

# **Identification And Measurement of Digital Economy : A Case for Cooperatives in India**

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## **Introduction**

With more than 8 lakh cooperatives having significant presence in all areas of socio-economic activities, digitalization based on latest technologies is considered very important for cooperatives to contribute their best in India becoming a 5 trillion economy by 2024. Cooperatives face a big challenge to use latest technology based communication system to not only communicate with their members and external stake-holders to improve their governance system to make it autonomous and self-sustaining, but also use it to enhance their business as well as advocacy, autonomous and promotional role so as to compete in the market economy.

Though digital changes have been taking place in the cooperative sector, steps related to identification and measurement of digital economy for cooperatives have not been undertaken till date. There is a very little awareness on importance for this subject of vital importance in the cooperative sector. Due to this, a study on this interesting topic is of paramount importance.

Digital identification, or digital ID is very important as India is making rapid strides in digitalization. Cooperatives are inclusive organizations benefitting poorer sections of the society. Digital identification can provide more inclusive access to services provided by cooperatives in providing loans, providing health care, education, etc for the poor. Similarly, measuring economic and social impact of digital measures as seen in digital transactions, use of platforms, ICT initiatives, etc., is also very important. My paper will attempt to explore this area so that a model or framework for identification and measurement of digital initiatives in cooperative sector emerges which can be useful in policy-making. As the cooperative banks, a vibrant segment of the cooperative sector have embarked themselves strongly on the path of digitalization, the paper will have an added focus on cooperative banks.

## **Digitalisation of Cooperative Banks**

In the changing market economy, cooperative banks are fast adapting themselves to the demands of digital economy. In the wake of rising consumer expectations, high levels of NPA, and the need to serve their prime clientele- the poor and weaker sections of the society, the cooperative banks are adopting core banking systems (CBSs), ATMs, Net banking, and other modes of digital transactions fast. There is a strong realisation that in the wake of fast emerging digital trends, cost effective digital solutions are very imperative for smooth functioning of these institutions. The cooperative banks are also realising that digital transaction management systems are important to make traditional systems paperless, reduce costs, enhance customer experience and strengthen security and compliance.

The Government has made a provision of Rs. 1900 crore towards computerisation of primary agriculture credit cooperatives, the bottom tier of the short-term cooperative credit structure. This shows the desire of the government to provide a level-playing field to cooperatives like commercial banks in the pursuit of digitalisation. The cooperative banking credit sector was recently hit by a massive fraud in PMC cooperative bank, which clearly showed glaring deficiencies in the regulatory mechanism of cooperative banks, which has led to RBI strengthening its monitoring mechanism and coming up with a regulatory framework for the urban cooperative banks. In the wake of this, there is a strong realisation that cooperative banks must undertake effective measures to streamline their banking measures, more particularly digital measures adopted in these banks.

## **Cooperative as Inclusive Organisations**

Inclusive growth ensures that the benefits of a growing economy extend to all segments of the society. Financial services are important for inclusive growth. Cooperative banks are playing a major role in inclusive growth by providing financial services to the underprivileged section of the society– farmers, rural artisans, landless labourers and women. Access to financial services and creating identical opportunities enable such people to participate better in the economy, helping them to contribute to poverty eradication.

Cooperative banks have a larger client base, but share of cooperatives in institutional credit is lower than that of commercial banks. The average loan size of cooperatives is smaller as compared to commercial banks. No doubt, the cooperatives' clients are small, marginal farmers and poorer segments of the society which are key targets of financial inclusion.

Cooperative banks have been following principles of good cooperative governance by adopting cooperative principles. Based on democratic principles, they help people in the rural areas to come out of the clutches of moneylenders. Their democratic structure is tailor-made for fostering financial inclusion. They have a clear advantage over other banking institutions by creating opportunities for employment and income generation. So there is a need to support and strengthen cooperative banks so that they can play an important role in inclusive growth in our country. As inclusive growth is integration of virtual networks, physical networks and social networks, which very much includes digital platforms, digitalization is a key component of inclusive growth through cooperatives.

### **Digital Identity and Financial Inclusion**

Digital financial services enabled by the digital identities have the potential to bring financial inclusion for people who are out of the financial system, which means the poor and deprived sections of the society. According to Mckinsey, the widespread use of digital finance can boost annual GDP of all economies by \$3.7 trillion by 2025. By enabling people to prove their identity conveniently, digital identity builds up trust, ensures ease of use and lower costs which is vital for adoption of financial services. It protects personal data from theft, unauthorised sharing and usage and only discloses the credentials that are needed for each specific service.

Aadhar is a popular mode of digital identity. However, it is not mandatory to furnish Aadhar to open a bank account. The people can use Aadhar card for identity and address verification on a voluntary basis.

For the cooperative banks, reaching out to their customers in the remote and inaccessible areas is a big challenge. The cooperative banks in this regard face a bigger challenge more than the commercial banks who are well equipped to open the branches in the remote areas as they have more resources and are backed up by full government support.

Digital identification for the cooperative banks is also important at a time when the public distrust in these institutions has increased due to various irregularities reported in functioning of these banks. Viable digital identification options have to be explored taking into account ground realities like the local context, the strong community orientation of cooperative institutions and the need to develop a strong monitoring mechanism which can look after the hazards of governance in cooperatives.

Jharkhand State Cooperative Bank serving the tribal customers in the remote areas has come up with a financial inclusion solution consisting of a software

gateway and fingerprint sensors embedded into micro-ATMs. This ensures biometric capture and identity verification and allows customers to access services such as cash withdrawal, cash deposit, balance enquiry, mini-statement, account opening, etc. A large number of banks agents have been equipped with bio-metric enabled ATMs serving the banks' customers in more than 40,000 villages.

