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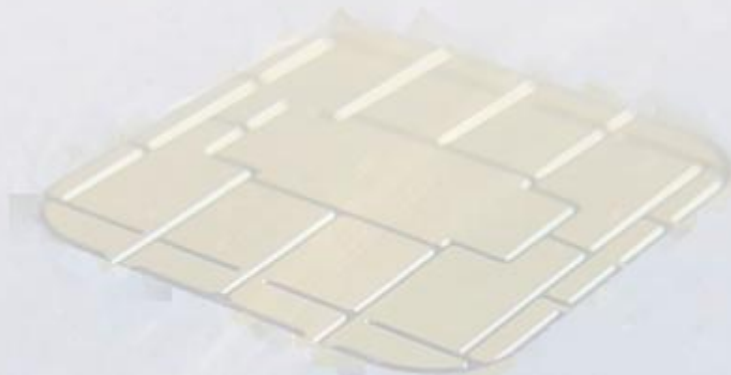
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EUROPEAN CAMPUS CARD ASSOCIATION 2013

NEW CHALLENGES ON CAMPUS' SMARTCARDS

May 27th, 2013

Jorge Lanza



AGENDA

Current smartcards ecosystem

Plan the future

Next generation

Conclusions

THE PRESENT IS ... LOOKING OUTSIDE



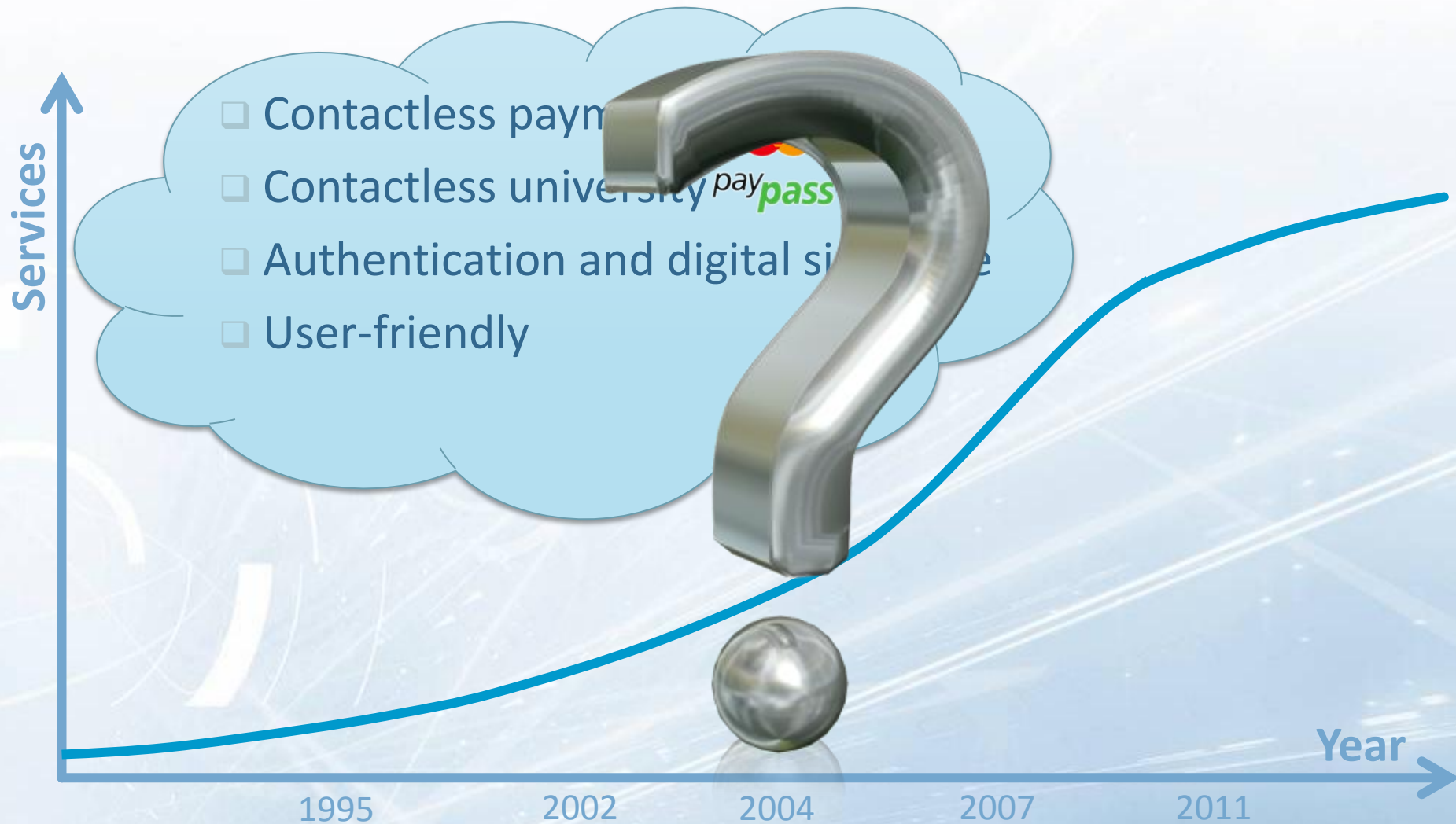
- ❑ Externally, smartcards haven't evolve that much
 - Carton, plastic, etc.
 - Picture, barcode or QR, logo, etc.
- ❑ Added security features

