

Knowledge Based Work Systems and Services

Challenges, Methodologies & Solutions

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Work System

- A comprehensive **set of interacting services, processes, people and technology** that “work” together in order to achieve of a set of **business goals**.

Intensive Knowledge Based Work Systems

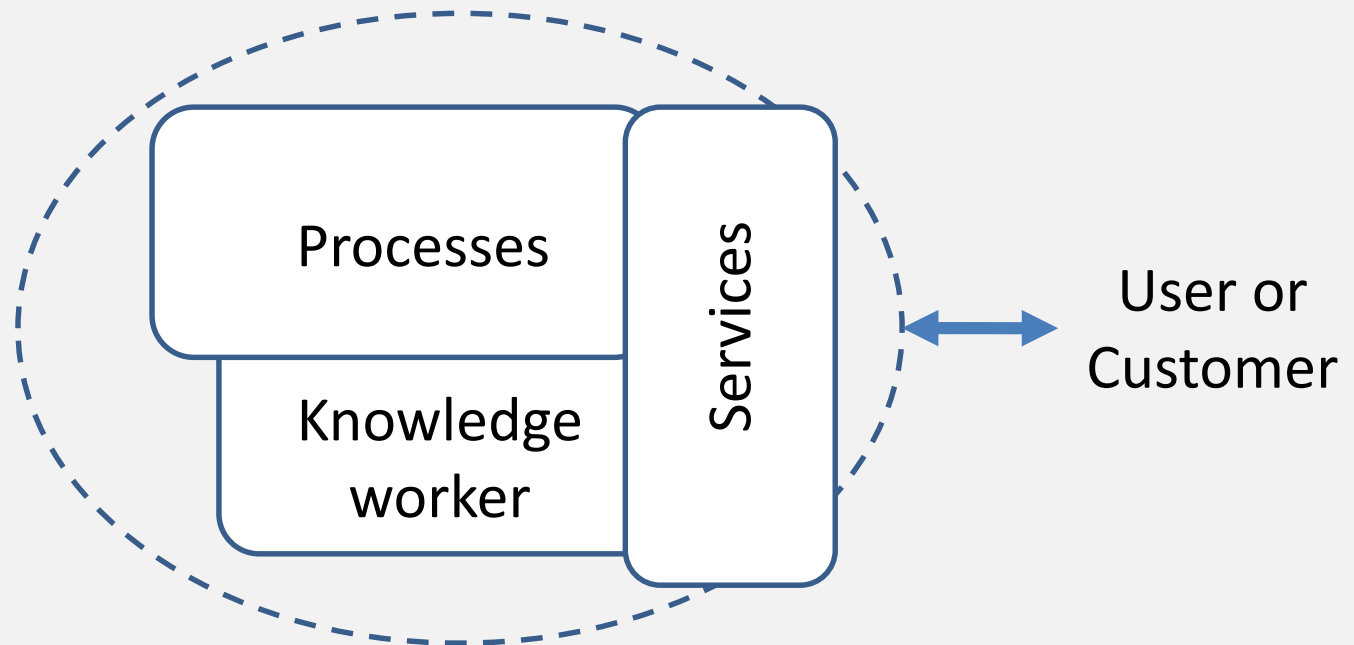
- Work system where **tacit knowledge plays a fundamental role.**

Some Examples:

- Software houses
- Law firms
- Engineering offices
- Educational institutions

Intensive Knowledge **Services**

- are provided by **highly skilled people**
- that work in the context of knowledge intensive work systems.



Work Systems Management *: how to?

- due to the very **nature of knowledge work**,
- knowledge work systems are “**not compatible**” with traditional BPM approaches.

** instead of Business Process Management*

Knowledge work characteristics

- **emergent** and largely **unpredictable**
- urgent deadlines **mixed up** with long running tasks
- information **scattered** across databases, emails and docs
- intensive **human interaction** (both formal and informal)
- **contextual** judgment and **autonomous** decision

