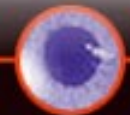


Estimating Cost of Software Maintenance: a Real Case Example

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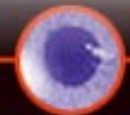
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The Poldermodel: methaphor for a metrics program?

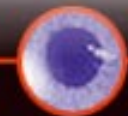


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Agenda

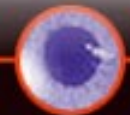
- Introducing PinkRoccade and the Life Cycle Enabling (LCE[®]) concept.
- Why LCE[®] Metrics, and how does it work?
- The Univé-case: goals, expected results, planning.
- Numbers and figures: results so far.
- Lessons Learned: What went right, what went less well, critical success factors.
- Questions and remarks.



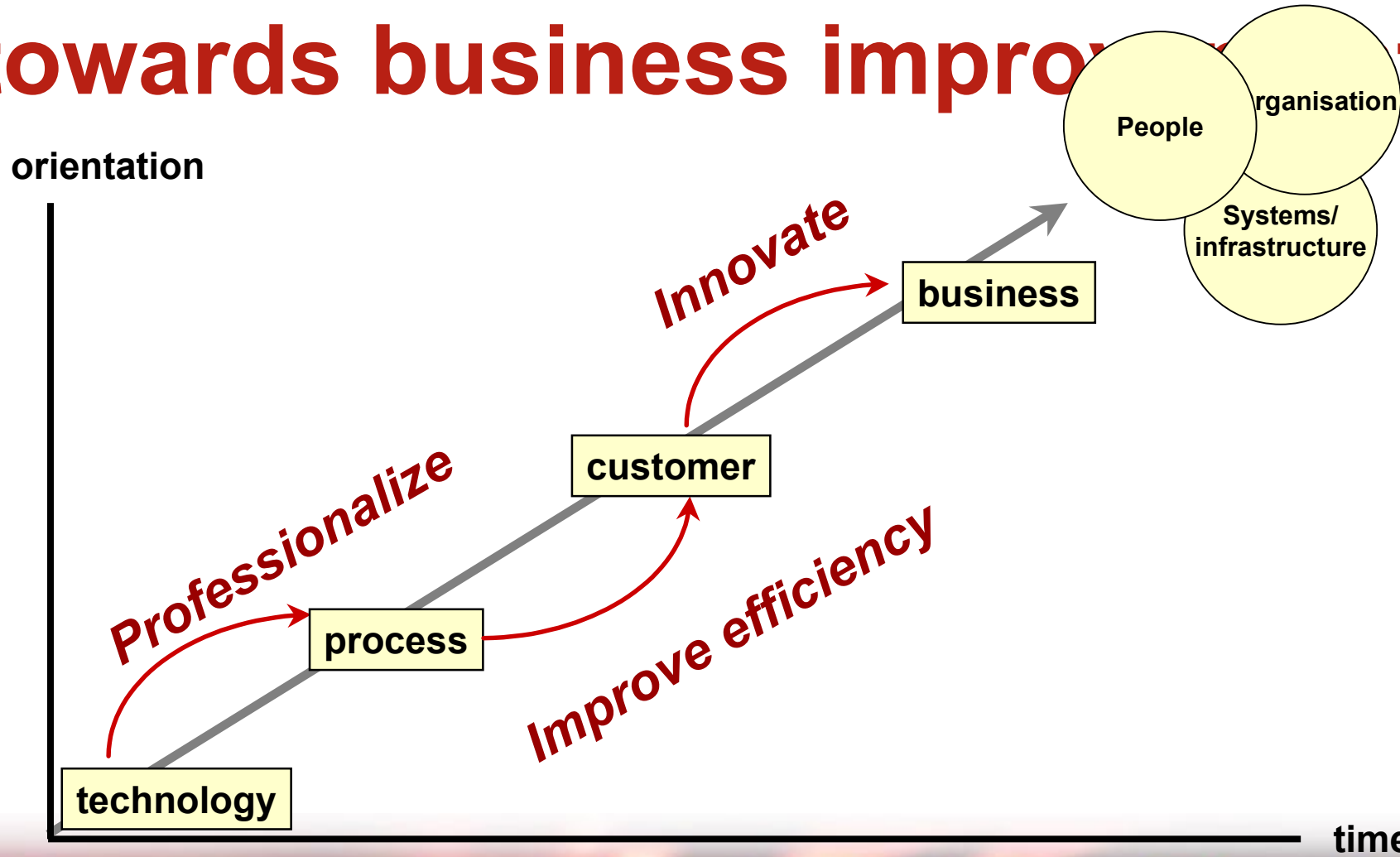
Introducing PinkRoccade and Life Cycle Enabling®

- The Roccade label is part of the PinkRoccade Group, a Netherlands based ICT company.
- Life Cycle Enabling (LCE®) is PinkRoccade's vision and approach for working with people to optimize and renew application environments.
- Goal: offer application management & renewal to all areas trough the various market specific companies.
- <http://www.pinkroccade.com>
- <http://www.roccadefinance.nl>

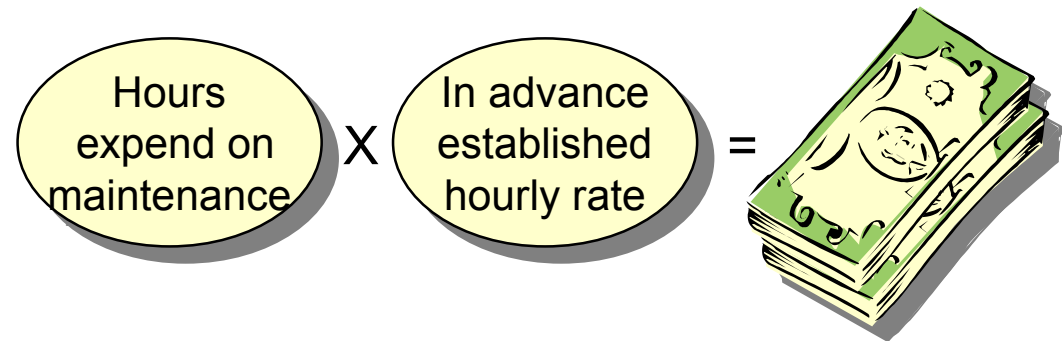
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From service improvement towards business improvement



From effort commitment...