THE PRESENT IS ... LOOKING INSIDE



- Internally, smartcards follow the pace of technology evolution
 - Contact / Contactless / Hybrid / Dual interface
 - Mono-application / Multi-application (Javacard, .NET, etc.)
 - More storage space, crypto-processors, ...

THE PRESENT IS ... GENERIC SERVICES



THINK ABOUT IT

□ Doubts / Thoughts

- What is the next generation? Is it a better smartcard?
- Which is the right path to follow? Another smartcard?
- What is the next step forward? Break away from the past?
- What is the market/communities telling us?



Think globally ...

THINK ABOUT IT



Think globally ...

UNIVERSITY'S ECOSYSTEM

- University is not only campus but ...
 - Life outside campus
 - Relationships within the community
- } SOCIAL

RELATIONSHIPS BETWEEN STUDENTS

- ❑ Social networks changed the way we interact
- ❑ Universities have to be
 - As a social network
 - Part of the online social networks
- ❑ Smartcard can play a key role in social networks
 - Enable for profile managing \Rightarrow one hop to be in touch
 - Access token to social network
- ❑ NFC enabled mobile phones can be the one link in the chain
 - Portable reader
 - User friendly interface with display and keyboard



UNIVERSITY'S ECOSYSTEM

- University is not only campus but ...
 - Life outside campus
 - Relationships within the community
- Campus smartcards must be alive outside campus boundaries
 - University collaborates with transport, shops, etc.
 - University anytime anywhere (at home, etc.)

