

The Use of Electronic Banking and New Technologies in Cash Management

Leire San Jose Ruiz de Aguirre
University of Basque Country, Spain

INTRODUCTION

The use of new information and communication technologies (ICT) as a business tool has increased rapidly for the past 10 years (Bonsón, Coffin, & Watson, 2000; Claessens, Glaessner, & Klingebiel, 2000; Vasarhelyi & Greenstein, 2003). More specifically, financial software, e-banking, and the Internet, as core aspects of the various technologies used, have become driving forces behind the expansion of firms and the development of cash management. New technologies are considered as one of the most attractive ways for businesses to increase revenue and achieve economies of scale that can reduce unit costs (Ballantine & Stray, 1998; Barajas & Villanueva, 2001; Daniel, 1999; Daniel & Storey, 1997; Deyoung, 2001; Downes & Muy, 1998; Faulder, 2001; Jayawardhena & Foley, 2000).

There are different studies about the use of ICT in the management of the enterprise that explain the obtaining of enterprise performance. Brynjolfsson and Hitt (2000) and Nájera (2005) have done a review of these works and a classification of these types of researches. Unfortunately, there are not specific works or empirical researches about the use of e-banking in cash management; consequently, this work is focused in this.

The rest of the chapter is structured as follows. The theoretical foundation on which the study is based is explained in Section 2. Section 3 presents the data and the analysis procedure used to conduct the empirical study. The main results of the investigation are shown in Section 4, and Section 5 presents conclusions. The chapter ends with a list of bibliographical references.

THEORETICAL FOUNDATION: E-BANKING IN FINANCIAL PRACTICES

Three different periods can be distinguished in the development of ICT in cash management (Williams, Chen, & Russell, 1997). In period one, prior to the 1970s, treasurers engaged in accounting and in managing the cash-flow of their companies, and did not use IT tools in their work. Period two, from the 1970s to the 1990s, is characterised by a vision based on

corporate relations and integrated systems. Since the 1990s we have moved into period three, the era of networking, in which the responsibilities of cash managers have come to include the use of electronic banking and new technologies to obtain the efficiency in their financial decisions because the great advantages for business management entailed by the development of technology. Internet is a space that can be shared freely at zero expense. However, the introduction of new technologies needs to be analysed thoroughly if business management efficiency is to be maximised (Levinsohn, 2001).

In this context, specifically, electronic banking management becomes an essential function in which information can be obtained electronically on market conditions, financial products, trends, and financial services. Financing and investment of treasury deficit and surpluses is optimised by comparing the terms of the different financial products on the market, and then contracting products online (Mooney & Pittman, 1996; Vasarhelyi & Greenstein, 2003; Welch, 1999).

In short, financial services based on new technologies use the e-banking as a single communication standard and thus, obtain economies of scale (Barajas & Villanueva, 2001; Eije & Westerman, 2002; Mishkin & Strahan, 1999) and positive synergies at treasury departments that were formerly difficult to achieve.

METHOD AND SAMPLE

To draw up the explanatory model of e-banking use in cash management, we used an exploratory factorial analysis of variables with Version 14.0 of the SPSS program.

In the following table, we have described the sample that is considered representative of the population of Spanish firms. This study was conducted on Spanish firms with more than 10 employees. The sample was chosen by proportional allocation according to criteria of company size (defined by the number of employees) and sector of activity. The total number of firms used was 501, and the error is smaller than 5%, necessary in this type of study.

Table 1. Acknowledgements: The sample

SAMPLE	THE CLASIFICATION OF THE SAMPLE	RANDOM ERROR	INFORMATION COLLECTION TECHNIQUE. TIME
501 valid questionnaires. The interviewed person was the finance manager or cash manager.	Criteria: company size (defined by the number of employees) and sector activity.	± 3 , 52% with a confidence level of 95,5%, $p=q=0.5$,	Telephone's interview. June of 2005.

RESULTS

The results indicate that the new technologies more utilized by firms to financial practices are financial software, Internet and electronic banking. Furthermore, these results have permitted us to develop an explanatory model of the use of electronic banking to treasury management.

Preliminary Results

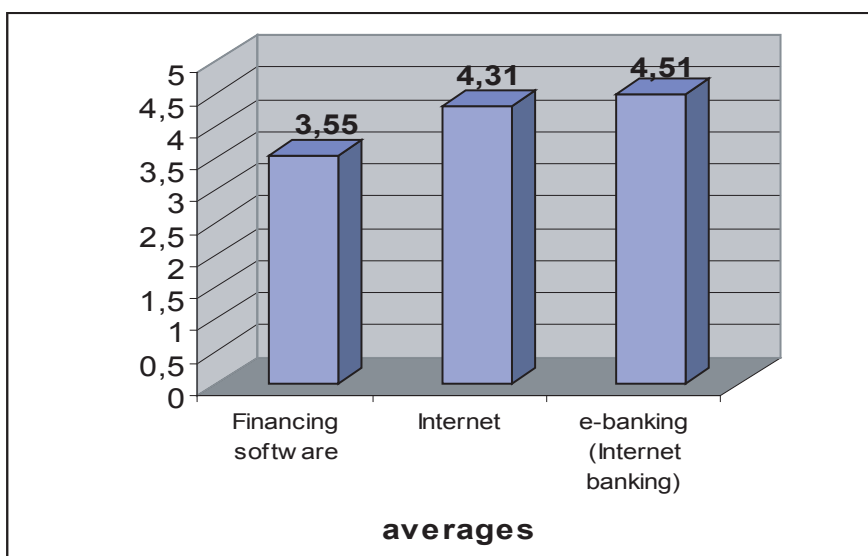
The Use of ICT in Cash Management

The ICT's most widely used in financial operations and more specifically, in treasury management are financial software,

the Internet, and e-banking, though it is the introduction of the Internet into all areas of corporate life that has been the major revolution of the past 10 years. All these technologies entail benefits for financial management, so the next step is to analyse their average levels of use and determine which ICT's are most widely used in this area (see Graph 1).

This analysis shows that e-banking (Internet banking) is the most widely used tool in treasury operations, with treasury managers awarding it an average score of 4.512 out of 5. The second highest score is that of the Internet, with 4.312, followed by financial software with an average of less than 4. Specifically, e-banking is used habitually by 73.1% of the firms analysed, the Internet by 65.5% and financial software by 44.6%.

Graph 1. The level of utilization of ICT in cash management: Averages



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