Management strategy: ad hoc collaboration

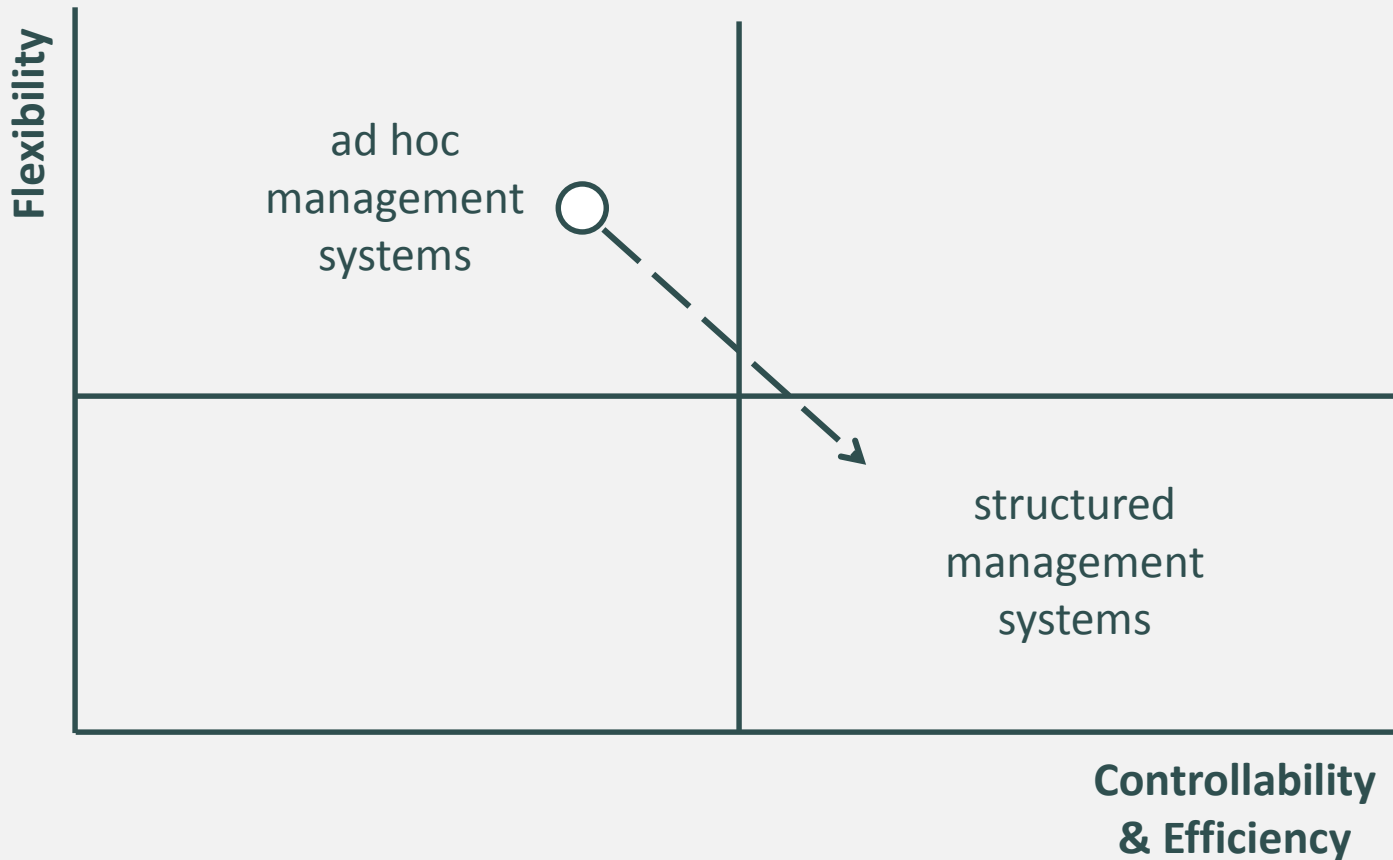
- offers **high flexibility**
- but also **lacks controllability and efficiency**

- knowledge workers appreciate flexibility,
- but **managers need controllability and efficiency.**

This often leads managers to define and implement:

- prescriptive **procedures** and **workflow systems**
- **KPI's** and **business intelligence** systems

“the long jump”



Knowledge work management systems

