

Strategic Agility in Practice: Towards Linking Company Goals with Daily Tasks in a Small Software Company

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Designing a Framework for **Linking Company Goals with Daily Tasks** in a Small Software Company

Research Problem

How can the planning and prioritization of daily tasks based on company's goals be supported in a small software company to achieve work efficiency and strategic agility.

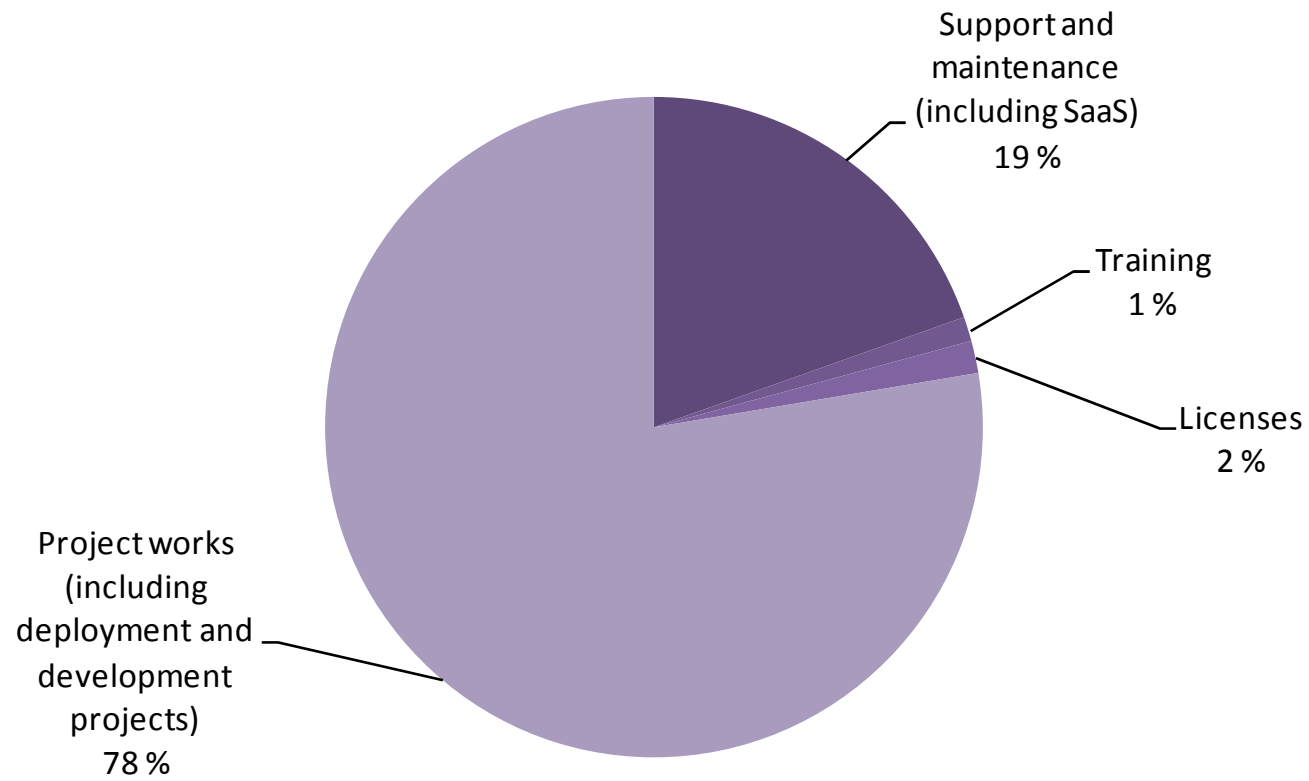
Research Questions

1. How is work effort used in the Company? How is the work effort distributed between employees? Based on collected data, what kind of improvements can be achieved in the effectiveness of work?
2. What is the current way of managing company goals, the project portfolio and other tasks and how well is it working?
3. Based on the literature, how could a tool for connecting company goals with daily tasks be designed? The tool is aimed to support better task planning and more efficiency of work for a small software company.
4. How could a better way of managing company goals, the project portfolio and other tasks be designed?

