

# End users' mobile payment expectations

Bank of Finland  
Harry Leinonen  
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Email: [firstname.lastname@bof.fi](mailto:firstname.lastname@bof.fi)

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# General development/delivery needs for any new payment and transportation service

1. lower transportation costs
2. higher speed
3. improved security
4. increased user interface efficiency and user friendliness
5. enhanced standardised user integration support

*Payments are transactions transferring funds from account a to b.  
Mobile payments will support some of the traditional conventions.*



# General development/delivery needs for any new payment and transportation service

## *Mobile opportunities:*

1. lower transportation costs
  - **ICT costs down, synergies internet/mobile, e-completeness**
2. higher speed
  - **real time, all time**
3. improved security
  - **encryption protected e-wallet, e-identity, biometrics**
4. increased user interface efficiency and user friendliness
  - **screen, keyboard, internet and payment everywhere, less typing**
5. enhanced standardized user integration support
  - **account keeping, cash management, invoicing, ordering etc  
in one integrated standardized processing family**



# 1. Lower transportation costs

- ▶ Mobile payments could replace cash, when the costs are sufficiently low
  - Telecom costs closer to production costs
  - Bank charges lower than cash and card charge
- ▶ e-commerce and m-commerce will merge on future mobiles
  - Re-use of systems and facilities, multi-channel efficiency
- ▶ e-completeness ie paperless and ‘plasticless’ payment
  - Mobile or network memory/archive can keep all transaction information

**(Personal  
opinion: )**

*Mobile payments needs to be  
a low-margin high-volume  
mass market service in order to succeed*



## 2. Higher speed

- ▶ Real-time is technically available and used in some systems and countries for credit transfers and card payments
- ▶ Real-time simplifies the payment and collection process = immediate response on errors
- ▶ Real-time supports e/m-commerce
- ▶ Real-time transaction-based processing supports network-based process-to-process integration

*Real-time in line with other m-service is expected to be the basic norm*



# 3. Improved security

- ▶ Customers are afraid of increased abstraction level
  - Money/cash is just a number on the screen (compare to paper cash introduction in 19th century)
- ▶ Customers are afraid of increased dependence on electronic incomprehensible ‘gadgets’
  - What to do when lost or broken? How to control that nobody steals my money?
- ▶ e-identity mechanism
  - The mobile phone would become the e-identity store when passport, driving licenses etc are included
- ▶ Understandable security functions
  - Understandable PIN, encryption, customer liabilities
- ▶ Good security support
  - Blocking of stolen mobiles, 24h help desk
- ▶ Good privacy
  - Customer data leaks will undermine trust

***Trust and reliability is a must for wide acceptance***



## 4. Increased user interface efficiency/friendliness

- ▶ Understandable easy-to-use user interface and screen navigation
  - Remember customer differences; age, education, language, disabled etc
- ▶ Push and go merchant-to-payer interface
  - Merchants value rapid payments and low cost interfaces
- ▶ Easy person-to-person interface
  - Large potential of person-to-person payments
- ▶ Easy SME (Small and Mid-size Enterprise)-to-payer interface
  - Entrepreneur eg hairdressers needs a cheap interface/terminal
- ▶ Vending and ticketing machines is a big market
- ▶ Internet and mobile payment available everywhere

**Easy to learn  
and understand**

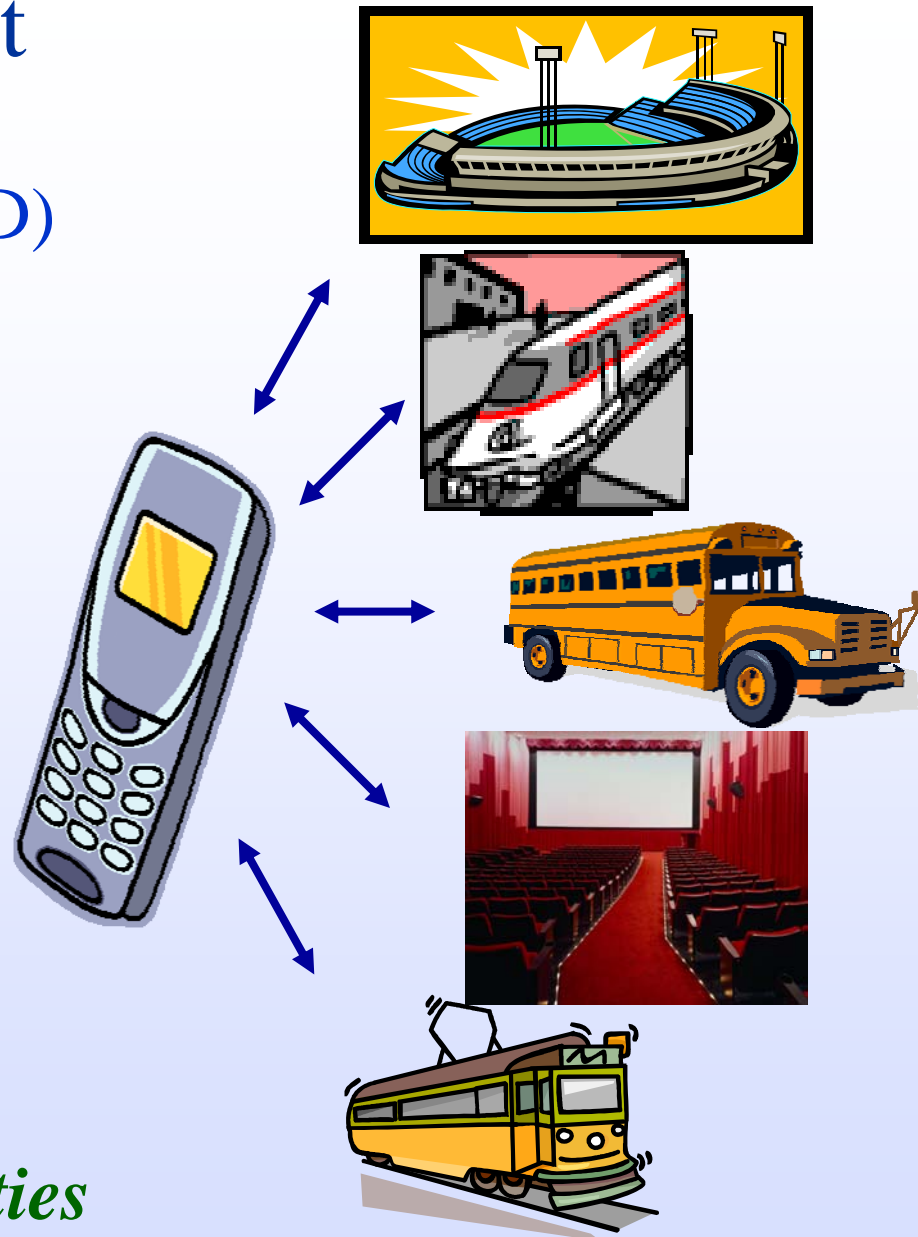
*Electronic data input/output (RFID etc)  
with minimal number of button pushes*