Instead of enforcing the compliance to standard prescriptive rules, the management systems should:

- **provide guidance** to the knowledge worker and
- allow to **fine-tune** the “**unique**” best practices of the organization.

Business Process Management

“People”
soft approach

- Non structured
- ad hoc procedures
- Office tools
- High flexibility
- Low controllability

ad hoc

“ERP and ISO”
hard approach

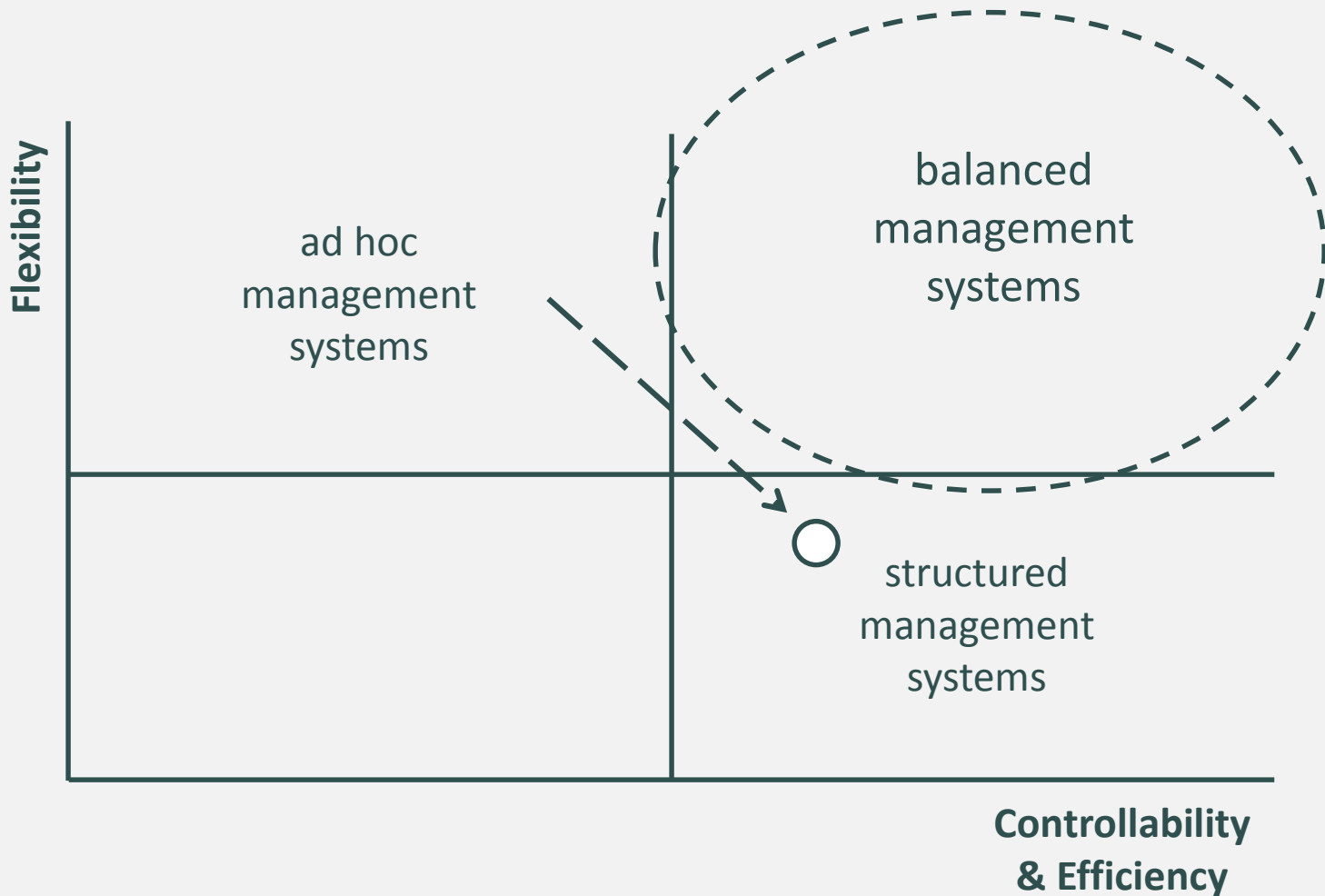
- Highly structured
- Detailed procedures
- Process automation
- High controllability
- Rigidity

