

# Arthur D Little

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**Arthur D. Little**  
**Global M-Payment Report**

## Key Questions

- What categories of m-payment are emerging on the national markets?
- What potential roles and responsibilities can the various players in the value chain take?
- Where in the world can we find best practise m-payment solutions?

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**Definition**

We define m-payment as third party retail billing

... and m-commerce as a subset of m-payment,  
where the mobile handset is part of the service delivery

## Agenda

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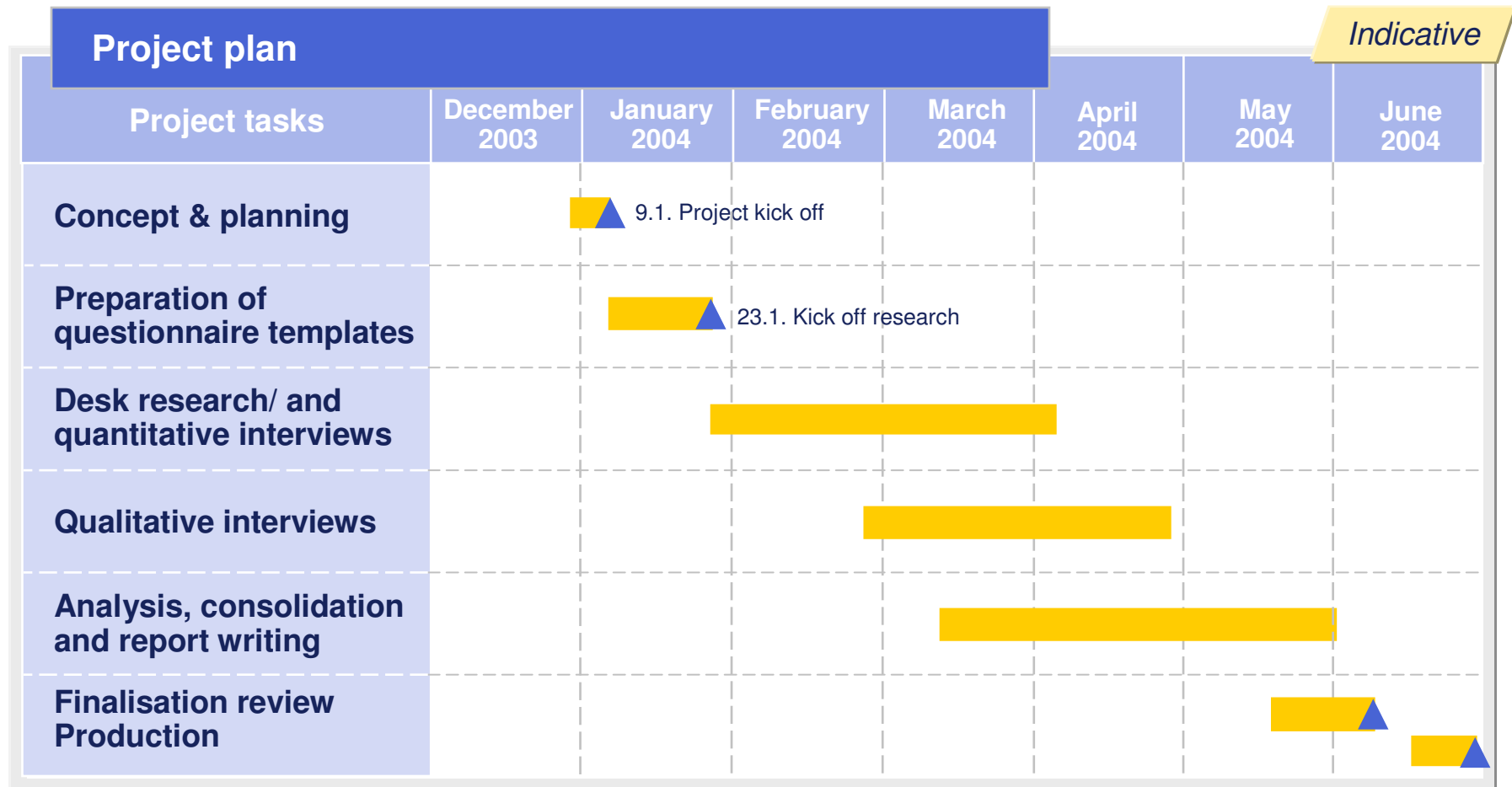
- 1** Introduction
- 2** The current m-payment market
- 3** Making m-payment a reality

## Agenda


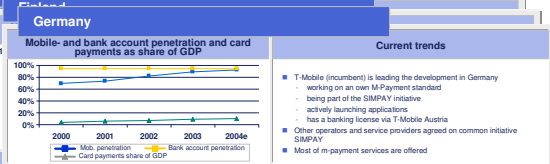
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<b>1</b>	<b>Introduction</b>
2	The current m-payment market
3	Making m-payment a reality

The project was started in January and is now entering the production phase



The Arthur D. Little Global M-Payment Report contains more than 100 pages core report, case studies from more than 30 companies, profiles of more than 20 countries, etc.

Arthur D. Little Global M-Payment Report	Comment
<div>  <p><b>Arthur D Little</b></p> <p>Arthur D. Little M-Payment Brochure</p> </div> <div style="background-color: #ffffcc; padding: 10px;"> <ul style="list-style-type: none"> <li>■ 100+ pages core report</li> <li>■ Case studies from more than 30 companies</li> <li>■ Descriptive profiles from more than 20 countries</li> </ul> </div> <div>  <p><b>Germany</b></p> <p>Mobile- and bank account penetration and card payments as share of GDP</p> <p>Current trends</p> <ul style="list-style-type: none"> <li>■ T-Mobile (incumbent) is leading the development in Germany                     <ul style="list-style-type: none"> <li>- working on an own M-Payment standard</li> <li>- being part of the SIMPAY initiative</li> <li>- actively launching applications</li> </ul> </li> <li>■ has a banking license via T-Mobile Austria</li> <li>■ Other operators and service providers agreed on common initiative SIMPAY</li> <li>■ Most of m-payment services are offered</li> </ul> <p>Future outlook</p> <ul style="list-style-type: none"> <li>■ All operators agree that standard platform is necessary</li> <li>■ Operators are working on the SIMPAY initiative</li> <li>■ Banks and financial services providers will join the mobile operator's initiative</li> <li>■ Consumer uptake is promising due to mobile affinity and because of convenience and merchant uptake</li> </ul> <p>Market status</p> <p>embryonic    <b>early stage</b>    developing    advanced    maturing</p> </div>	<ul style="list-style-type: none"> <li>■ Structured overview on m-payments across the major players of the value chain</li> <li>■ M-payment from a strategic point of view analysing the market from the perspective of suppliers and consumers</li> </ul> <div style="background-color: #d9e1f2; padding: 10px;"> <p>Order your personal copy of the executive summary free of charge, by sending an e-mail with the subject: "M-Payment - eco" to:</p> <p><a href="mailto:timeDAnewsletter@adlittle.com">timeDAnewsletter@adlittle.com</a></p> </div>



We have conducted more than 100 interviews with m-payment experts from companies in 32 countries throughout the world

