



Tailoring the Enterprise System to the Organisational Needs – the case of SAP implementation

The implementation approach involved the **installation of different modules** at different locations of the organization at different time periods

The first method is **the installation of all modules** of the ERP system with complete functionality in a single effort

ERP systems that are available in the market are mostly ready-made software packages, and thus **the implementation ought to be a simple installation** or system replacement. However,

Amoako-Gyampah, K. (2004). ERP implementation factors: A comparison of managerial and end-user perspectives. *Business Process Management Journal*, 10(2), 171–183.
doi:10.1108/14637150410530244

Beheshti, H. M., & Beheshti, C. M. (2010). Improving productivity and firm performance with enterprise resource planning. *Enterprise Information Systems*, 4(4), 445–472.
doi:10.1080/17517575.2010.511276

Vilpola, I. H. (2008). A method for improving ERP implementation success by the principles and process of user-centred design. *Enterprise Information Systems*, 2(1), 47–76.
doi:10.1080/17517570701793848

Customization increases the overall challenge of the implementation (Holland and Light, 1999), requires in-depth knowledge of the software especially during subsequent releases (Glass, 1998), and in reality, **few implementations are completely “vanilla”**.

It is almost impossible and not advisable to change an organization to **meet the out-of-the-box solution of an ERP system. Some people call this installing “vanilla,”**

Ko, D.-G. (2010). Consultant competence trust doesn't pay off, but benevolent trust does! Managing knowledge with care. *Journal of Knowledge Management*, 14(2), 202–213.
doi:10.1108/13673271011032355

Grossman, T., & Walsh, J. (2004). Avoiding the pitfalls of ERP system implementation. *Information Systems Management*, 21(2), 38–43. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1201/1078/44118.21.2.20040301/80420>.
6

Possible ways of adopting the system to organisational needs

Configuration

setting the system parameters to determine the way the system operates by choosing from the existing options

