The Transition of a Home Grown Campus Card System
to
The European Education Connectivity Solution

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Presentation Overview

➤ Background to the WITCard

➤ EECS Project & the New WITCard System

➤ WITCard Applications & Services

➤ Benefits of a Cashless System

➤ The Future

The Background to the WITCard

- **WITCard Research Programme 1996 – 1999**

  - US and Mondex System in UK

- **System Design and Build**

- **Installation – Sept. 1999**

  - Phased Installation (based on priority/demand of applications and services)

- **Jan. 2012 – Installation of the new EECS System** (European Campus eID)

  - WIT – Pilot test site for this new system

  - 14 Applications currently in use on the WITCard

European Campus Card Association & EECS Project
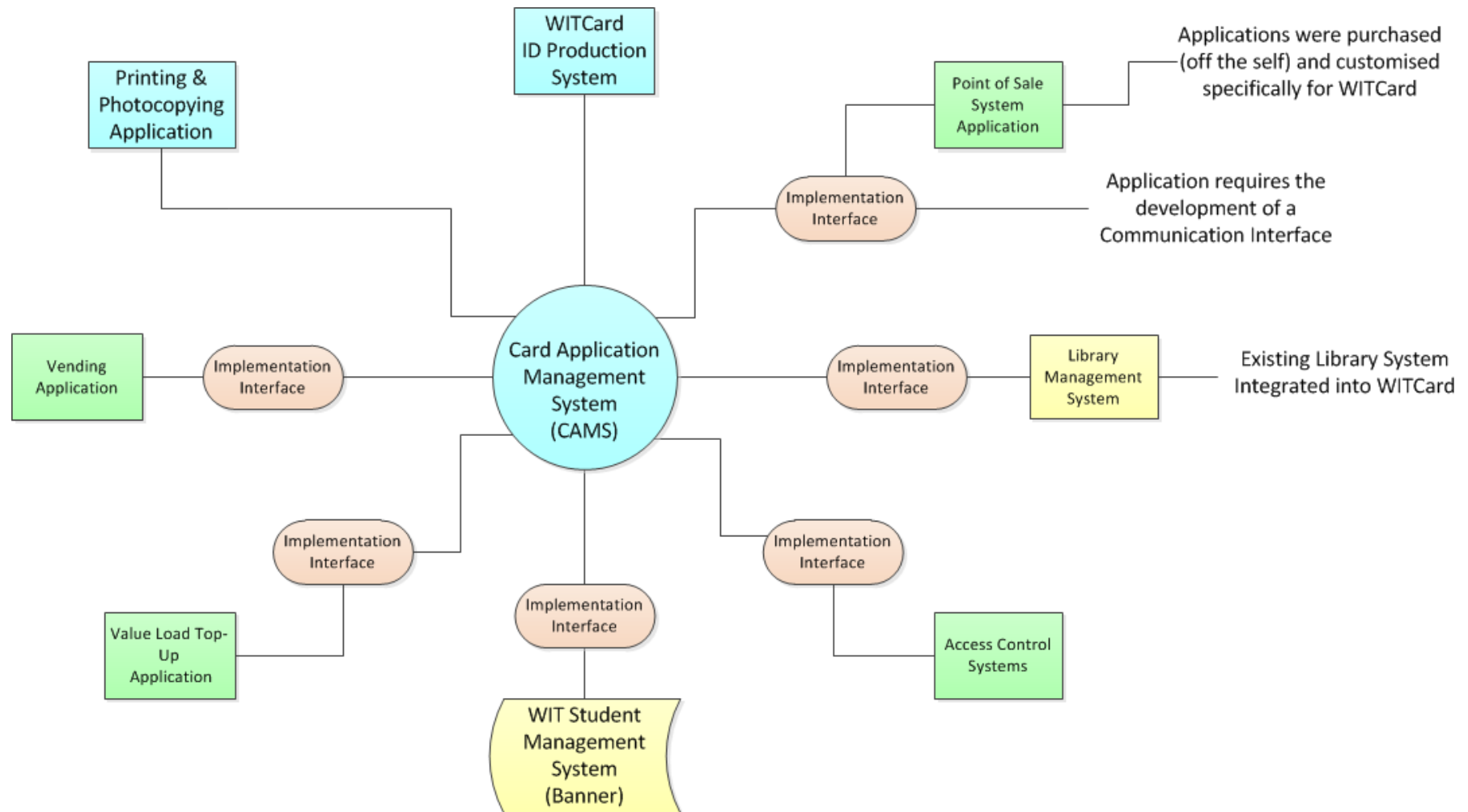
➢ **European Campus Card Association (ECCA) - Established 2002**