# Push & Go + eTicket

- ▶ Select event via network or locally from info-tags (RFID)
- ▶ Pay for ticket using mobile
- ▶ Receive ticket into mobile
- ▶ Enter the event by showing mobile to automatic gate
- ▶ Check the seat from mobile

*Ordering from everywhere,  
secure e-tickets,  
automated entrance control,  
black market barrier,  
etc electronic ticket possibilities*



# 5. Enhanced standardised user integration support

- ▶ Integration builds on re-using common standardised data
  - a large XML dictionary of relevant data fields
- ▶ Payments are just a part in the ordering, invoicing, cash management and account keeping process
  - e/m- ordering, e/m-invoices/receipts
- ▶ Payments need to be enhanced with more data content in order to support the total process
  - intermediaries need to pass-through end-user data
- ▶ Global general standards are needed
  - m-payments need to be global as emails and jpg-pictures

*Intelligent e-integration is the basis for future cost-benefits*



# **Common and open standards and interoperability is a must**

Proprietary bank, handset maker or TELCO services/standards  
will just hinder general acceptance.

Without general acceptance not sufficient volumes.



# e-Account statements = e-Invoice archives

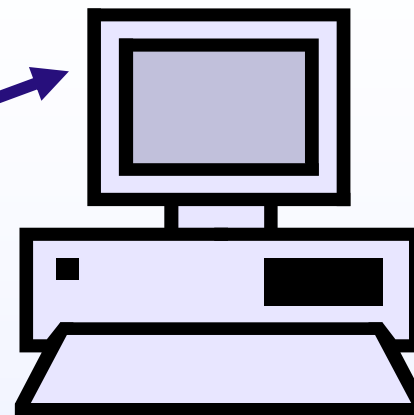
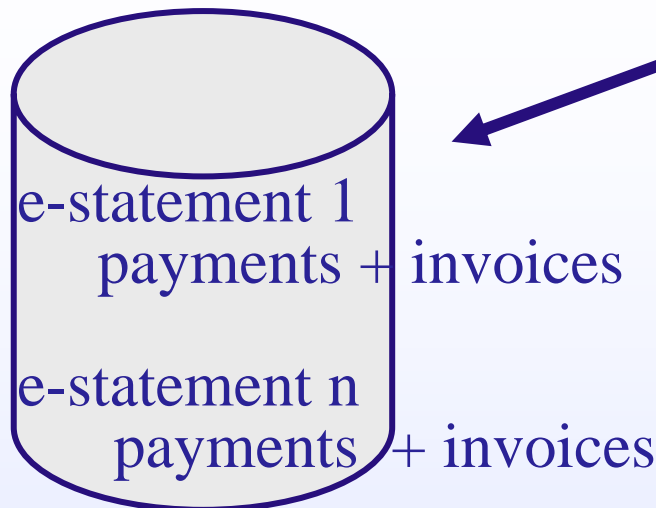
Credit transfers  
+ e-invoice



Direct debits  
+ e-invoice



Card payments  
+ e-invoice



eCustomers view  
ebank accounts  
like email accounts

Electronic account  
statement consists  
of individual payments  
incl. invoices plus totals

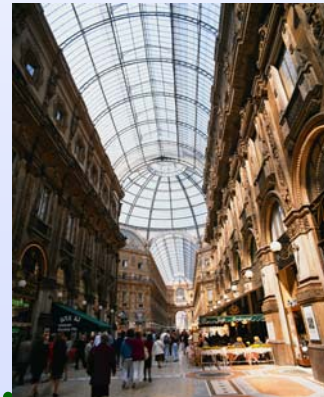
**Paying is just  
a phase in the  
invoice process**

*Easy browsing of banks' systems for invoicing information  
or customers' copies of e-statements.*



# Requirements for realisation

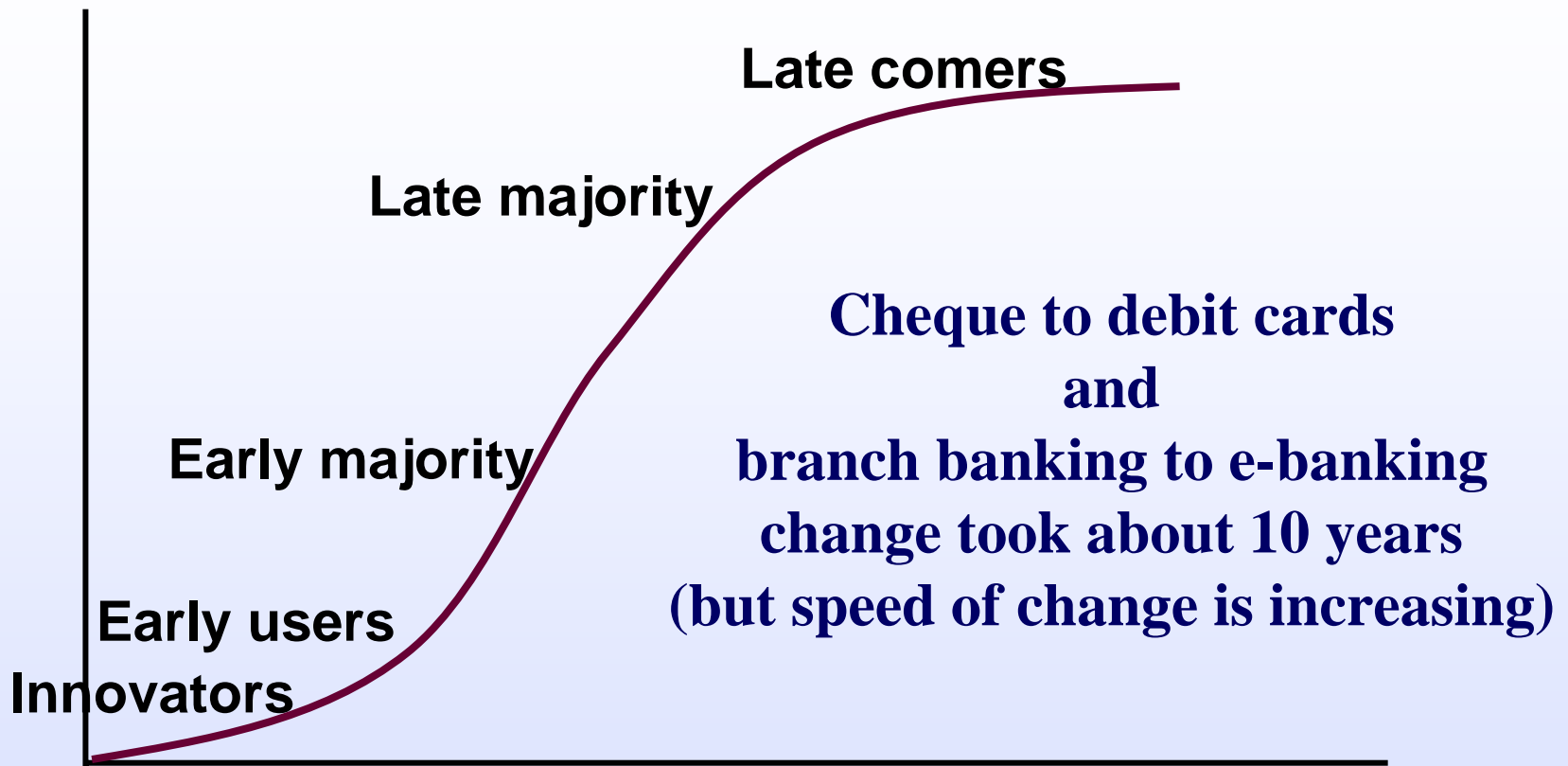
- ▶ Banks with mobile service development & marketing interest
- ▶ Interbank real-time network services
- ▶ Interested merchants for start-up volumes
- ▶ User/consumer interest and benefits
- ▶ EFTPOS manufactures interest for mobile connections
- ▶ Handset manufacturers with interest to provide secure data and payment usage environment in the phone
- ▶ Common security design (m-money needs e-vaults)
- ▶ TELCOs interested in providing standardised real-time services at affordable prices



