



The Smart Card Integrator

2nd International Workshop on Embedded Systems, Internet Programming and Industrial IT



Industrial Engineering within ORGA's smart card production

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System Software Integration
Industrial Engineering





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ORGA Introduction

- What does ORGA do?
- Where you'll find ORGA worldwide
- ORGA's product portfolio





ORGA Introduction

What does ORGA do?

ORGA is one of the world's leading companies in the smart card industry.

ORGA Kartensysteme develops and markets software and tools for smart cards, which we also manufacture and personalize.

ORGA Systems develops and markets billing solutions for tailored customer needs.

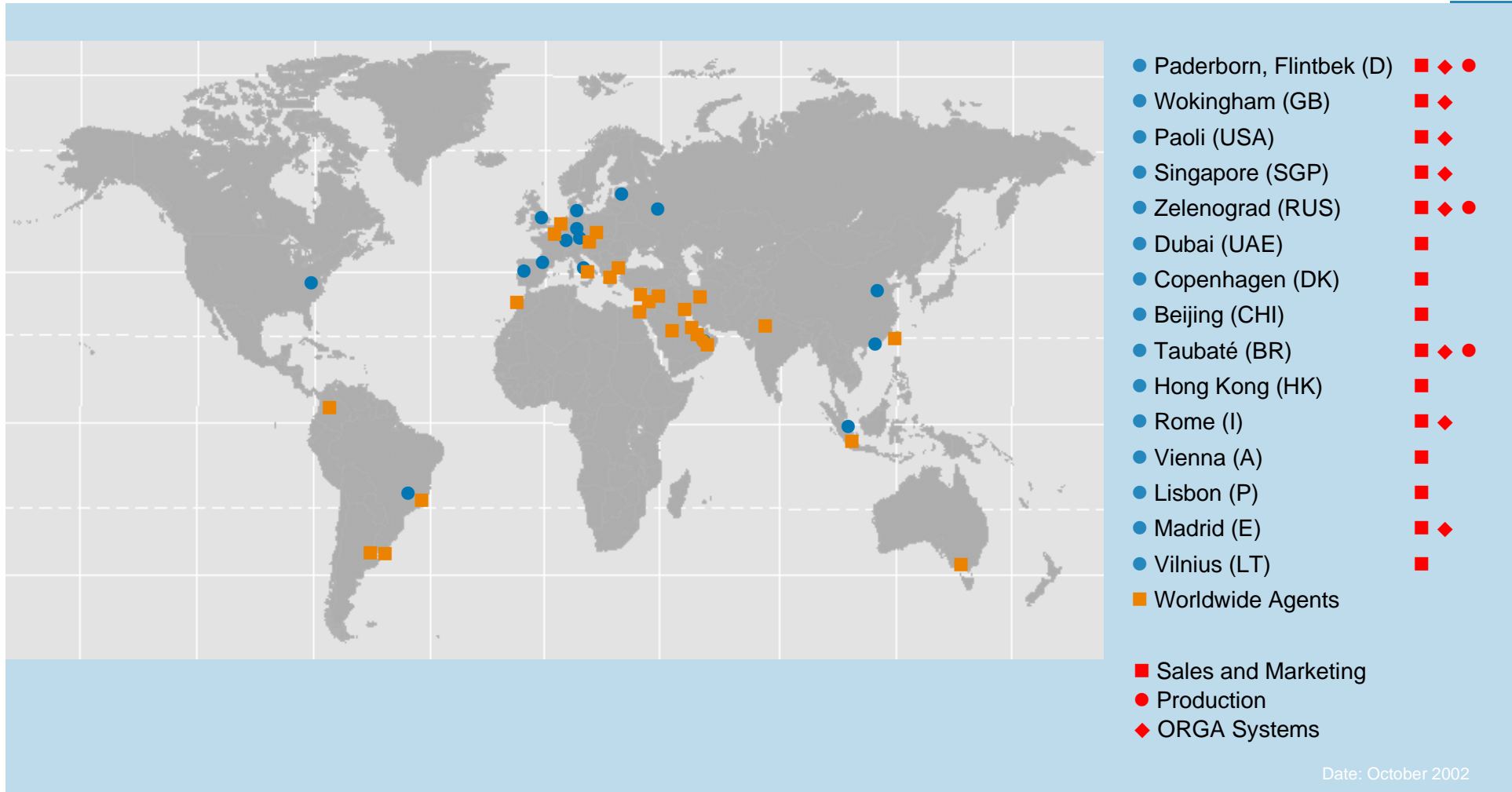
As part of the GHP Services group we offer card-based, end-to-end interactive marketing and customer management systems.





