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mobile financial services

Mobey Forum's HCE workgroup presents

HCE Options for Financial Institutions

A Member Exclusive Webinar

4pm CET Thursday 13 Nov, 2014

Welcome to the Webinar

Presented by

Zaf Kazmi, Head of Mobile Payments & Commerce, **CaixaBank**

and

Kristian T. Sorensen, Senior Manager for Corporate Strategy, **Nets**

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Webinar Agenda

- Survey Results: The bank opinion
  - What to do inhouse
  - Selecion criteria
  - HCE providers
- HCE versus physical SE
  - The Flow
  - The Roles
  - Comparison
- Trasaction flows
  - Full Cloud Based
  - Phone Applicaiton solution
- Questions

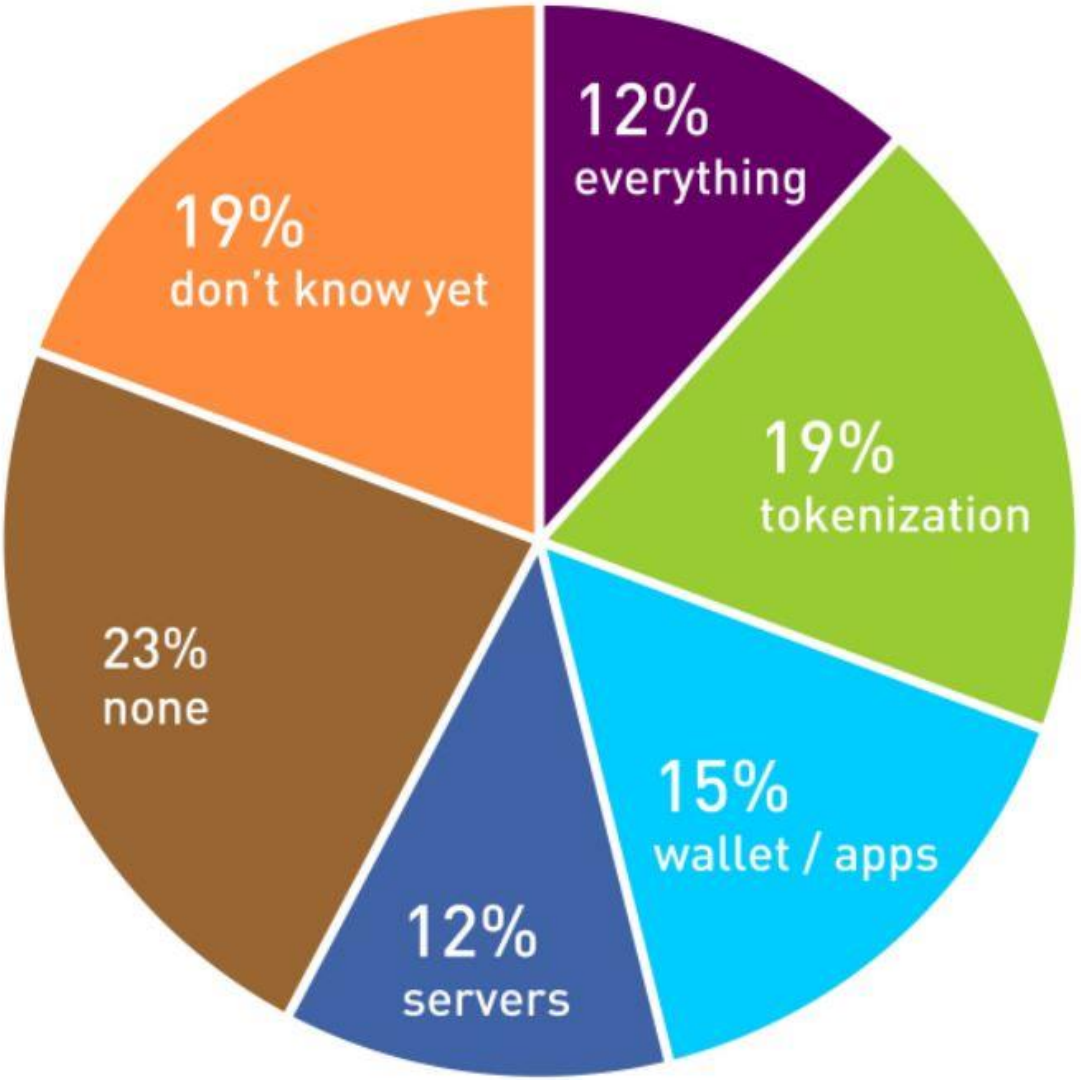
Kristian Sorensen:

THE SURVEY RESULTS – THE BANK VIEW

Mobey Forum HCE Survey

In September 2014, Mobey Forum surveyed over 130 representatives from banks and technology/service providers on their views on HCE.