} SOCIAL

} MOBILE

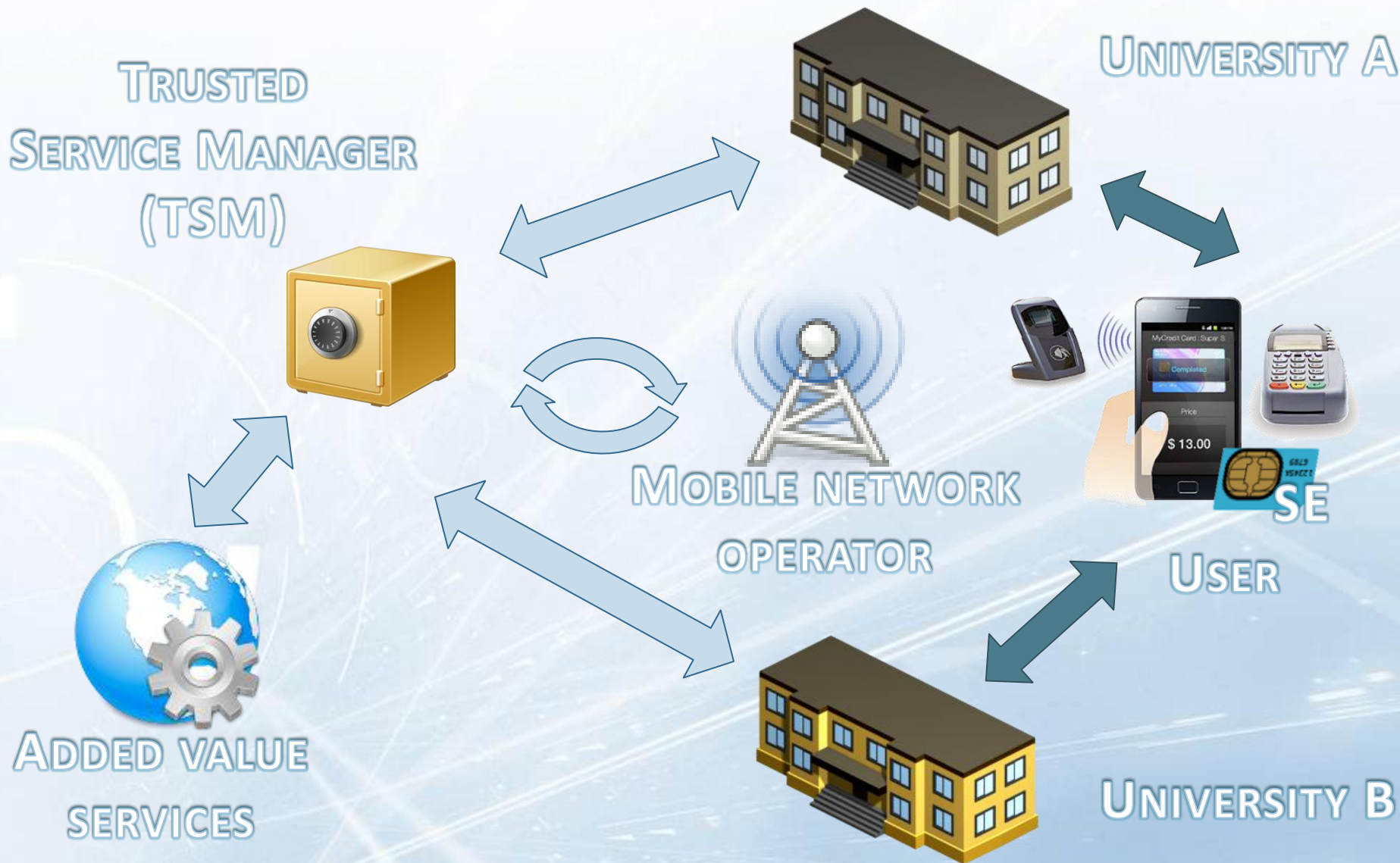
NEXT GENERATION FORM-FACTOR

- It is clear that the world is moving toward mobile environments
- NFC embedded in mobile devices can be the proxy between the smartcard and the services in the universities

	SIM NFC	Embedded SE	MicroSD NFC	Bluetooth tag	Passive tag	Case Sleeve	Virtual SE
NFC handset required							
Integration							
Independent from 3 rd parties							
NFC experience							
User perception							

Positive Negative

NEXT GENERATION SERVICES



UNIVERSITY'S ECOSYSTEM

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} SOCIAL

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} MOBILE

- Universities are not alone, they are a network
 - Share resources \Rightarrow cost S integration W
 - Students move from one university to another
 - No big distinguishing factor on services

} GLOBAL STANDARD

YOUR COUNTRY, EUROPE, WORLD

- ❑ Students and personnel \Rightarrow geographic mobility W
 - Standards needed
 - Keep native university identity
- ❑ Community mobility support
 - Ease adaptation to new EU education methodology
 - Share common educational data
 - Seamless student/personnel identification
 - Students/personnel always connected
- ❑ Issue new smartcards is non-sense
 - Reuse of smartcard \Rightarrow user chooses applications
 - Most universities uses similar memory map and services
 - Waste of resources \Rightarrow waste of money