ORGA Introduction

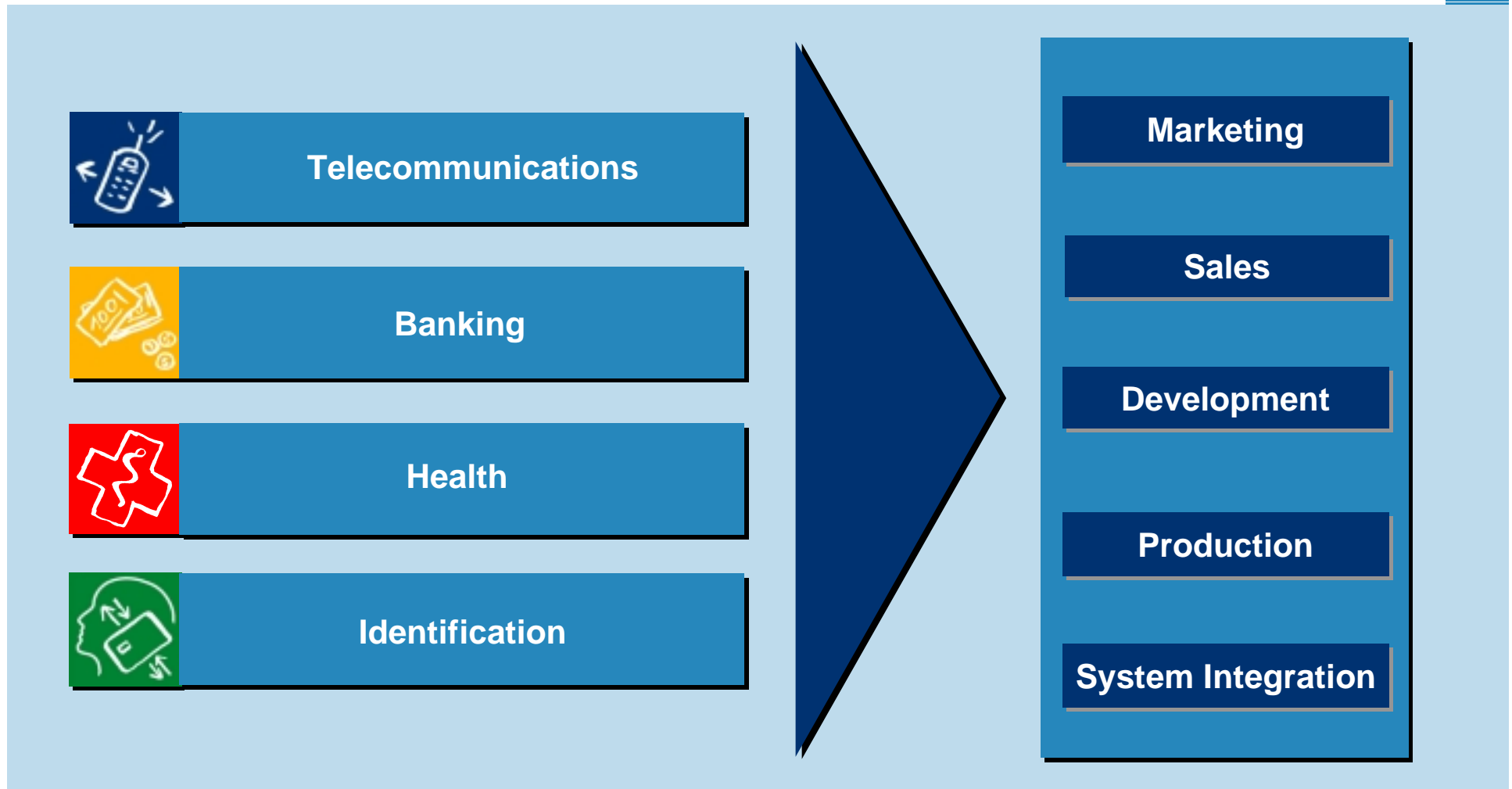
Where you'll find ORGA worldwide





ORGA Introduction

ORGA's product portfolio





ORGA´s Smart Card Center in Flintbek

- ORGA Smart Card Center
- Smart Card Production
- Manufacturing View



Industrial Engineering within ORGA´s smart card production



ORGA´s Smart Card Center in Flintbek

ORGA Smart Card Center



ORGA Smart Card Center, Flintbek, Germany

Certificates:

VISA
(credit/debit cards)

EUROPAY / MasterCard
(credit/debit cards)

GSM Network Carrier:
Several network operators

Social insurance (Health)
Several authorities

Pay TV
Several companies

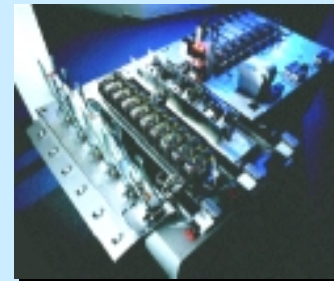
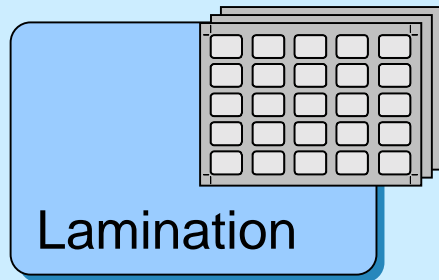
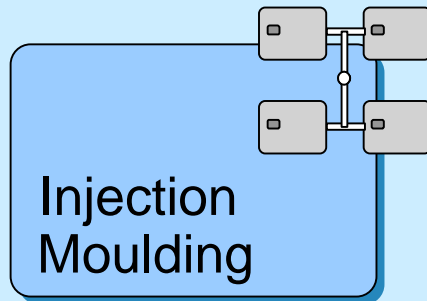
Quality Management Certificates:
DIN EN ISO 9001:2000