Which part of the HCE solution would banks consider doing in-house?



Which part of an HCE solution would banks consider doing inhouse?

NFC Payment, BEA Token (2-FA), BEA App identification

Wallet, Wallet Platform, VAS platform

We are currently looking for solutions in the market. Depending on the outcome we could outsource everything or do some things in-house.

UI & alternate PAN issuance

Still evaluating the best option for our organization

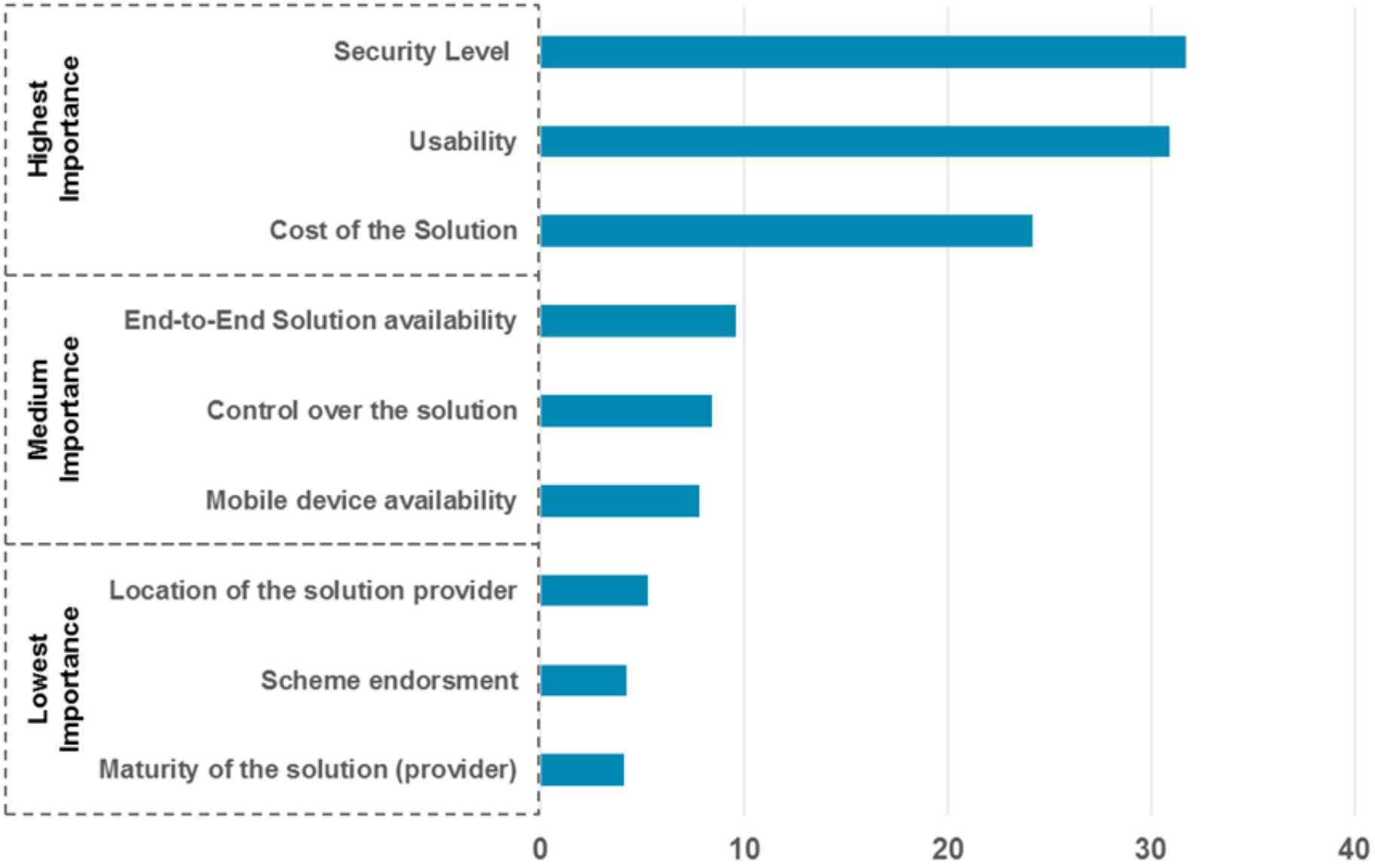
As little as possible. Time to market....

