

PROTOTYPES AS TESTS FOR INFORMATION MANAGEMENT WITHIN LARGE ORGANIZATIONS

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Nederlandse Testdag 2019



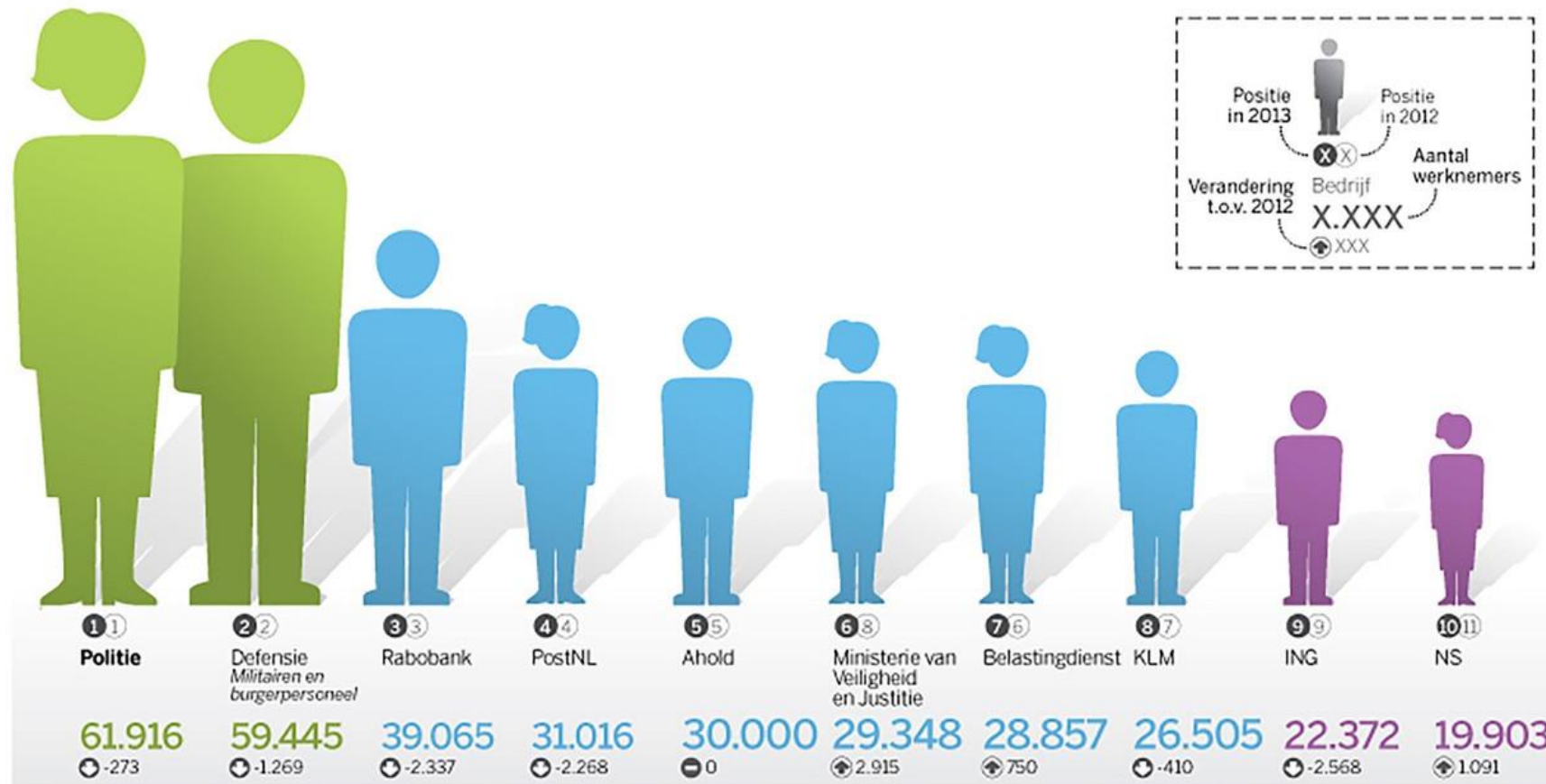
My testing background

- Analytical tests (extreme cases, limits)
 - @ University of Amsterdam
 - Field: Education
- Programming tests (unit, validation)
 - @ Cimsolutions
 - Field: Software Engineering
- Business tests (use case, prototyping)
 - @ Belastingdienst
 - Field: Information / Business Analysis