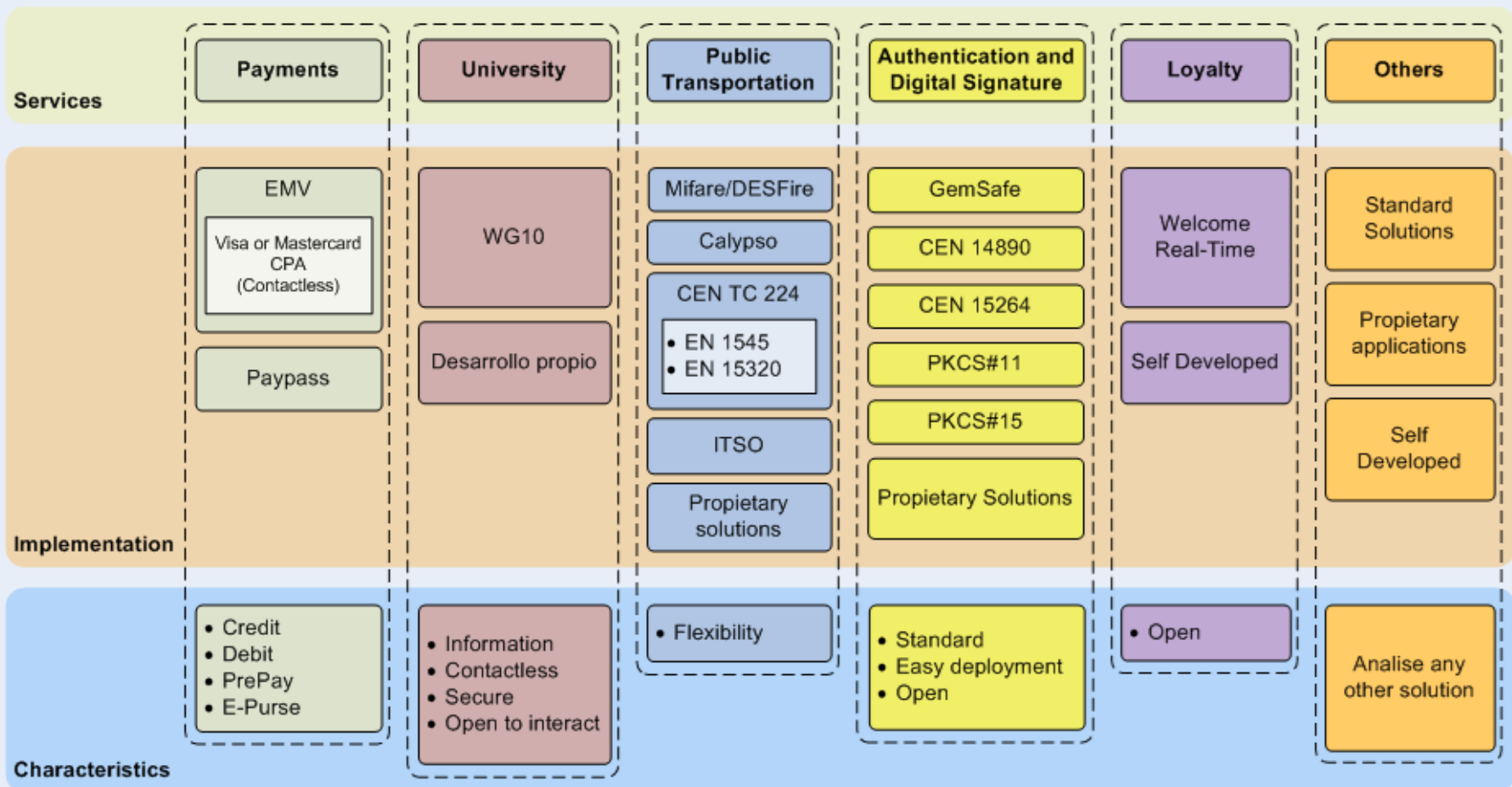
SANTANDER UNIVERSITIES

- ❑ Built thinking globally
- ❑ Currently up to 250 universities in the world, which means over 6 million users shares the same smartcard
- ❑ Collaboration network
 - Smartcards reuse: backwards compatible, update content,...
 - Share experiences and applications: problems and success
 - Key to many added value services
- ❑ Plenty of benefits not only for the university but also for the students



SANTANDER'S UNIVERSITY SMARTCARD

SANTANDER'S UNIVERSITY SMARTCARD



CONCLUSIONS

- ❑ Scenario is changing and adaptation is required
 - Mobile and ubiquitous university
 - Seamless access to information
 - Reuse of resources
 - Cloud services as social networks, etc.

- ❑ When and how to make the step forward is up to you
 - Answers are not easy
 - Is it worth the investment?

- ❑ Technology is making the change happens

THANKS FOR YOUR ATTENTION



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