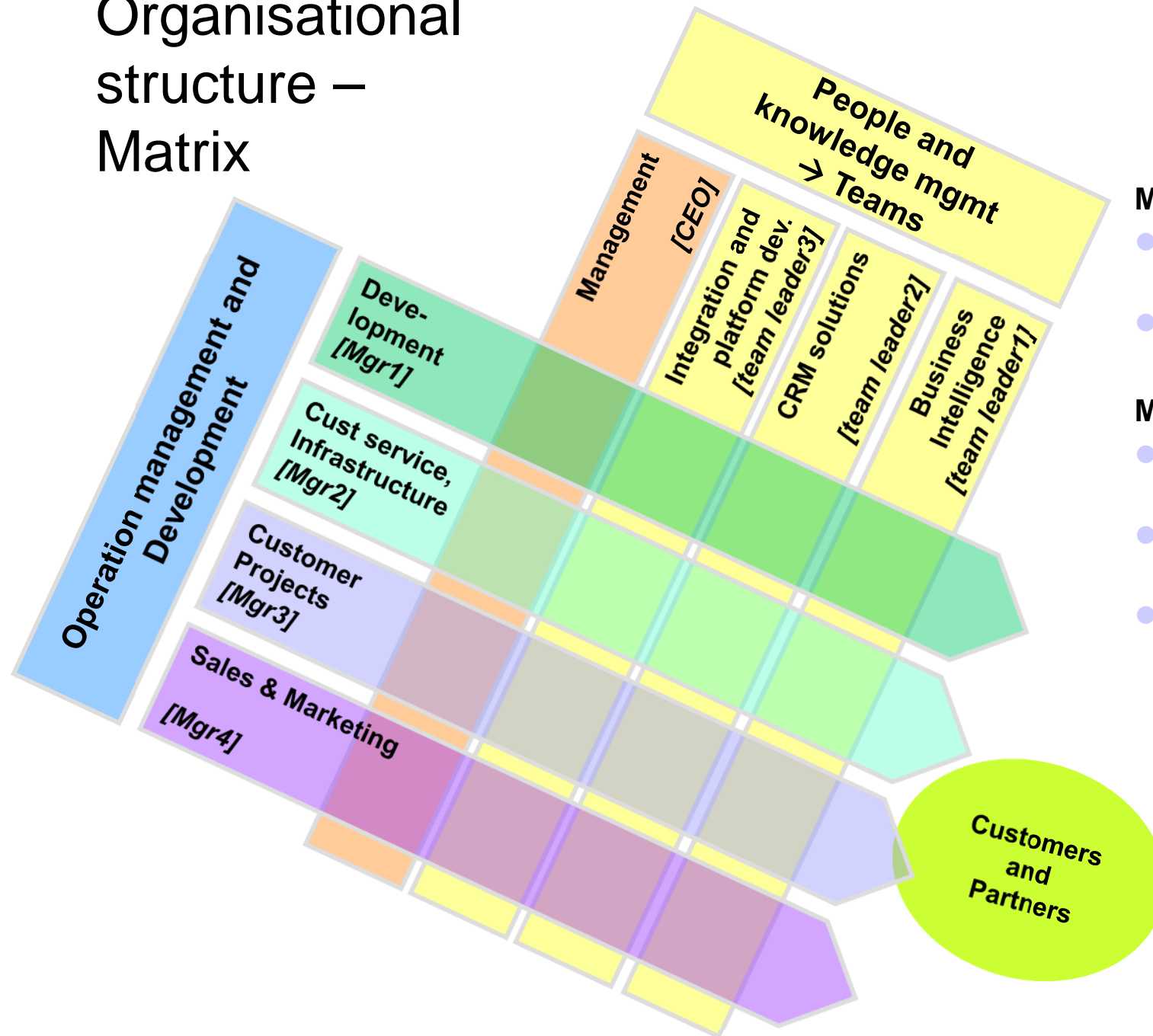
Structure of the Study

- A Case Study on the Company, Three Parts
 - Company Business and Organisational Structure
 - Analyze work effort usage and opportunities for improvement
 - How the work is managed currently
- Designing a Framework for strategy based work management