Environment Certificates:
DIN EN ISO 14001



ORGA's Smart Card Center in Flintbek

Smart Card Production



Mailing



Letter Printing

Module Production

Card Body Production

Initialisation / Personalisation

Mailing / Fulfilment

Industrial Engineering within ORGA´s smart card production



ORGA´s Smart Card Center in Flintbek **Manufacturing View**





Industrial Engineering at ORGA

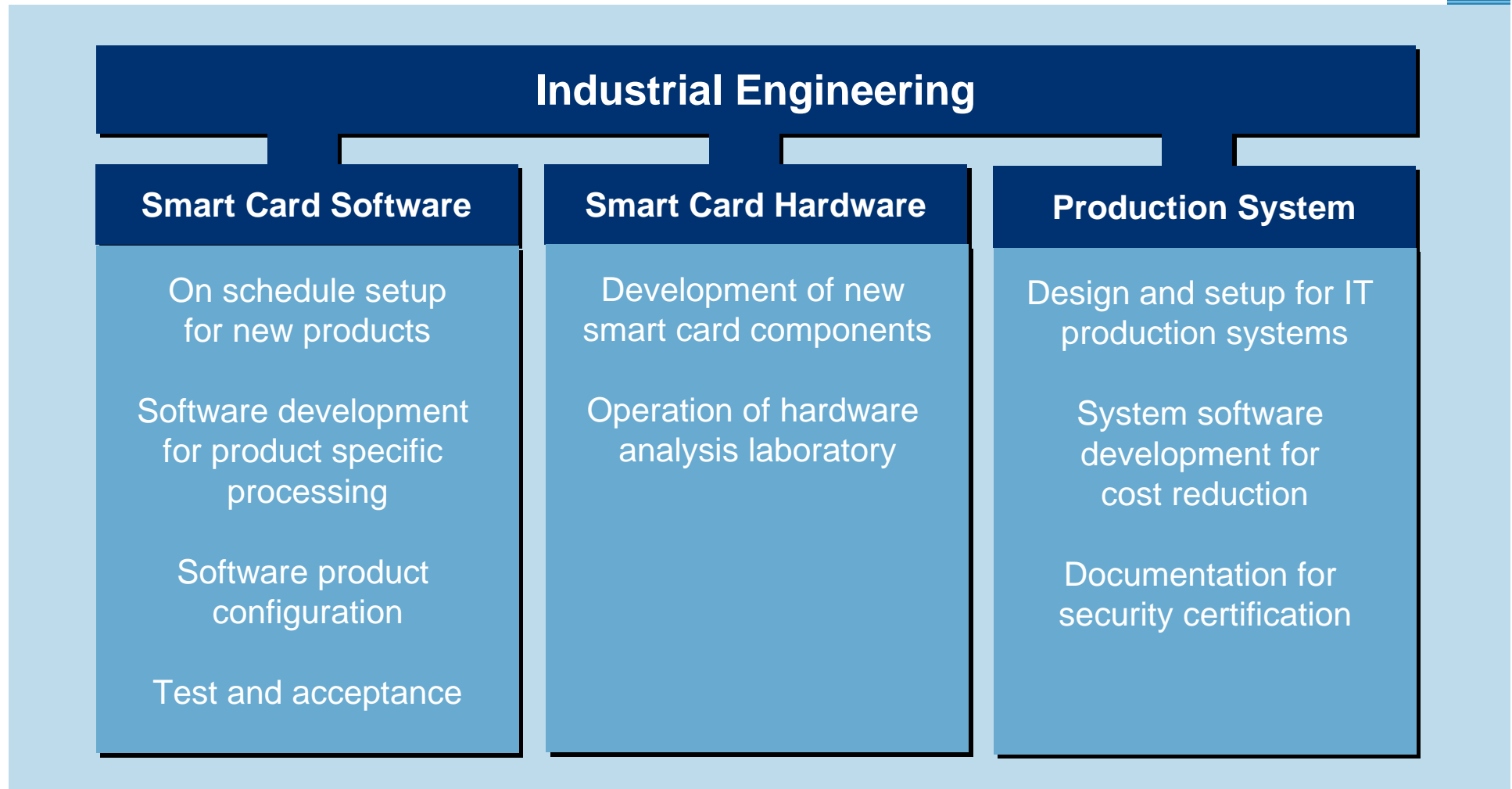