As long as the server is on-site in-house. For the rest, would prefer solution providers.

Not yet discussed as we have one central acquirer in our market looking into a solution.

Challenging question, given that set-up (what is done in-house, what with partners) varies a bit from country-to-country. HCE could potentially even be good at unifying some of the current set-ups [across] countries

Weighted Importance of Criteria to Select a Solution Provider



What criteria do you consider important when choosing a HCE provider

Roadmap of the Solution; Impact on existing infrastructure; Integration Capabilities

IP availability: if the vendor does not provide the IP related to the provided end-to end solution then all the IP risk will be for the issuer Bank exploiting the service. In legacy EMV schemes the smart card vendors used to own such an IP, having made cross licensing among them, so somehow the IP was "embedded". That is not the case anymore in HCE, and I believe Mobey Forum should help its Members to avoid such an uncertainty.

Geographic / 'universality' of the solution = ideally fits for many markets with differing payment infrastructure & providers.

Post implementation support

Reference, reputation and size of the provider

Roadmap on top of the HCE Solution - Flexibility of implementing additional (scheme) requirements - Lead time for end-to-end implementation

Tokenization expertize and flexibility

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HCE Solution Providers

Solution Providers as of September 2014	
ABNote	*www.abnote.com.au*
Accarda	*www.accarda.com*
Bell ID	*http://www.bellid.com/*
CA Technologies	*http://www.ca.com/us/default.aspx*
CartaWorldwide	*http://www.cartaworldwide.com/*
C-Sam -A Mastercard Company	*http://www.c-sam.com/about-us*
Gemalto	*http://www.gemalto.com/*
Giesecke & Devrient	*http://www.gi-de.com/en/index.jsp*
Helixion	*http://www.helixion.com/*
INSIDE Secure	*http://www.insidesecure.com/*
Mahindra Comviva	*http://www.mahindracomviva.com/products/mobile_financial_solutions.htm*
MasterCard	*http://www.mastercard.com/index.html*
Nexperts	*http://www.nexperts.com/*
Oberthur Technologies	*http://www.oberthur.com/*
Proxama	*http://www.proxama.com/*
Redsys	*http://www.redsys.es/*
Seglan	*http://www.seglan.com/*
Sequent	*http://www.sequent.com/*
SimplyTapp	*https://www.simplytapp.com/*
Visa	*http://usa.visa.com/about-visa/index.jsp*
WincorNixdorff	*http://www.wincor-nixdorf.com/internet/site_EN/EN/Home/homepage_node.html*

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Mobey Forum has not qualified the suggested companies, and does not imply all of these have relevant solutions. Mobey Forum is also aware of the fast-changing situation in the market