Income percentages by business area



Organisational structure – Matrix



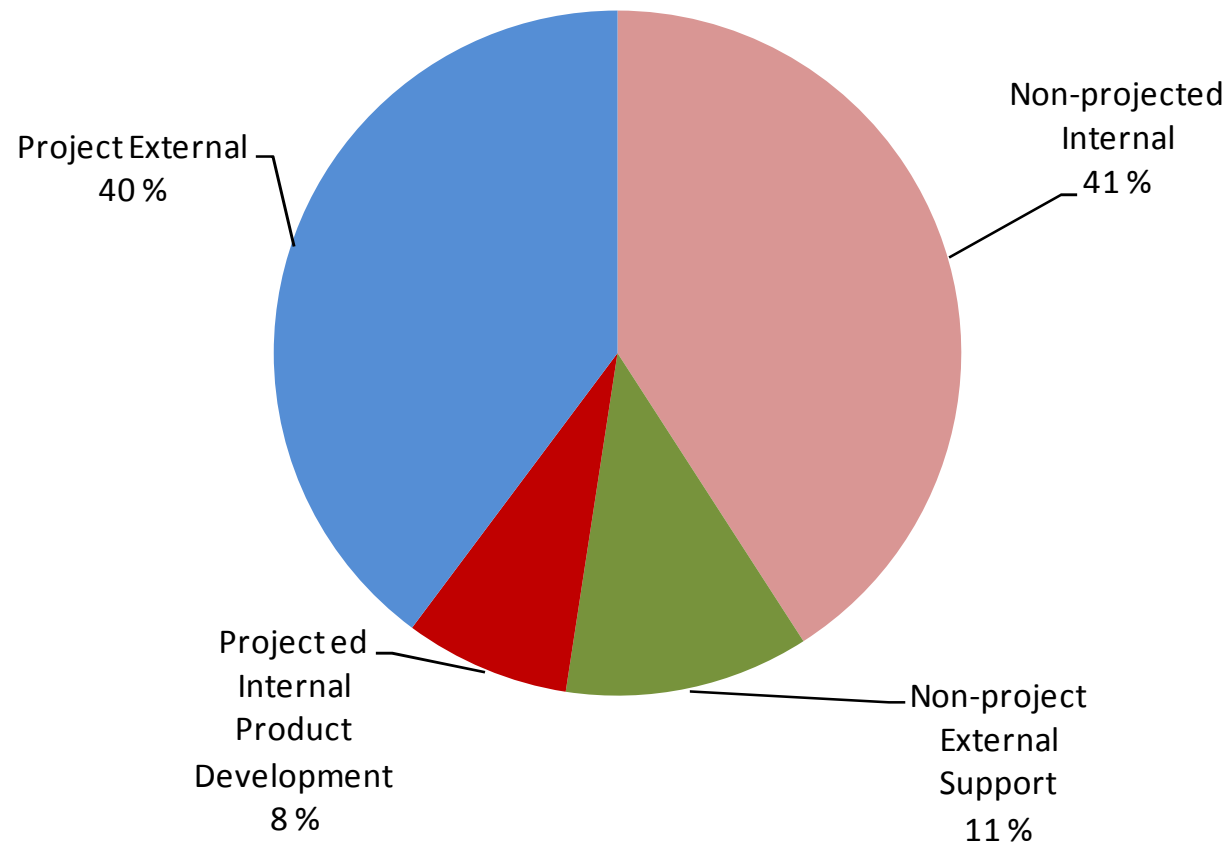
Matrix enables

- Resource Fluidity and
- Strategic Agility

Matrix requires

- Efficient work management tools
- Slick task status visibility
- Straightforward effort and remaining effort reporting (two directions)

Work effort distribution



All work logged in Agilefant.org tool:

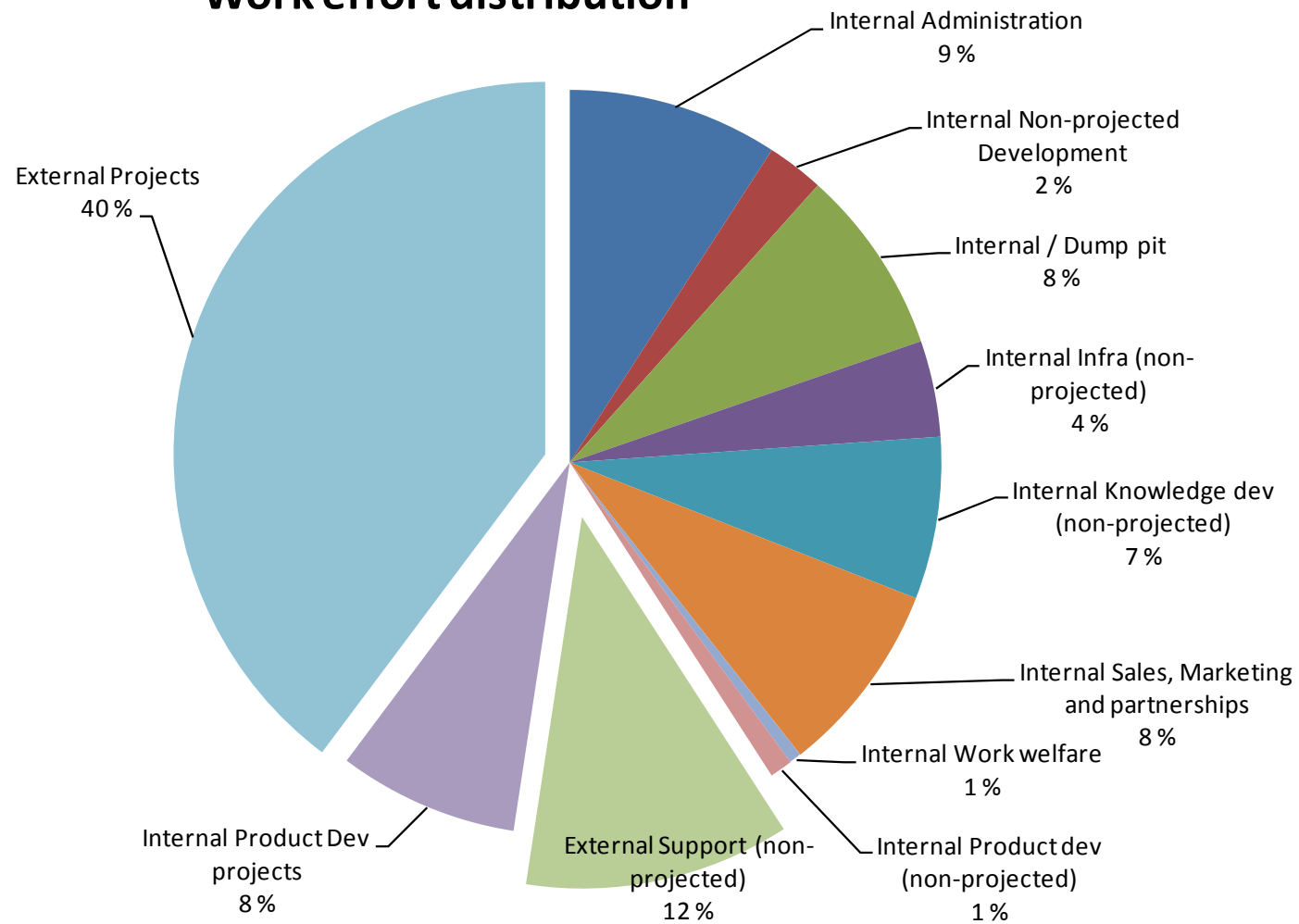
- Product, project, iteration, story, task
- Comment
- [h]