- Main Tasks
- Influencing Variables





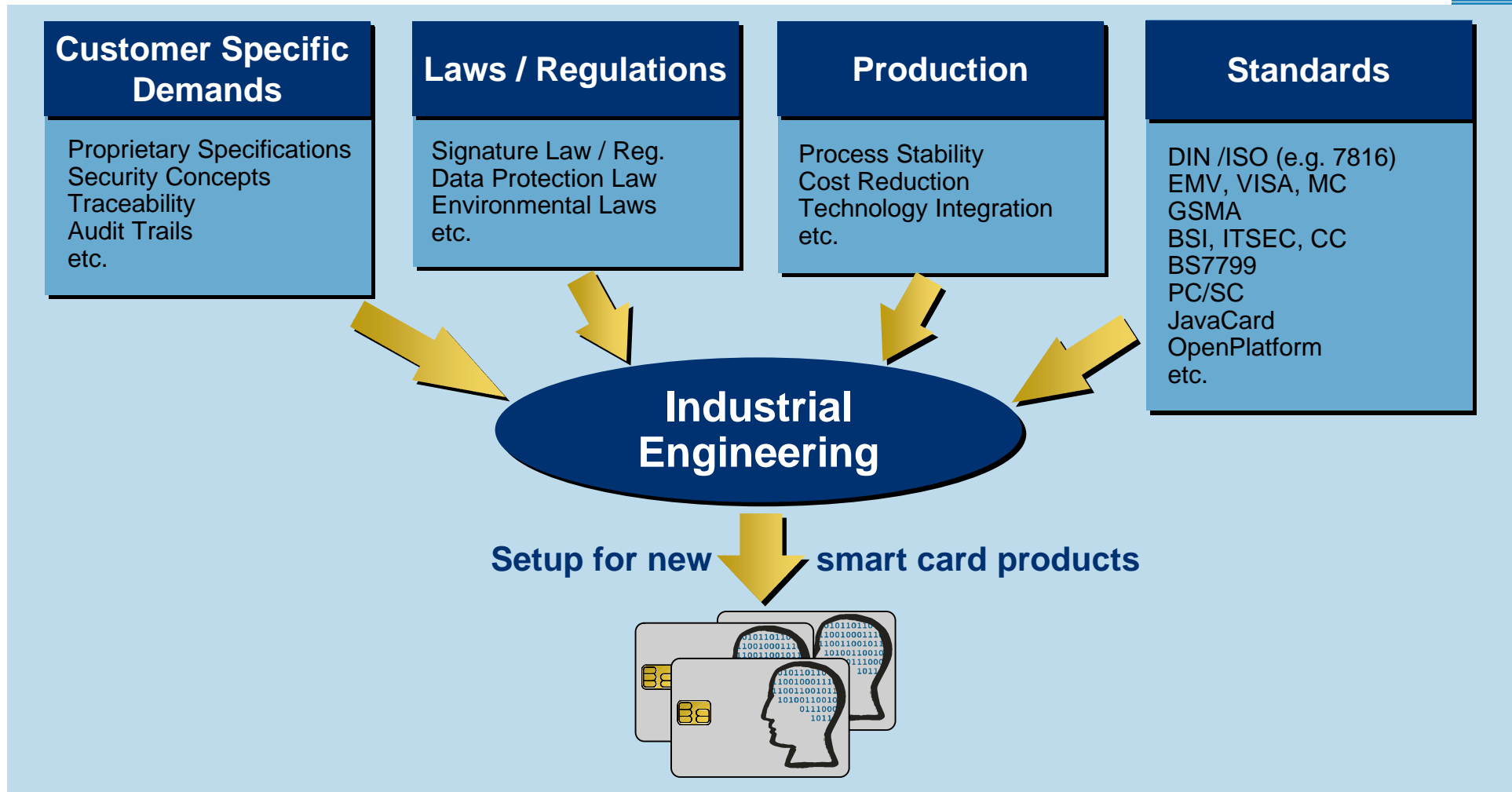
Industrial Engineering at ORGA

Main Tasks





Industrial Engineering at ORGA Influencing Variables





Smart Card Production

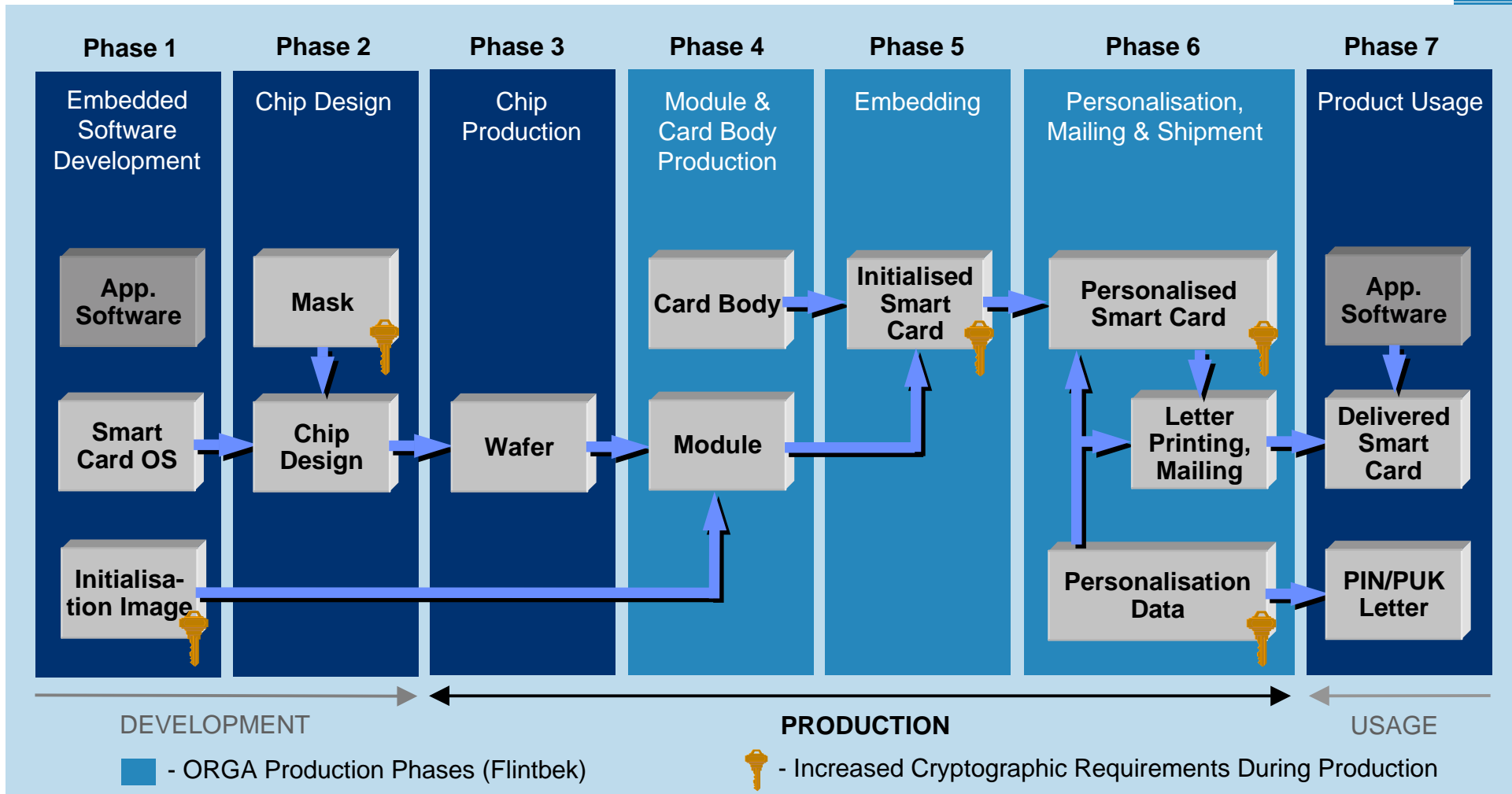
- Production Phase Model
- Production Interfaces (IT)
- Production System (Functionality)
- Production System (Organisation)
- Production System (Structure)