*Development of new integrated services requires for each generation a longer chain of cooperation*



# Conclusion: Changing payment habits is a slow and demanding process



*The earlier the project starts  
and the better marketing cooperation,  
the earlier the benefits are achieved*



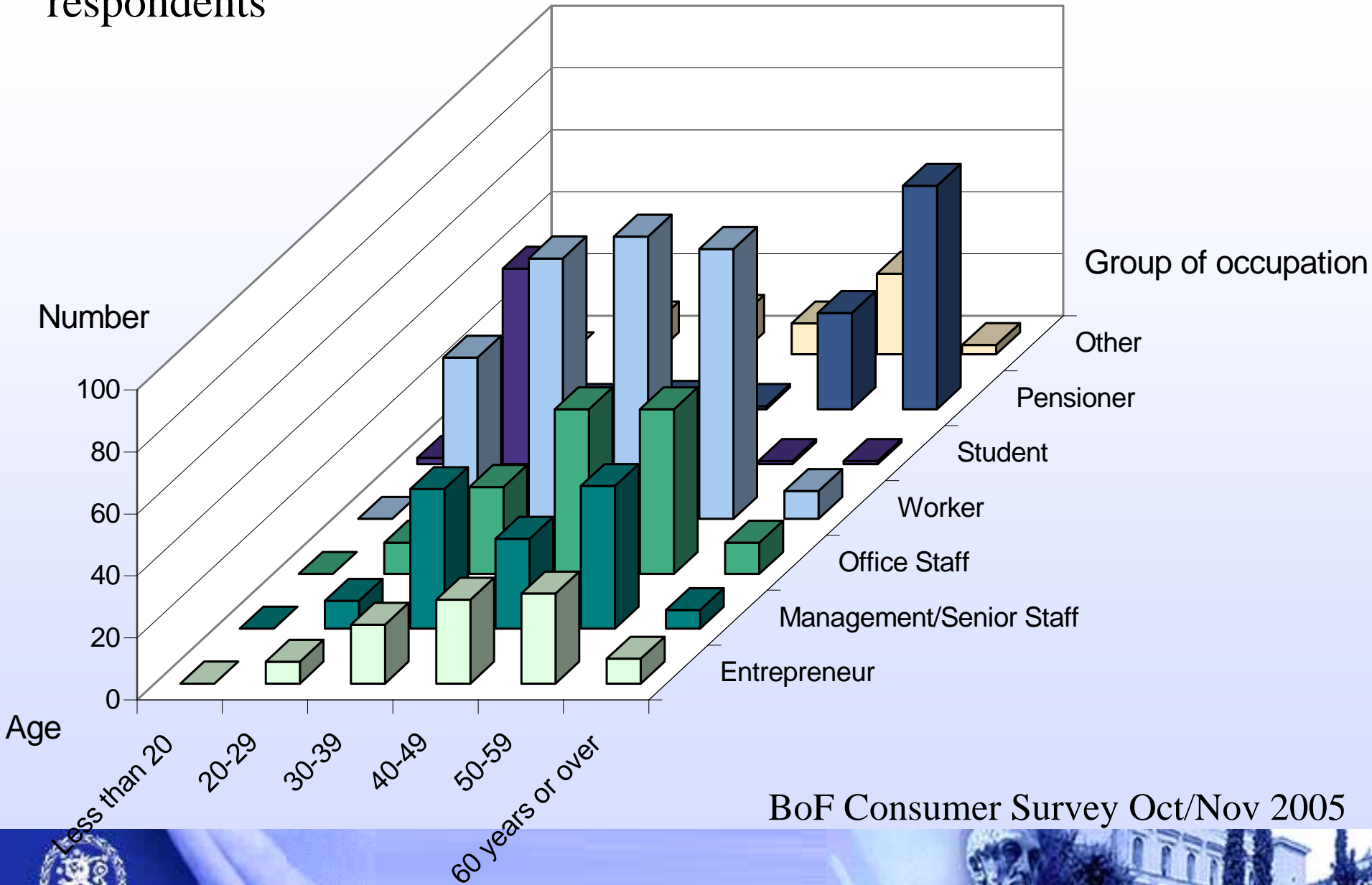
# Payment habits 2010+ study

- ▶ Fact finding about payment developments
  - Major trends
  - Technical, costs, pricing, institutional, regulatory etc changes
  - Customer behavior and expectations
- ▶ Private customer inquiry
  - 2000 letters, 960 replies (48%)
  - Random selection Finnish citizens age 20-65 from Finnish population register centre
  - 117 questions
  - October-November 2005