Interviews with companies from 32 countries



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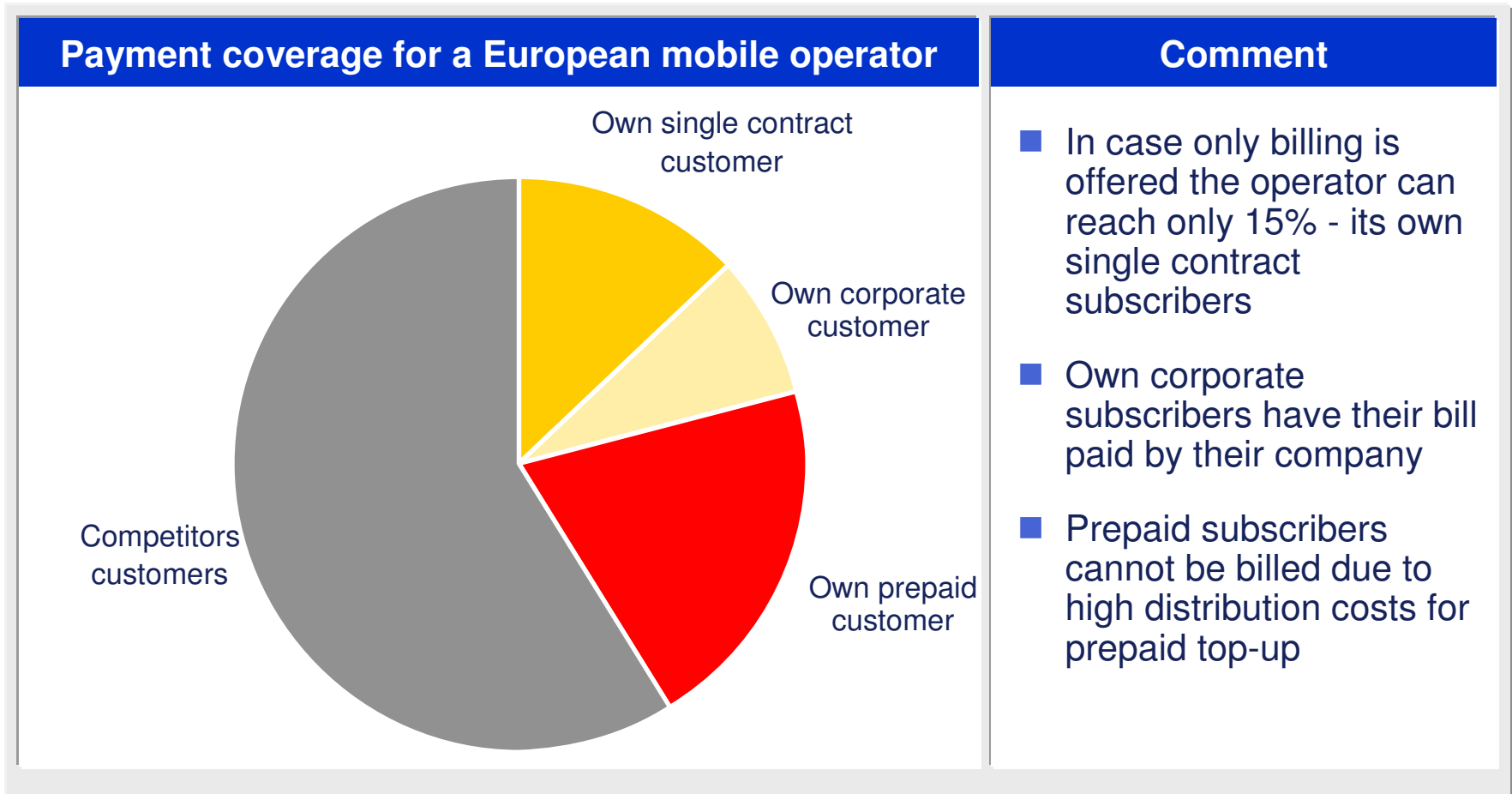
**Telecom and mobile portal related channel will bear mainly payments of small size while the online and face to face channels mainly will contain macro payments**

Payment channel	Payment size		Point of sale (examples)
	Micro payment	Macro payment	
Telecom and mobile portal related	[Yellow bar covering Micro and Macro columns]		Content server
Online		[Yellow bar covering Macro column]	Web site / M-commerce platform
Phone to machine (P2M)	[Yellow bar covering Micro and Macro columns]		Vending machine
Face to face (F2F)		[Yellow bar covering Macro column]	Taxi car
Phone to phone (P2P)		[Yellow bar covering Macro column]	-

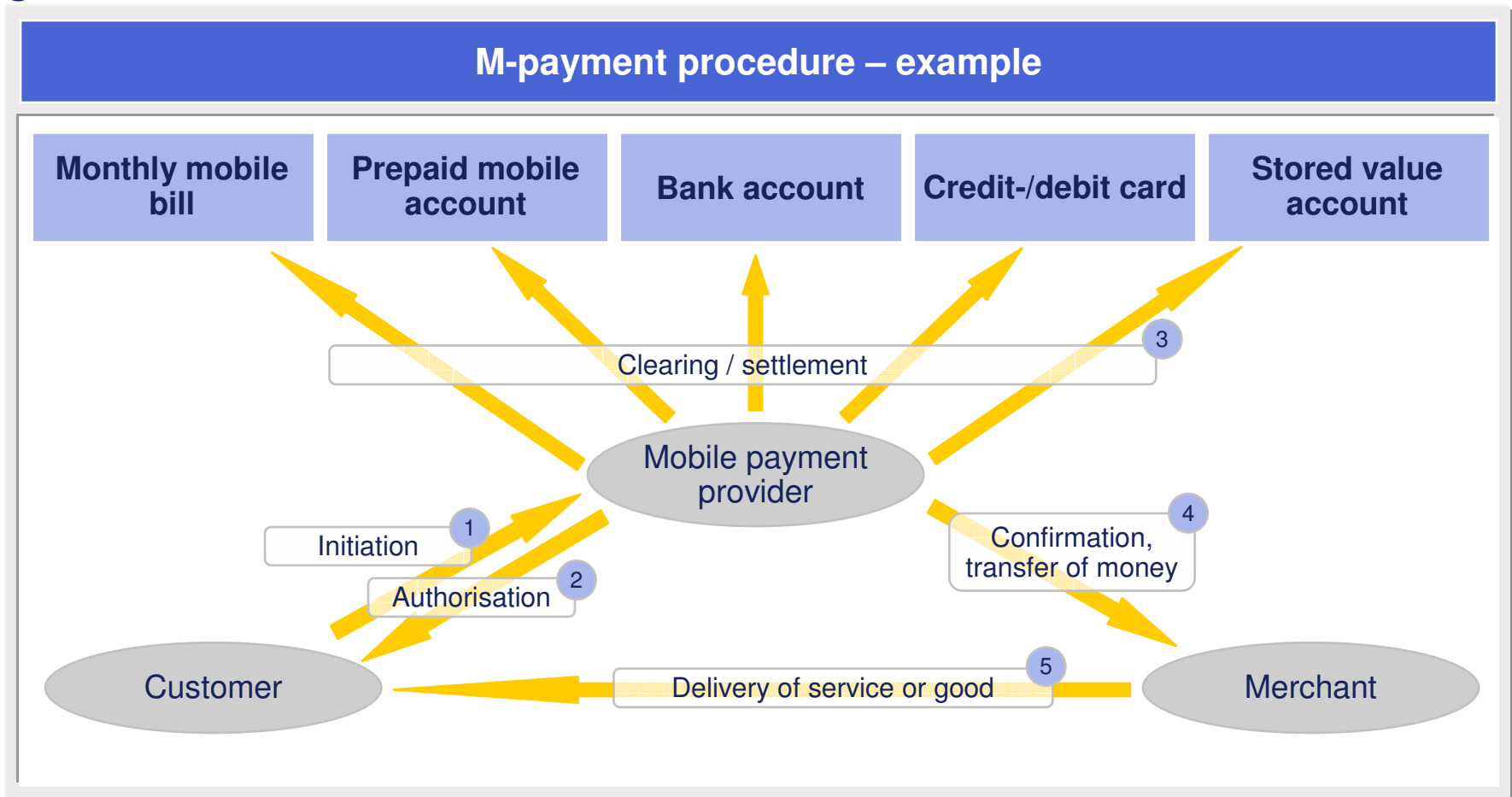
**There are three pure m-payment models all of which enable different combinations of pre-paid, debit and credit payments**