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Top 10 largest Dutch organizations



081114 © de Volkskrant - tb. * Communiceren geen fte, alleen aantal medewerkers. Aantal fte is berekend op basis van verhouding voltijd/deeltijd en gemiddelde werkweek deeltijd voor desbetreffende branche. ** Exclusief medisch specialisten *** Minus Rijkswaterstaat

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Large vs. small organizations

- **Politics**

- No direct influence over leaders vs. long standing personal relationships

- **Structure**

- More bureaucratic and hierarchical vs. more ad-hoc

- **Employees**

- Job security vs. speed growth, change or risk taking

- **Culture**

- More conservative improvements vs. very competent marketing



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Information management challenges

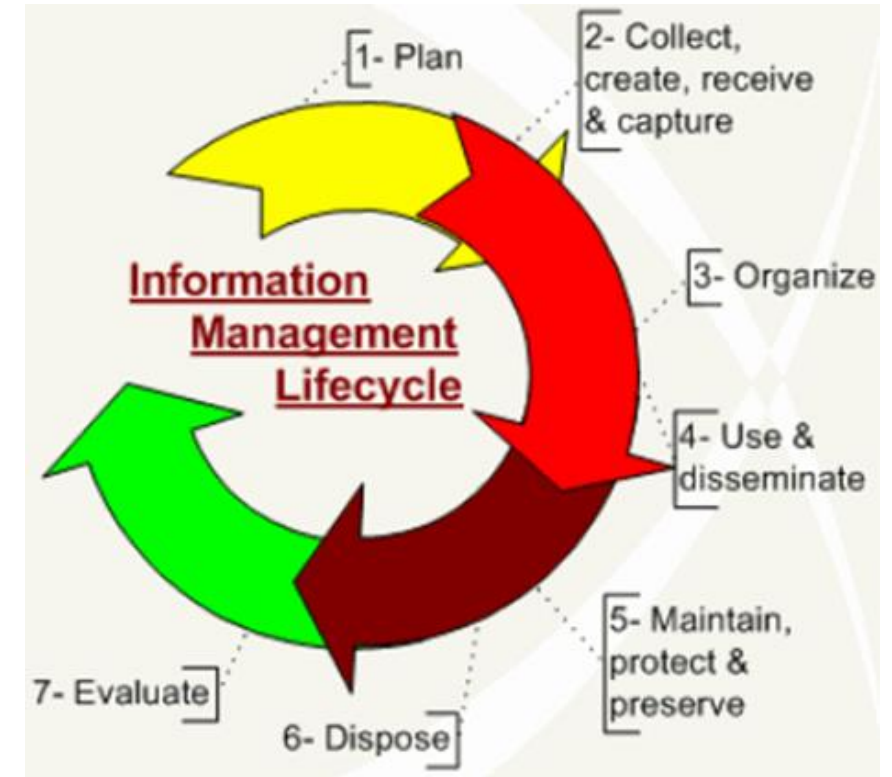


- Large number of separate information management systems
- Lack of consistency, duplication, and out-of-date information
- Difficulties in changing working practices and processes of staff

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Main principles of IM

- Recognize (and manage) complexity
- Prioritize according to business needs
- Focus on adoption
- Deliver tangible & visible benefits
- Mitigate risks
- Communicate extensively
- Aim to deliver a seamless user experience