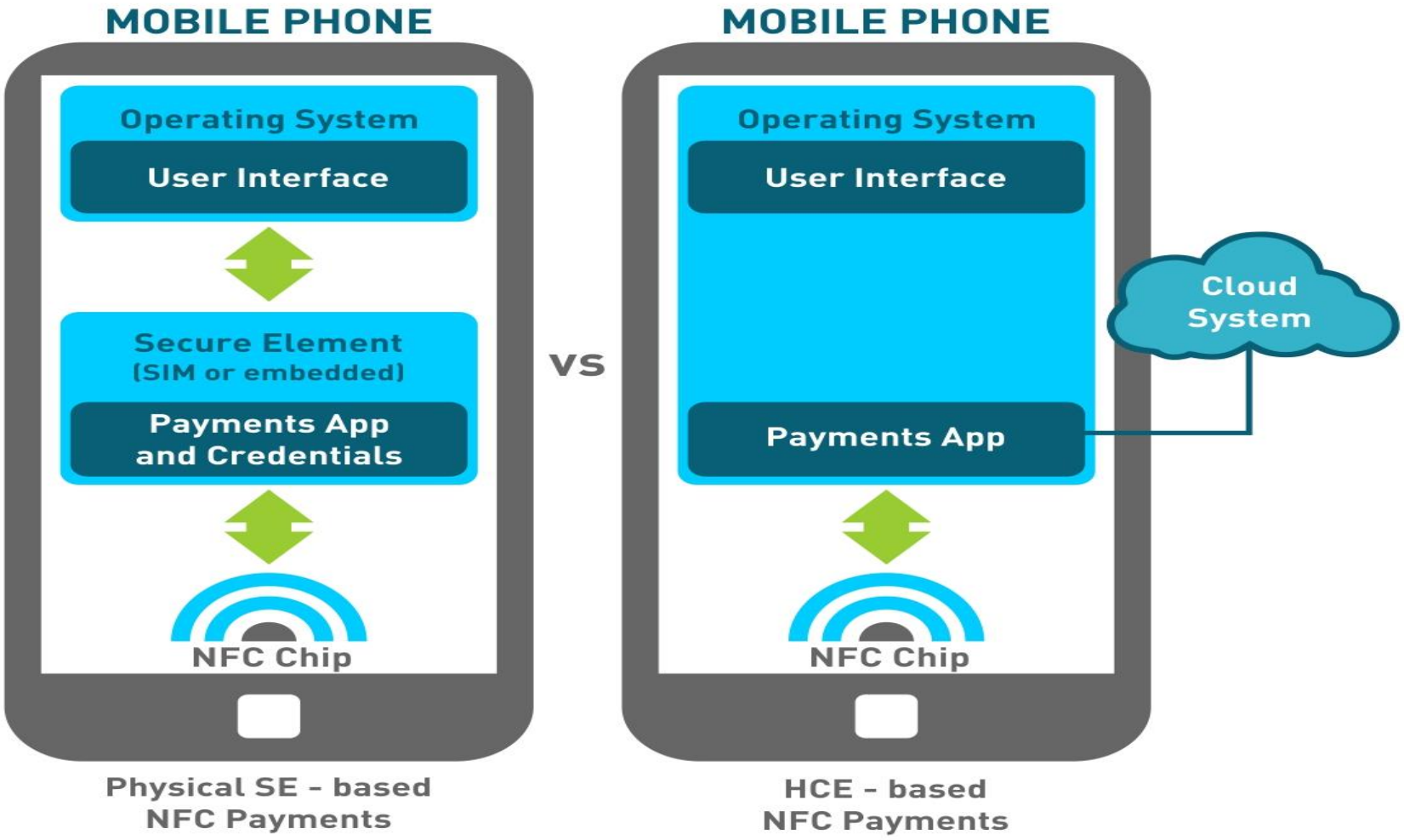
Zaf Kazmi:

HCE VERSUS PHYSICAL SE

Fundamental Security Paradigm Shift

- Traditional physical SE-based NFC needs a physical space on device to secure our data
- In HCE, the starting assumption is that the phone is ***not*** secure, and we use tokenization and other techniques to mitigate risk.
- We see HCE is more of an opportunity than a threat.

Comparison of HCE & Physical SE



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The Roles

- HCE business model is more straightforward – in theory, the issuers can do it all themselves
- in-house implementation might help avoid recurring fees
- however, issuers would have to invest upfront to develop a solution, and would likely engage specialist **HCE solution providers**.
- For token based HCE solutions, the issuers may also want to utilize a third party **Token Service Provider**, which would likely charge for its services.

