

- The Quick'n'Dirty Approach in the Real World

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SOFTWARE DEVELOPMENT

gotocon.com

The Case: Danske Bank

- Biggest bank in Denmark:
 - -Founded in 1871
 - -2.2 mill customers
 - -300 branches

- -6,000 employees in DK
- -20,000 in Northern Europe
- -Operating in 15 countries



Goals of the Project

- Make the first and best mobile bank in Denmark
- Success criteria:
 - –10,000 downloads
 - -5 enquiries
- Core values:
 - -Expertise
 - -Integrity
 - -Value creation
 - -Commitment
 - -Availability





User demands



Case Characteristics

- Well known topic
 - -Private basic banking
 - -4 mill. do online banking
- Functionality well defined
 - -View accounts
 - -View transactions
 - -Pay bills
 - -Transfer money
 - -Contact
 - -Currency

- Janne Jul Jensen Indstille Forside Din sidste log-on var den 30.09.2011 kl. 14:32 Betal & overfor Kort & 2 nenter i e-Boks 30.09.2011 01.09.2011 30.09.2011 0.09.2011 30.09.2011 31.08.2011 0.09.2011 30.09.2011 ne Jul Je 29.09.2011 26.09.2011 lobiltelefo mail privat
- Existing service
 - -Online banking (2000)
 - –Mobile banking (2003)
- Two platforms
 - -iPhone
 - -Android
- Agile development
 SCRUM







Are use patterns and user needs the same on a different platform?







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- Fixed release date

SCRUM process

- Estimating: Proof of Concept
- Product backlog: Making it reflect UX
- Sprint: Working separately on UX
- Roles: How clear roles help UX
- Product owner & user stories: Prioritising UX
- Testing: When to start testing UX



What did you do yesterday?

3

What will you do today?

Is anything in your way?

Sprint meeting

- Sprint review:
 - -Review the work done
 - -Demo
- Clarifications and alignment
- Sprint retrospective
- Sprint Planning:
 - -Decide the work to be done
 - -Make a sprint backlog



Time Planning Example



Proof of Concept (POC)

- Three basic work flows 2,5 months
 - -Log on
 - -Account overview
 - -Currency calculator







Timeboxed

Design included







- Use patterns (online & mobile)
 - -1.2 mill customers on online banking
 - -7.5 mill logons per month
 - -Loads of detailed numbers on actual use







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- Use patterns (online & mobile)
 - -1.2 mill customers on online banking
 - -7.5 mill logons per month
 - -Loads of detailed numbers on actual use
- Survey: 70+% want to use mobile banking daily
 - -51% to view account balance
 - -40% to transfer money
 - -32% to pay bills
 - -31% to see transactions





A A

User Hindrances



"But what about security??"



- 37% worry about the security of a mobile bank app
- Two factor login based on:
 - -Social security
 - -4-digit service code
 - -NemID (Danish paper based security solution)















Wireframing



















GPS





GPS



Camera



- GPS



Camera



Mobility

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Tilbage Kurs	sliste Sorter							
Nationalbankens middelkurs - kurser i forhold til DKK								
Danske kroner	- 100,00							
Brasilianske re	eal 310,86							
Euro EUR	744,39							
Australske dol	lar 542,32							
Britiske pund	860,77							
Bulgarske leva	a 380,61							
Canadiske dol	lar 535,11							
Valutaomregner	Kursliste							

Testing Challenges

NDAs

- -Secret due to competition
- -The surprise element
- -Control the publication
- Security issues
 - -Live data not possible
 - -Jeopardising customers finances
 - -Risking the business's economy and reputation

But how do we test then??

intended number

tools

methods

output regression plan process design devel

performance

ertification

SQA latest level coverage

time adle

expected a so example oriented

often requirements defects beta defect USed

testers tests unit functionality

one quality product developers

data functions

white Input

may analysis black compatibility

include Institute

Working Around the NDA

- Continuous testing every sprint
- Internal testers (app. 50)
- Time dedicated to testing
- Test cases
- Automatic tests
- Heuristic inspection





Working Around Security

- Test environment
 - -Dummy data
 - -Available from everywhere
- System environment
 - -Real data, but not live
 - -Available only in the bank
- Production environment
 - -Real live data
 - -Available everywhere, to everyone!



Feedback system

- What (headline)?
- Which platform?
- Which version of the app?
- Who should deal with it?
- Description
- Attachments
 - -Screens
 - -Pictures
 - -Documents





Timeline

- Jan Mar 2010:
- May Sept 2010:
- Sept Dec 2010:
- Jan May 2011:
- June Nov 2011:

- Proof of Concept
- Basic banking
 - Pay bills by camera
 - Investment
- iPad banking







- Facebook idea bank
 - -263 ideas
 - -3,109 votes



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iPad

- -105 ideas
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How Did It Go?

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- Success Criteria:
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Actual:

- -335,000 downloads
- -3000+ new customers
- -50,000 daily users (14%)
- -200,000 transactions (5%)









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Top 25

Kategorier

Udvalgt

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Opdateringer



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Danske Bank har succes med kamera-betaling

Thank You for Your Attention!