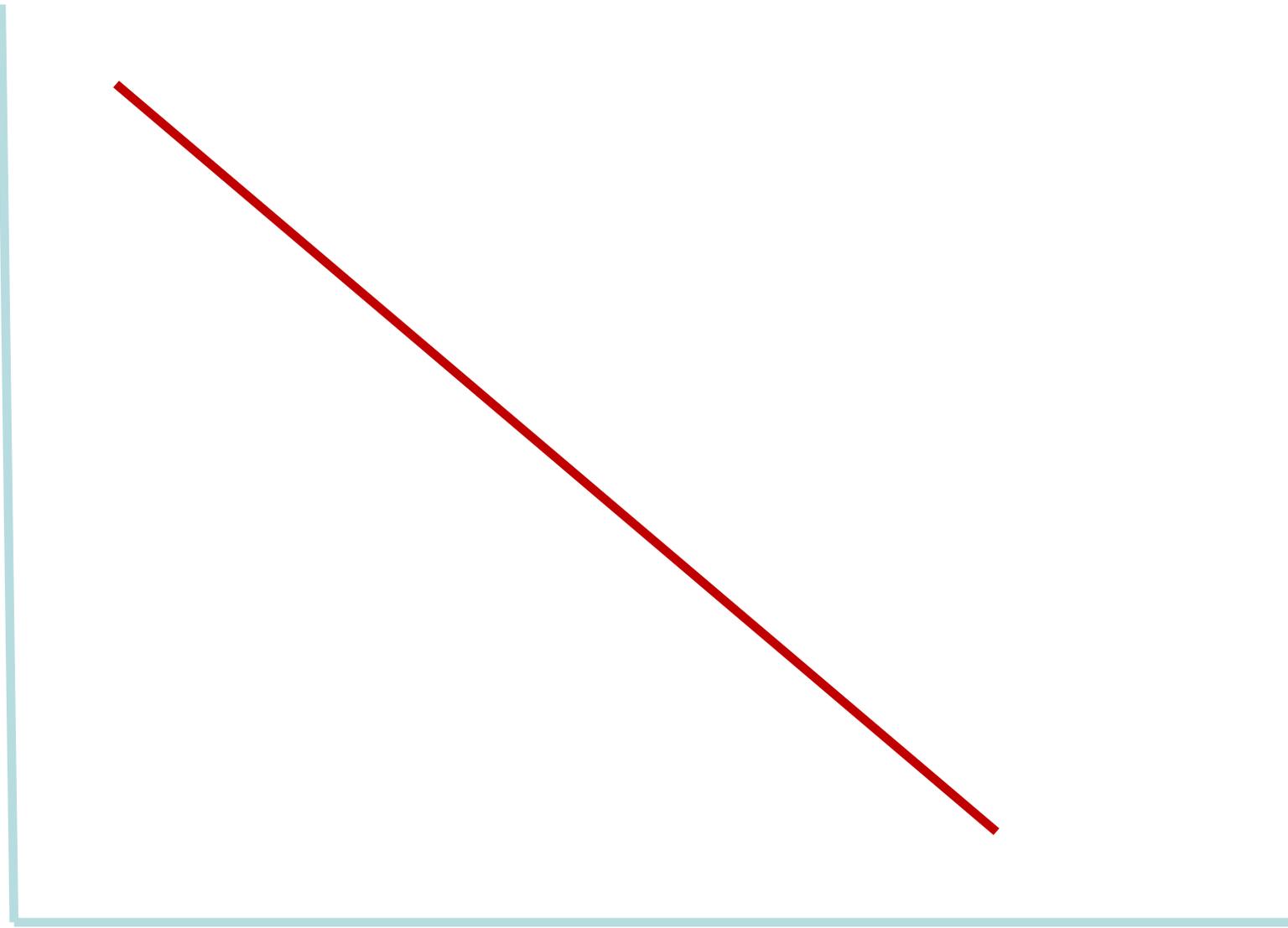
Customization

changing the existing code of the system to alter its operation or developing a new code to extend or change the functionality of the system

In SAP ECC: 16 000+ configuration tables!



**Readiness
to use**



**Elasticity
Configurability**



Research questions

1) How is the ES adjusted to the needs of a specific organisation during the implementation phase?

2) What are the specific modes of adaptation used for?

3) What is the split of effort ?



- Case study – full scope SAP implementation

- Data source: Activity Reports
- 137 entries coded

Project Preparation

Business Blueprint

Realisation

Final preparation

Go-live and Support

Activities

- Analysis of the organisational structure and business processes
- Preparation of the configuration specification
- Identification of RICEF
- Preparation of the Business Blueprint

Products

Business Blueprint

- Organisational structure
- Description of the business processes
- Design of the business processes—configuration specification
- identification of RICEF

Tests

Effort days	Effort %	Duration
139,5	27%	4 months

Project Preparation

Business Blueprint

Realisation

Final preparation

Go-live and Support

Activities

- Technical specification of RICEF
- System configuration
- System customization
- Preparation of the data migration concept and tools

Products

RICEF technical specification

System configured

RICEF ready

Data migration concept

Data migration tools

Tests

Effort days

Effort %

Duration

180 days:

35%

3 months

50,5 – configuration
130 – customization:
• 56,5 – design
• 73,5 - coding

Interfaces, reports and forms

Project Preparation

Business Blueprint

Realisation

Final preparation

Go-live and Support

Activities

- Unit tests
- Modular tests
- Integration/User Acceptance tests

Products

System free from errors

System approved by the users

Key-users familiarized with the system functionality

Tests

Effort days	Effort %	Duration
120,5 days: <ul style="list-style-type: none">• 80,5 general• 40 - customisation	23%	3 months

Project Preparation

Business Blueprint

Realisation

Final preparation

Go-live and Support

Activities

- Configuration transport to the production environment
- Data migration
- End-user training

Products

System ready for go-live

End-users trained

Tests

Effort days	Effort %	Duration
18,5 days - configuration	4%	2 months

Project Preparation

Business Blueprint

Realisation

Final preparation

Go-live and Support

Activities

- Fine-tuning
- Support of daily activities

Products

System operational

Tests

Effort days	Effort %	Duration
55,5 days: <ul style="list-style-type: none">• 6,5 configuration• 49 - customisation	11 %	3 months

Summary

Phase	Duration months	Total mandays	% of effort	Configuration mandays	Customisation mandays
Project preparation	n/a	n/a	n/a	n/a	n/a
Business Blueprint	4	139,5	27%	139,5	-
Realization	3	180	35%	50,5	130
Testing	3	120,5	23%	80,5	40
Productive start preparation	2	18,5	4%	18,5	-
Go-live and support	3	55,5	11%	6,5	49
TOTAL	15	514,5	100%	295,5 (57%)	219 (43%)

Conclusions

Enterprise Systems do not form a homogenous group. When researching ES adoption one should differentiate between:

- **Ready-to-use / COTS systems** (including public cloud systems)
- **Configurable / adjustable systems** – including most systems from major vendors, such as SAP, Oracle, Microsoft (AX and Nav)

For configurable Enterprise Systems the term „vanilla system” should be used with caution (if at all).

Vanilla implementation may be the right term for the implementation proces which does not involve changes/additions to the code.

Thank you for your attention

Related work:

Lech P., Causes and remedies for the dominant risk factors in Enterprise System implementation projects: the consultants' perspective, SpringerPlus, 2016, Vol 5, Issue 1, pp. 1-12, ISSN 2193-1801,
<http://link.springer.com/article/10.1186/s40064-016-1862-9>, DOI: 10.1186/s40064-016-186

Lech P., Managing knowledge in IT projects: a framework for enterprise system implementation, Journal of Knowledge Management, Volume 18 Issue 3, 2014, s. 551 - 573, ISSN 1367-3270

Lech P., Enterprise System Implementation from the Functional Consultants' Perspective, w: The Electronic Journal of Information Systems Evaluation, Volume 16, Issue 4, 2013, s. 291-301, ISSN 1566-6379

Lech P., Time, Budget, and Functionality? IT Project Success Criteria Revised, w: Information Systems Management, Volume 30, Issue 3, 2013, s. 263 – 275, ISSN 1058-0530

You may download this presentation from: www.przemyslawlech.info.pl