48% of work is in external or internal projects

52% of work is outside projects

Sum of Spent effort			Year <input type="button" value="2009"/> Mon <input type="button" value="2010"/>													Grand Tot
			<input type="button" value="2009"/>									<input type="button" value="2010"/>				
Int-Ext	Product*	Project*	5	6	7	8	9	10	11	12	1	2	3	4	5	
<input type="button" value="Internal"/>	<input type="button" value="IPSS Internal"/>	Administration	409	333	164	357	410	373	300	246	291	260	306	272	259	3979
		Dump pit	246	276	194	323	313	256	271	266	258	264	313	291	250	3520
		Development	165	92	16	69	115	80	49	83	51	49	69	120	120	1077
		Infra	82	104	56	121	196	195	237	179	217	137	114	103	81	1822
		Knowledge dev	401	347	196	279	173	214	213	105	198	338	225	217	162	3069
		Sales, Marketing and p	300	255	25	292	348	356	268	275	270	276	346	324	332	3668
		Work welfare	12	3	1	9	16	2	1	23	13	39	100	7	2	227
		IPSS Internal Total	1614	1410	652	1451	1571	1476	1340	1177	1297	1362	1473	1333	1206	17363
	<input type="button" value="Product dev"/>	Product Dev	227	144	128	175	223	257	249	241	223	187	528	401	415	3398
		Concepting									6	11	16	1	6	40
		Fixes			17	20	22	8	2	2	3	1	1	1	1	78
		Evaluations							16	30	38	33	21	33	13	213
		Roadmapping		1	15	1	11	12	14	9	2	3	8		11	91
	Product dev Total		228	176	149	208	243	289	290	290	271	232	563	432	449	3820
Internal Total			1842	1586	801	1659	1814	1765	1630	1468	1568	1593	2036	1765	1655	21183
<input type="button" value="External"/>			1879	1882	920	1452	2016	1982	2204	1727	1611	1743	1573	1584	1761	22336
Grand Total			3721	3468	1722	3112	3830	3747	3835	3195	3179	3336	3609	3349	3416	43519