➢ **ECCA – Main Aims & Objectives**

- Develop & Promote Standards (EECS Project)

- Mobility of Students (EECS Project)

- Establish a business case for card systems

- Forum for sharing of knowledge and information

The EECS Project

➢ Purpose – Achieve Interoperability, Mobility, Standards

➢ EU Funded Project (€1.5 million)

➢ Timeframe – 2 year project (June 2009 to May 2011)

➢ Consortium – SME's & RTD's

➢ Market Survey & Standards Experts Workshop

➢ Testing & Trial Process

➢ Result - Prototype System Design – CAMS/CAI/SCM

➢ Prototype Installed in WIT in 2012
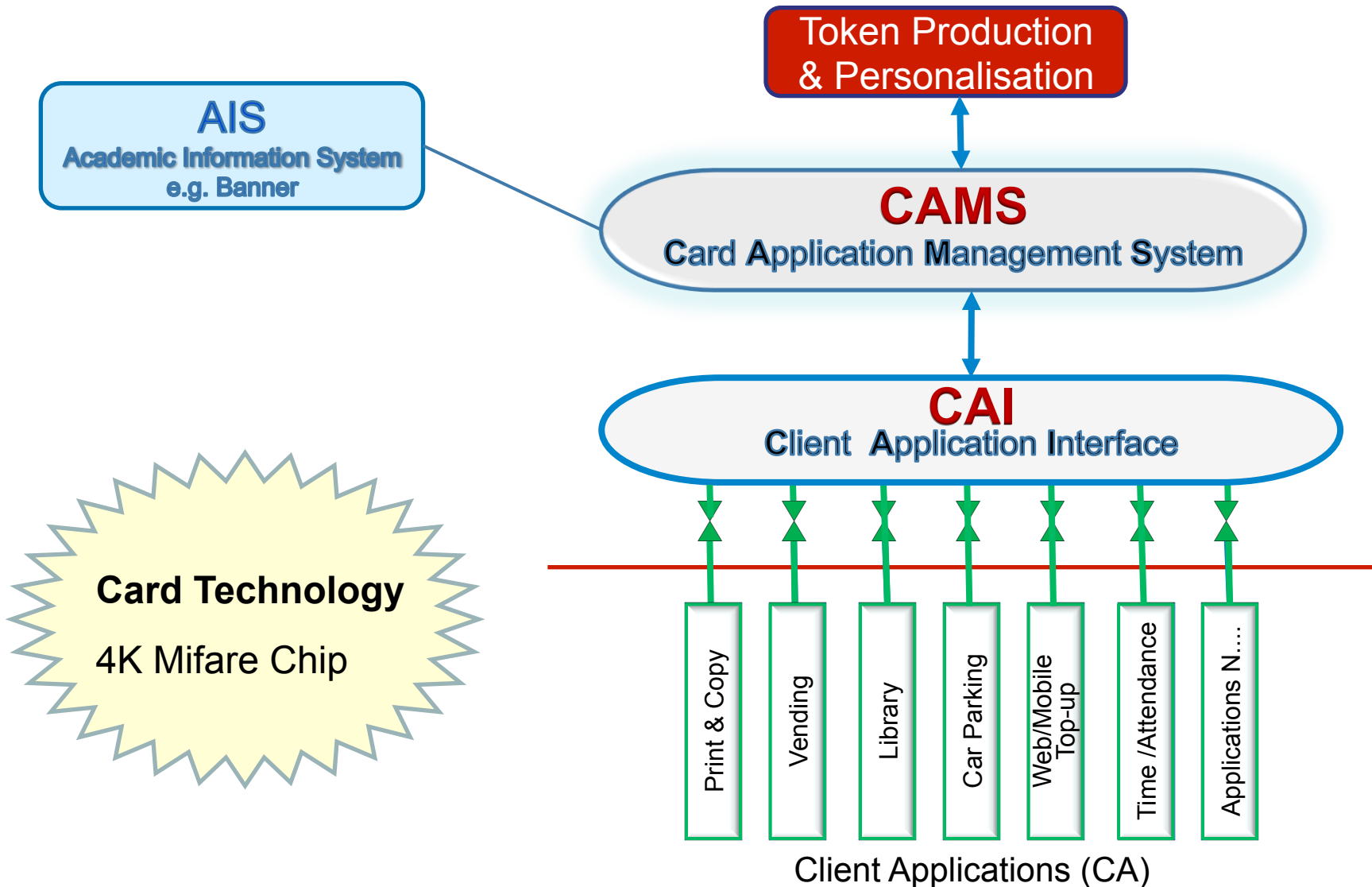
Develop Prototype for Card Management System