prescriptive

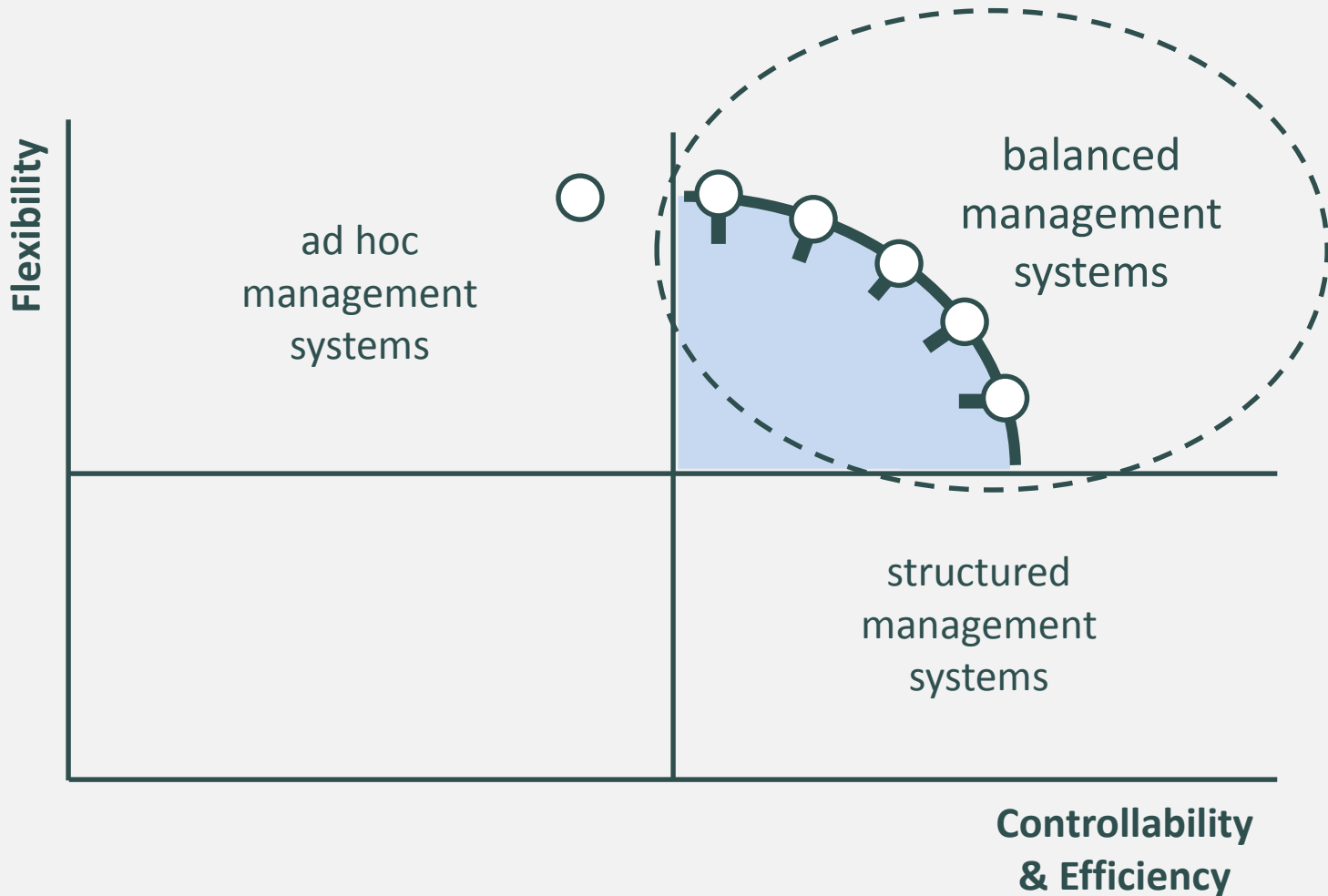
balanced
approach

bBPM

the balanced approach



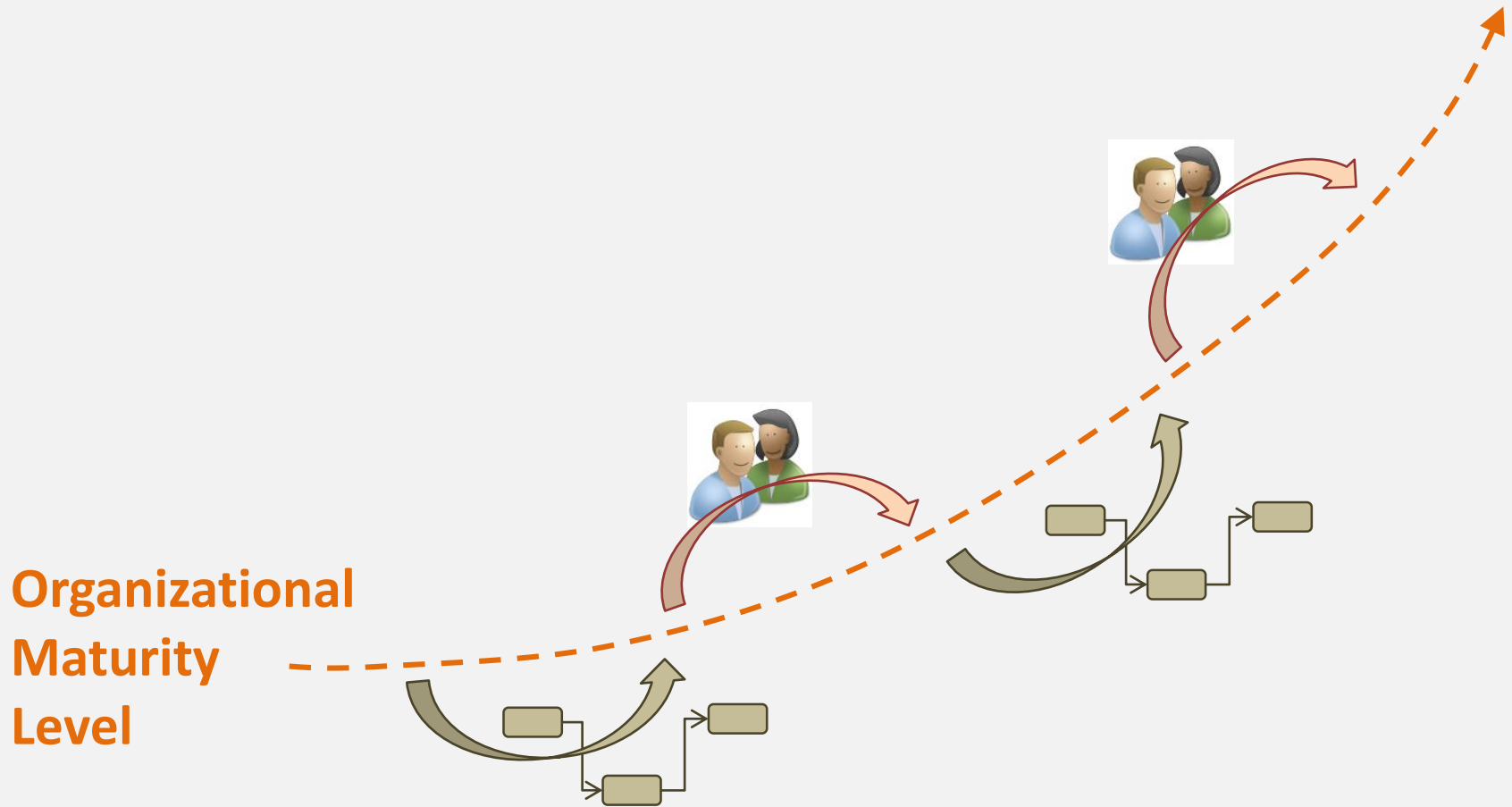
the balanced approach



The Learning Organization