M-payment models			
<b>Billing</b>	<ul style="list-style-type: none"> <li>■ Micro payments (&lt;10 €), e.g. m-parking, metro tickets, etc.                             <ul style="list-style-type: none"> <li>- Pre-paid</li> <li>- Post-paid</li> </ul> </li> </ul> <div style="text-align: right; margin-top: 10px;"> </div>		
<b>M-enabling</b>	<ul style="list-style-type: none"> <li>■ Macro payments (&gt;10 €), e.g. event tickets, m-shopping, etc.                             <ul style="list-style-type: none"> <li>- Debit cards</li> <li>- Credit cards</li> </ul> </li> </ul> <div style="text-align: right; margin-top: 10px;"> </div>		
<b>M-wallet</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>■ Micro payments (&lt;10 €)                                     <ul style="list-style-type: none"> <li>- Pre-paid (SVA)</li> <li>- Debit cards</li> </ul> </li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>■ Macro payments (&gt;10 €)                                     <ul style="list-style-type: none"> <li>- Direct debit bank account</li> <li>- Credit cards</li> </ul> </li> </ul> </td> </tr> </table> <div style="text-align: right; margin-top: 10px;"> </div>	<ul style="list-style-type: none"> <li>■ Micro payments (&lt;10 €)                                     <ul style="list-style-type: none"> <li>- Pre-paid (SVA)</li> <li>- Debit cards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Macro payments (&gt;10 €)                                     <ul style="list-style-type: none"> <li>- Direct debit bank account</li> <li>- Credit cards</li> </ul> </li> </ul>
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**One sample European mobile operator would reach only 15% of the mobile customers in case only mobile billing was offered**

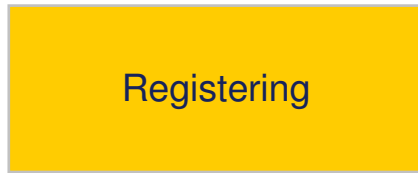


**A full m-payment procedure contains initiation, authorisation, clearing / settlement, confirmation and money transfer, and delivery of the service or good**

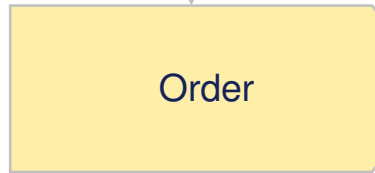


## M-parking solutions can be designed in a userfriendly way, with a minimum of steps from order to delivery

### Sample m-parking process



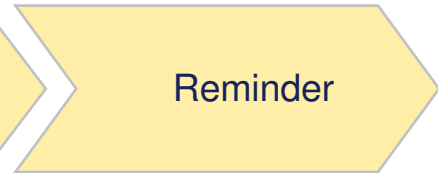
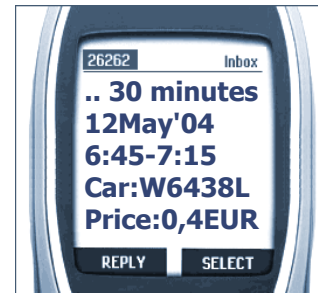
- User registering over the web to the service by entering:
- Mobile phone number
- Number plate (optional)
- An SMS containing the PIN is sent to the user



- User sends SMS with requested parking time
- For example "30" for 30 minutes



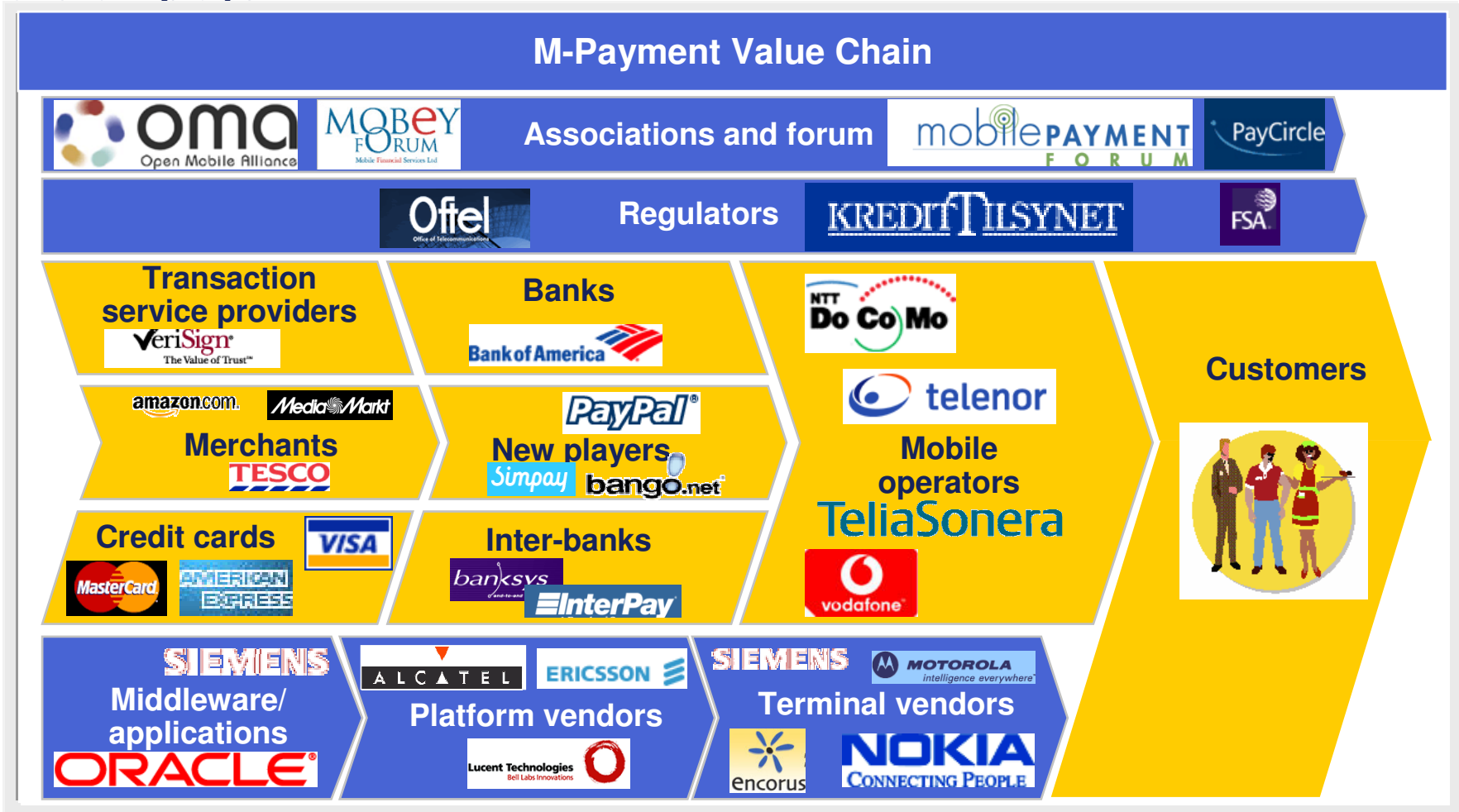
- System delivers SMS with start and ending time for the purchased parking ticket