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IM products / deliverables



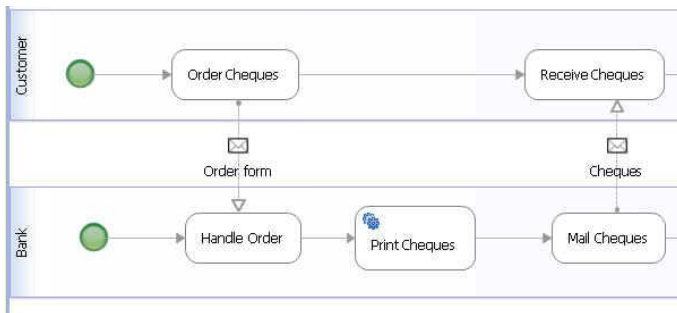
Customization plan



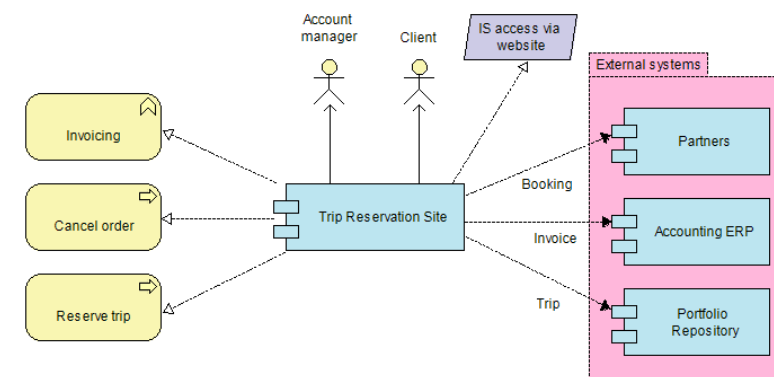
Impact assessment



Goal hierarchy