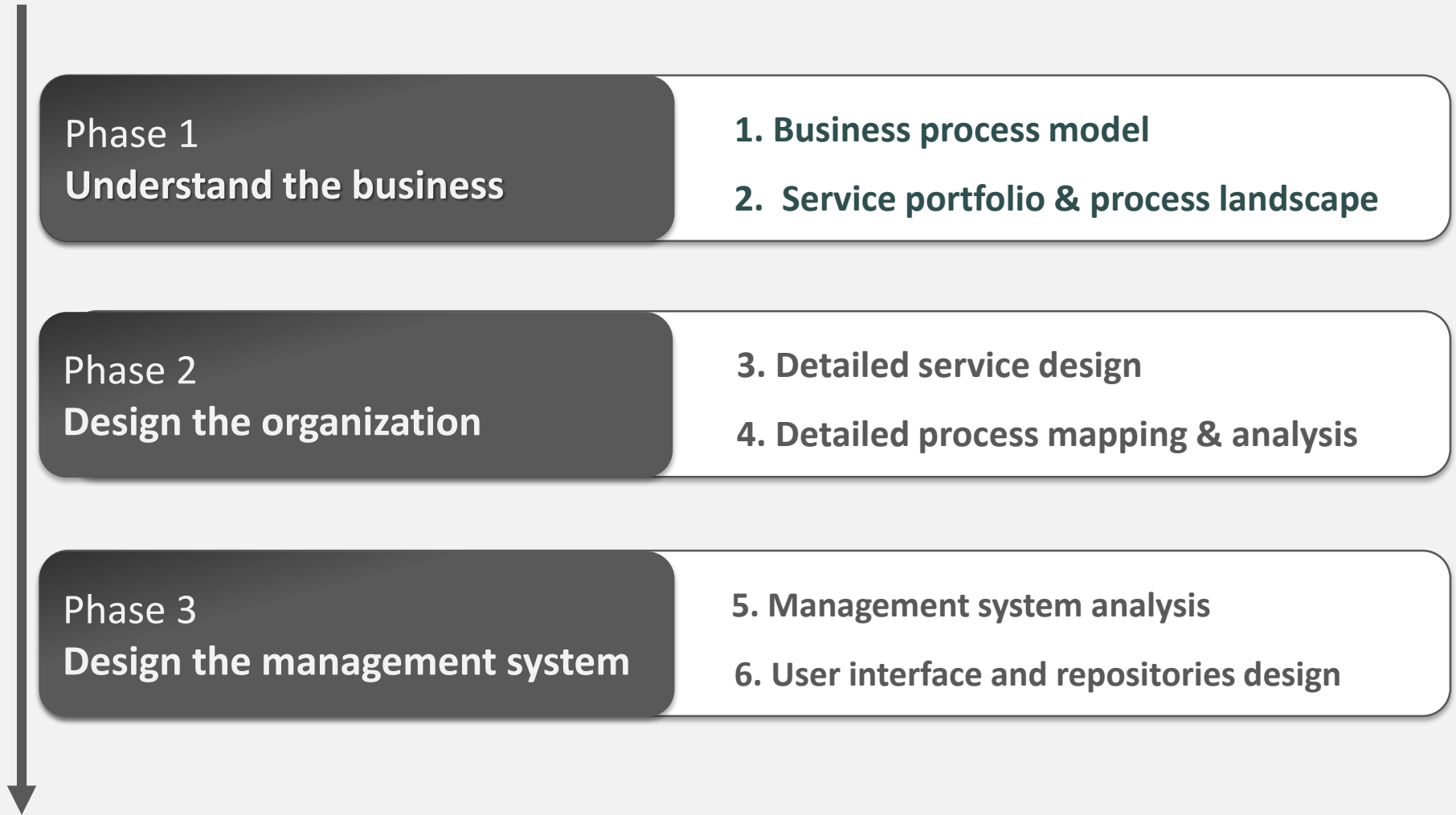
- if **all stakeholders participate** actively in the design of the management system,
- then, **people and processes development will reinforce together**