# Survey respondents

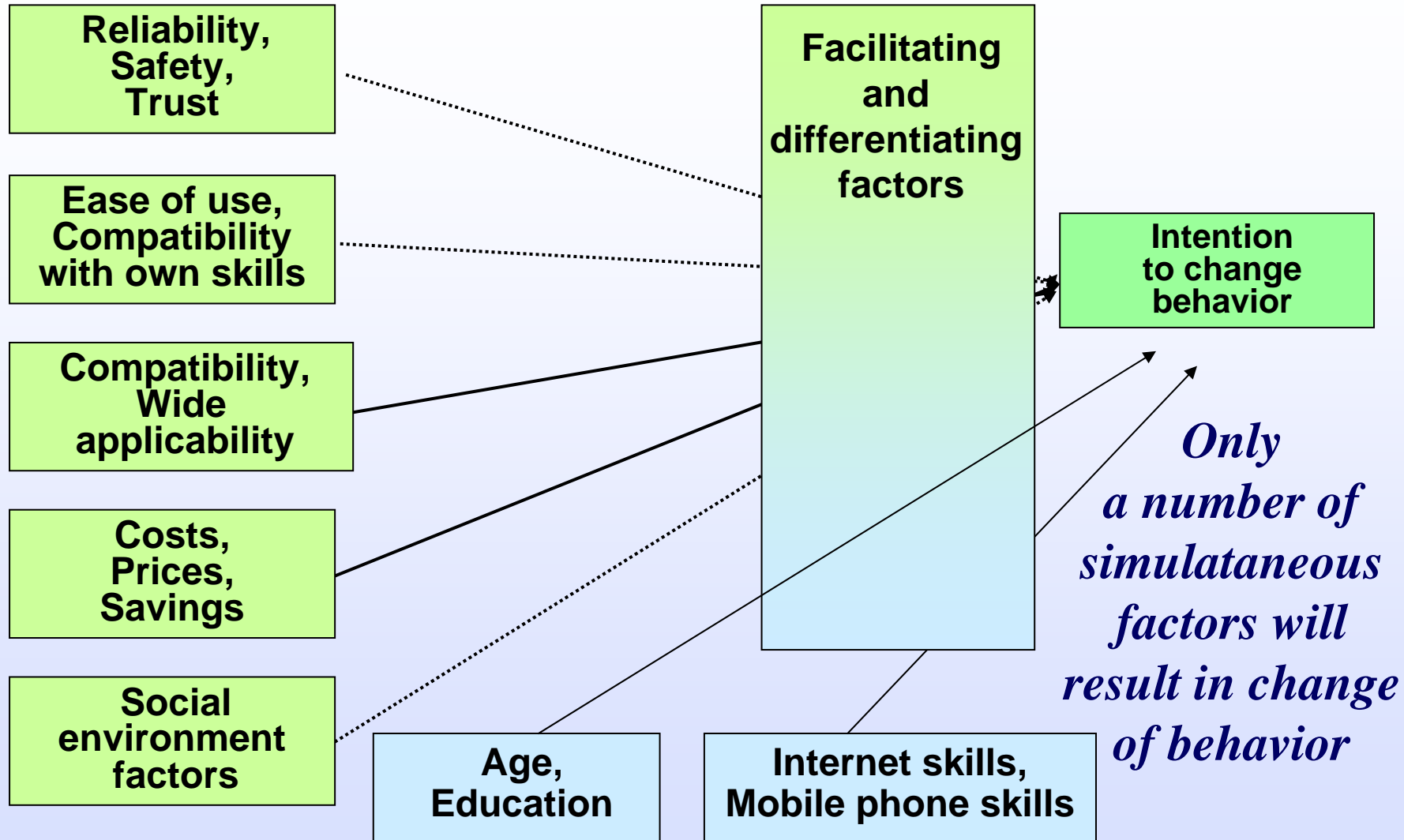
## 1. Background information



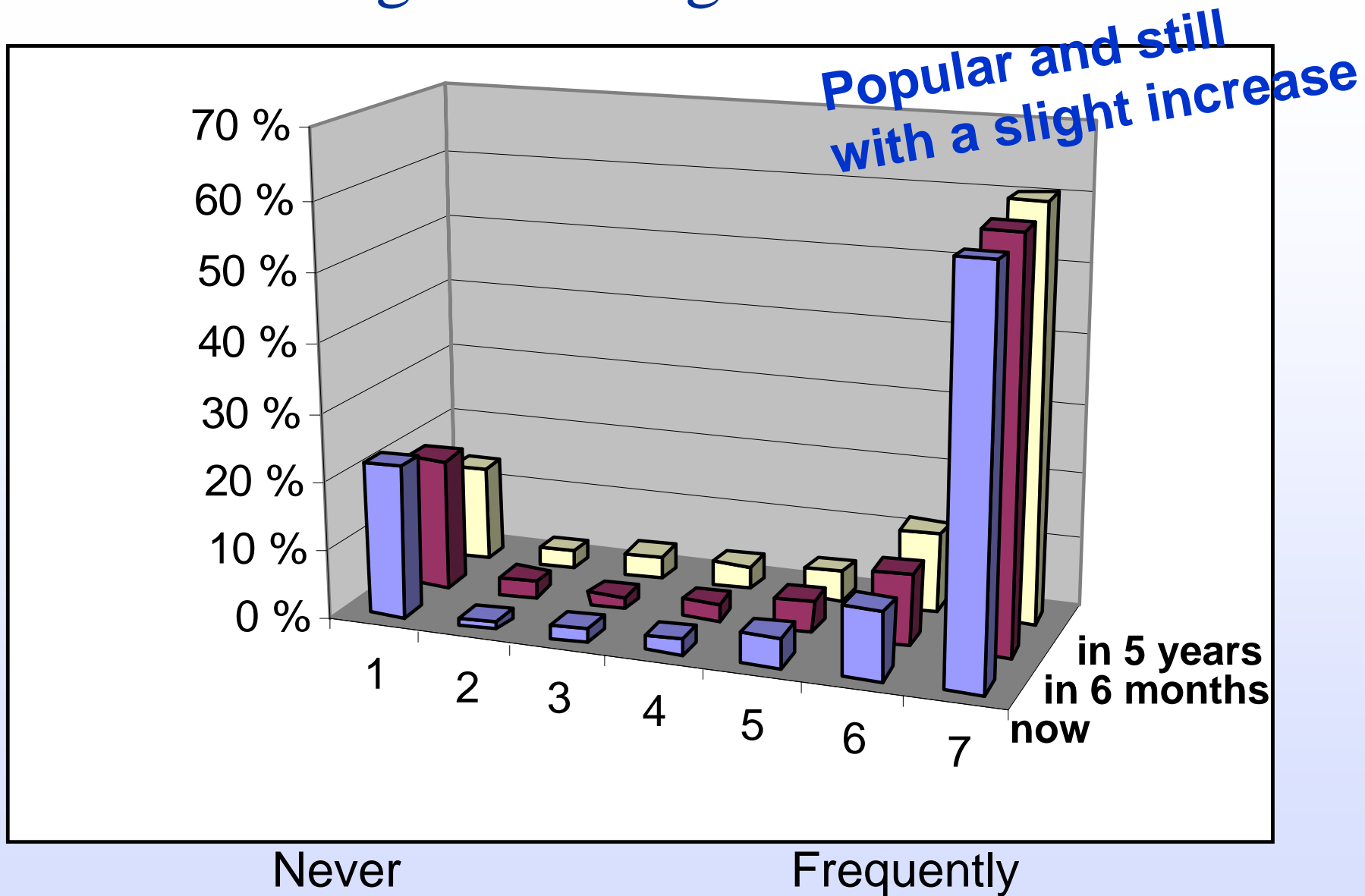
BoF Consumer Survey Oct/Nov 2005



# Adoption factors for new payment habits