Three Core Modules

- ❏ *Card Application Management System (CAMS)*
- ❏ *Client Application Interface (CAI)*
- ❏ *Student Connectivity System (SCS)*

Key Objectives

- ➢ Facilitate Interoperability
- ➢ Develop Standards for Card Systems
- ➢ Mobility (key requirement of EU)
- ➢ Security & Access to on-campus facilities
- ➢ Assist with cashless campus

The New WITCard System – (EECS Project)

Token Production & Personalisation

AIS
Academic Information System
e.g. Banner

CAMS
Card Application Management System

CAI
Client Application Interface

Card Technology

4K Mifare Chip

Print & Copy

Vending

Library

Car Parking

Web/Mobile Top-up

Time /Attendance

Applications N....

Client Applications (CA)

WITCard – Applications & Services

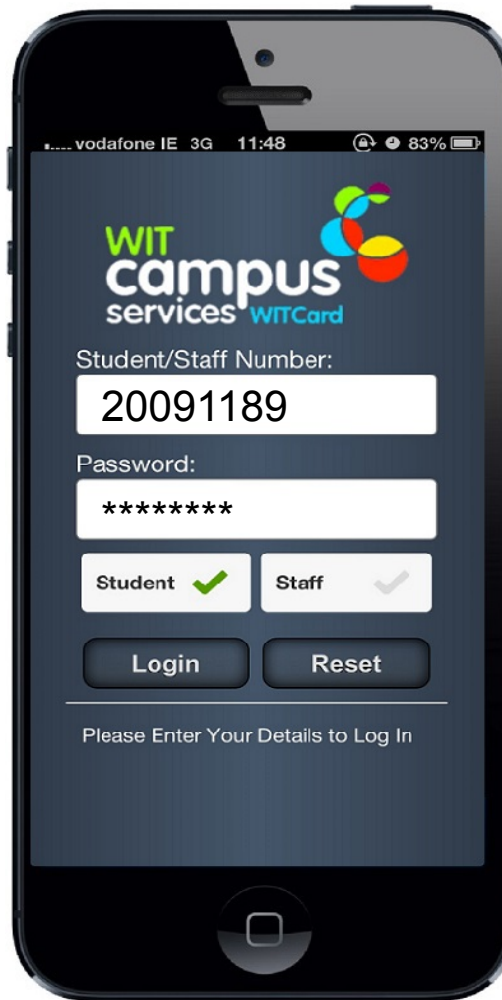| CLIENT APPLICATIONS/SERVICES	
Library Access and Eligibility	ATM Top-Up
E-Purse (Tap & Go E-payments)	Campus Sports Facilities
Self Service Beverages (Hot Snacks)	Loyalty Programmes
Vending	Student Discounts/Concessions
Time and Attendance (Student & Staff)	Student Authentication (NFC)
Car Parking	Wireless & Cloud Printing
Mobile Phone Top-Up	Access control

Authentication

HIGH LEVEL SECURE AUTHENTICATION

➢Counterfeit issues eliminated

➢Secure Authentication of the user – examinations

➢Student Concessions -sporting events, travel …..