- System sends reminder SMS 10 minutes before parking time runs out
- User can optionally prolonge his parking ticket by sending new order

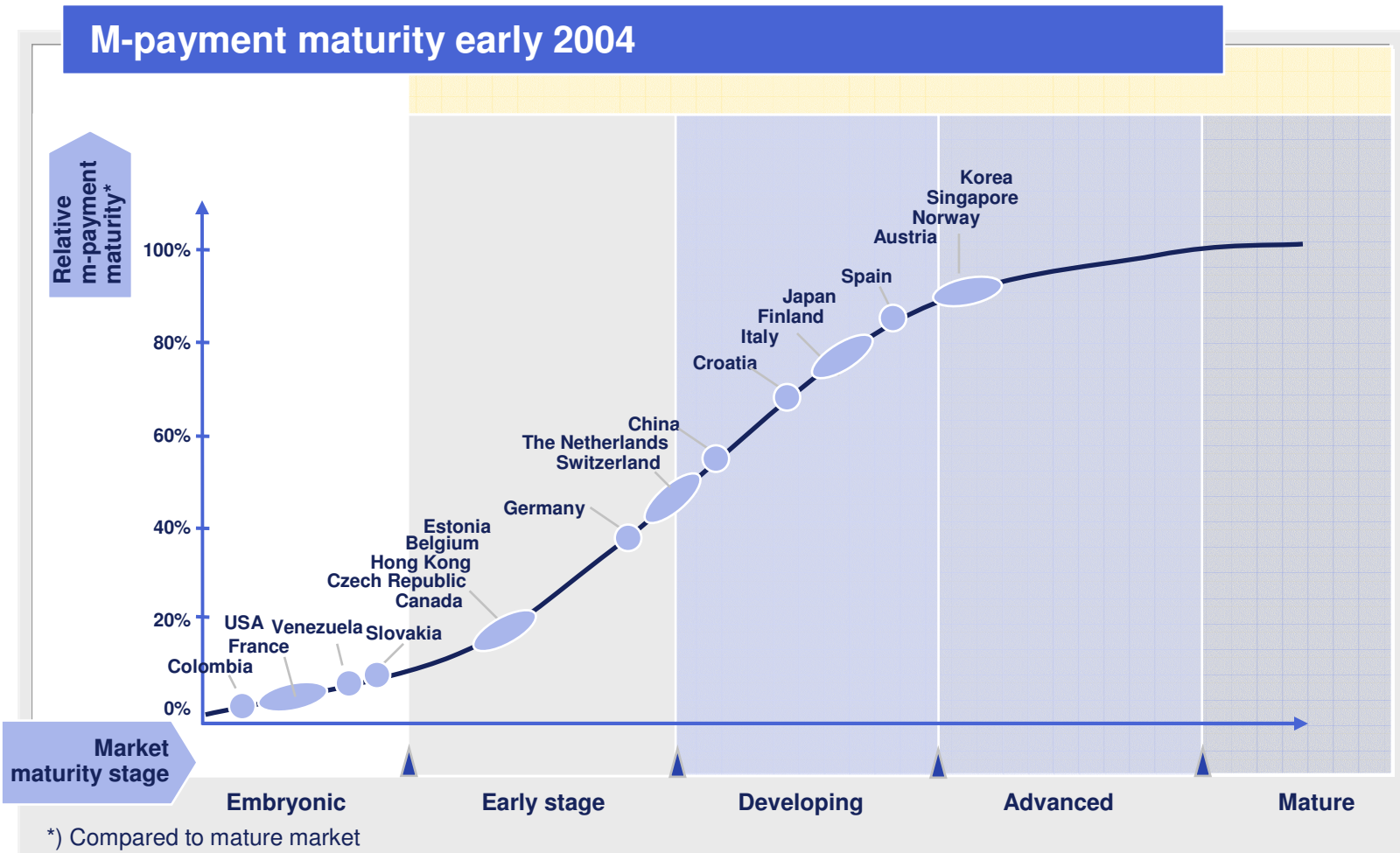


The m-payment value chain involves a larger number of players than the traditional method of payment and introduces changes in the role that each of them plays





**Korea, Singapore, Norway and Austria are considered to have the most advanced m-payment markets**



We have identified seven models corresponding to the current market stage of the different national m-payment markets

Model	Key players								
	MNO	Bank	Credit card	Indep. PSP	Content	Media	Gov't	Retail	Hand-set
Mobile operator driven	Very important	Medium important	Less important	Not important	Less important	Not important	Not important	Less important	Not important
Bank centric	Medium important	Very important	Less important	Not important	Less important	Not important	Not important	Less important	Not important
Independent payment service provider	Medium important	Medium important	Less important	Very important	Less important	Not important	Not important	Medium important	Not important
Content aggregator / media driven	Less important	Medium important	Less important	Not important	Very important	Very important	Not important	Not important	Not important
Government supported	Medium important	Medium important	Medium important	Medium important	Less important	Less important	Very important	Medium important	Medium important
Industry driven	Less important	Less important	Medium important	Not important	Not important	Not important	Not important	Very important	Very important
Anarchy	Less important	Medium important	Medium important	Medium important	Medium important	Medium important	Medium important	Medium important	Medium important