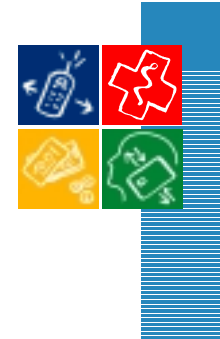




Smart Card Production

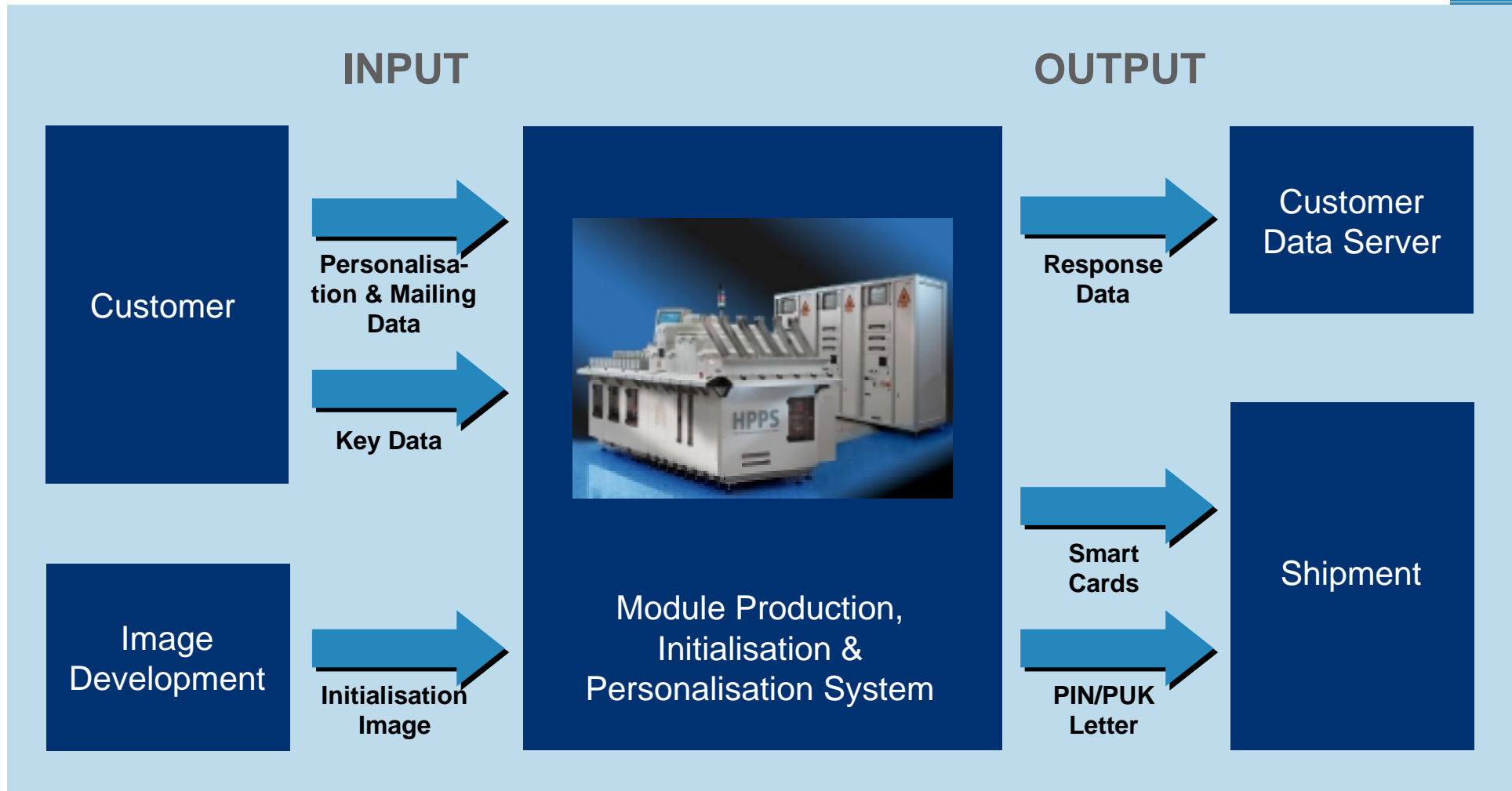
Production Phase Model





Smart Card Production

Production Interfaces (IT)





Smart Card Production

Production System (Functionality)

The main system functionalities are:

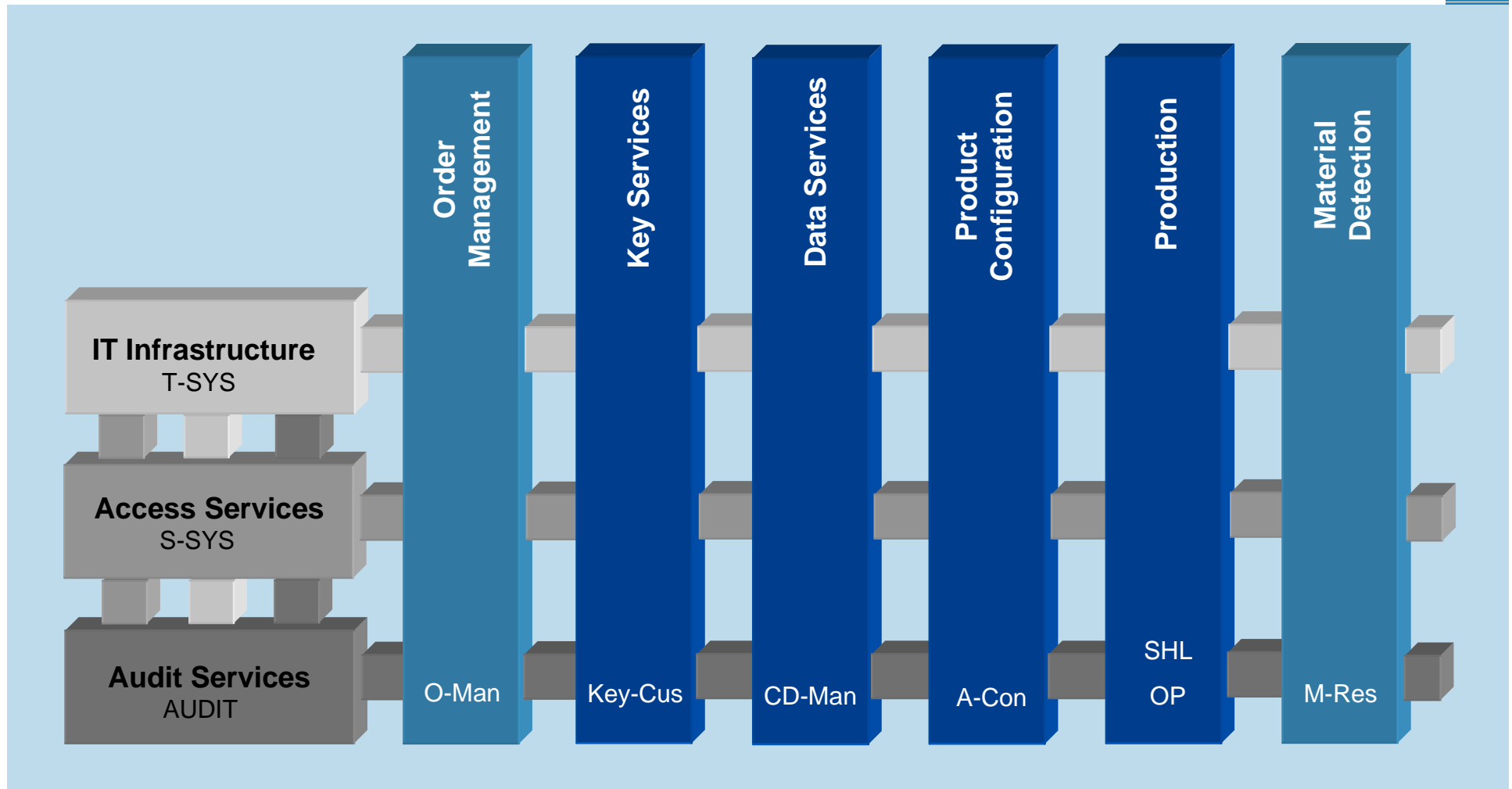
- user / role administration
- security and audit functionality
- workstation access control (*Smart SignOn*[®])
- customer and production order management
- key management (e.g. HSM)
- production data management
- machine interfaces for testing, initialisation, personalisation, application loading
- data interfaces for secure data exchange between internal and external systems (e.g. using CD-R)