- Calculation afterwards.
- Number of hours to expend, and accordingly the amount of money to be paid, is established beforehand: the customer just knows afterwards what enhancements are performed.
- Steer on hours to expend, and on work within a budget.

Towards result agreement

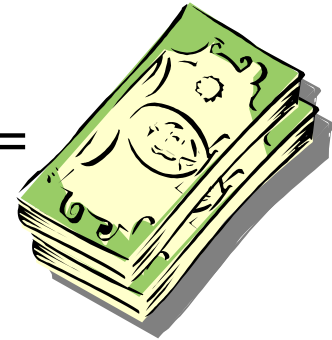
Enhancement
function points

Hours
expend on
maintenance

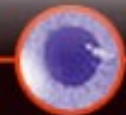
X

In advance
established
hourly rate

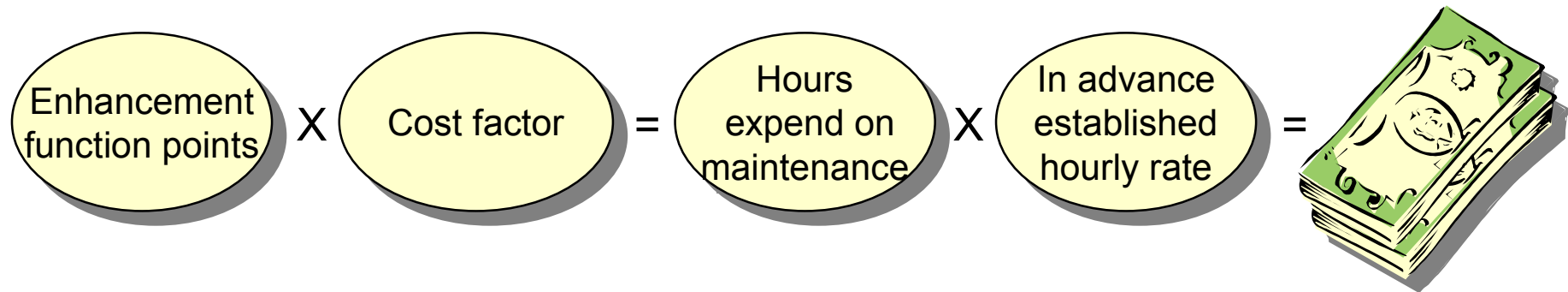
=



- Calculation of enhancements in advance, expressed in enhancement function points.

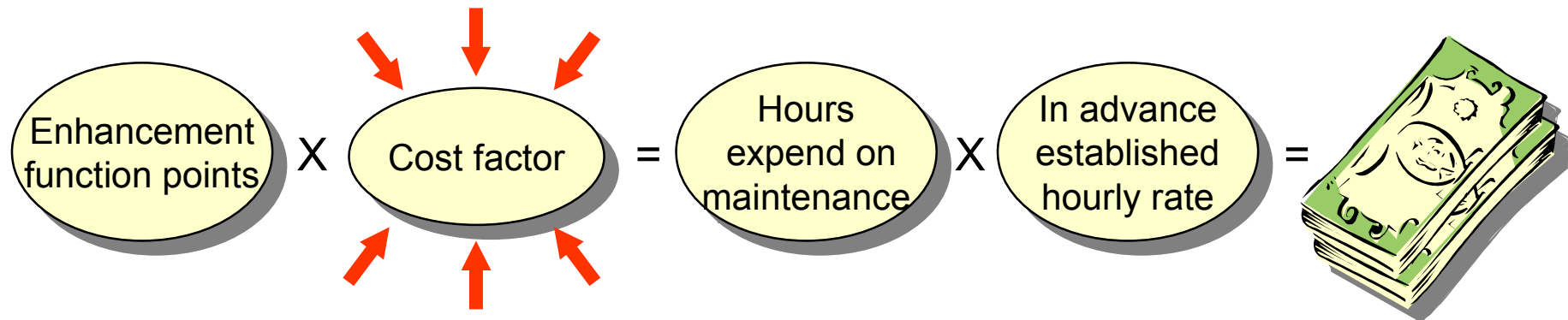


Towards result agreement



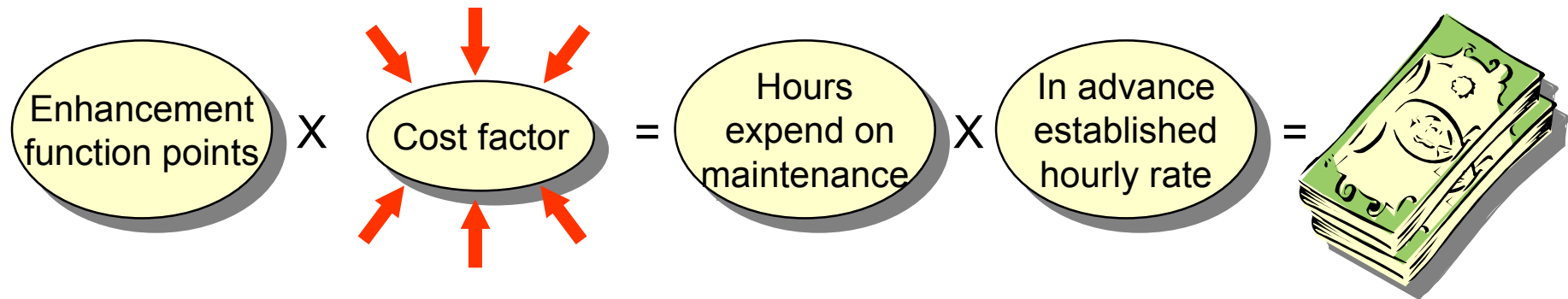
- Calculation of enhancements in advance, expressed in enhancement function points.
- Establishing a cost factor, based on experience.