Collaboration diagram

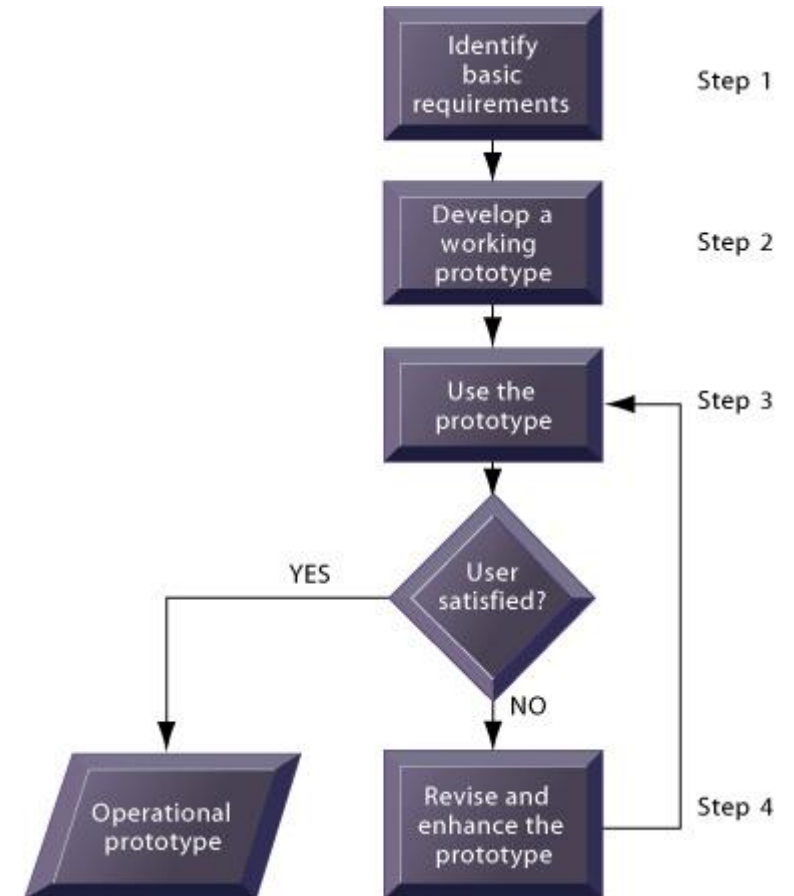


Context diagram

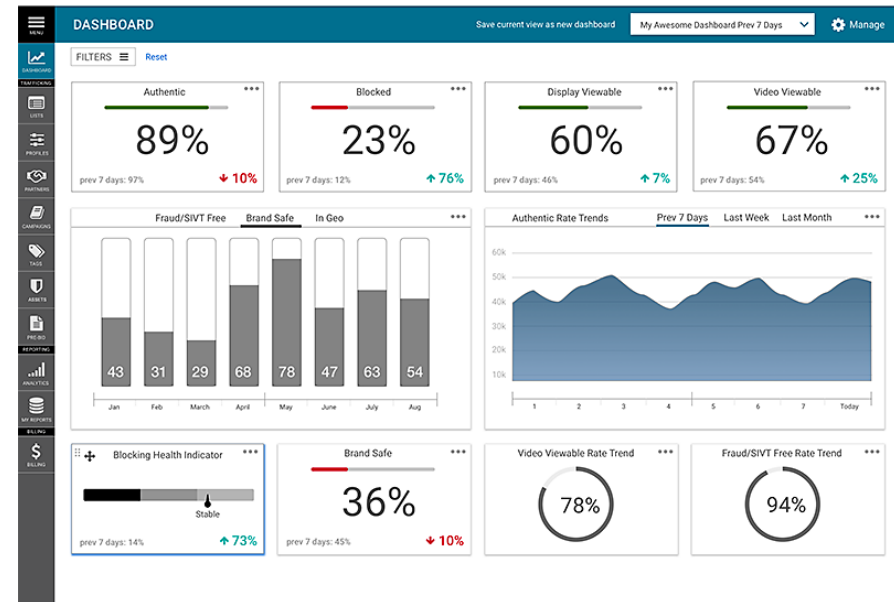
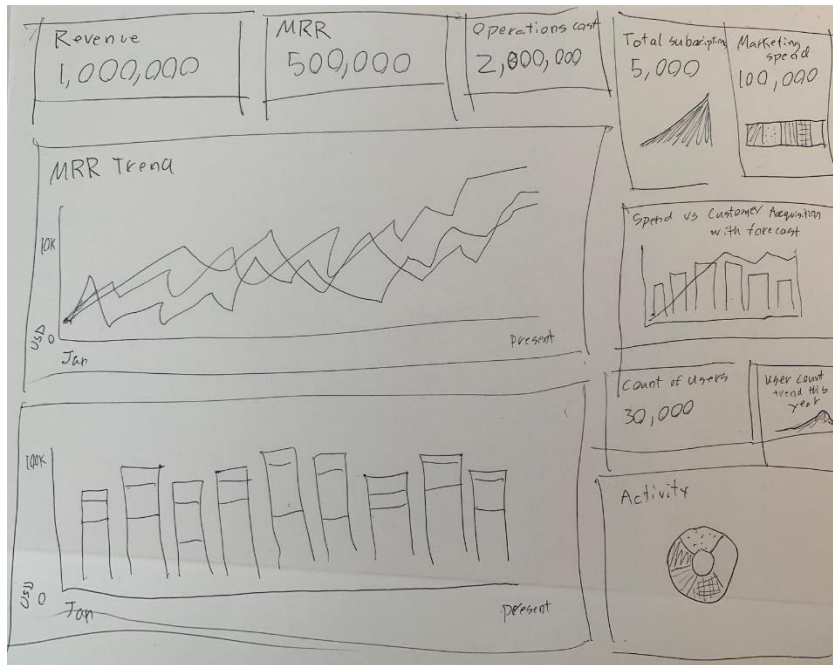
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Prototyping

