

## EXPANDED ABSTRACT

### How do co-operative banks perceive the impact of digital transformation?

The digital transformation is posing an unprecedented challenge for the financial sector. The classic model of financial intermediation is threatened. This is both a consequence of the development and the application of new technologies that are transforming society and that are empowering individuals with new digital tools.

Nowadays, banks are not only competing with each other. New actors have also emerged in the financial landscape, such as *fintech* (financial companies whose business model is technology-intensive) and *techfin* (technology companies offering financial services, especially large technology companies -or *bigtech*-). The extensive branch networks that are typical for traditional retail banking, such as in cooperative banks, are reducing their prominence in the face of the growing offer and digitized management of financial products and services.

The credit cooperatives have traditionally been characterized by a special link with their base of members and customers based on physical proximity. This has allowed the acquisition of great knowledge of the economic activity within the territory where the cooperative banks are established. Digital transformation and non-face-to-face financial services can significantly affect this traditional relational model based on personal contact with the users.

Consequently, faced with this paradigm shift and taking into account the particularities that define the cooperative banking model, there is an interest to analyse the perception of this sector on this important and accelerated technological change, both from the perspective of internal processes, as from the external perspective of its clients. At the same time, it is appropriate to inquire about whether this process is being perceived differently depending on the size of the cooperative bank, given the fact that the traditional model of cooperative banking has been based on a wide network of offices. This research would be, as far as it is known, the first to address such a task in the field of credit cooperatives, since the scarce studies found have a more general character about the banking sector as a whole.

In order to comply with the proposed objectives, information has been obtained through a questionnaire, consisting of 20 questions of a quantitative and qualitative nature. The questionnaire has been answered by a large number of Spanish credit cooperatives (41 out of 62 existing cooperative banks). With the obtained answers, a statistical-descriptive analysis has been completed, through the application of common statistics, such as: arithmetic mean, standard deviation, percentiles, maxi-

mum and minimum. In turn, in line with the objectives set, statistics are presented including calculations for both, the sample set and for two sub-samples, in order to distinguish between entities of different dimensions.

Once the analysis has been concluded, some remarkable results have been obtained. On the one hand, the cooperative banks that have been included in this study have indicated the necessity to improve their digital transformation. It can also be observed that the digital gap is perceived in relation to the rest of the banking sector. Managers are aware of the significant impact of the digital transformation of the economy and society. Technology-based tools, such as big data, may have the greatest impact on the commercial banking activity. Within the next five years an intense competition from technology-based companies is expected. Furthermore, the technological culture of members and customers is insufficient.

On the other hand, it can also be observed that the dimension of the cooperative banks influences their perception of the digital transformation in the cooperative banking sector. In this sense, the cooperative banks that affirmed the existence of a wide margin of improvement in the operational scope have a smaller dimension and more seniority than the rest of the sample. Banks that have a higher number of total assets and a higher number of employees also perceive a greater margin of improvement when it comes to the internal management processes.

Additionally, the results indicate that the perceptions of digital transformation are conditioned by the size of the entity. Larger entities perceive a lower degree of assimilation of the digital transformation by the organization's employees, giving it greater importance to the impact of different technologies. Large entities perceive less intensity of competition from foreign banks and value the degree of technological and financial culture of members and customers more.

However, these results have limitations that have conditioned this research. These are basically founded on the fact that the analysis is based on the perceptions of the managers of the surveyed entities. This implies a degree of subjectivity conditioned by multiple non-controllable variables. With this general approach to different aspects related to digital transformation it has not been possible to contemplate other transcendental issues.

The study culminates with a series of strategic suggestions that can be considered by the sector. Credit cooperatives, usually with a smaller comparative dimension with respect to the large commercial banks and based on federative models, cooperation or systems of cooperative concentration give special value to territorial self-identification and proximity to the members. Technology can be a factor of distancing that can lead to a loss of personal contact with members or clients. Therefore, the cooperative bank must design compatibility strategies between the philosophy of its specific business model and the assimilation of digital transformation. Precisely, its closeness to the client can be the way to acquire a prominent role in the financial-digital education process that society will demand over the next few years.

Additionally, based on the results obtained, it can be said that, from a strategic approach, credit cooperatives must value or advance in various lines of digital transformation of their activity, both in their internal and organizational processes and in their relations with clients. In the latter case, the reduction of processing times for operations, the use of *apps* (mobile applications) and access systems that are increasingly simple, agile and attractive, can be essential. Special attention should be given to anything that implies a more satisfied customer experience and simplification of procedures, with a wider and more personalized portfolio of financial products and services.

In this sense, the strategy should begin with evaluating the implementation of new technologies that already anticipate major changes. This is the case of blockchain in its internal processes or the use of vast amounts of data that is collected from the daily relationship with customers, with the aim of improving the personalization of the offer.

**KEYWORDS:** co-operative banks, co-operative banking, digitization, digital transformation, blockchain, customer experience.