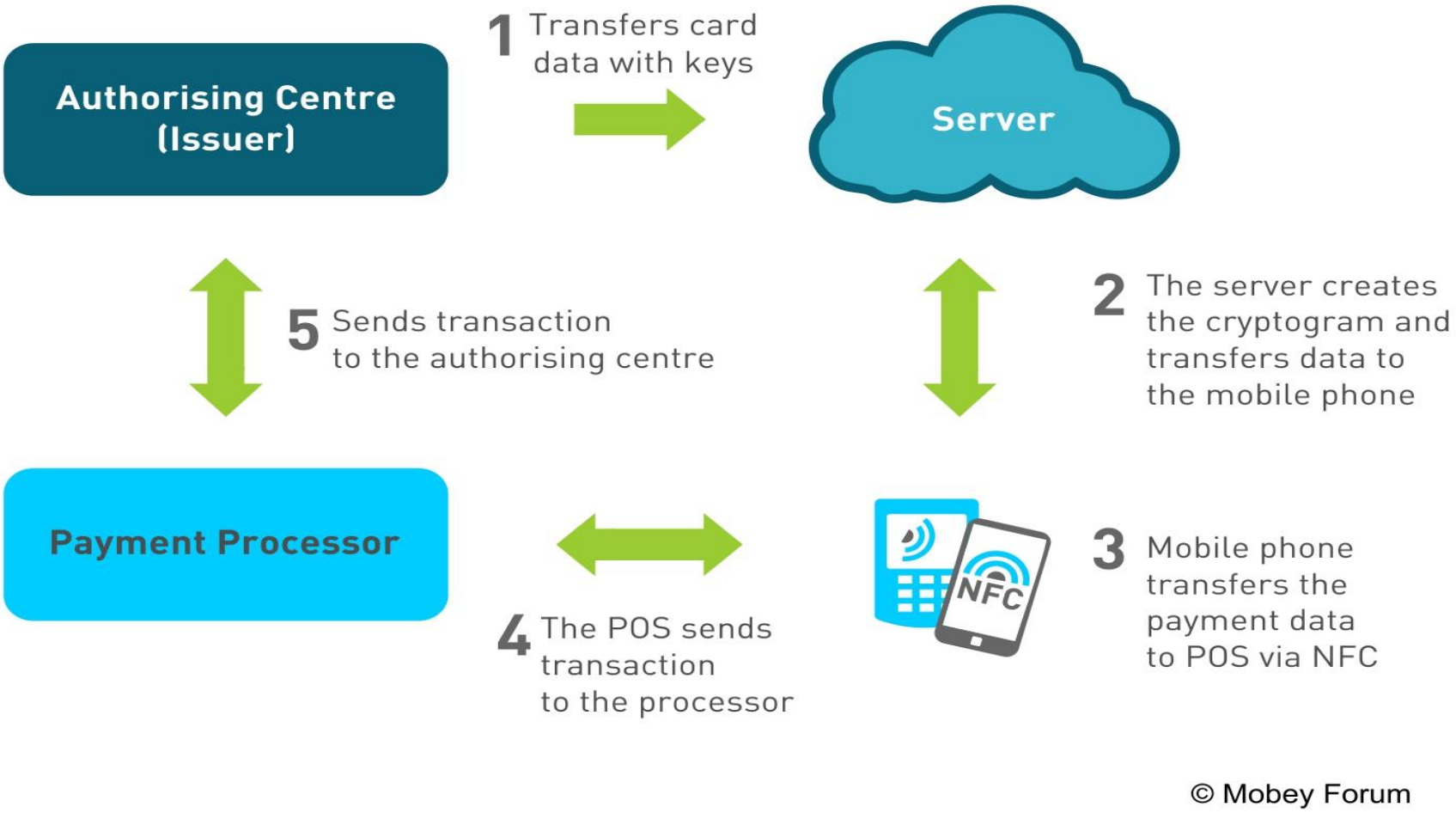
Comparison of technologies

	Issuing/ Provisioning	Security	User experience	Business model
Physical SE	Requires provisioning of the payments app and credentials to a physical SE on the phone. A new SIM card will probably be needed.	Very secure, chip-based, tamper resistant environment	Seamless. Works without battery.	Complex ecosystem and business models: issuers need agreements with both SE owners and TSM providers.
HCE Solution	Payment app can be downloaded from the app store; payment credentials supplied as needed by the solution.	Risk-based authentication Utilising limited-use payment credentials (e.g. tokens) and other risk management techniques.	If slow network, users may experience slow transactions. Tokens have to be delivered to the phone ahead of the transaction Battery power may be required.	Fast time to market –However, issuers may want to partner with HCE solution providers or utilise third-party Token Service Providers.