# Using e-banking

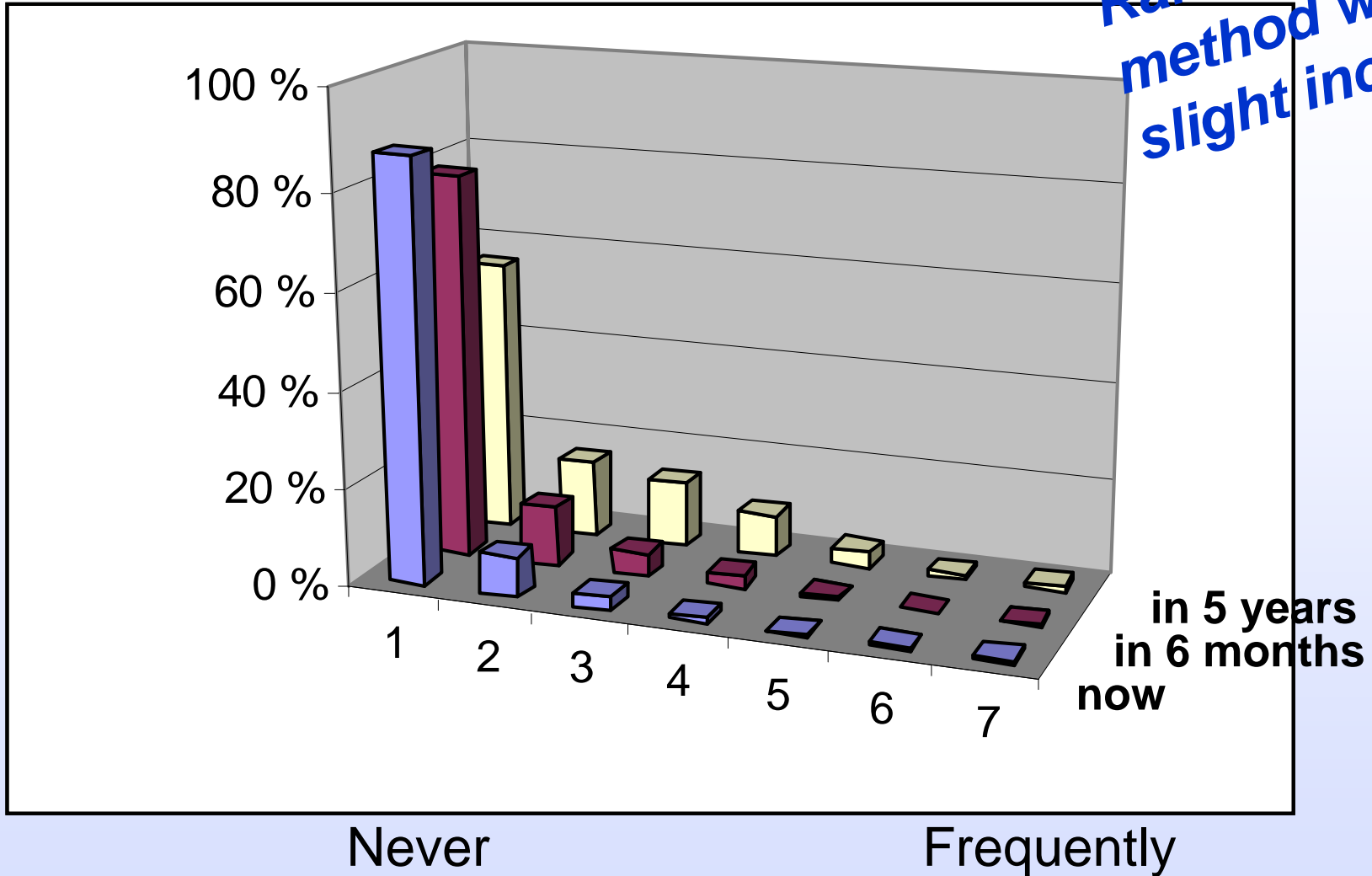


BoF Consumer Survey Oct/Nov 2005



# Payments by mobile phone

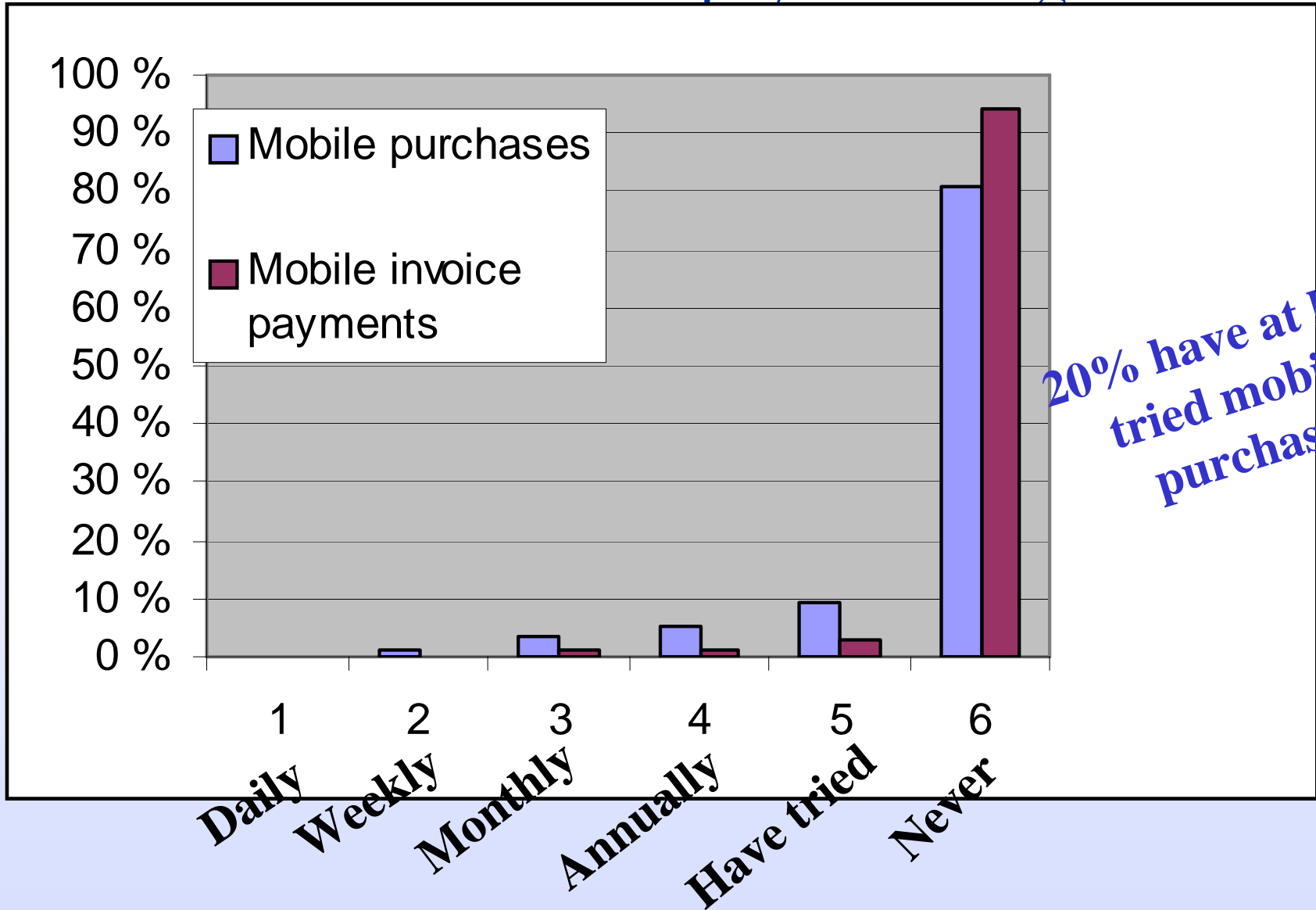
*Rare payment method with a slight increase*