➢Mobile user status confirmation
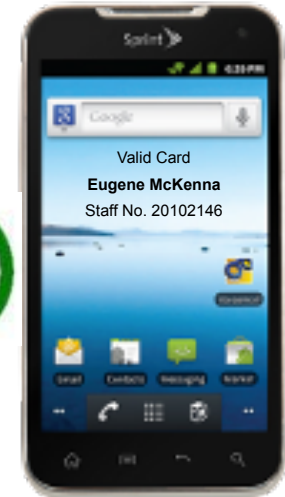
Mobile Phone Top-Up App

- ✓ Smart Phone App

- ✓ Secure real-time access 24/7

- ✓ User Friendly

- ✓ FAST - Real-time top-up (15 to 20 Sec)
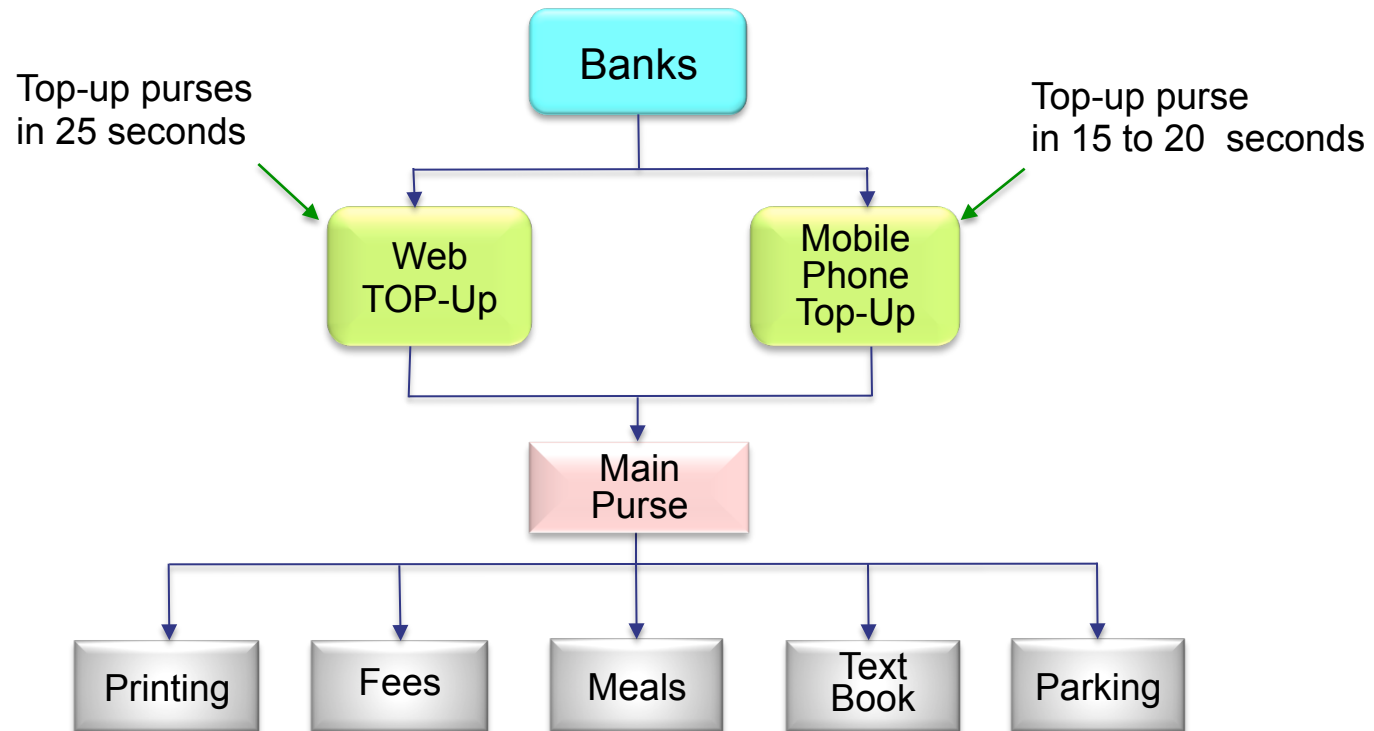
- ✓ Transparency/ visibility