Zaf Kazmi:

TRANSACTION FLOWS

Transaction Flow in a Full Cloud Based HCE Solution



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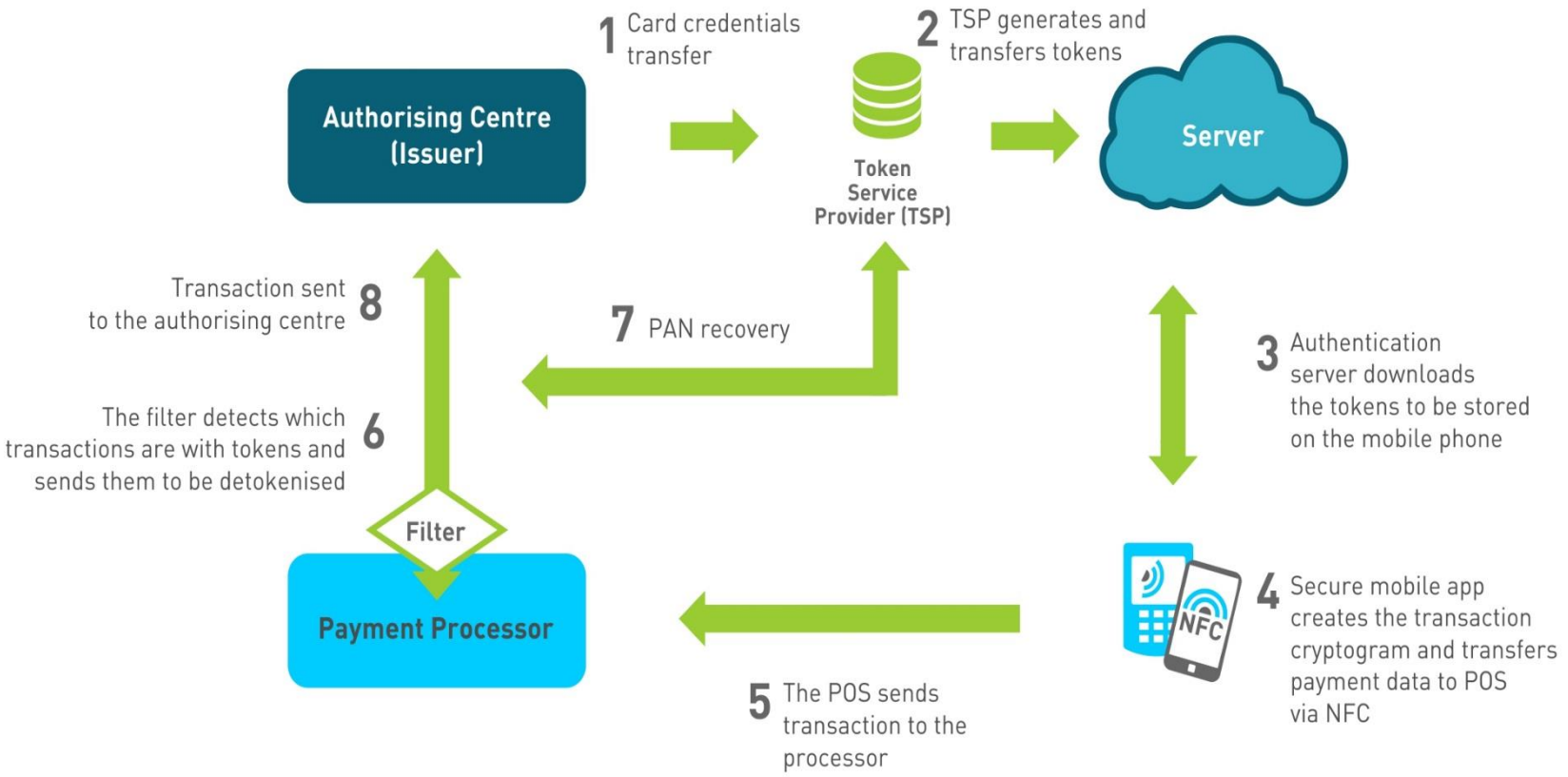
Transaction Flow in the Card Emulation by Phone Application Solution



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What's Next?

- The first HCE paper will be published next week: **Wed 19, Nov**.
- The HCE Workgroup will continue its work. Potential future topics to focus on include:
  - Use cases/end user perspectives
  - HCE vs Tokenization
  - Control Points
  - Security
  - Legislation & certification
- What would you be interested in?
- If you are interested in joining the HCE Workgroup, please contact *elina.mattila@mobeyforum.org*

Any Questions?

Please use either the chat function to submit your question

or

the ”raise your hand” function to voice your question