The Learning Organization

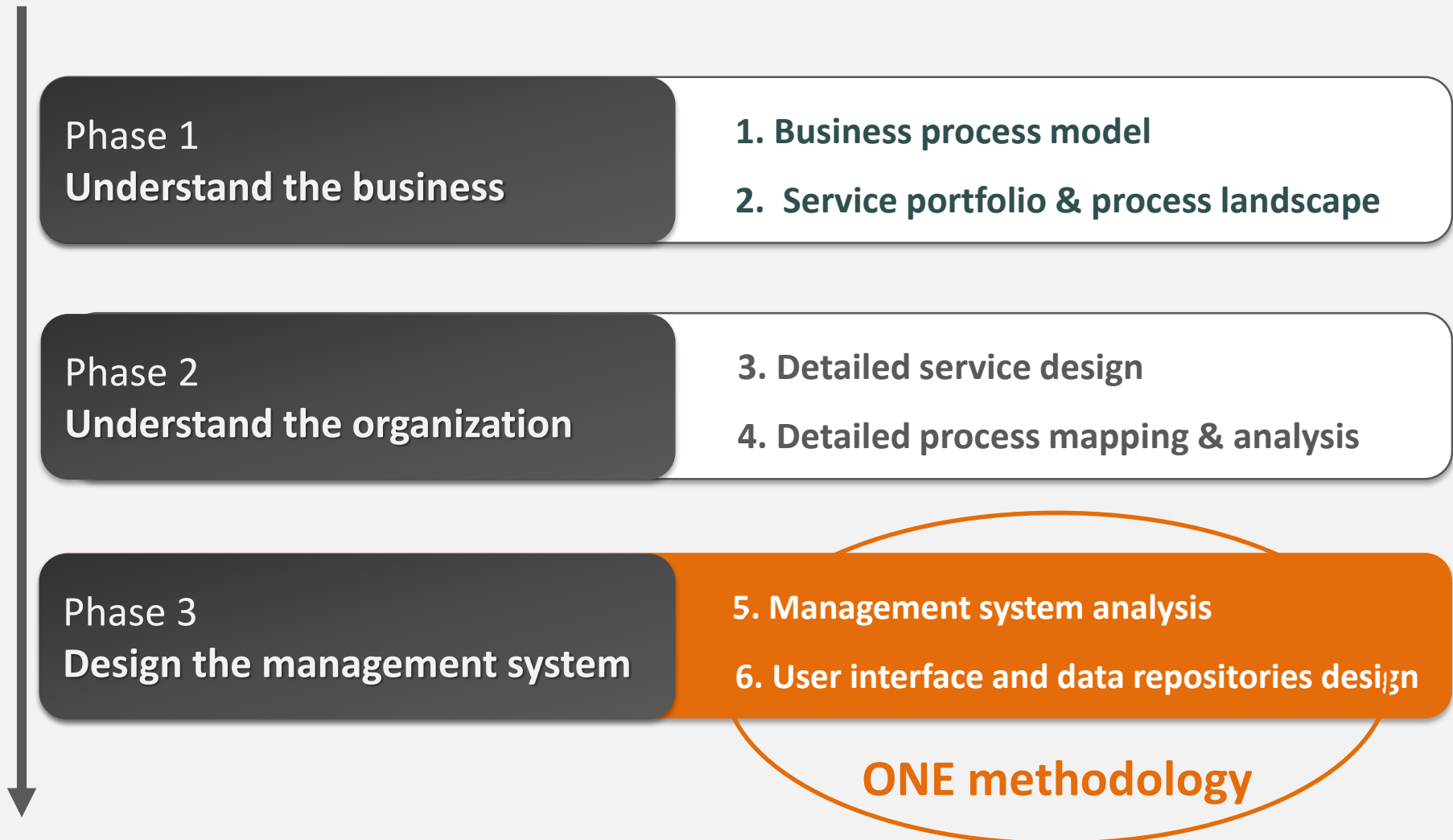


2. Methodology

From Business Processes to Information Technology



From Business Processes to Information Technology



ONE methodology

3 analysis perspectives

3 design principles



**Work
Management**

Tools

Project portfolio

Gantt chart

Backlog

To Do's list

Check list

Agenda

Activity log

...

Information perspective



Tools

Databases

File & doc system

Email

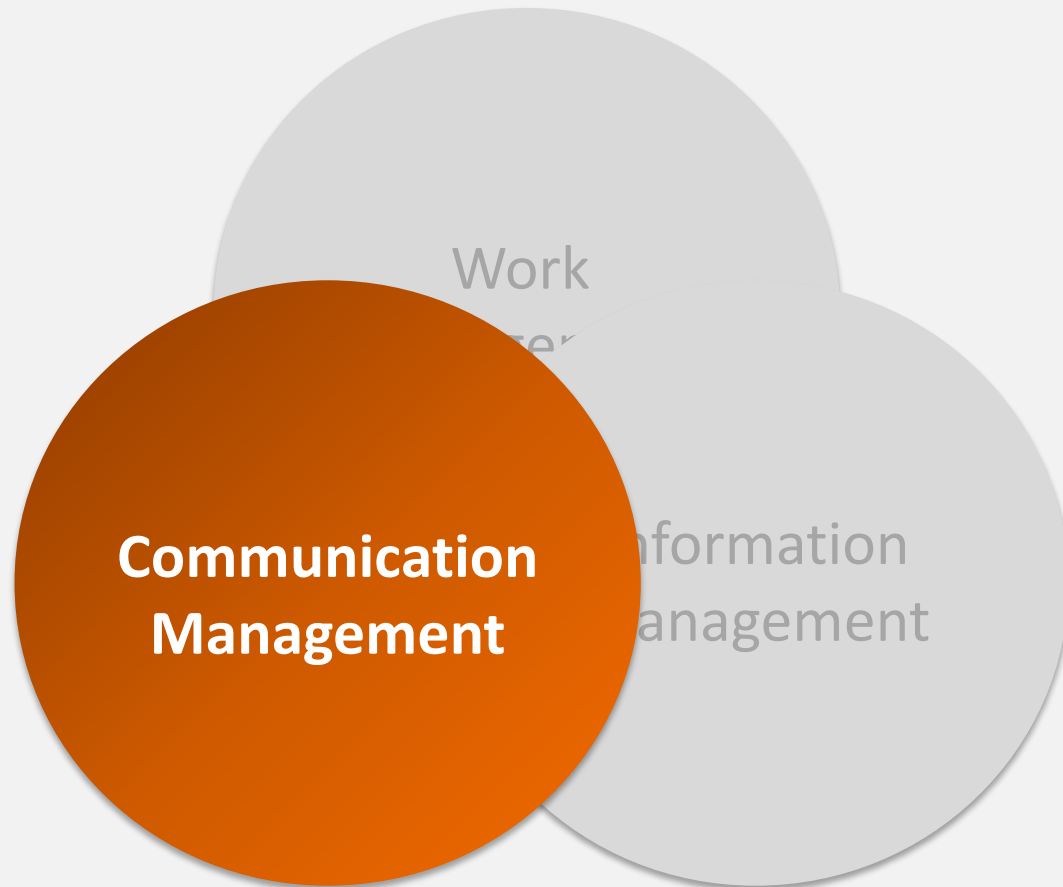
Wiki' s

Annotations

Debates

...

Information perspective



Tools

Email

Notifications

Alerts

News

Dashboard

...