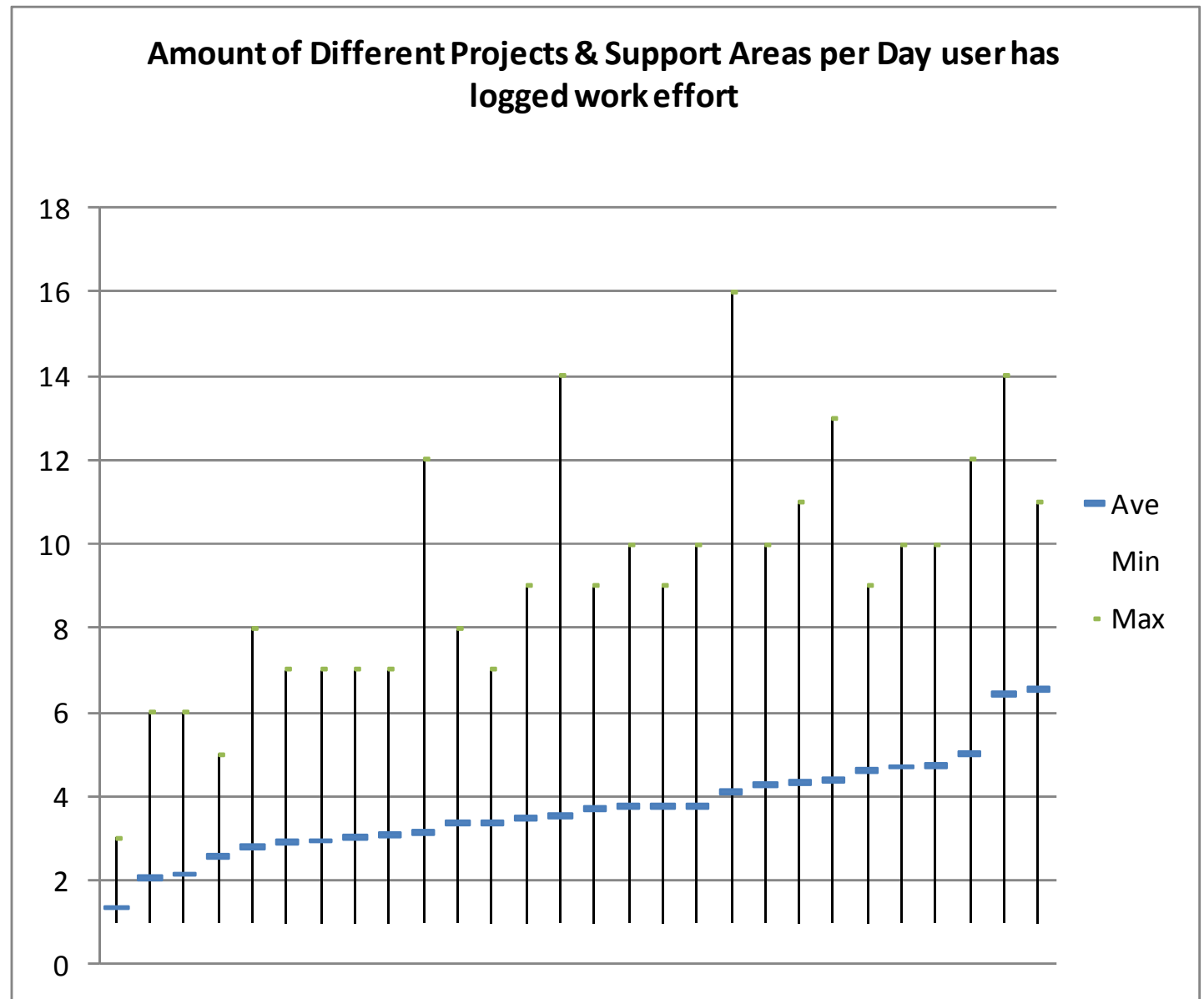
Work effort distribution



Can the company do better?

(Q2) Based on collected data, what kind of improvements can be achieved in the effectiveness of work?