Towards result agreement



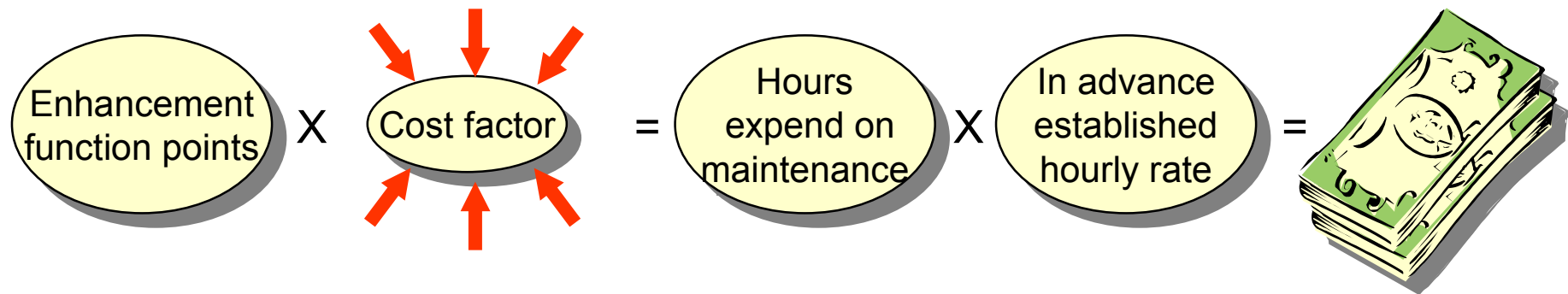
- Calculation of enhancements in advance, expressed in enhancement function points.
- Establishing a cost factor, based on experience.
- Steer on size of maintenance and performance, instead of hours to expend.

Towards result agreement



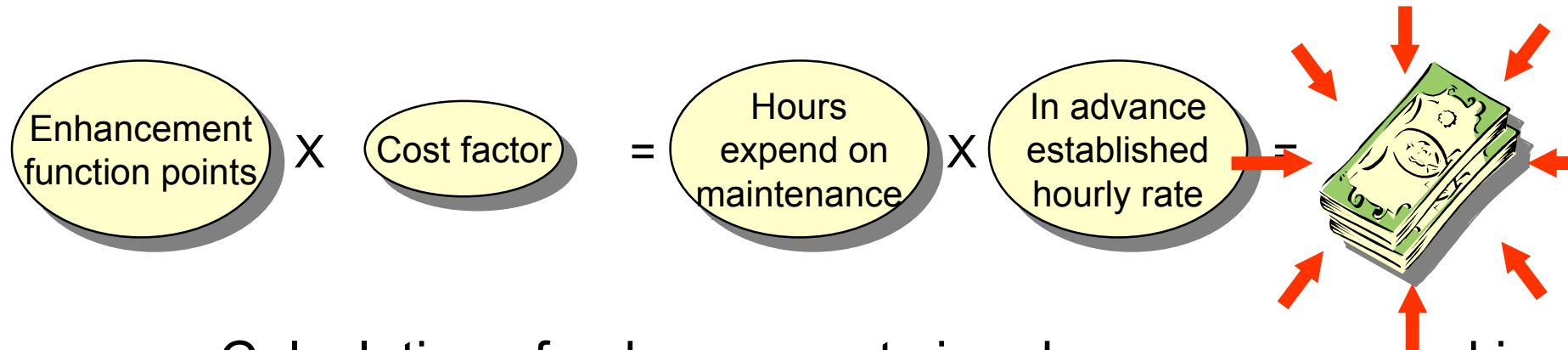
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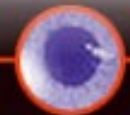


- Calculation of enhancements in advance, expressed in enhancement function points.
- Establishing a cost factor, based on experience.
- Steer on size of maintenance and performance, instead of hours to expend.

