

Joint cloud-based campus card project

Tor Fridell, LiU
Ingo Hölscher, LiU
Bobo Spetz, UmU



Background to this project

- Linköping university, LiU, has about 30 000 students
- Umeå university, UmU, is similar in size
- About the same type of studies at both
- About the same organisation
- Tradition of cooperation in some areas



Background: similarities

LiU

- 30 000 students
- 3 campuses
- Full university
- Faculties and departments
- Strong IT-dep.

UmU

- 36 000 students
- 4 campuses
- Full university
- Faculties and departments
- Strong IT-dep.



Background: differences

LiU

- Program oriented
- Campus card since 10 year
- Automated flows
- Card office
- Different home built integration tools

UmU

- Course oriented
- No campus card
- No automatic flows
- Service centers
- Home-built integration engine



900 Km apart



Current system LiU

Photo-ID-card



Access control
(mag stripe)



Membership
Student union

Mifare-chip: access control, copy/print,
electronic ID for exams, campus bus



Proof of student



Holographic ECCA-
lamine on top

Library card



Rewrite area validity

Student discount card



Settings

- LiU Identified the need for replacement of old card system
- UmU was in need of card system
- LiU tested and evaluated many different systems
- LiU and UmU decided to start procurement together



The project

- Procurement documents
 - Requirements
 - SaaS-agreement/SLA
 - Data processing agreement
- Cooperation meetings
- Design meetings LiU-UmU
- Supplier meetings



Card system

We chose Cards Online from
ScreenCheck Europe BV

- Cloud based system administration
- Cloud based data management
- Cloud based card management
- Cloud based card design



Card process

- Student gets e-mail notification upon admittance
- Student uploads photo
- Student chooses pick up place
- Notification photo OK and card printed
- Student picks up card, needs valid ID



Card system



Linköping University

Linköping University

Signed in as: [Ingo Hölscher](#) for Students

[Account](#) | [Logout](#)

HOME

DATA MANAGER

CARD LAYOUTS

PRINT SESSIONS

CARD MANAGER

E-PHOTO REQUEST

INTELLIMODE

Personal number	First Name	Last Name	Selected(0)	
7407091961	Eva	Johansson	<input type="checkbox"/>	    
7806041682	Desirée	Hallberg	<input type="checkbox"/>	    
7403212074	Mattias	Lilja	<input type="checkbox"/>	    
7405236915	Mattias	Hjälms	<input type="checkbox"/>	    
6605216263	Eva	Heijne Adolfsson	<input type="checkbox"/>	    
6512041945	Susanne	Bard	<input type="checkbox"/>	    
7506241988	Malin	Johansson	<input type="checkbox"/>	    
7004010216	Ulf	Svensson	<input type="checkbox"/>	    
7206265915	Martin	Odenö	<input type="checkbox"/>	    
7110101982	Nina	Gunnarsson	<input type="checkbox"/>	    
7502081917	Dominique	Femerström	<input type="checkbox"/>	    
6705081906	Ann-Charlotte	Fjällström	<input type="checkbox"/>	    
8001120180	Anna	Salovaara	<input type="checkbox"/>	    
6709171950	Magnus	van Wassenaar	<input type="checkbox"/>	    
6411172007	Ulrika	Örtenberg	<input type="checkbox"/>	

Card system



Linköping University

Linköping University

Signed in as: [Ingo Hölscher](#) for Students

[Account](#) | [Logout](#)

HOME

DATA MANAGER

CARD LAYOUTS

PRINT SESSIONS

CARD MANAGER

E-PHOTO REQUEST

INTELLIMODE

Show filter

Batch processing

Current

History

Card id

Cardholder

ISO number

Current status

Selected (0)

6

[Odenö, Martin](#)

Issued



Personal tab

Card Related

Card history

Status	Reason	Modified	Created by
Issued		2013-05-17 14:17	Ingo Hölscher
Temporary blocked	Unblock Card	2013-05-17 14:17	Ingo Hölscher
Issued		2013-05-17 14:16	Ingo Hölscher
Printed		2013-05-16 14:49	Linköping Admin
Available for printing		2013-05-16 14:49	Linköping Admin

< Previous Next >

Page 1 of 1, 5 Records total

4

[Johansson, Malin](#)

Cancelled

3

[Hjäl, Mattias](#)

Cancelled

2

[Lilja, Mattias](#)

Cancelled

1

[Storckenfeldt, Hanna](#)