Login Screen

Home Screen

Multiply E-Purses

Top-up purses in 25 seconds

Top-up purse in 15 to 20 seconds

Banks

Web TOP-Up

Mobile Phone Top-Up

Main Purse

Printing | Fees | Meals | Text Book | Parking

WIT 80% Cashless – the Main Benefits

(i)   Queuing time Reduction – Less POS required.

(ii)   POS's operate much faster than Cash tills.

(iii)   Cash handling costs eliminated – No cash floats, balancing or reconciliation.

(iv)   Greater security, Lower Insurance costs and Risk reduction.

(v)   High level accountability and management information.

(vi)   Use of Counterfeit money eliminated.

(vii)   Reduction in the audit time of the daily sales.

(viii)   Increased level of hygiene.

Issues/Cost of Handling Cash

Security:

Exposed cash and long operating hours can increase the risk of robberies. Cashless POS make their operators feel more secure at their wok place.

Cash Handling Costs:

Cost saving in cash handling and administration is essential to achieving maximum profitability and competitiveness.

Shrinkage:

Shrinkage due to theft, internal error and cash counting discrepancies effects the turnover of the operation

Staff Training:

Operations can have high staff turnover, the training required for cash POS system is much higher than that required for a cashless POS.

Survey/Research into Cash v Cashless

Survey/Research was carried out at Waterford Institute of Technology in March 14

Findings:

Continuous queue payments at the POS

➢ Cashless - the average time taken to complete the transaction = 11.01 sec.

➢ Cash - the average time taken to complete the transaction = 19.00 sec.

➢ Cashless throughput at the POS is 72.57% greater that Cash.

➢ 4 Cashless POS will provide a similar throughput to 7 Cash POS.

http://youtu.be/GN5qmeObZo8

WITCard System - Core Benefits to WIT

➤ One Card for all access to services and facilities on Campus

➤ Secure ID & Authentication of Student & Staff

➤ Tap & Go e-payments - delivering efficiency, security & accountability

➤ Improved level of Student Services (Commercial & Non-commercial)

➤ Wireless & Cloud Printing – important revenue generator

➤ Facilitates a range of self service operations

➤ Keyless and Cashless Campus

WIT Sports Campus – Cashless & Keyless

The Future

➢ Use of Multi Token – no dependence on a particular technology

➢ Mobile Phone E-purse top-up

➢ E Payments & Multiple Purses

➢ Debit & Credit Card Payments

➢ Secure ID Authentication

➢ Campus Card v Mobile Phone

➢ Future Proofing against Technology Changes
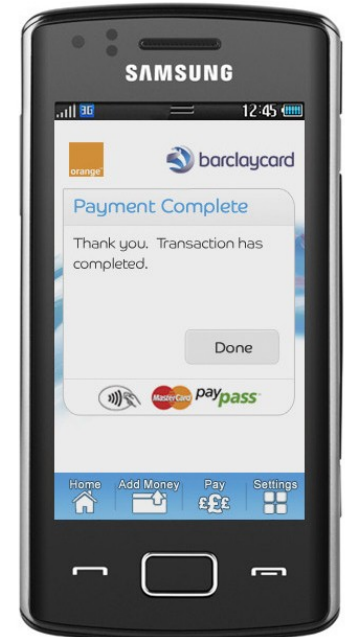
➢ **Join us if you have or plan to have a card system!**

➢ **Information, best practice, study visits, exchange of ideas with colleagues**

Information Available on www.ecca.eu

Questions