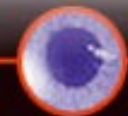
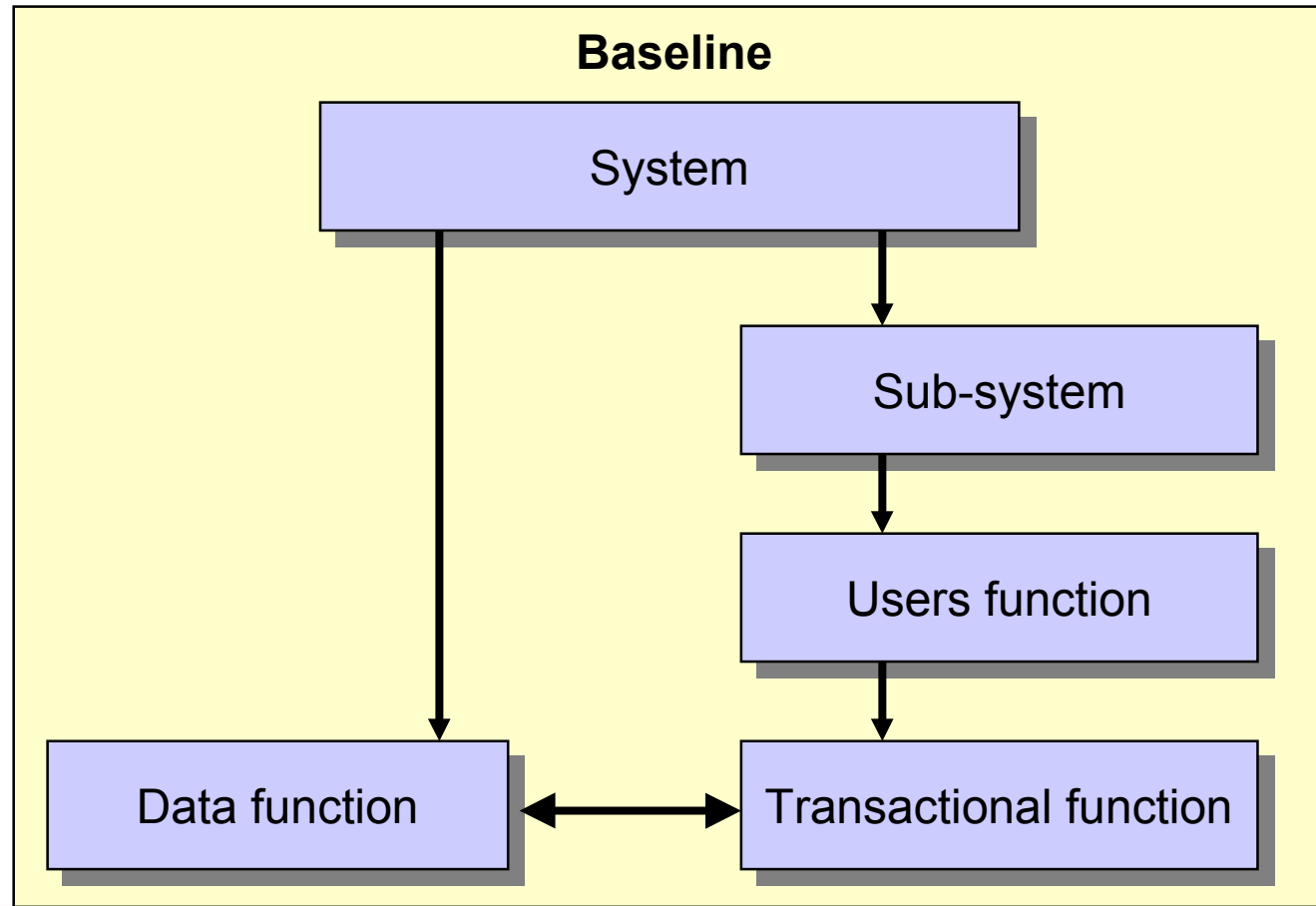
Towards result agreement



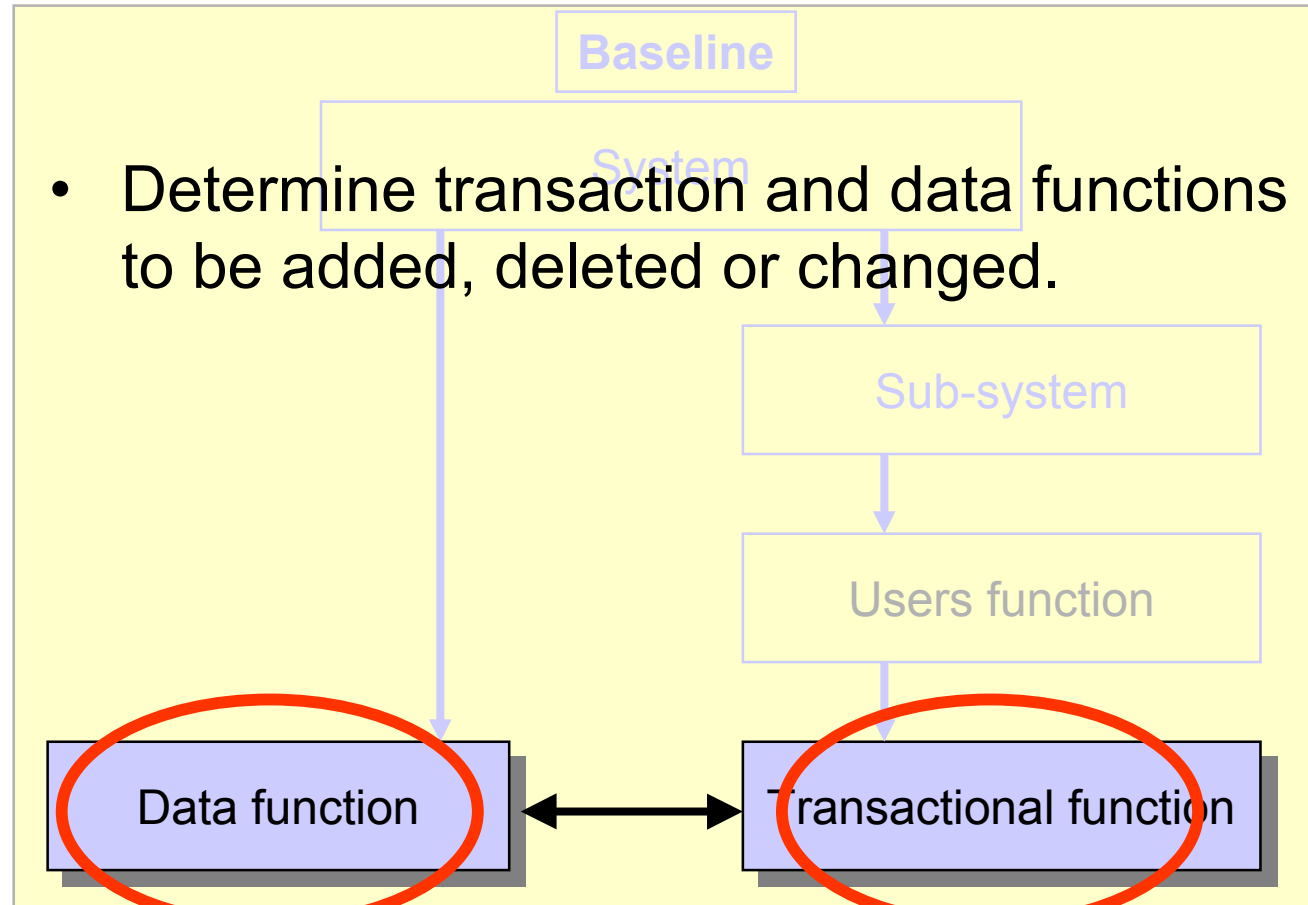
- Calculation of enhancements in advance, expressed in enhancement function points.
- Establishing a cost factor, based on experience.
- Steer on size of maintenance and performance, instead of hours to expend.
- Settlement afterwards: profit performance improvement.