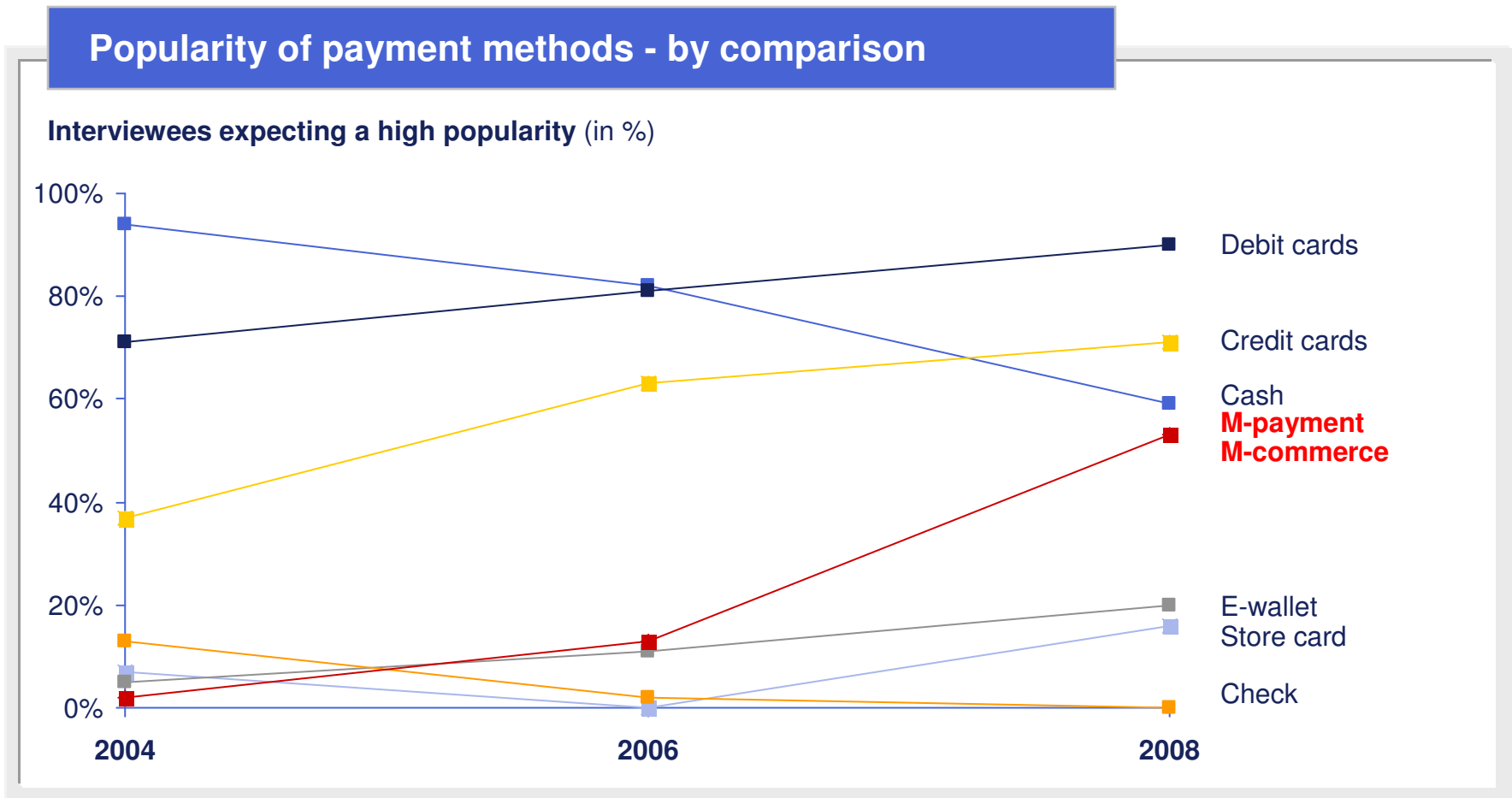
Role of player: very important important medium important less important not important