BoF Consumer Survey Oct/Nov 2005



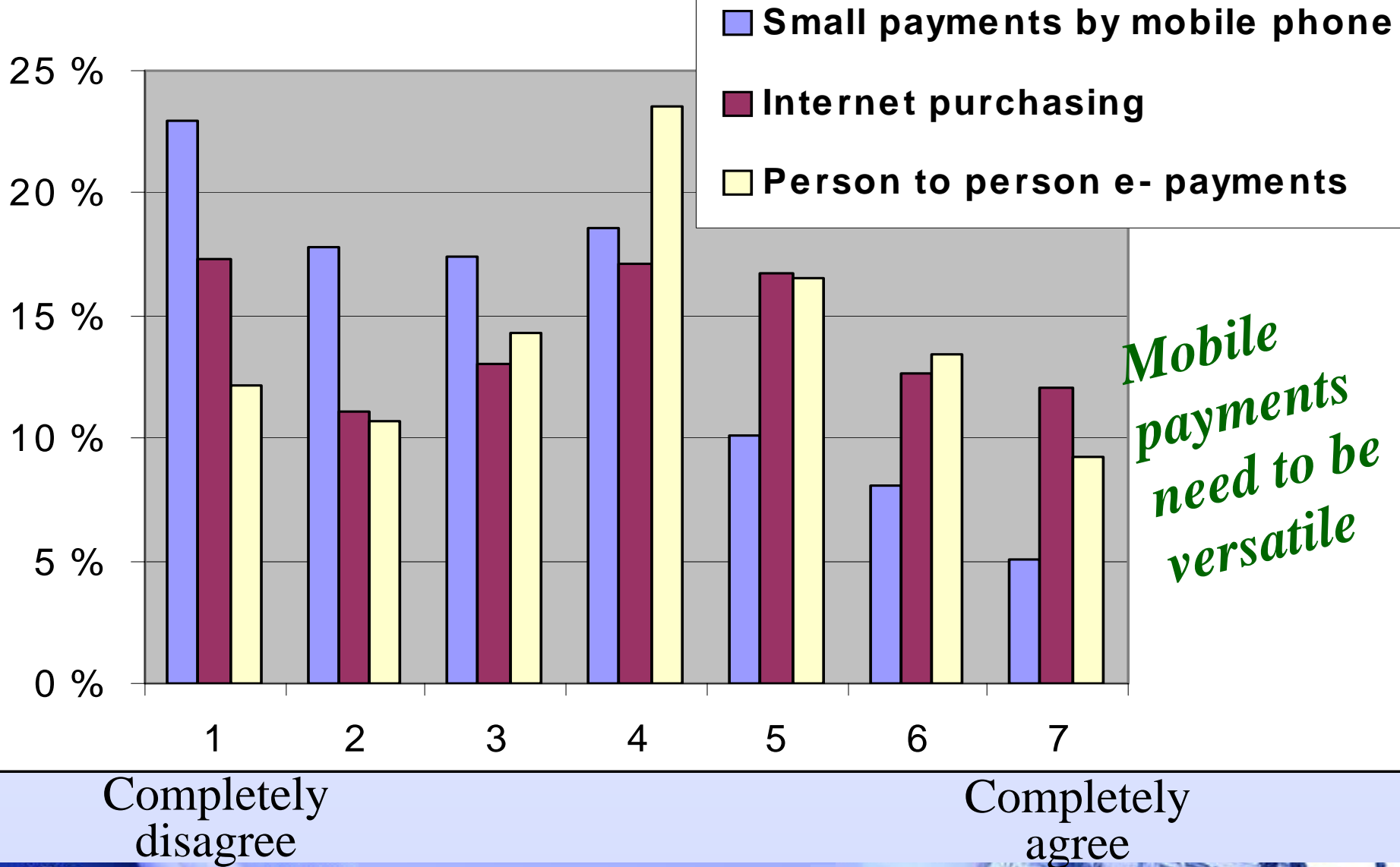
# Current mobile payment usage



BoF Consumer Survey Oct/Nov 2005



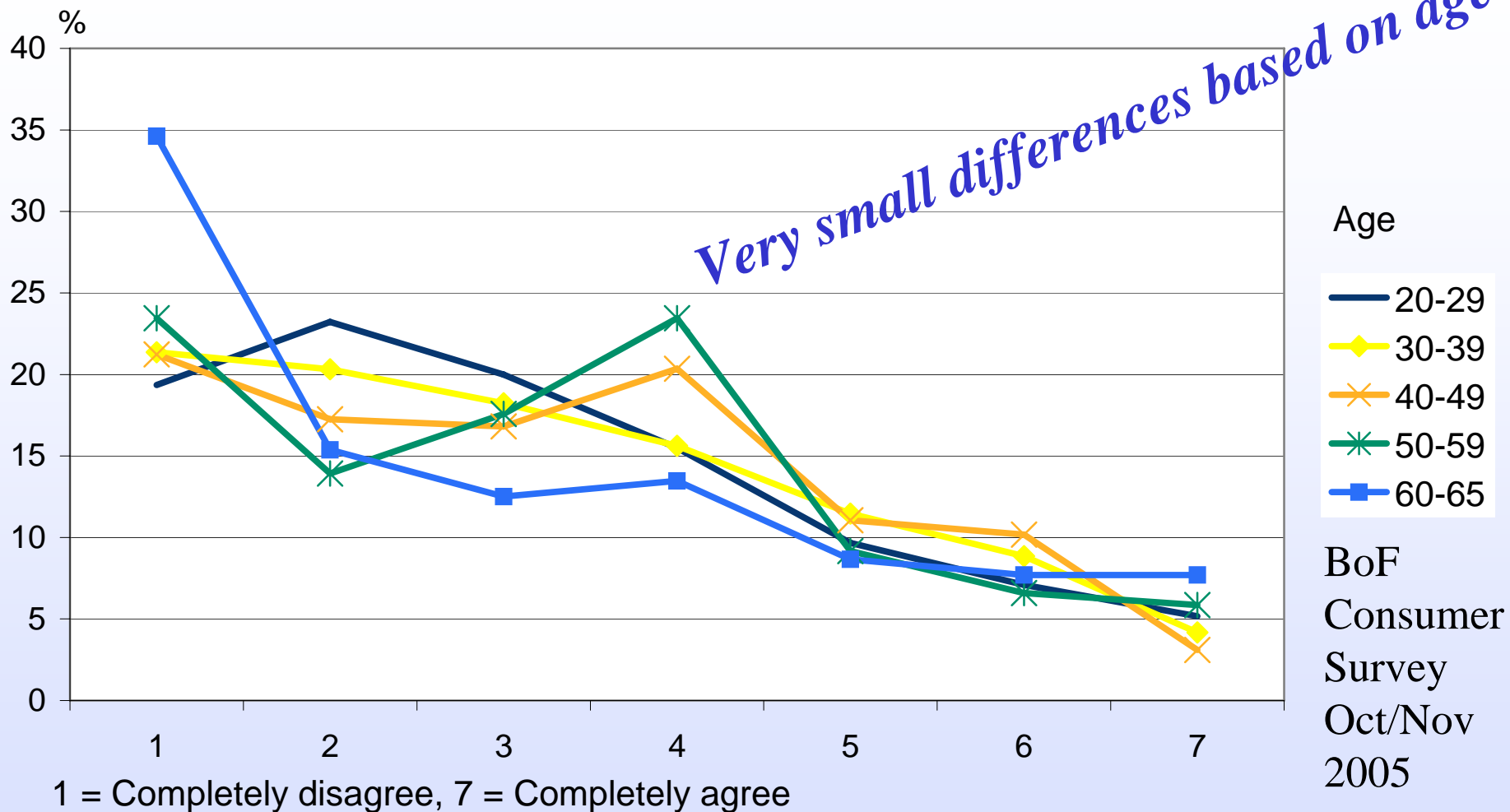
# Important development needs



BoF Consumer Survey Oct/Nov 2005

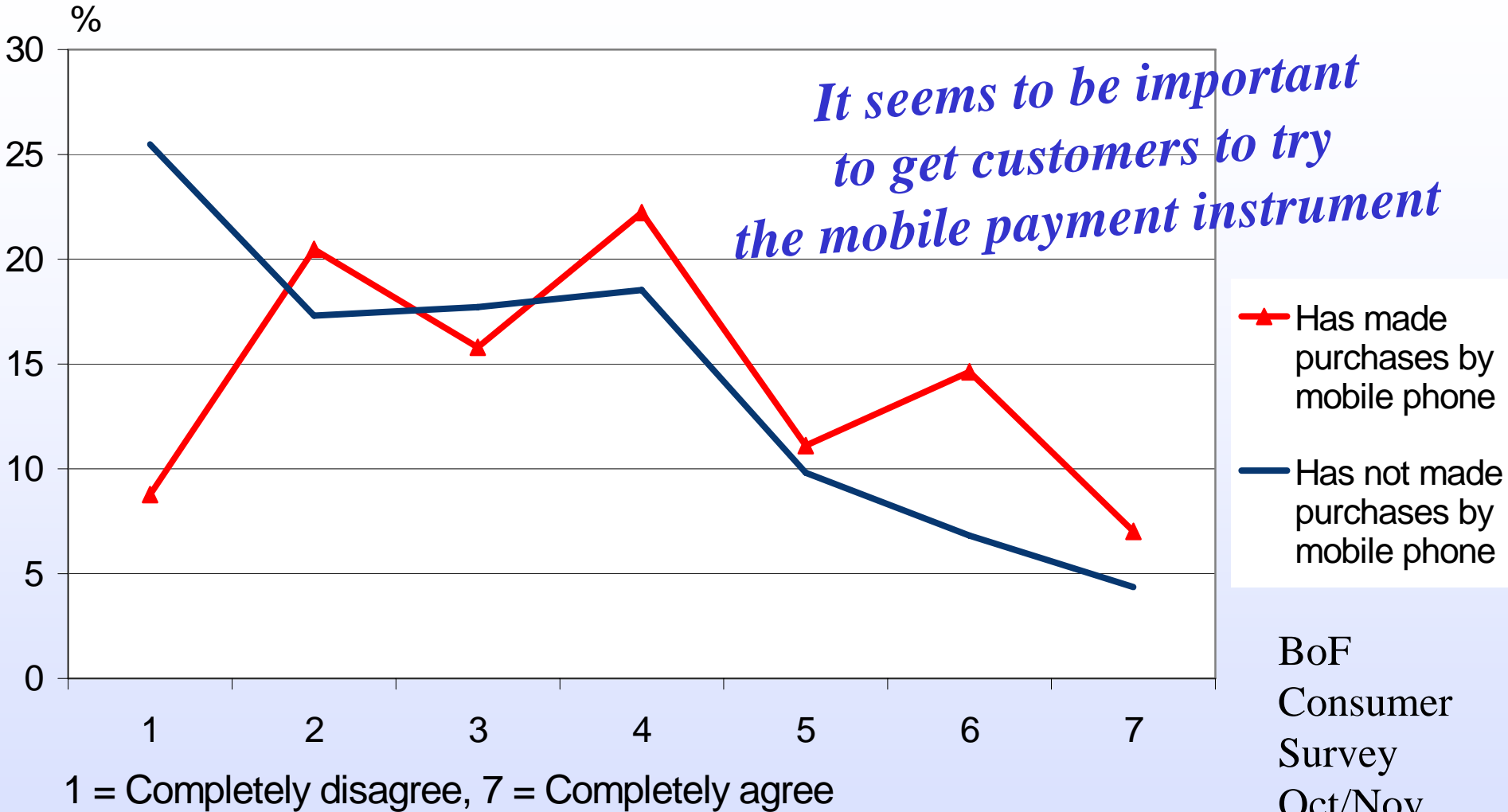


# It is important to me that new payment habits are developed in order to make small payments by mobile phone possible