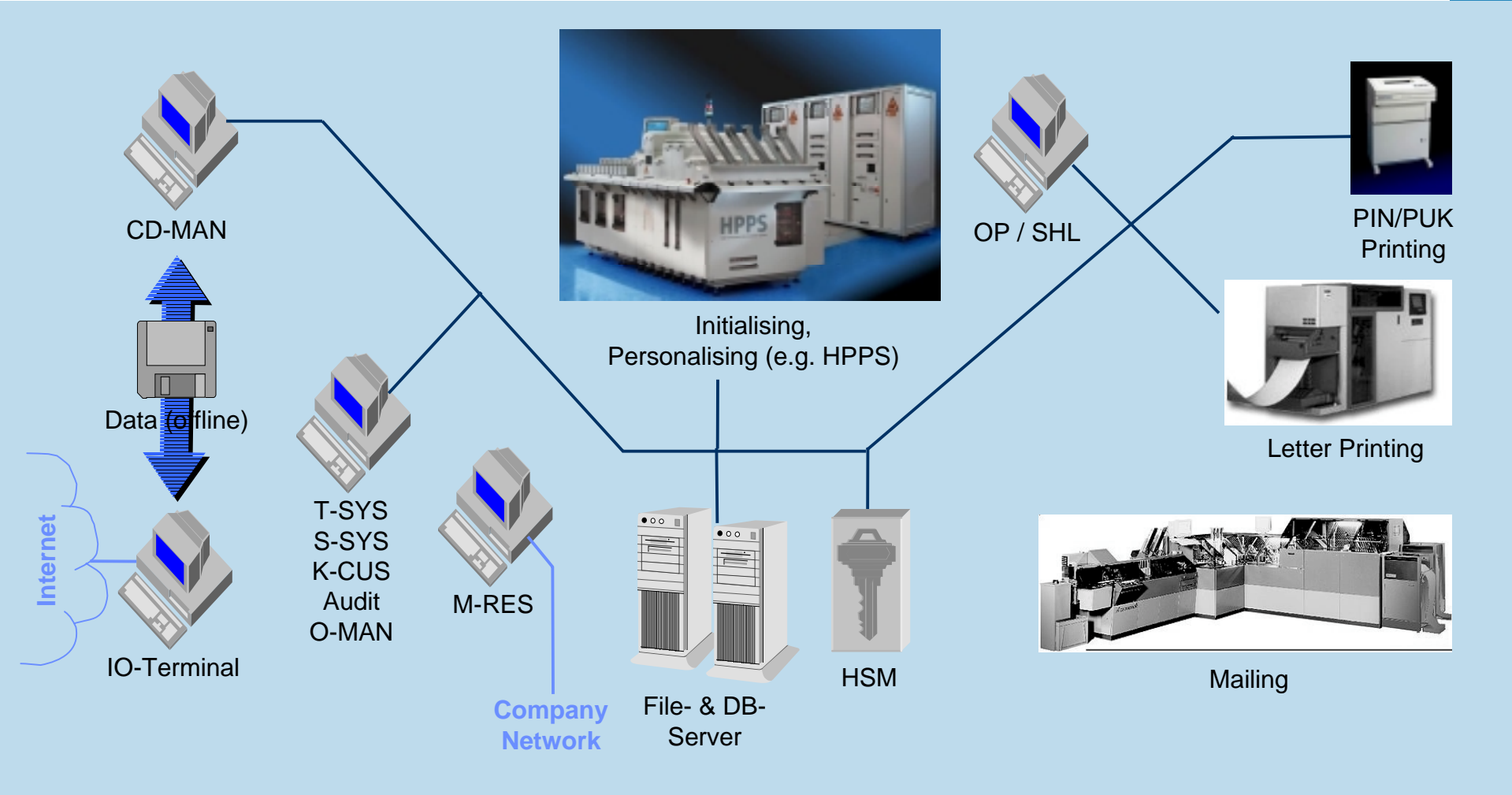
Smart Card Production

Production System (Organisation)





Smart Card Production Production System (Structure)

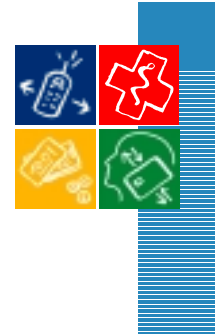




PKI Product Setup

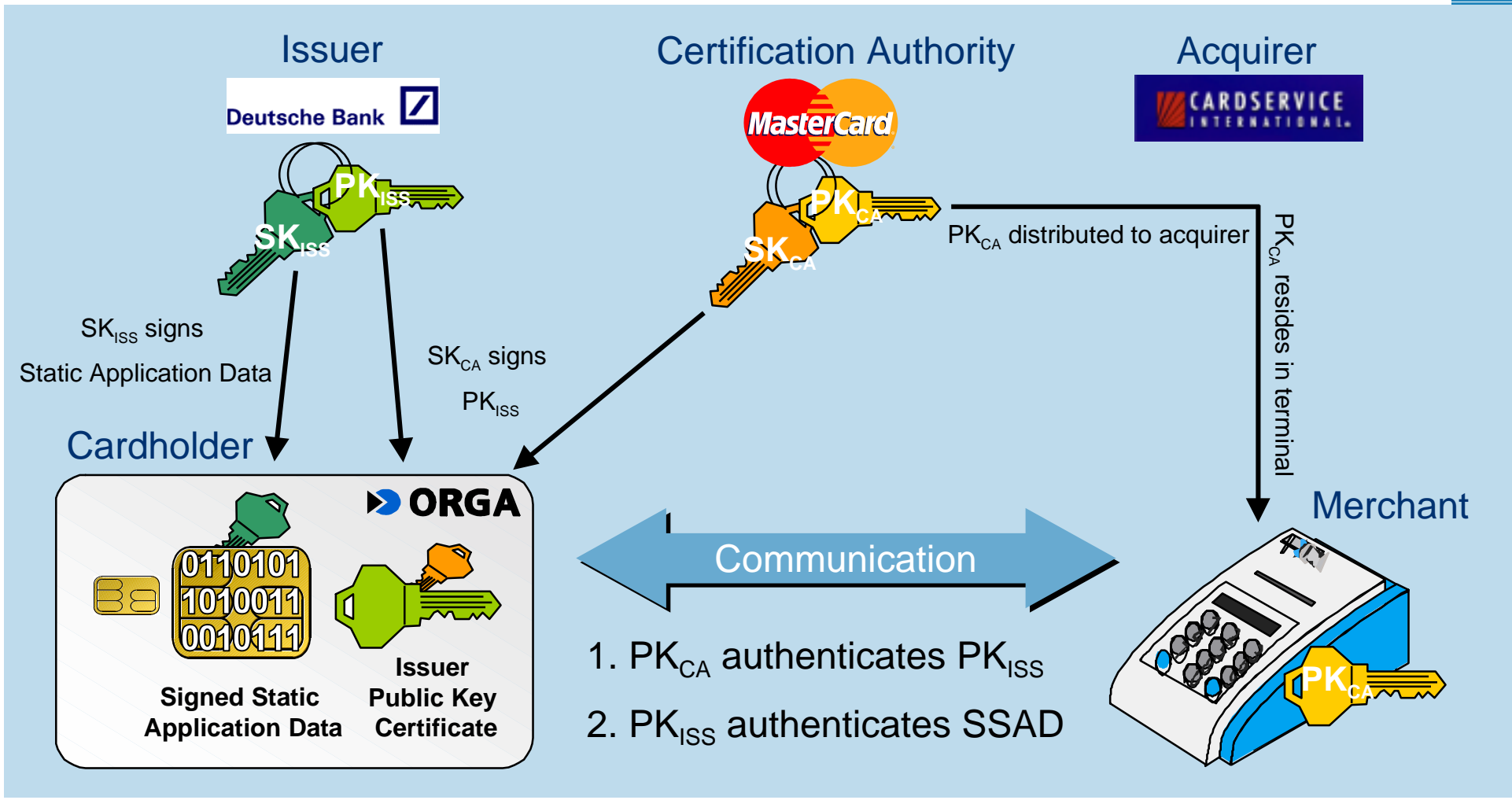
- PKI Product Example (SDA)
- PKI Production Integration