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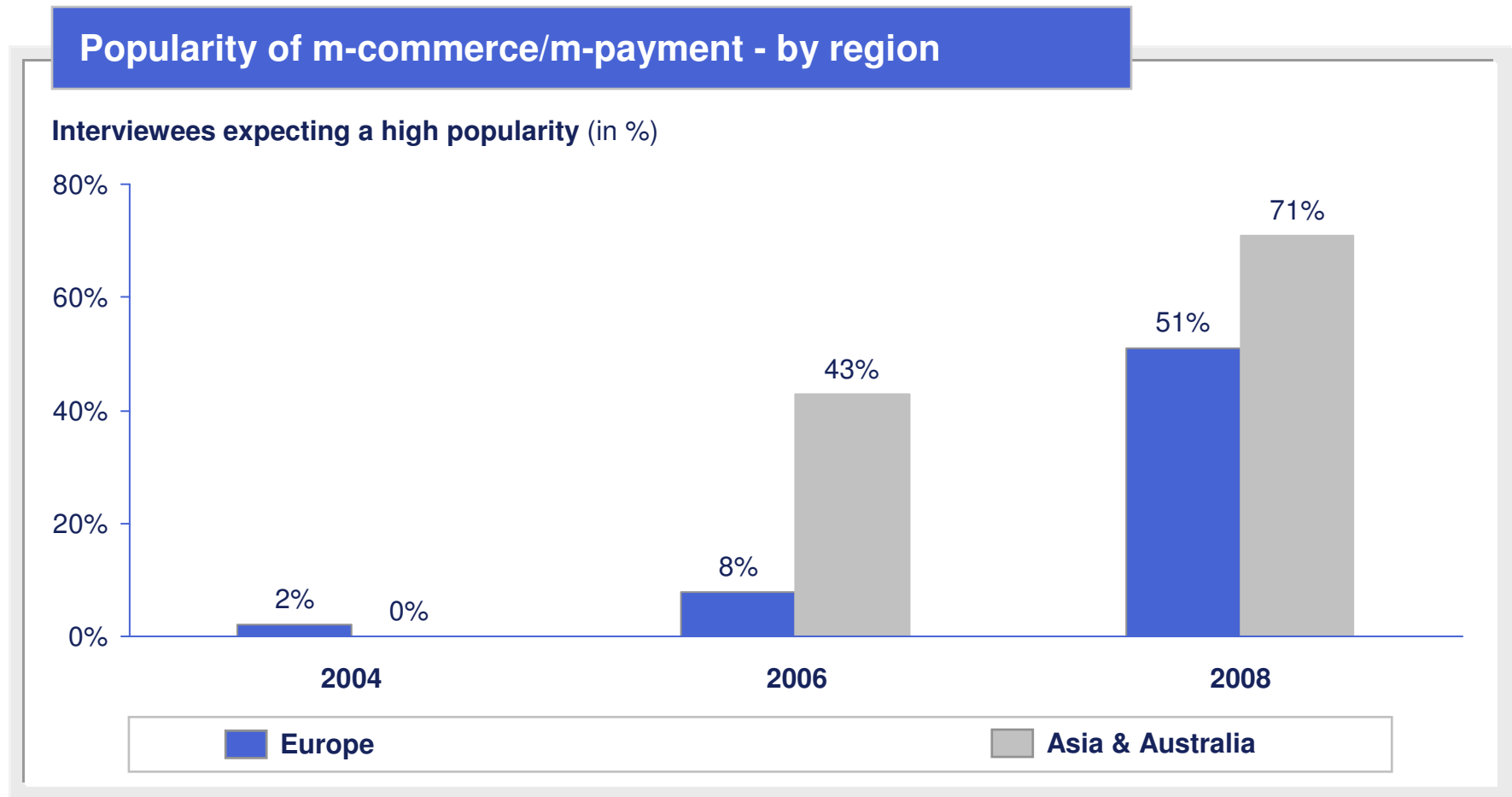
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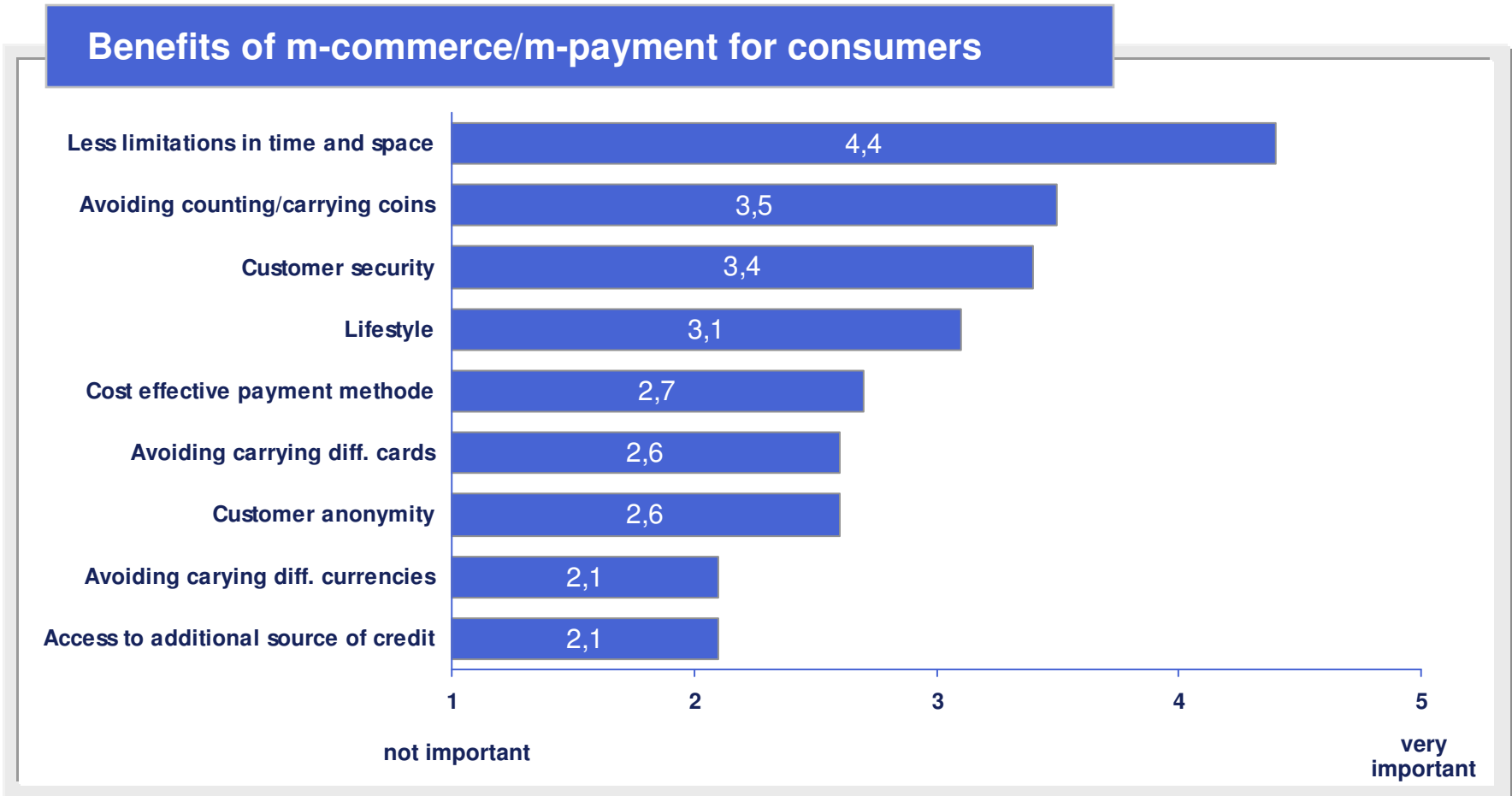
## More than half of all interviewees expect popularity of m-payment to have taken up in 2008 taking market share mainly from cash



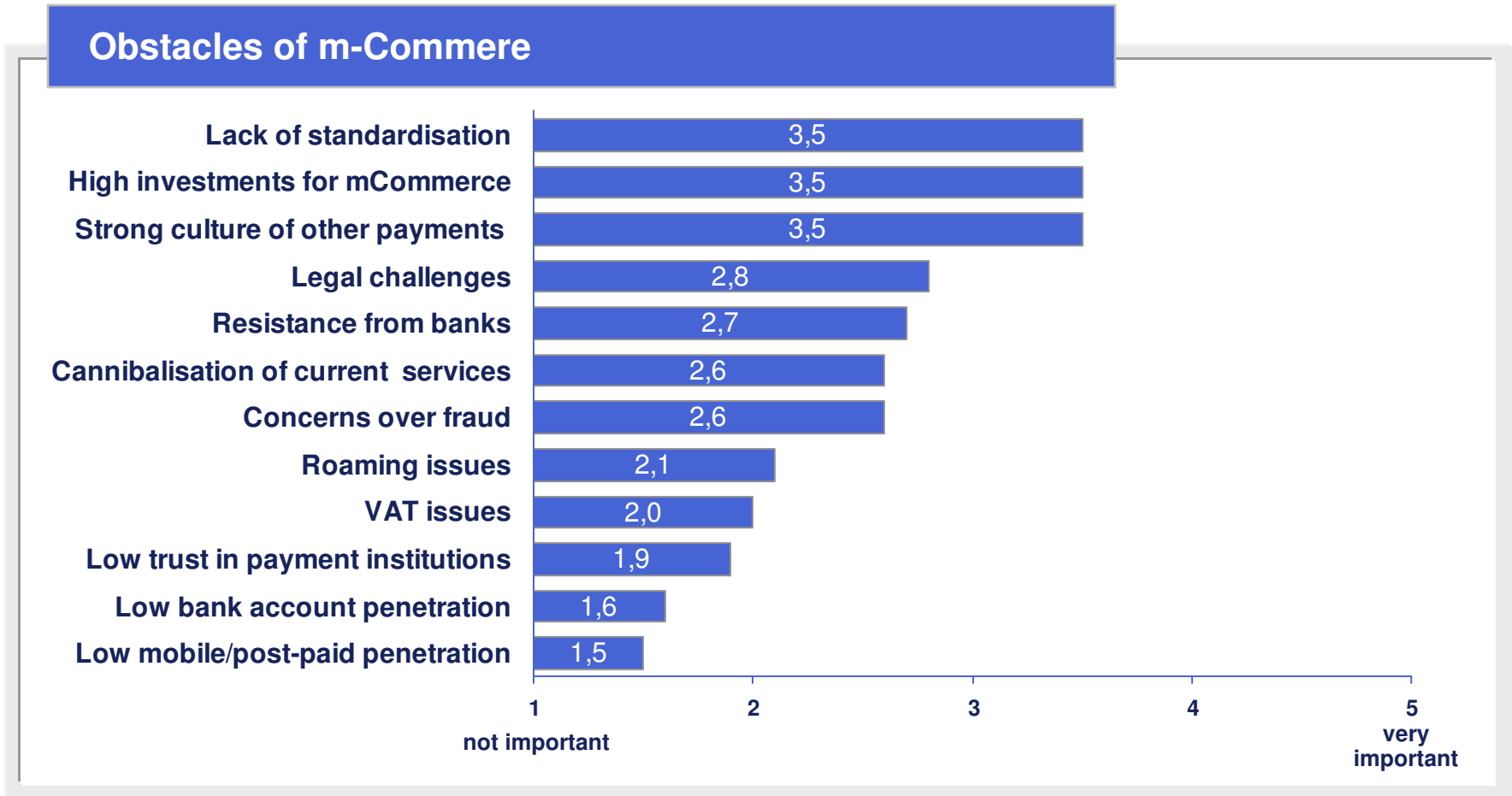
## Significantly earlier uptake is expected in Asia, while no major differences were identified between Western and Eastern Europe



