players to provide services on mobile platforms in a such manner that it is safe, easy to use and is cost effective (Singh & Srivastava, 2014).

Equally, it is important for BFSI service providers to thoroughly and appropriately prepare their employees who are responsible for offering services to consumer with the use of technology on mobile platforms. In the absence of such preparation, mobile technology would end up as a source of frustration and delayed services instead of bringing in efficiency and convenience (Son & Han, 2011).

It is needless to explain role of Training in successful diffusion of mobile technology. If the employees do not acquire adequate knowledge of handling new technology platform, it may lead to unnecessary delays and frustration instead of productivity gains. The combinations of technologies, productivity gains and training programs are studied in many researches across industries (Boothby, Dufour, & Tang, 2010). It becomes even more important for BFSI organizations as their offerings are complex and technical in nature along with added regulatory and govt compliances.

There are many other factors apart from training that plays role in making technology adoption successful. There are several such studies which highlights these factors. Technology Acceptance Model (TAM) is one model that is widely used to explore factors that impact the acceptance of various technologies or information systems (Davis, Bagozzi, & Warshaw, 1989). The usefulness of TAM and its future trajectory is discussed by Lee, Kozar and Larsen (Lee, Kozar, & Larsen, 2003). Similarly, on acceptance of information technology, Venkatesh et al. (Venkatesh, Morris, Davis, & Davis, 2003) has developed a model that is also quite a used model in the field of technology adoption. This model is called as "Unified Theory of Acceptance and Use of Technology" also popularly known as UTAUT. Review of literature on technology adoption cannot be said complete without reference of these two models.

Ease and convenience of use of technology is a factor of paramount importance in case of acceptance and adoption of any technology related platform. There is no dearth of studies that highlight ease and convenience of use as a critical factor for adoption of technology. As per TAM, "perceived ease of use" and "perceived usefulness" are the two dimensions that can be used to develop constructs for researches on technology adoption (Davis, 1989). There are various determinants to the ease and convenience of use of technology and it is important from the viewpoint of designing impactful learning and development intervention to understand these determinants. Training modules for disseminating the knowledge and skill to use new technologies are created considering the determinants of ease and convenience of use of new technology. In a study considering different respondents and different information system, it is validated that adoption of new technology depends highly on ease of use (Venkatesh & Davis, 1996).

Role of supervisors and managers of platform users is a significant factor for success of adoption of new technology as highlighted by Kristianto, Ajmal, Tenkorang & Hussain (Kristianto, Ajmal, Tenkorang, & Hussain, 2012) in their study of manufacturing firms. In technology adoption process, role of line managers is very critical as employees find it easy to align with their bosses and get support from them as and when it is required. In a study involving adoption of Salesforce automation, respondents underlined the role of their supervisors (Schillewaert, Ahearne, Frambach, & Moenaert, 2005).

Another study shows that Management Commitment Alignment (MCA), i.e., the commitment and alignment of management plays a critical role in successful adoption of sales force automation. This comes from the findings of research done by Cascio, Mariadoss & Mouri (Cascio, Mariadoss, & Mouri, 2010).

In their study Speier and Venkatesh in 2002, highlighted that while salespeople were trained thoroughly and their motivation to use sales force automation was high immediately after the training was imparted but with the lapse of time their motivation to use new tools started falling and gradually they got disinterested (Speier & Venkatesh, 2002). It clearly supports the belief of the researcher that proper training and development of users is not the only one factor that would lead to successful adoption of new technology. For continued motivation of users, till the stage they fully imbibe it becomes an essential part of their day to day working, it is important to use extrinsic motivator like financial incentive and reward and recognition. Yoo, Han & Huang (Yoo, Han, & Huang, 2012) has also suggested that the successful adoption of e-learning platforms depends upon intrinsic as well as extrinsic motivators.