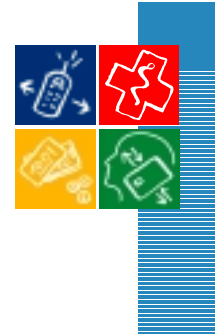




PKI Product Setup

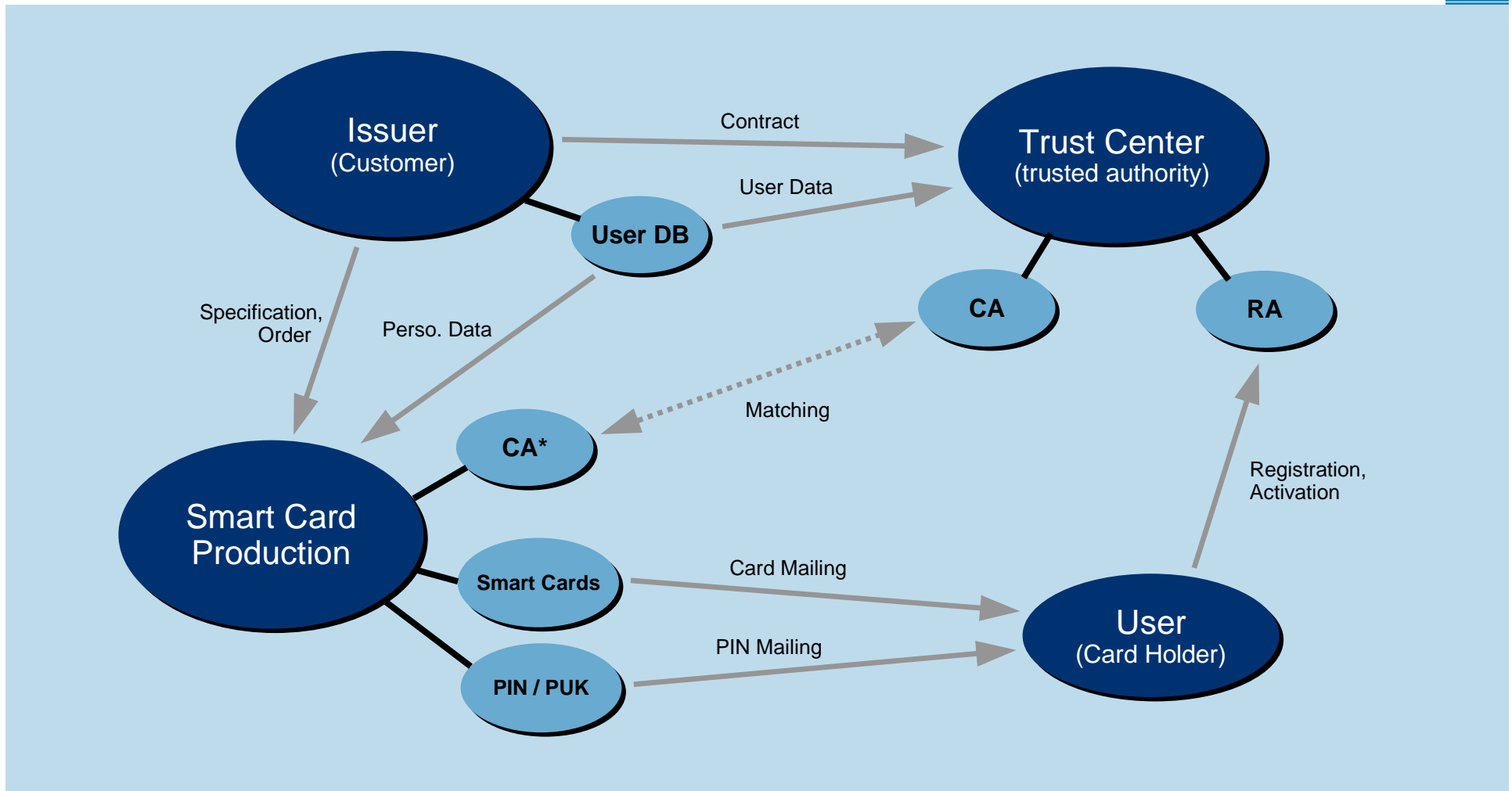
PKI Product Example (SDA)





PKI Product Setup

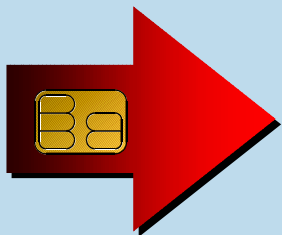
PKI Production Integration





Outlook

- 2010: each person has 3 - 5 smart cards
- New applications every day
- Smart cards with open platform technology enable the flexible and efficient design of new smart card-based applications
- Users can employ applications and services on smart cards flexibly and according to their own individual needs



- The continuing migration to smart card-based solutions enables profitable new business models.
- Smart cards make life more mobile, convenient, communicative, secure and informative.

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