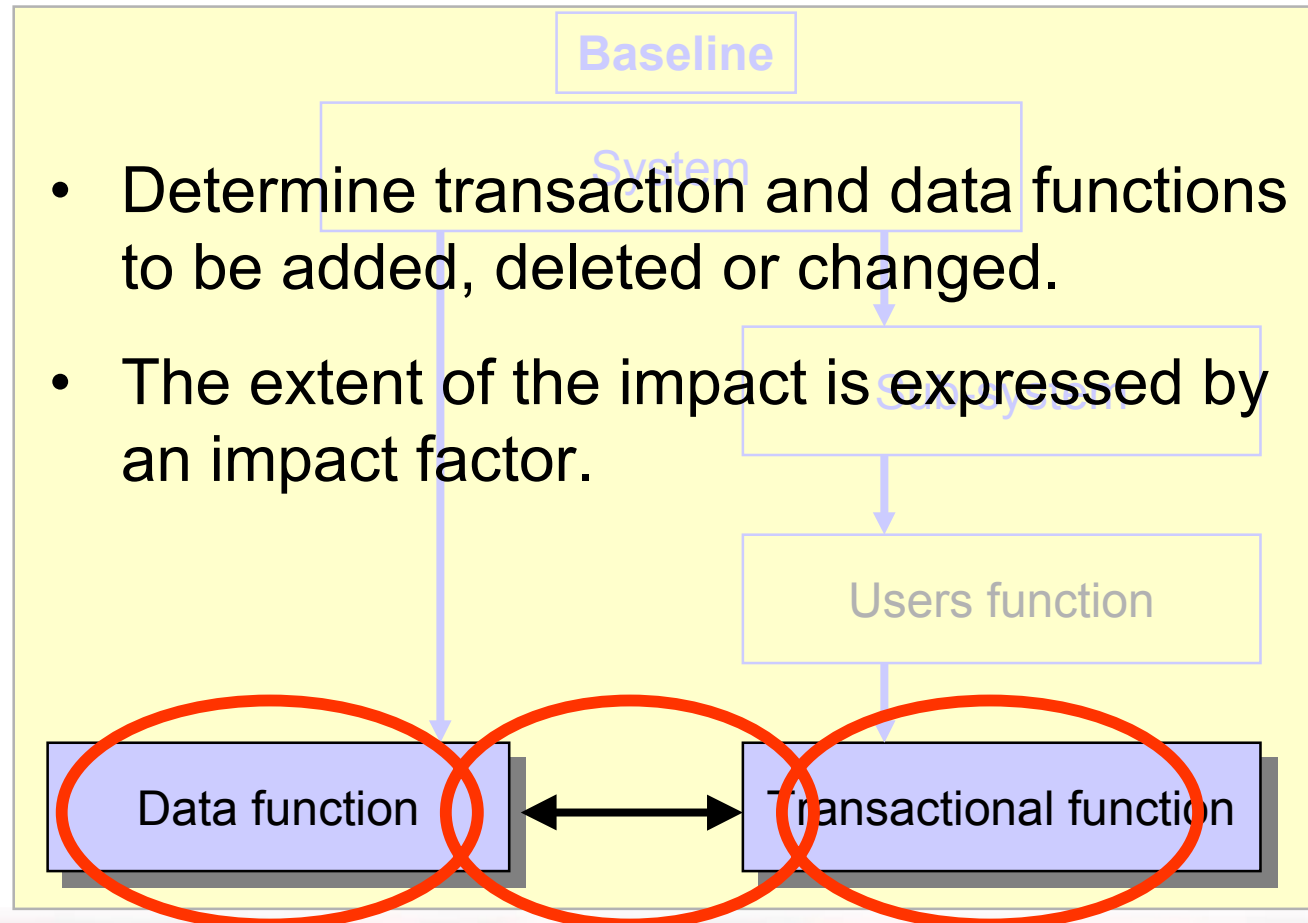
Set up an initial base-count



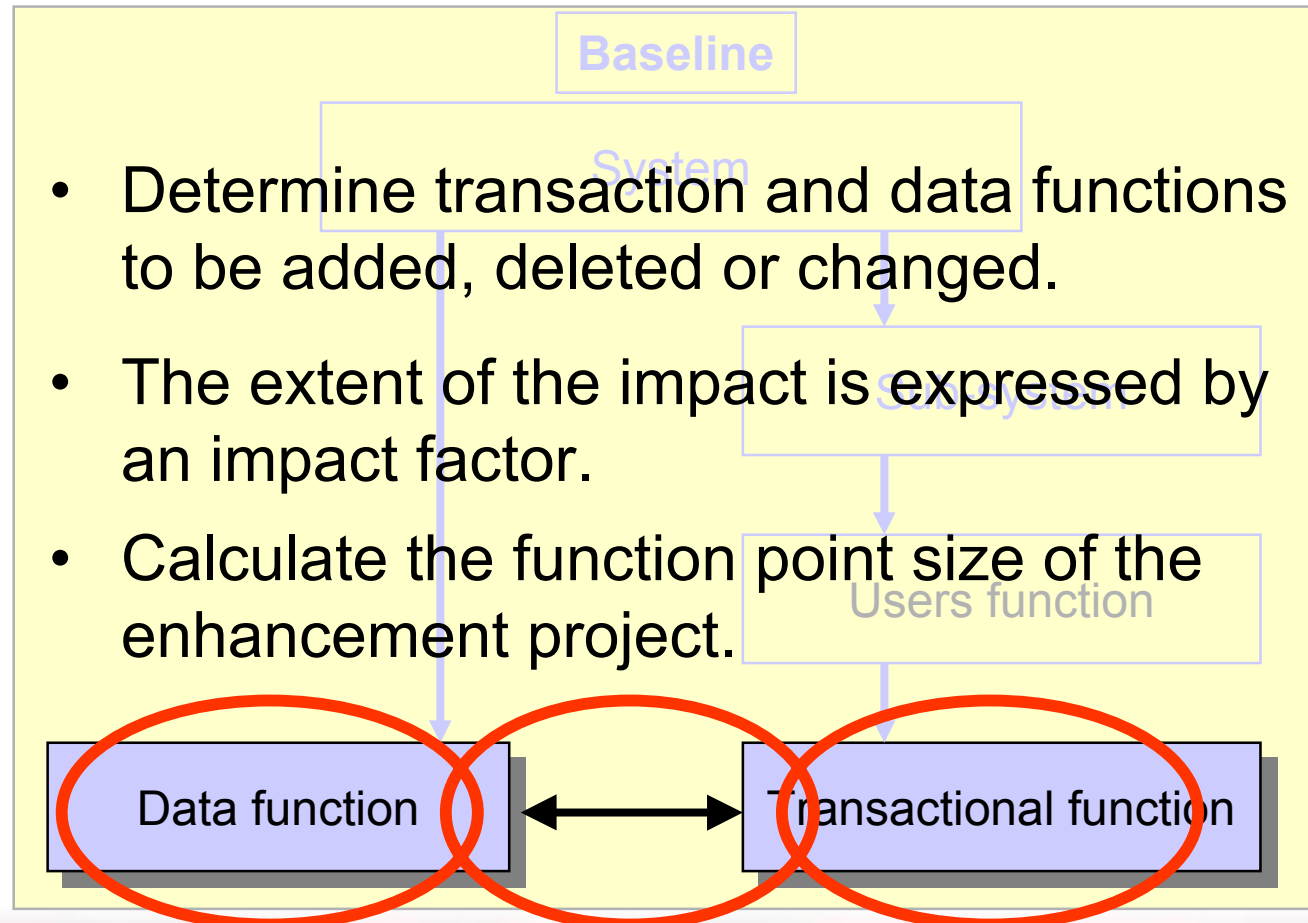
How to size enhancements?



How to size enhancements?



How to size enhancements?



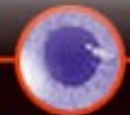
Added value of LCE[®] Metrics

For the customer:

- Well fit up cost estimating process.
- Responsibilities are clear (SLA)
- Same maintenance, yearly cheaper.
- Clear agreement beforehand on costs and savings.

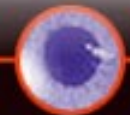
For PinkRocade:

- Work more effective and efficient.
- From effort commitment towards result agreement.
- Faster calculation, no specialized knowledge of systems required, independent from persons.



The Univé case

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The occasion to start with LCE[®] Metrics...

Direct trigger:

- Outsourcing of administration and maintenance from Univé Insurance's to PinkRoccade.
- Maintenance assignments to be performed fixed price.
- Measure the size of maintenance in an objective way.

Indirect trigger:

- PinkRoccade: LCE[®] at a higher quality level!



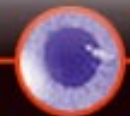
The Univé case: what were the goals of the project?

- The LCE[®] Metrics method is applied according to the LCE-standards to all enhancements on applications within the outsource contract.
- As a result from this the size of enhancements is established in an objective way, measured in function points.
- Beforehand the supplier and the customer agreed on an initial cost factor: A SLA was based on this.