III. RESEARCH METHODOLOGY

The research methodology adopted in this case is mixed-methods research involving both quantitative as well as qualitative research tools. Over the span of studied time period, mobile technology adoption is measured in terms of usage percentage of new technology platform over three stages and Focus Group Discussions (FGDs) conducted at each stage to determine factors impacting the adoption and refine the findings. The research design is sequential explanatory as every successive stage factors are determined and explained (Ivankova, Creswell, & Stick, 2006). Since this study is based on a real-life case, hence details of the case are chronologically provided in subsequent section.

IV. ANALYSIS & FINDINGS – A CASE OF MOBILE TECHNOLOGY ADOPTION

The advent of Fintech companies in India have changed customers' preferences in all kinds of financial transactions. They want quick and real time based decisioning on their borrowing requests. Figure 1.0 highlights how fintech ecosystems has evolved in Indian market. Adoption rate of Fintech products in India is as high as 59% which is second highest in world, as per report (EY, 2017). Taking clue from Fintech companies, traditional financiers like PSU banks and NBFCs are fast moving to adopt technology to stay afloat in the competition. However, they face lot of challenges like employee readiness, compliance requirements, security of banking data etc. (Gupta & Xia, 2018), (Krishna Priya & Anusha, 2019). While the challenges like data security and compliances can be worked out, it is difficult to overcome challenges of technological adoption and seamless transition to new platform.