- Building an experimental system rapidly and inexpensively for end users to evaluate
- Working version of an information system or part of the system, but is meant to be only a preliminary model
- Iterative process of systems development



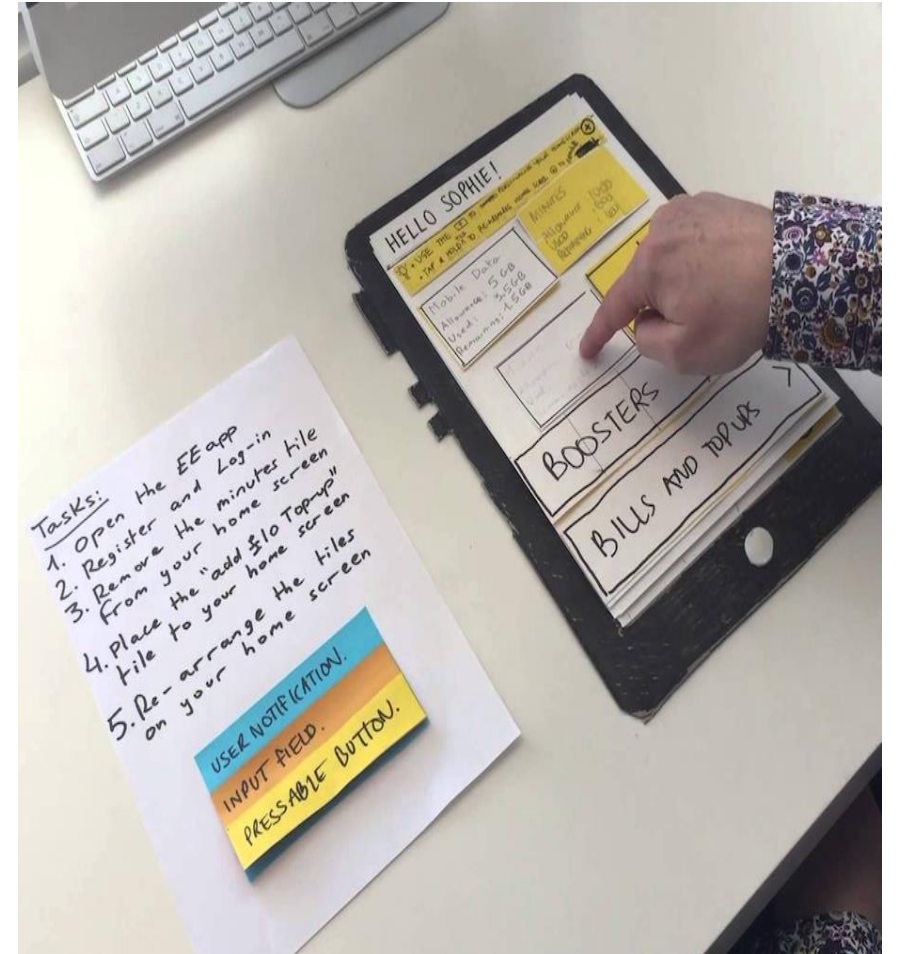
Prototypes in MI systems = dashboards



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Pros & Cons of prototyping

- + Covers uncertainties about requirements or design solutions
- + Useful in designing an information system's end-user interface
- + Encourages intense end user involvement
- Management may not see the need for a polished production system
- Large quantities of data / users in a production environment may not be easily accommodated



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Conclusion

- Prototypes are extremely good in projects where goals are vaguely determined and decisions are hard to be taken
- Prototyping is quite efficient in quickly probing organizational needs as it gives stakeholders a clear vision of the gap between current and desired management
- Using prototypes in large organizations can get tricky as it gets more challenging to determine right stakeholders and prioritize decisions

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Thank you for attention!



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