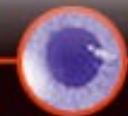
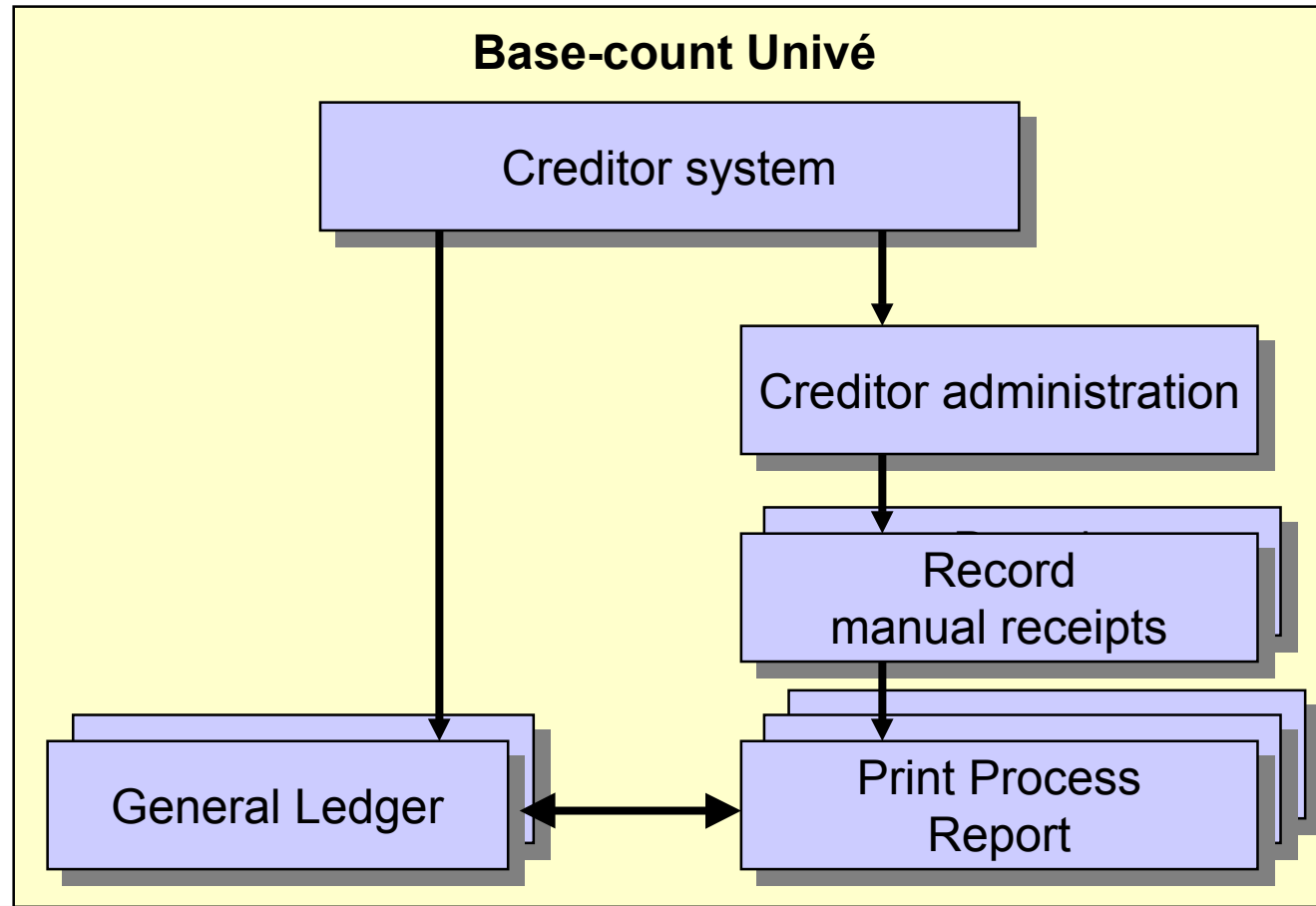


The Univé case: what were the intended project results?

- A one-time base-count is performed.
- A procedure is drawn up with regard to maintenance requests.
- The maintenance organization, both on the supplier as on the customer's side, is set up based on the LCE[®] Metrics method: a FPA-tool is being used to calculate the size of maintenance.
- Gaining experience...

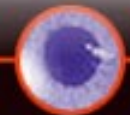
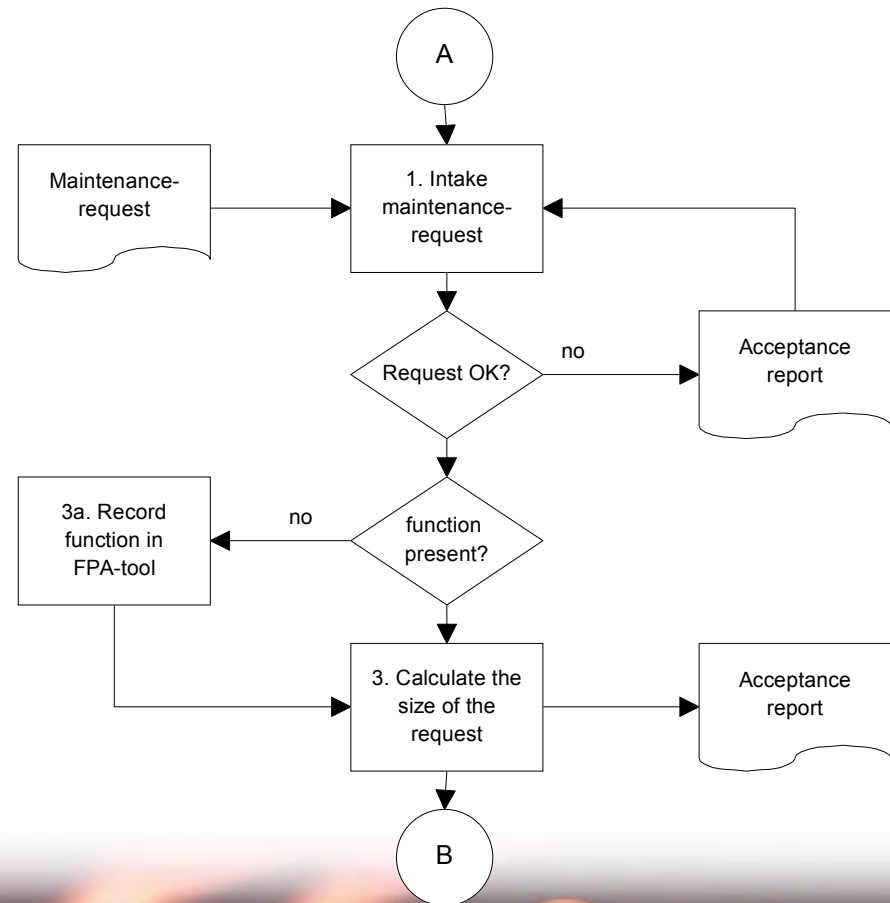


A base-count was performed...



A maintenance procedure was drawn up...

- Tune requirements of maintenance requests.
- Describe the activities within maintenance process.
- Gear procedure to functional application management (customer).



A maintenance organization was set up...