Printed



Integration

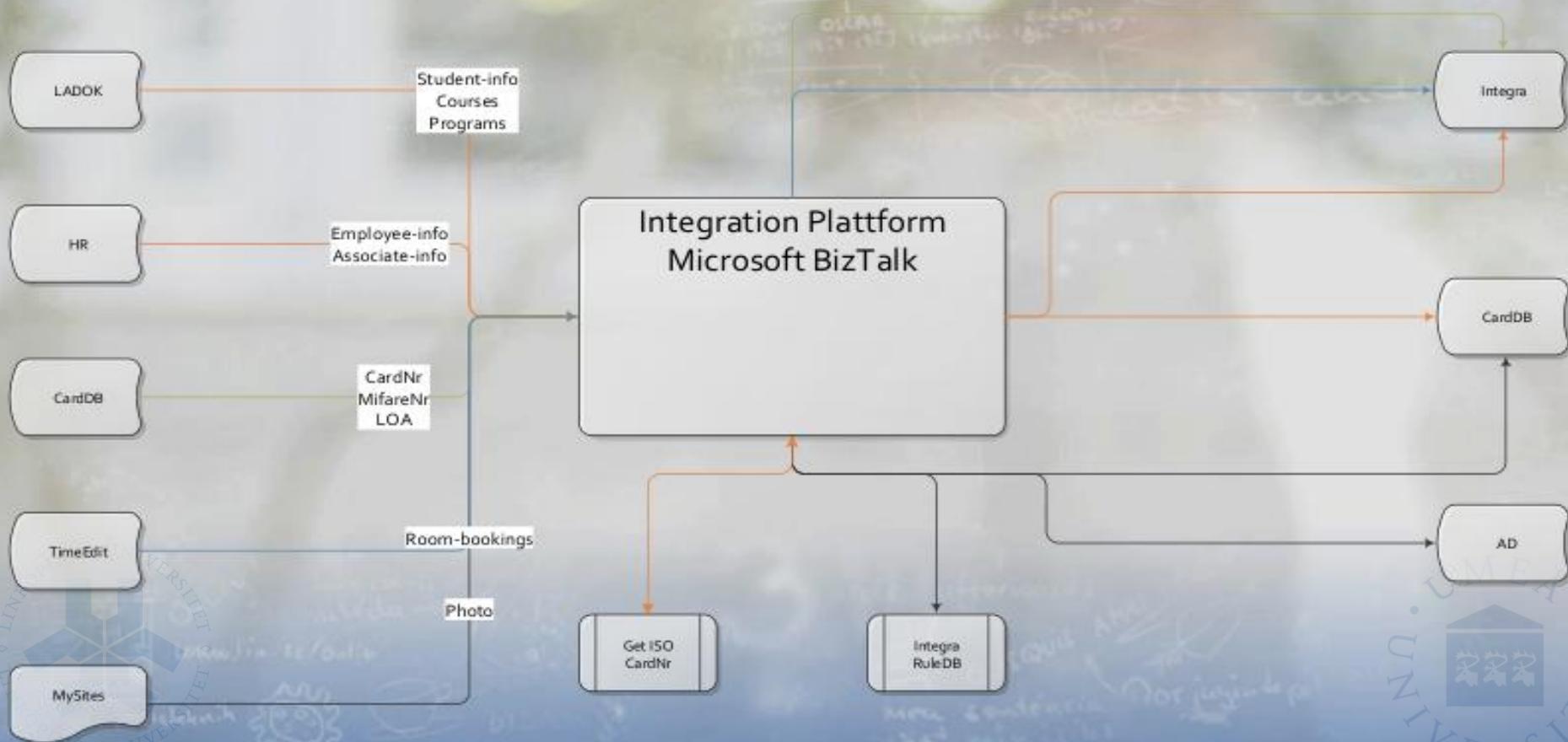
- Integrations developed locally
- Standard web services
- Real time update

- Common data model
- Lots of work



Integration

Integration CampusCard



What went right?

- Procurement
- Requirements specification
- Customization of COL, data model, design etc
- SLA specification
- Quality increasing discussions
- Support
- Manuals, courses, information material



What went wrong?

- Integration!
 - Involves backbone of the university systems
 - Different policies and tools
 - Often very complicated
 - Different end systems (copy/print, access...)
- Time schedules



What went wrong?

- Integration!
 - Involves backbone of the university systems
 - Different policies and tools
 - Often very complicated
 - Different end systems (copy/print, access...)
- Time schedules



Conclusions

- Collaboration **definitely** favourable but does not solve **all** problems
- You can never take over a complete system from someone else
- All parties must realize that own work is needed, especially integrations
- Works best with fairly equal parties
- Double in project time when more than one party
- Difficult when you replace an existing, working system



Thanks

Tor Fridell, Linköping university, tor.fridell@liu.se

Ingo Hölscher, Linköping university, ingo.holscher@liu.se

Bobo Spetz, Umea university, bobo.spetz@umu.se