3 design principles

find docs, data & email
on the same interface

every command
at your fingertips

start using it
tomorrow

ONE page
shows all

ONE click
management

ONE day
set-up

Sent Items
Deleted Items
Infected Items
Junk E-mail
Outbox
RSS Feeds
Search Folders

Le Monde.fr
A vos marques : Philippe Gilbert, le roi

Hugo Pereira
RE: Drª Emília Silva

SlideShare
SlideShare Digest: Facebook timeline

Stuart Campbell
Re: [Adventure] [WP6] D851

João Falcão e Cunha
RE: Project discussion

Switches	Transistors	Part Number	Manufacturer	Description
C001000	ECK-03D101KBP	Panasonic - ECG	CAP 180PF 2KV CERAMIC DISC YSP	
C001001	ECK-03D102KBP	Panasonic - ECG	CAP 1000PF 2KV CERAMIC DISC YSP	
C001002	ECK-03D121KBP	Panasonic - ECG	CAP 1200PF 2KV CERAMIC DISC YSP	
C001003	ECK-03D122KBP	Panasonic - ECG	CAP 1200PF 2KV CERAMIC DISC YSP	
C001004	ECK-03D151KBP	Panasonic - ECG	CAP 1500PF 2KV CERAMIC DISC YSP	
C001005	ECK-03D152KBP	Panasonic - ECG	CAP 1500PF 2KV CERAMIC DISC YSP	
C001006	ECK-03D181KBP	Panasonic - ECG	CAP 1800PF 2KV CERAMIC DISC YSP	
C001007	ECK-03D182KBP	Panasonic - ECG	CAP 1800PF 2KV CERAMIC DISC YSP	
C001008	ECK-03D221KBP	Panasonic - ECG	CAP 2200PF 2KV CERAMIC DISC YSP	
C001009	ECK-03D222KBP	Panasonic - ECG	CAP 2200PF 2KV CERAMIC DISC YSP	
C001010	ECK-03D271KBP	Panasonic - ECG	CAP 2700PF 2KV CERAMIC DISC YSP	
C001011	ECK-03D272KBP	Panasonic - ECG	CAP 2700PF 2KV CERAMIC DISC YSP	
C001012	ECK-03D331KBP	Panasonic - ECG	CAP 3300PF 2KV CERAMIC DISC YSP	
C001013	ECK-03D332KBP	Panasonic - ECG	CAP 3300PF 2KV CERAMIC DISC YSP	
C001014	ECK-03D391KBP	Panasonic - ECG	CAP 3900PF 2KV CERAMIC DISC YSP	
C001015	ECK-03D392KBP	Panasonic - ECG	CAP 3900PF 2KV CERAMIC DISC YSP	
C001016	ECK-03D471KBP	Panasonic - ECG	CAP 4700PF 2KV CERAMIC DISC YSP	

0715SurveySummary
0715SurveyCalculations
0715SurveyFinal

20070922-ExecStaff
20071015-SalesStaff
20071108-CustomerSvc
20071215-HolidayParty

Temp | Outros | Bancos | Lojas | Filmes | Desporto | FEUP | G | YT | IH | PB | BTN | SIGIT qualifeup | BSource | Home - BSource V2 | b1 Energia | b1 Manutenção | Polisport

i9source2

Inbox

- E-mails
 - Helder Marques
 - RE Formação NET (1).msg
 - RE Formação NET.msg
 - RE One Note (2).msg
 - RE One Note.msg
 - Digitalizações
 - Fatura Atlas Copco
 - Emailing
 - Atlas Copco

Documentos

- 2011
 - Manutenção periódica Chillers 2011.pdf
 - Renovações
 - Proposta de renovação.pdf
 - Proposta renovação.msg
 - RE Proposta renovação.msg
 - Manutenção periódica Chillers.pdf

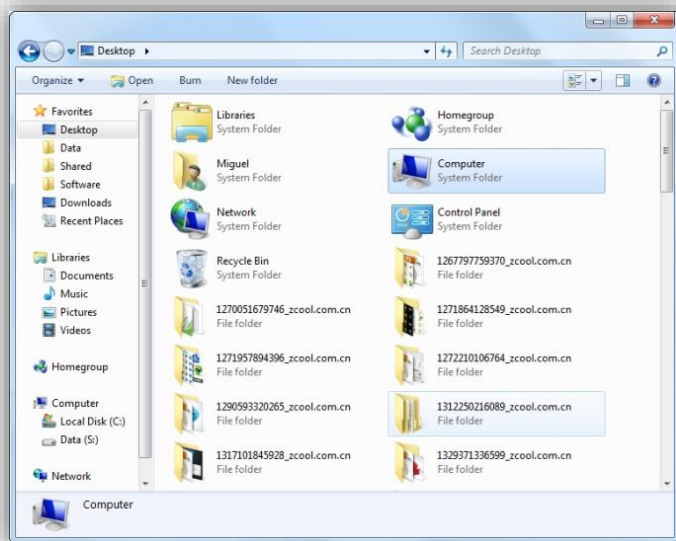
Contratos

Filtros: Família | Tipo | Fornecedor | Estado | Pesquisar

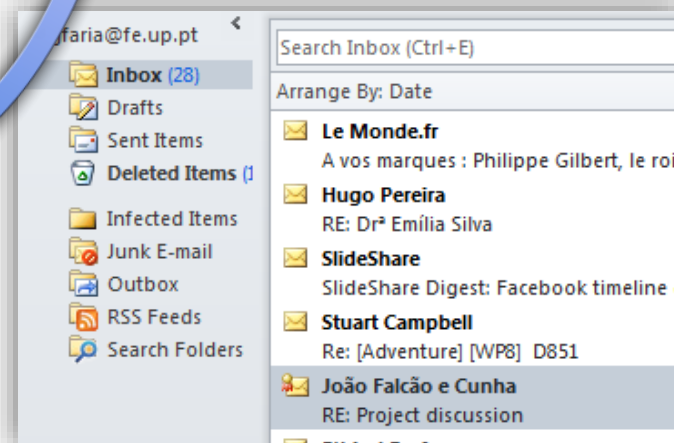
Contrato	Família	Valor	Renovação	Responsável
Manutenção periódica Chillers	AVAC	\$15,650.98	3/25/2012	Helder Marques
Assistência técnica Lennox	AVAC	\$7,490.00	7/31/2012	Helder Marques
Manutenção periódica Atlas Copco	Ar Comprimido	\$4,958.75	2/15/2013	Helder Marques
Manutenção periódica Wika	Ar Comprimido	\$3,000.00	10/5/2012	Helder Marques
Assistência 24h Citegaz	Ar Comprimido	\$11,350.00	1/30/2012	Helder Marques