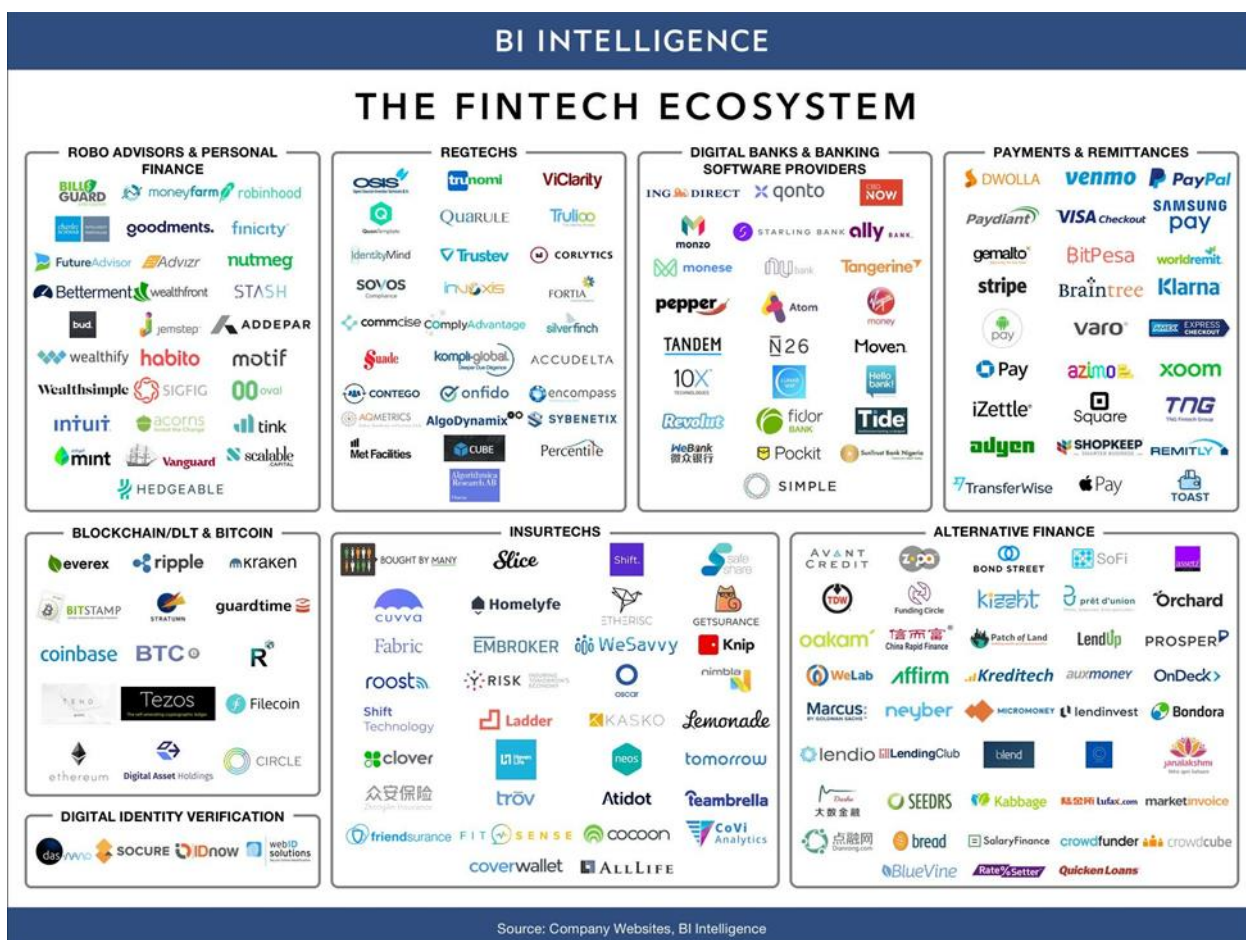


Fig 1.0 – The Fintech Ecosystem in India, 2020 (Source: BI Intelligence company Website)

As per “DefiSolutions” a key research agency, top three trends of asset financing industry in India are related to digital lending and online services as highlighted in Figure 2.0.

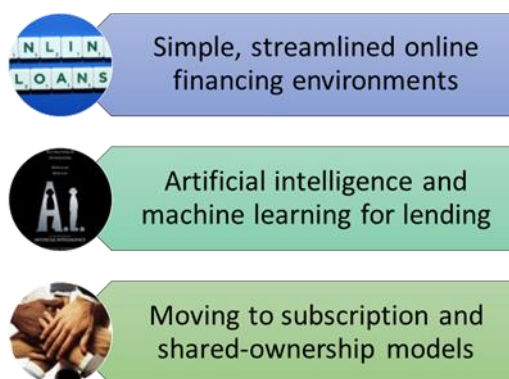


Figure 2.0 – Trends of Asset Financing in India, 2020

(Source: Website of Defisolutions – A Research Agency)

This is an empirical case study of a leading asset finance company in India and it investigates the challenges of technology adoption and the methods to mitigate them. This is a captive finance company and serves only to the two-wheeler customers of its parent brand. They operate at 600+ dealership locations of their parent brand across the country with help of 2000+ employees of sales function. The sales function uses their desktops and laptops to access cloud-based Loan Originating System (LOS) for end to end processing of loans. However, with the changing

need of business, these employees needed to be mobile to support the customers at their choice of place. The existing LOS system did not allow mobility as it was accessible only using office-based desktop. Thus, the need was felt to develop a Mobile App that will offer flexibility of time and place along with on the spot decisions on customer request.

After the mobile app was developed, the in-house training team of the company conducted large scale training programs to ensure the entire sales force is trained on using the new system before launch of the app. Table 1.0 highlights the details of location wise training program.

TABLE 1.0 – Details of Region wise employees trained on usage of Mobile App for CAS

Name of Region(s)	Total No. of On Role Employees Trained	Total No. of Off Role Employees Trained	Total No. of Batches for each Region
Panjab & Haryana	47	157	12
Rajasthan	33	99	8
Delhi & NCR	27	98	7
Uttar Pradesh East & West	65	220	17
Bihar & Jharkhand	33	107	8
West Bengal & North East	39	123	10
Madhya Pradesh & Chhattisgarh	61	198	15
Maharashtra	57	221	16
Gujarat	37	101	8
Karnataka & Goa	39	134	10
Andra Pradesh & Telangana	47	136	11
Tamilnadu	54	160	13
Kerala	26	89	7
Total	565	1843	142

(Source: Internal Data of Studied Company, 2019)

The app was launched at pilot locations of each region and was assumed that employees will be able to use this app-based platform as they are trained. After initial days of launch, it was observed that the usage percentage came down significantly. Multiple Focused Group Discussion (FGD) with concerned stakeholders revealed two primary reasons that stopped usage of this app (a) employees had difficulties in scanning the customer documents and taking photos of customer (b) lack of adequate support system in resolving technical issues during app usage. The technical glitches of the functionalities were fixed, and the users had a better experience of using this app. It took little time for the organization to create a proper system to resolve technical issues arising out of first-time usage of the app. The app was re-launched at those locations to see the adoption.