**It is important to me that new payment habits are developed in order to make small payments by mobile phone possible**

*It seems to be important to get customers to try the mobile payment instrument*

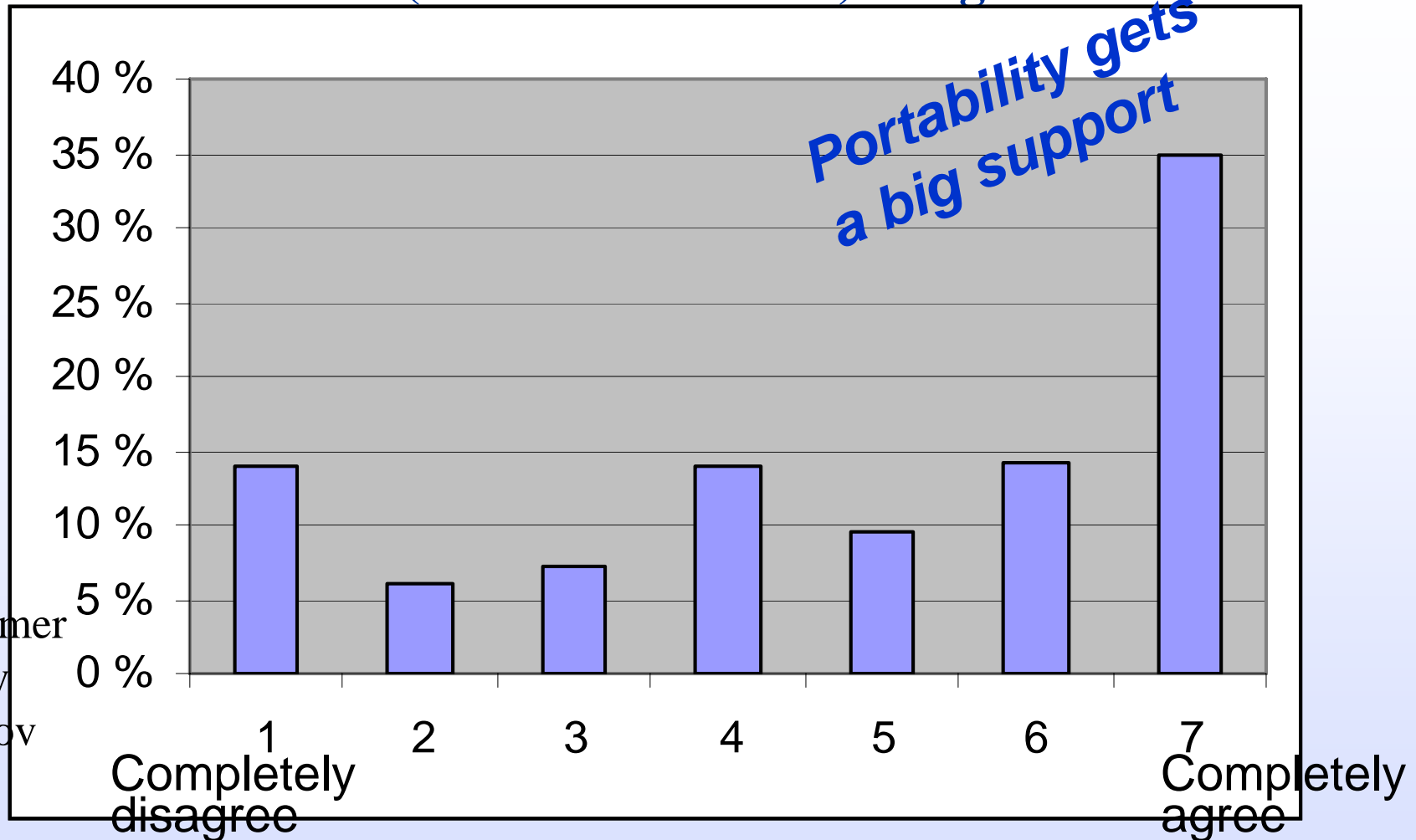


- Has made purchases by mobile phone
- Has not made purchases by mobile phone

BoF  
Consumer  
Survey  
Oct/Nov  
2005