## Convenience in the form of less limitations in time and space and avoiding carrying coins is expected to be the major benefit of m-commerce/m-payment for consumers



### Major obstacles for a successful m-commerce market is the lack of standardisation, high investments needed and a strong culture of traditional payments



## Partnerships are necessary to combine all needed core competencies in m-payments

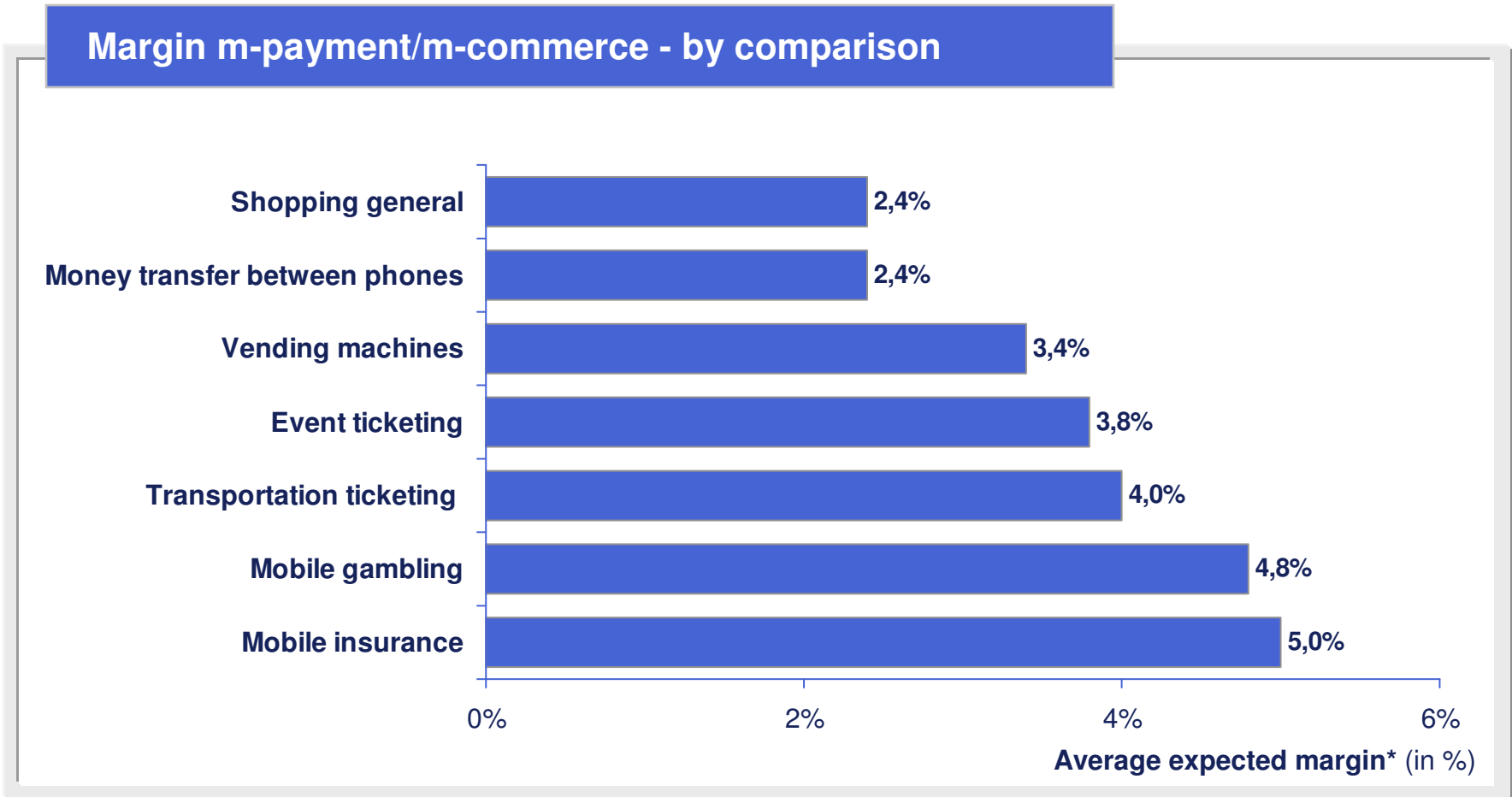
Core competencies of potential mobile payment providers					
	MNO	Bank	Credit card	Content aggregator	Start-up provider
Payment relationship					
Mob. access to customers					
Large customer base	*				
Widespread merchant network					
Strong brand					
Trusted third party					
Innovator / first mover					
Fin. svcs. empowerment from fin. regul.					

