

# Chapter 11

## The Impact of Digital Transformation on Personnel Number in the Banking Sector

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### ABSTRACT

*Digital transformation affects the banking sector as it does every sector and enables significant innovations and changes in the banking and finance market. In this sense, it aims to ensure that banking transactions can be carried out quickly, securely, and at less cost, and to achieve the highest level of satisfaction in customer service. New solutions should continue to be developed to enable customers to benefit from digital banking products in the fastest way possible. There are also negative effects of digitalization. When evaluated within the framework of the banking sector, the increasing number of digital services and the number of customers using these services may lead to a decrease in the number of bank personnel. In the study, quantile regression was applied for the period of 2010.Q1-2020.Q4. This study examines the changes that may occur in the number of personnel as a result of the digitalization process in the banking sector and determines the decreasing effect of digitalization on the number of personnel.*

### INTRODUCTION

Thanks to technological progress, the banking sector is one of the sectors most affected by change and development in the modern digital marketing environment. In today's competitive economic conditions, businesses that adapt quickly to the radical changes in the marketing environment stand out in the race to achieve profitability, which is one of their main objectives (Shettar, 2019:3). The cost-cutting benefits of using digital channels, which provide consumers with access to financial services at the most cost-effective place and time, encourage banks to invest in this area (Hinings et al., 2018:53).

Banks aim to increase customer satisfaction in digital banking services through digitalization efforts. With the worldwide competition, banks are focusing on a system that enables their customers to receive banking services in a fast, practical and comprehensible way, and to intervene immediately in

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the problems experienced by their customers (Cortet et al., 2016:14). Therefore, the number of employees, the consistency of the number of transactions and the number of branches have a very important place in digitalization in the banking sector. Digital transformation is defined as “a process which aims to improve a unit by combining information, information technology, communication and connectivity technology and bringing about significant changes in its structure”. Digital transformation includes a broad concept in the banking sector, such as digitization of documents, electronic signatures for transactions, e-learning, teleconferencing, online trading platforms, digital stores, e-statements and m-payments (Ravi, 2017:173; Kitsios et al., 2021:4).

The fact that digitalization plays an important role in consumer preferences and reduces costs leads to an increase in technology investments made by banks and plays a decisive role in providing competitive advantage in the competition between banks (Omarini, 2017:3; Li, 2020:3). While the first stage of the digital transformation in the banking sector was the internet, the second stage was mobile applications. On the other hand, the increasing number of financial technology companies (FinTech) and large technology companies (BigTech), which have gained a significant share of banks' market share with the digital transformation, indicates that competition in the banking sector will be much more intense in the future. About fifteen years ago, more than half of banking transactions took place through the branch network, whereas today this proportion has fallen to less than 10%. By 2022, with the rapid growth of digital channels, it is predicted that at least one out of every two transactions will take place through a non-bank channel (Bakhareva, 2017:13; Gomber et al., 2017:539).

There are also negative effects of digitalization. When evaluated within the framework of the banking sector, the increasing number of digital services and the number of customers using these services may lead to a decrease in the number of bank personnel and branches. Therefore, the aim of this study is to reveal the impact of the digitalization process in the banking sector on the number of personnel with the help of quantile regression.

## **CONCEPTUAL FRAMEWORK**

### **Digitalization and Employment in the Banking Sector**

Today, there are still diverging views on the possible effects of digitalization on labor markets and employment. Because there is no doubt that the digital revolution, while increasing efficiencies and reducing costs, will destroy many existing professions and give rise to new ones (Hansen & Sia, 2015:53; Hagberg et al., 2016:698). While various surveys in this area reveal concerns that robots will displace blue and white collar jobs in the near future, there are also optimistic views that technology is always creating new employment opportunities and will not lead to further job losses (Lanzolla & Anderson, 2008:73; Buss et al., 2016:7). As a result, there is no consensus on the effects of technological developments and digitalization on the workforce. Some experts and academics argue that the developments will have partially or completely negative consequences, while others argue that they will have more positive effects (Bihari, 2011:35; White, 2012:207).

In this context, in order to better analyze the issue, when the results of technological advances to date are examined, it is observed that there are some common points. The first of these is that although the demand for labor initially decreased with the developments, it later increased (Umans et al., 2018:413). The other commonality is the increase in the productivity of the labor force. In this context, it can be said

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