# The possibility to transfer the account number from one bank to another (as a GSM number) is a good idea



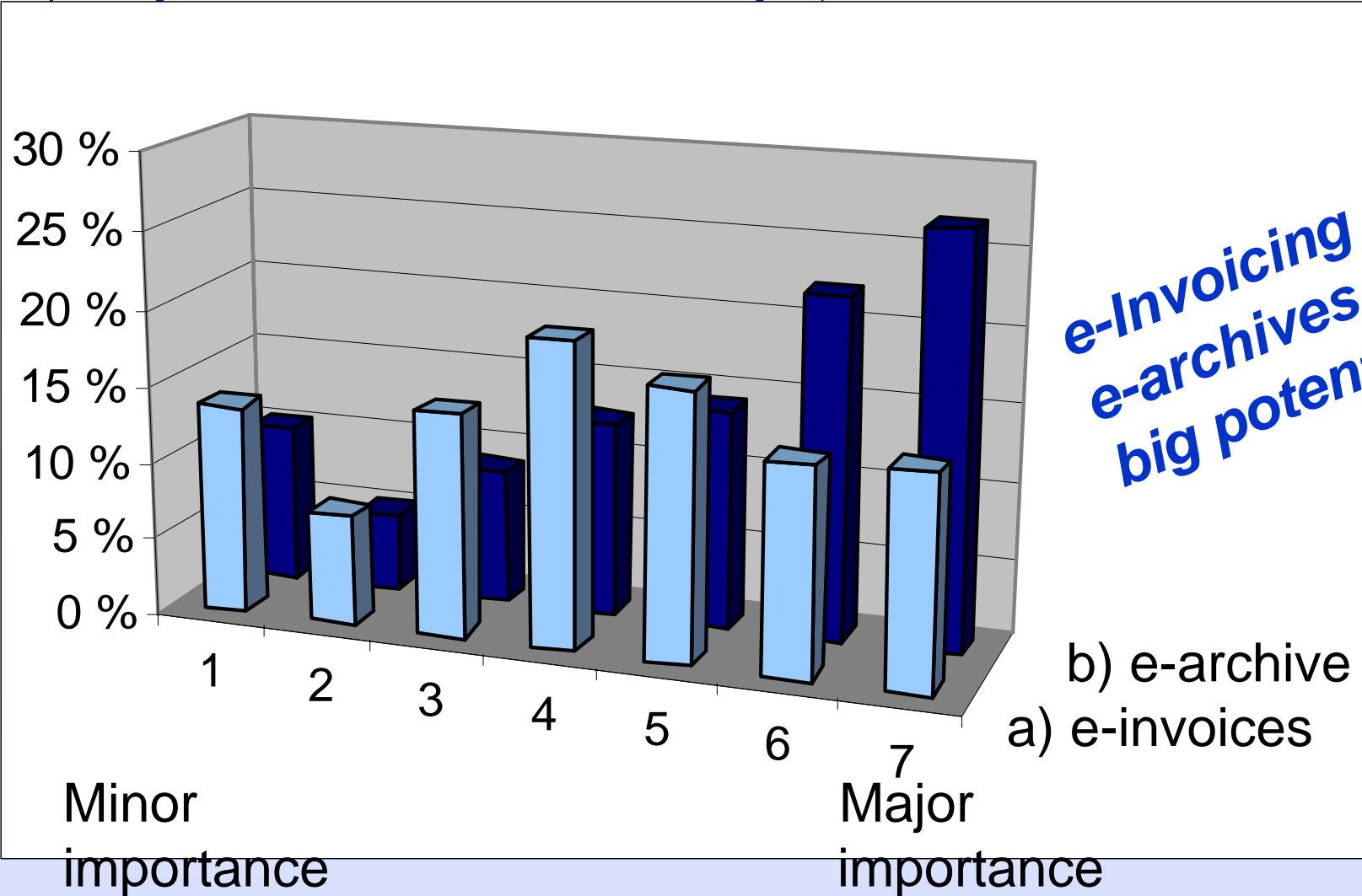
*The interest in number portability will increase the more payments are received on mobile phone accounts*



I am interested in a new payment method if I can

a) give up paper invoices and switch to e-invoices

b) keep detailed information on payments in an e-archive



BoF Consumer Survey Oct/Nov 2005