Now, it was observed that despite fixing of above two challenges, the usage percentage was not satisfactory. A dipstick study was carried out across the regions to know the reasons of employees not using the app. It was found that the app was brain child of the Head Office and line managers were not involved during inception, development or implementation of the app. The employees continued to source business using old system the managers did not take any interest implementation of this app. As the managers were not engaged, the employees did not find immediate fall back system in case of any difficulty. After due deliberation at head office, it was felt to engage with the line managers. The regional managers were called to head office and were explained the multiple benefits of the new platform. Subsequently, they were tasked to disseminate this information to their Area Managers and other employees. The regional managers recommended for introducing incentives for faster adoption of this platform which was immediately incorporated. Finally, after four months of different methods, the app was successfully institutionalized across the organization. The adoption rate is given in Figure 4.0. Consideration filters for usage and details of each stage is described as:

1. At least 40 users were chosen to do pilot at each region that covers atleast 25% of concerned manpower in that particular region.

2. Users were chosen basis minimum 50 disbursements per month
3. Stage I – App launch after the formal training
4. Stage II – After the technical functionalities were fixed and helpdesk was established
5. Stage III – Regional Managers were invited to head office and explained the advantages of app along with launch incentive

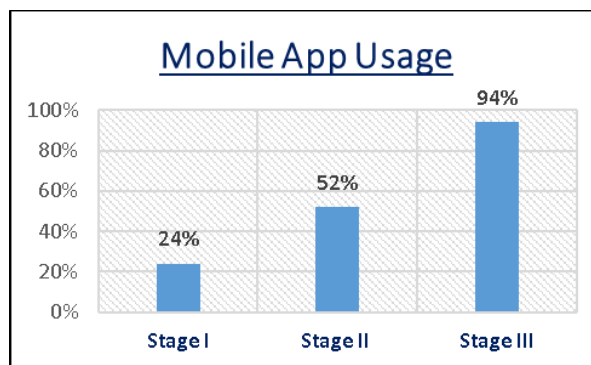


Figure 4.0 – Gradual movement in App usage, 2019

(Source: Internal data of Studied Company)

V. CONCLUSION AND RECOMMENDATIONS

The For organizations, moving to technological platforms from traditional systems and processes, technology adoption continue to be a big challenge. Based on this empirical case, it is suggested that to overcome this challenge, organizations may like to take consider following points before, during and after launch of technology platform:

1. It is important to involve all stakeholders especially the users and their reporting managers right from the inception stage to successful implementation of the technology platform. Without their involvement and buy-in it would be next to impossible for organizations to successfully roll out such platforms.
2. Extensive User Access Testing (UAT) of the new application and systems are essential part of launching any new system. The users get turned off and lose interest if initial experience of using the application is not satisfactory.
3. Disseminating the knowledge and imparting training on skills of users to use the new platform are of utmost importance. Designing a customized training and practice programs considering the profile of users and continuing timely refresher programs are key factors for successful implementation of new platforms.
4. A systematic process and help-desk infrastructure to resolve technical queries are critical success factors for adoption of new technological platform. It is also recommended that special set ups like war rooms be created for immediate resolution of such queries.
5. Active support of line managers to train their people, motivate their team members to use platform enables easy transition to new platform.
6. Motivation of users to use new platforms is usually high during the initial stages and it fades with passage of time. To have this motivation through until new system usage is imbibed, management may like to work on intrinsic and extrinsic motivation through incentives and rewards and recognition.

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