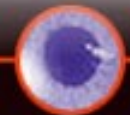
- Roles were assigned:
- Change Manager is responsible for counting
- Tooling implemented
- Training organized

The screenshot shows a software application window titled 'Functiepunctanalyse' with a menu bar (Bestand, Functiepunctanalyse, Extra, Help) and a toolbar. A sub-window titled 'Onderhoud op FPA-functies' is open, displaying a form for maintenance of FPA functions. The form includes the following fields and values:

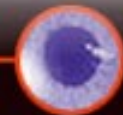
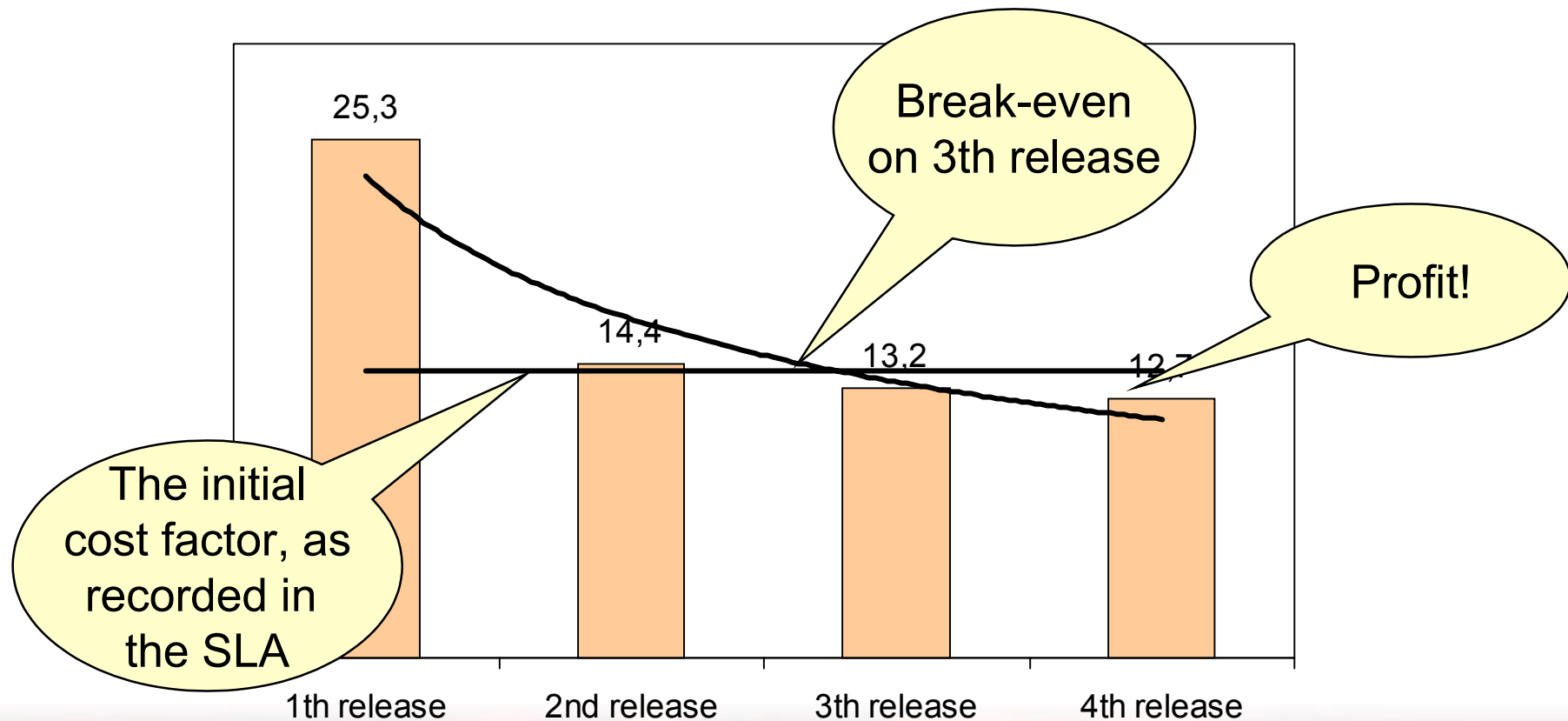
- Subsysteem: 02 BEHEER POLIS GEGEVENS
- Gebruikersfunctie: 0211 VERZENDREGISTER ON-LINE
- FPA-functie: 021101 OVERHEVELEN OFFERTE NAAR AANVRAAG
- Type functie: Invoerfunctie
- Soort mutatie: **Wijzigen**
- Aantal onderhoudsfunctiepunten: 1,50
- Mutaties table:

	+	-	Δ	=
Aantal DET's	1	0	0	227
LGV's	0	0	0	8
- Weging: **Moeilijk**
- Aantal BFP: 6

Buttons for 'Herstel' and 'Sluiten' are visible. The status bar at the bottom shows '16-02-2000' and '63322 - (OFPA-telling)'.

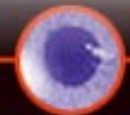


Gaining experience: Evaluate the cost factor...



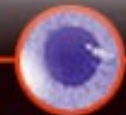
Project evaluation: what went well?

- A selection of what was experienced as positive by the participants of the assessment:
 - The FPA-training (together with the customer)
 - Cooperation within the project (supplier, customer and NESMA)
 - Professional intention of the project (e.g. deadline)
 - Practical applicability, no difficult processes
 - Standardized method
 - Required data was relatively easy to collect



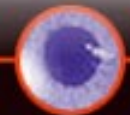
Project evaluation: what went less well?

- A selection of what was experienced as negative by the participants of the assessment:
 - The FPA-training took place too late
 - Feedback of maintenance functionpoints from the supplier towards the customer
 - Base-count was incomplete
 - The FPA-tool did not supply all desired functionality
 - Cooperation between supplier and customer started at a too late stage
 - Insufficient distinction between adaptive and corrective maintenance



Project evaluation: critical success factors

- What CSF's did the participants experience in case of a future LCE[®] Metrics project?
 - Adequate tooling en manuals (6)
 - Project management: both parties in one project (6)
 - Equal level of knowledge trough collective training (5)
 - Broad commitment for a project (5)
 - Clear agreement about shared responsibilities (3)
 - Use of standards (e.g. NESMA) (3)



To close...



Greetings from Holland

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