

## Chapter 69

# Comparative Study Among New Payment Systems and New Future Trends in Mobile Payments

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### ABSTRACT

*Over the last few years, the payment systems used in business activities have been altered by recent technological developments. Increasingly, more consumers use their mobile phones to do their purchases. Currently, sales through smartphones are an indicator of the growth potential that these new trade and payment methods have in the future society. In this chapter, the authors carry out a theoretical review of the different payment systems, from the most traditional ones to the new payment systems used on the Internet. They also analyze the different security protocols that are currently operational, with the aim of improving consumers' trust. In this literature review, the authors extract a few implications and recommendations to management of M-Payment-based businesses.*

### INTRODUCTION: NEW PAYMENT MEANS IN THE B2C COMMERCE

The new payment systems are a result of the Information and Communication Technologies (ICT) developments in the field of economic transactions between companies and their customers. More specifically, they emerged as a means to solve certain problems related to cash handling (Tamayo, 1999): 1) the need to reduce the cost of money and of the existing payment systems; 2) make small purchases and instant

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## Comparative Study Among New Payment Systems

Table 1. Structure of payment transactions in the Eurozone in 2011

%	Transfers	Direct debits	Card payments	Electronic payments	Checks	Others
<b>EUROZONE</b>	<b>27.06</b>	<b>28.93</b>	<b>35.47</b>	<b>2.02</b>	<b>5.83</b>	<b>0.69</b>
Germany	34.26	48.73	16.58	0.20	0.23	0.00
Austria	42.40	36.86	18.89	1.10	0.08	0.66
Belgium	40.99	10.58	46.15	2.02	0.26	0.00
Cyprus	28.02	8.22	41.58	0.74	21.44	0.00
Slovakia	55.18	14.52	30.28	0.01	0.01	0.00
Slovenia	49.26	15.14	35.56	0.00	0.04	0.00
Spain	14.67	39.94	43.11	0.00	1.71	0.57
Estonia	31.04	6.02	62.94	0.00	0.00	0.00
Finland	46.23	3.75	50.01	0.00	0.02	0.00
France	16.98	20.15	45.11	0.27	16.94	0.56
Greece	36.45	11.42	39.56	2.09	10.27	0.22
Netherlands	29.86	23.73	43.28	3.13	0.00	0.00
Ireland	22.31	15.67	49.68	0.00	12.33	0.00
Italy	30.33	14.44	37.67	3.65	7.01	6.89
Luxembourg	7.43	1.80	7.69	83.06	0.02	0.00
Malta	21.67	4.18	43.47	0.00	30.62	0.00
Portugal	11.27	13.56	69.07	0.12	5.95	0.02

payments more flexible; 3) increase security and protection against fraud and other types of crime; and 4) the emergence of online payments and the electronic commerce on the Internet.

According to the last European Central Bank report (2011) concerning the number and types of transactions in the Eurozone in 2011, 35.47% of all payment transactions were carried out through payment systems related to bank cards, 28.93% were direct debits and 27.06% were performed through bank transfers. The distribution of the payment systems employed is very different depending on to the country of reference, as shown in Table 1.

For instance, almost 50% of all the transactions performed in Germany are direct debits; 70% of the transactions are made with bank cards in the case of Portugal and over 80% through electronic payments in Luxembourg. In Spain, the main payment tool is the bank card (43.11), followed by direct debits (39.94%) and bank transfers (14.67%). Payments with checks and the rest of payment systems have no relevant significance.

One of the most relevant aspects in the development of the electronic commerce is the payment system employed to complete the economic transactions. As shown in Table 2 and according to the B2C Electronic Commerce Report<sup>1</sup> published by the National Observatory of the Telecommunications and Information Society (ONTSI, 2011), the main payment tool for purchases made on the Internet in Spain is the bank card (64.6%), followed far behind by payment on delivery and bank transfer (13.6% and 9.2%, respectively).

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