The cooperative banks in other parts of the country should adopt a similar software for digital identification. Adequate training for this must be provided so that all are well-equipped to handle this technology. The poor customers of the cooperative banks have to travel long hours to reach the premises of the banks. If the cooperative banks employ agents who can serve the banks' customers with the digital identification and other services at their doorsteps, this can be cost-saving for both the banks and customers.

### **Why Measurement for Digital Transactions in Cooperatives?**

The business world is seeing a great change in how impact is regarded and measured, and how organisations, business, etc., are evaluated. There is an increasing interest in measuring and evaluating cooperative performance. Besides, cooperatives are considered key organisations for achieving UN Sustainable Development Goals, in which digitalisation is also important parameter. The measurement and impact of cooperatives to Sustainable Development Goals is a fast emerging area of interest and study.

Against the above backdrop, it will be interesting to try to build up a framework for measuring digital transactions in cooperative banks, which can build up a model for other sectors of the cooperative movement to emulate.

### **Framework for Measurement**

Digitalization is not just about technology, it is about having meaningful criteria to measure business transformation progress to adapt with the changing context. The banks should build up their criteria to measure the progress of their digital adoption strategy by measuring digital engagement performance. For cooperative banks this is of paramount importance as currently they are far behind the commercial banks who are more equipped with more modern means of digital transactions, and more active customer digital engagement considering the fact that these banks are more urban-based with clients who are more educated to handle the digital technologies.

Against the above backdrop, the framework for measuring digital transactions in the cooperative banks may include the following :

- ***Active Clients***

Considering that many of the online customers of the cooperative banks may be inactive, evaluating the number of customers who use the application regularly is very important. A careful analysis of the active users of online platforms needs to be done to enable the cooperative banks to boost users experience, and grow the number of active users of the application. The evaluation of active users can be done as a daily, weekly or monthly basis. More frequent analysis can lead to more interesting results. The results may indicate the nature of the users— rural, or urban based, their social roots and class composition. The findings may point out in a direction, for example that as the rural-based customers, who are the key targets of the cooperative banks are generally aloof from digital use, the banks may have to re-orient their digital strategies .

- ***Digital Customer-base and Transactions***

Measuring percentage of digital customer-base and increase in this percentage over a period of time are also important yardsticks for measurement. Similarly, volume of digital transactions, and percentage of increase in the digital transactions are also important yardsticks of measurement. All these can effectively provide a good picture of the digital progress of the cooperative banks. Are the customers willing to switch over their loyalties to digital use? Are they comfortable in using the technology? Do the cooperative customers feel that the trust which they had built in the cooperative banks earlier through their face-to-face interactions with the bank officials may diminish due to their digital use? Answers to all these questions may come from these measurement indices.

- ***Measuring Engagement of Digital Users***

The engagement of digital users of the cooperative banks is also an important measurement yardstick considering that there are highs and lows in digital engagement of the customers. Identifying the activities of the users can also be an effective way to measure engagement. This can help in finding out the meaningful impact of the digital use of the customers, instead of their routine, or mundane use of digital platforms. Measuring engagement is also important to gauge the rate at which the online applications solve the need of the users, or the time taken to complete the tasks with an application.

- ***Customer Feedback Surveys and Customer Retention***

The customer feedback surveys of the cooperative banks are important to assess whether the digital use is benefiting the customers, the deficiencies in its functioning, and whether the customers can recommend the online banking system to others. Considering the fact that the customers of the cooperative banks may quickly switch over their loyalties to the commercial banks if they find the digital services satisfactory, it is important to devise various indices like repeat purchases and satisfaction, or trust measuring scores to assess whether the customers will stick to digital use.

- ***Comparison of the Online and Other Platforms***

A comparison of the offline and online use of the platforms in the cooperative banks may be an interesting way to measure the customer mood besides assessing cost-effectiveness. If the customers are preferring the digital use, then this means that this may be cost-effective for the banks as the offline ways may cost more. If the customers are hesitant, or reluctant in digital use, then the banks must strengthen their training plank for their customers, or devise more outreach customer programmes to convince them about the benefits of digital use.

- ***Return on Investment in Online Platform***

Return on investment in the online platforms for many of the cooperative banks matters a lot as the cooperative banks when compared to commercial banks face a big challenge to utilise their limited resources in an effective manner. If there is cost-reduction due to providing some of the services online, and there is higher engagement with customers on-line, then the returns on the investment may have their own logic and significance.

## **Safeguards in Digital Use**

Uninhibited digital use may lead to risks when a large number of loans are approved by a single person in a span of few days. Measuring this through an appropriate tool, and create alerts and notifications become very important in this regard.

Measurement of digital transactions in the cooperative banks is very important as it creates a learning culture not only to improve the functioning of digital services in the cooperative banks, but this also helps for decision-making purposes. This

enables the banks to know whether they are achieving the goals or not so as to undertake corrective measures if needed.

## **Conclusion**

As cooperatives are slowly and steadily marching on the path of digitalisation, identification and measurement of the digital transactions are very important for them to devise effective strategies so that they serve their key clients in a best possible way with a sound business sense. For the cooperative banks, this is the need of the hour as they face a big challenge to professionalise their services, retain their clients and show their credibility more particularly at a time when the regulatory mechanism of the government is becoming stiff. In the times to come, the cooperative banks have to embrace superior technologies like artificial intelligence, predictive analytics, etc., which may be more challenging. They must prepare and equip themselves with a proper mechanism based on identification and measurement of digital interactions at present which can be of great help to them in future.

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