CHAPTER 6

CONCLUSION, LIMITATIONS AND FUTURE SCOPE OF RESEARCH
This chapter presents concluding remarks for the undertaken research. The chapter also highlights limitations of the study and paves the path for future scope of research. The chapter also covers theoretical and managerial implications of the research findings which would be useful in defining the contribution towards theory and field.

The research findings presented in a framework can be classified under two heads. Firstly, contribution towards existing body of knowledge and secondly towards practical aspects of the field. The contributions are standalone for both the sections and therefore, it is important to understand the implications in detail.

6.1. Theoretical Contribution

The study started with understanding the existing scenario of technology diffusion in rural India and then specifically in MGNREGS. The results contributed towards testing the relationship between behavioral intention and usage of Smart Cards for enhancing the financial inclusion. The research results drew variables from TAM and added fresh dimensions in the existing body of literature by including variables like trust, output quality and accessibility. The existing framework of TAM was also enhanced by studying the effect of demographic variables on the relationships along with the effect of stakeholders. The variable “Attitude” which was made redundant from previous models while transition to TAM was also revived by adding “Attitude of Stakeholders”. The study also added that “Awareness” was a key variable which was found to be one of the prime barriers from field discussions. It is therefore proposed that “Awareness” which was a confounding variable in most of the early researches should be included in the modified version. The study also introduced the effect of variables like technology self efficacy and terminology clarity which showed different results for different demographic variables like age, gender etc. This confirms that TAM although has been constantly been revised by various researches needs a bird eye view analysis in terms of explanatory variables. The integration of these extraneous variables has also proved that there is a need to checking the transitivity among the variables. It can be interpreted that external factors and trust are both theoretically significant in the framework and appealing as well.
The results also add a fresh perspective to study the models of Roger and apply the concept of extended TAM to other technologies as well. The study is one of the few studies which integrate diffusion of technology in a public policy program to generate higher financial inclusion. The innovated topic also helps the existing literature towards interdisciplinary research. The study is one amongst the few studies which integrates the three dimensions of technology, finance and economics.

The research framework also splits the core constructs into sub parts and extends the relationship of Perceived Ease of Use and Perceived Usefulness with Behavioral Intention to Usage of Smart Card technology. The present study also forms the bridge between TAM and UTAUT models which although uses demographic variables but do not relate with stakeholder analysis.

### 6.1.1 Managerial Implications

The study aimed at analyzing the relationship between the key constructs of TAM and extends the relationship with intervening and confounding variables. The results will not only benefit the existing literature but also impact the stakeholders involved in the process. The study, being interdisciplinary in nature leads to implications for stakeholders as well. The slow yet definite drift to Smart Cards under MGNREGS has been seen and covered in the study from the user’s viewpoint. The results indicate that stakeholders have not been contributing much in changing the decisions of the end user. An increase in interest of the users and the results indicate that MGNREGS officials need to be more proactive in helping this change and diffusion of technology. The results also promote that the private companies should provide services and to MGNREGS in making the Smart card much more user friendly. The results also are beneficial for banks and financial intermediaries as they are indirectly benefiting as diffusion of technology leads to solving their problem of financial inclusion.

The results also point out the role of perceived ease of use and perceived usefulness towards changing the behavior of users which is a matter of concern for service providers and NGO as well. The perception of the users seems to be the primary constructs which needs to be focused by strategy development by them. It is also important for the designers and developers of
the Smart Cards to understand the results and therefore design the card which would be useful for enhancing the diffusion of technology at a much faster pace. The results would also benefit the banks and post offices as they need to improve and restructure the business correspondents in order to increase the accessibility of the usage of Smart Cards.

6.1.2 Limitations of Study

Although the findings of the study present degree and attributes of relationships between the key constructs, it also has a flip side of it which needs to be understood as well. The data collected was cross sectional in nature which could be changed to longitudinal in nature to understand the pattern of behavior of individuals towards changes with time. The data was also collected in a district Ajmer in Rajasthan and therefore, the results cannot be generalized for other districts of the same state or other states. The data although was collected using questionnaire and focus group discussion, needs to be backed up by understanding the ethnography of the individuals. The study also deals with one technology used and the diffusion of the same. The results may differ for diffusion of other technologies in MGNREGS. Therefore, generalizing the findings in this case would be challenge. The study also studies a recently introduced technology i.e. “Smart Card” and therefore the results might be different if the same experiment is conducted after regular intervals.

6.2 Future Scope of Research

The research gives a fresh dimension in understanding the relationship of barriers for Smart Card technology. The research also adds a step more in the ladder and finds out relationship between behavior intention and usage of Smart card for financial inclusion. This research paves a path for continuing such researches for other technologies as well which are being used in public policy programs or for enhancing financial inclusion in the country. The study also forms a foundation for conducting research in understanding the role of stakeholders in enhancing the diffusion of Smart Cards in rural areas which most of the framework do not talk about. The robustness of the model can be enhanced by using cultural enablers in the model. A similar framework can be developed for other districts in a state and the results can be then
generalized for a state and therefore for a country. The study could also be used for studying the rate of diffusion of similar technologies which can lead to development of a theory or extension of a theory. Thus, it would be important to integrate similar studies to develop theory for studying the behavior patterns of users of technology.

Similar studies can be conducted in different districts which would help in making a comparative analysis in the results and therefore identifying common barriers and successfully addressing them. The results can also be used for longitudinal study which would be useful for extended version of study is developing a different theory in future.

6.3 Conclusion

Research on factors influencing user acceptance of Smart Cards was stimulated by the advancement in information and communication technology (ICT), which was considered as one of the most fundamental forces for change in the financial services sector. This includes the availability of Smart Cards and similar technologies for public policy programs. Together with innovation in technology, ICT has transformed the ways in which personal financial services are designed and delivered in public policy programs. The introduction of Smart Cards allowed consumers to conduct a wide range of uses apart from just being a Job Card or ATM Card at any time of the day, anywhere, much faster, and in a cost-saving manner compared to traditional banking services offered at the bricks-and-mortar branches of banks. It was important to understand why customers accept or reject new information systems and identify those factors that influence acceptance of Smart Card technology. This research study intended to address this research issue by developing and testing a structural model of Smart Card acceptance and use. The proposed framework in this study was based on the model of technology acceptance and relevant constructs. The model was tested by collecting data from the field using structured questionnaire and focused group discussions. The current study investigated the effect of user beliefs (i.e. PU and PEOU), trust and external variables (i.e. technological self-efficacy, output quality, response time, accessibility, terminology clarity) on behavioural intention towards acceptance of Smart Card by extending the TAM, which provides a conceptual framework to explain individual’s acceptance of an information system based on user perceptions. TAM model
postulates that individual’s beliefs of ease of use and usefulness are primary determinants of acceptance of new information system technologies. The present research proposed a conceptual causal model that incorporated trust as additional direct determinant of intention to use Smart Cards, along with, the antecedents of user beliefs (i.e. PU and PEOU) to supply a better explanation and understanding of the factors influencing user acceptance of Smart Card for financial inclusion in rural areas. The results of this research study provide empirical support for the extended model of the TAM. In this study, the beliefs about ease of use and usefulness were observed to have significant impact on behavioural intentions towards acceptance of Smart Cards under MGNREGS, revealing more than half of the total variance in the acceptance intention. However, beliefs about usefulness had a stronger effect on the intended use than the perceived ease of use beliefs. Thus, suggesting that usefulness beliefs contribute more in Smart Card acceptance than the ease of use beliefs. These findings provide additional external validity to the technology acceptance model, especially in the new contextual settings i.e., Smart Card technology.