ONE page shows all

Direct drag & drop from office tools to server

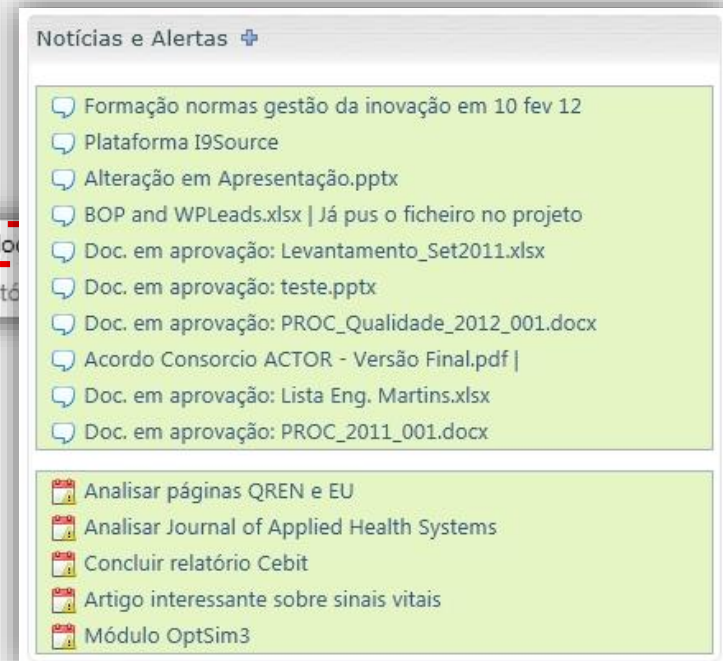
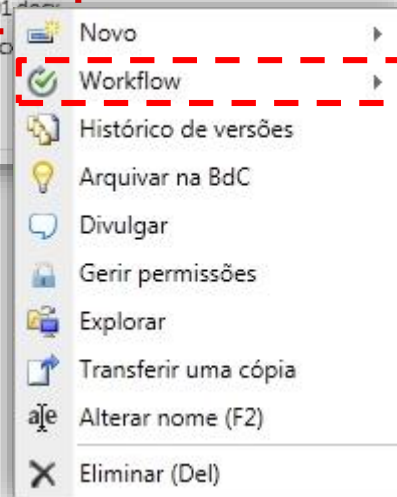
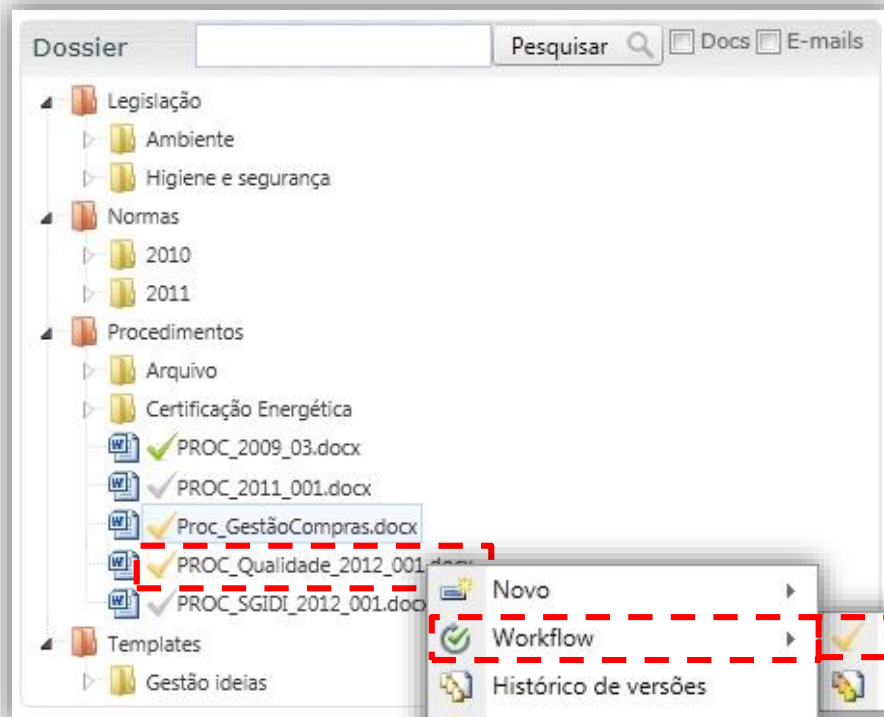


Explorer (PC)



Outlook (PC)

Commands directly available at the context menu



Our target

Combine the **usability of desktop** applications
together with the **robustness of server** applications

3. Solutions

Solutions



Innovation management platform



Facility management platform



main modules

- Ideas and opportunities management
- Project management
- Portfolio management
- Documents management
- Knowledge management
- Communication management
- Organizational development management



buildONE

main modules

- Maintenance management
- Subcontracting management
- Energy management
- Environment, health and safety management
- Documentation management
- Project management