



Evolutionary Delivery in Practice

Experiences in RCS Leuven

a happy customer looking back

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RCS



✓ Remote Control Systems

- World's 1..2nd biggest remote manufacturer



✓ From 4 bit remotes ... to

'portable multimedia interfaces'



✓ Leuven, Ovar, Juarez, Suzhou, Sunnyvale, Singapore, Batam, Tokyo



✓ Partnering with Philips Bangalore



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✓ 1992-2000

- Philips Leuven
- DSP & embedded SW,
- SW Process Management



✓ Since 2001

- Remote Control Systems Leuven
- Group leader of some 20 SW people
- SW Process & SW Release



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RCS' touch screen products



← iPronto (2002-Q3)

- Web-pad-like device + webservice



← Pronto Pro (2001-Q3)



← Pronto II (2002-Q3)



← Pronto (1998)



← Pronto Neo (2001-Q3)

History

Technology

Market characteristics

Sales price

Why is Pronto successful?



We create fun products



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Evonauts' biotope



✓ Volatile spec

- Spec evolves while we build the product
- Constant feedback from customer needed
- The only manageable project parameter



✓ Critically staffed projects

- No statistical management possible



✓ Challenging schedule

- Immovable end dates



✓ New, immature technology

✓ Mixture of (un)experienced team-members

✓ Limited/Fixed budget

✓ 'Zipped' lifecycle



This is not a problem, we just love this context!



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What is?



✓ Continuously prioritize



✓ Delight/Disappoint the customer AEarlyAP

✓ Delivery: output focused

- Added value for the customer (earned value)



✓ Convergent thinking

- Decide! Choose!



✓ Create quality early on

✓ Think long term, act now



....Making success unavoidable



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The Evo Engine



Repeat

Repeat

- (Re)specify, (Re)prioritize, cut/add features
- Schedule features

Until 'list of features can be delivered 🕒 n time'

Define fortnightly delivery packages

Run short term cycles

- 1 week task cycle, 2 week delivery cycle

Measure

Until 'Final Delivery'

- **Schedule = S estimates + S s**
- **(s is estimated)**
- **Contingency = S s**



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Delivery cycle



✓ 2 weeks



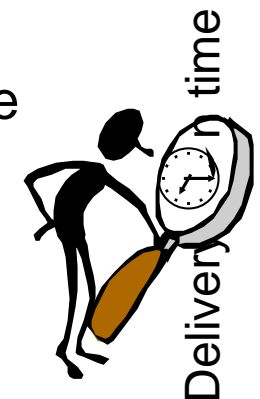
✓ Every delivery = added value for the customer

✓ Feature driven



✓ No full 'V' per delivery cycle

- The release team lags one delivery cycle
- Architecture & design loosely coupled to delivery cycle



Make the team taste success



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Planning cycle



✓ 1 week



✓ People tell what they can do

- They are not told what to do
- They document this in their task sheets



✓ All tasks must fit in 1 week

- Big assignments are split in 1 week chunks,
- but the result is possibly only integrated in the first delivery of the complete assignment



✓ Every task is linked to a requirement

✓ Finished task = properly verified

✓ SWPL measures task completion



End every week with a comfortable feeling



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Measurements



✓ Weekly Steering Committee/SCCB



- Do we estimate correctly?
 - Task Completion (%)
 - Effort planned - Effort still to be done
+ Effort to be done in another week finished now
- Do we deliver value to the customer?
 - Earned value
- Do we still have air?
 - Contingency Trend =
Contingency estimated – $S(1 - TC_i/100) * \text{effort week}_i$
- Do we solve known problems?
 - PR state trend
- How do we feel?
 - Long term/short term confidence



Keeping a firm grip on the steering wheel



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Dangers, Traps & Pitfalls



✓ Management considers Evo projects more difficult to manage



✓ Forgetting the long term

✓ Top down task definition



✓ People may feel controlled



✓ Misuse the detailed information



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EVO is management intensive



- ✓ SW team leaders
for teams > 10 members



- ✓ SWPL & Architect
do some sort of XProject Management



- ✓ Plan for coaching

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Evo & CMM



✓ See a conflict... raise your hand!



- We defined a complete SW Process Manual and we never had an issue with CMM compliance



- It takes some months for team members to digest Evo...
how long will it take for a CMM assessor?



We're heading for CMM Level2, based on Evo

Evo is successful



✓ Three cases, three success stories

- Home shopping (2001-Q1)
- NeoEdit (2001-Q3)
- Pronto Neo (2001-Q3)



✓ Two more heading for success

- Pronto II (2002-Q3)
- iPronto (2002-Q3)

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Links



✓ www.malotaux.nl/nrm

Niels' website



✓ www.malotaux.nl/nrm/Evo

Evo pages



✓ www.malotaux.nl/nrm/pdf/MxEvo.pdf

Evo booklet



✓ www.gilb.com

Evo guru



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