Core competency strength: very strong strong medium low non existing

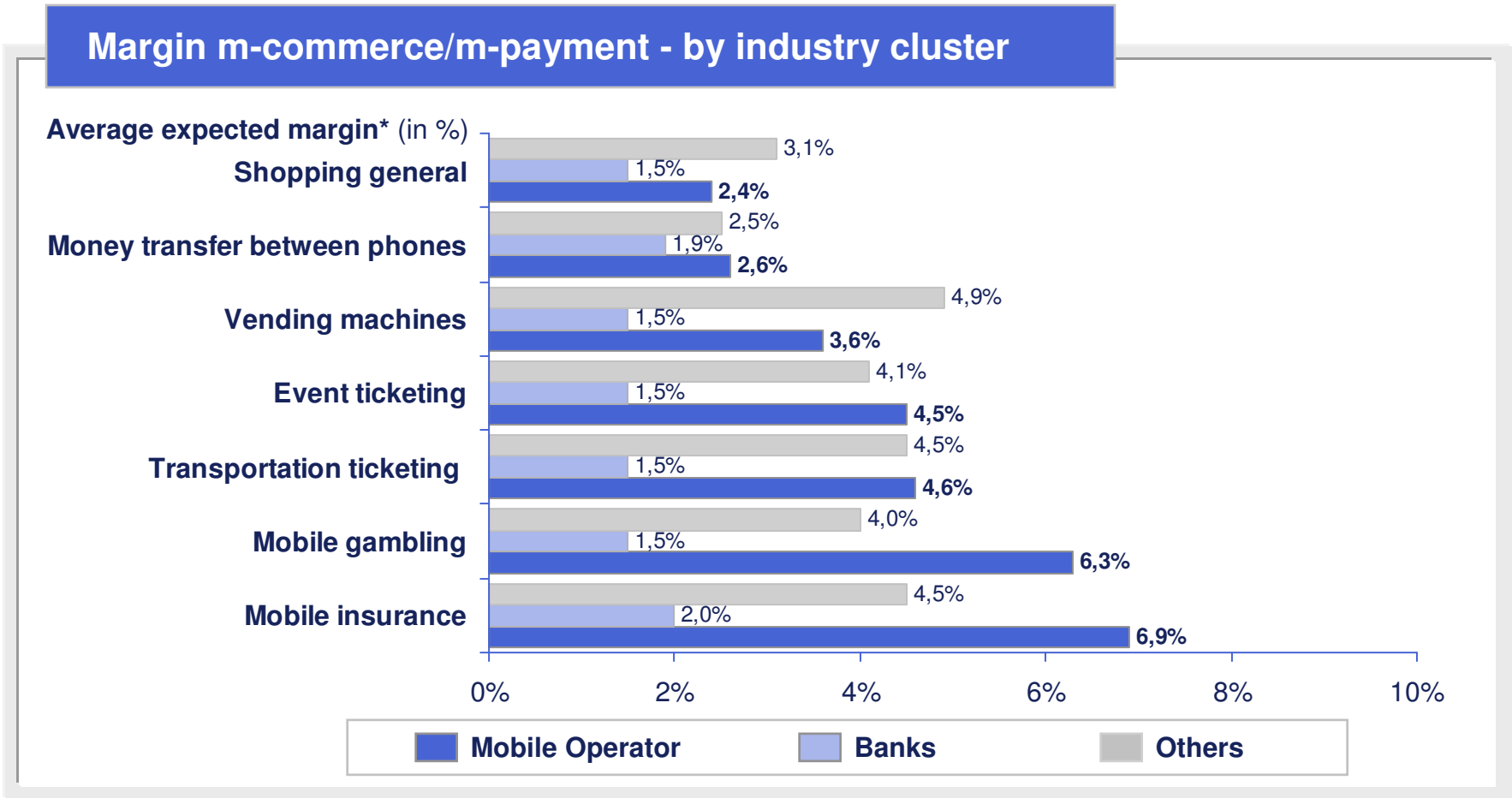
\*) Limitations for prepaid customers



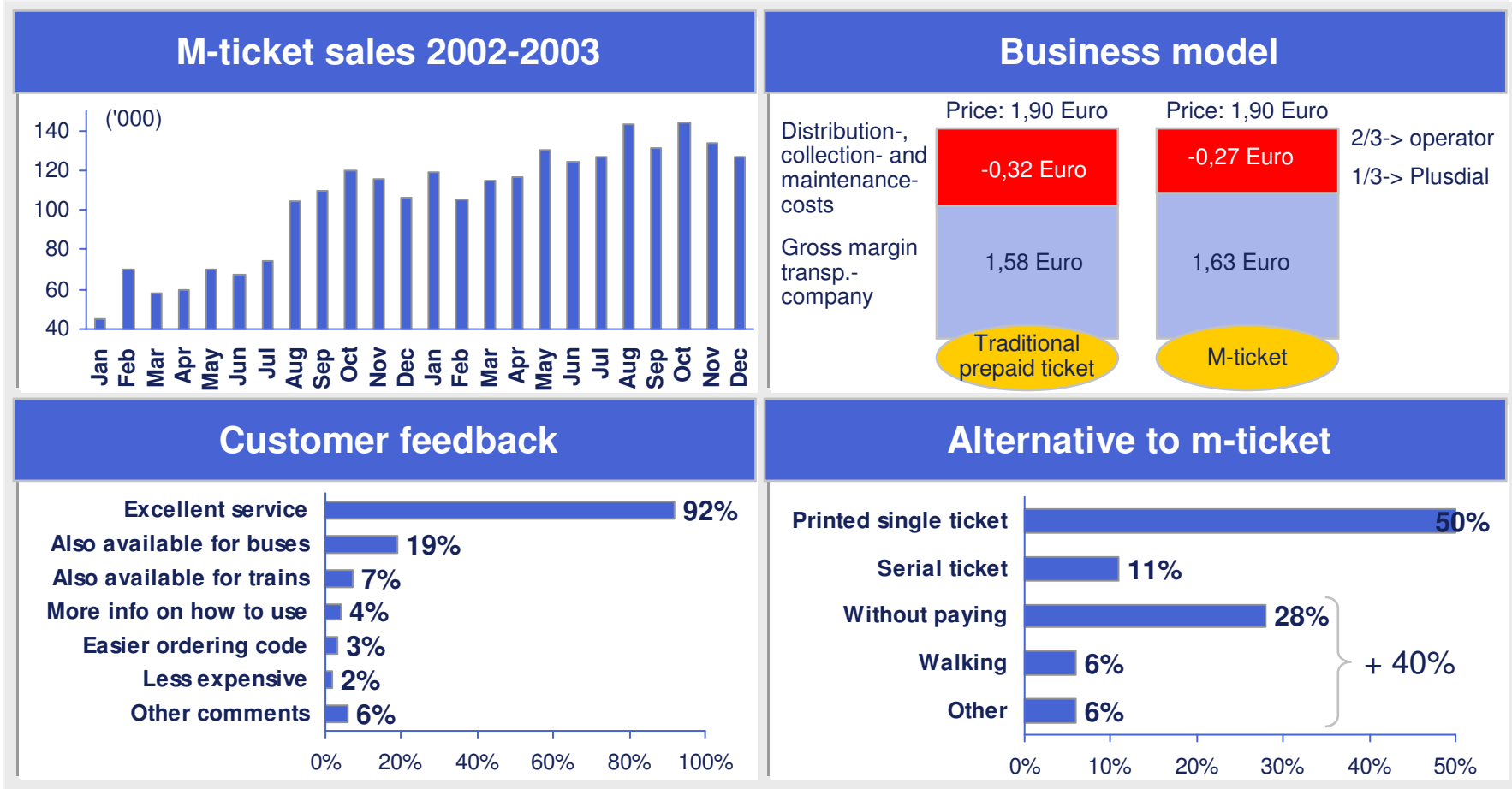
Margin range is expected between 2,4 and 4,8 per cent - most profitable applications comprise mobile insurance (5,0%), mobile gambling (4,8%) and transportation/ticketing (4,0%)




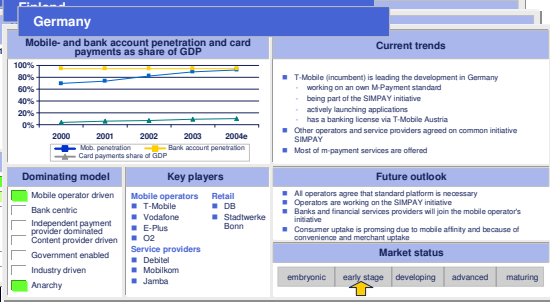
Currently, banks tend to be less optimistic in terms of margins than mobile operators and "Others" are



## Plusdial has gained extensive customer acceptance through its m-ticketing service for the public transportation of Helsinki in Finland



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