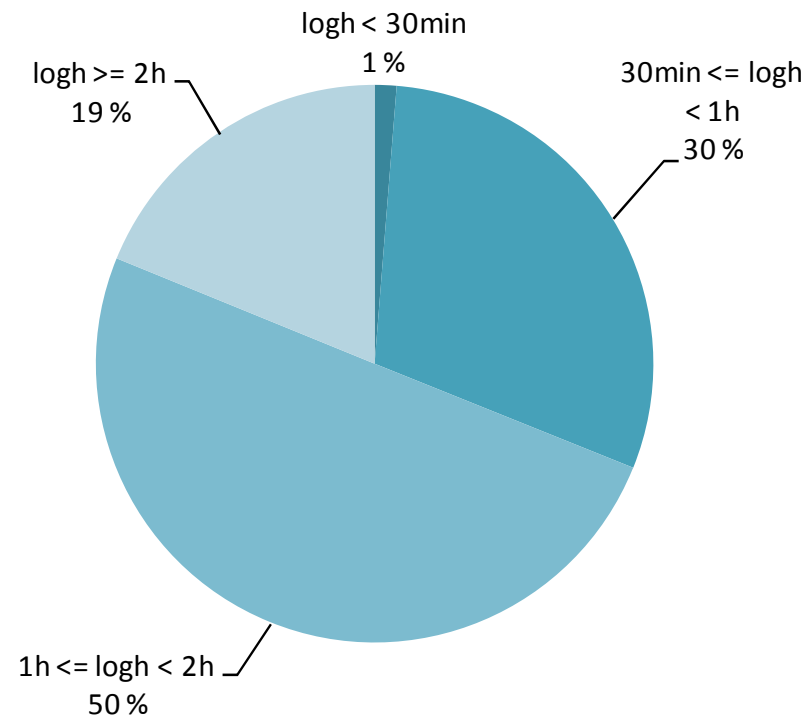
Amount of projects & work areas per day



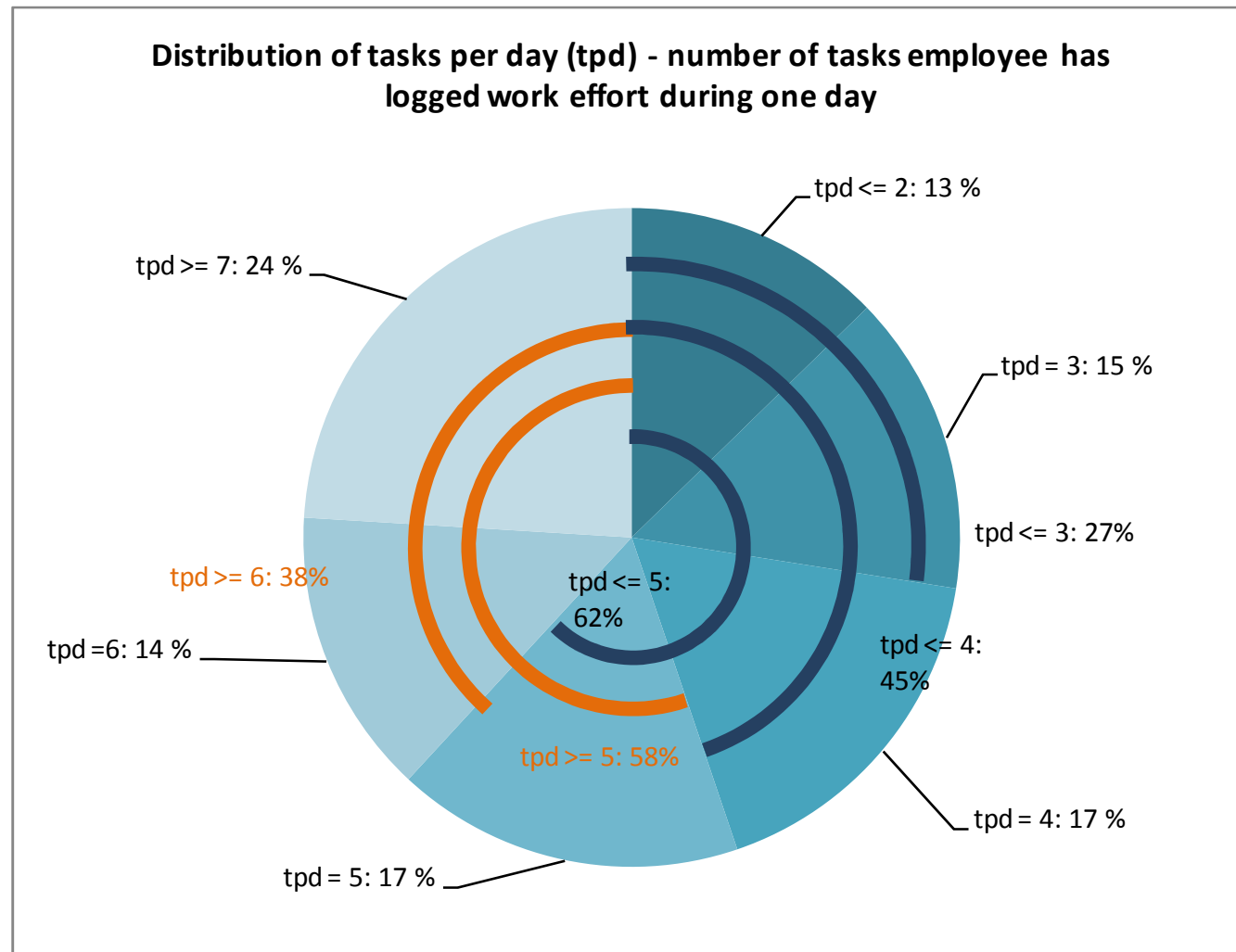
“Actual non-interrupted lengths may be even shorter because employees commonly log the daily effort into one task at once even though they were interrupted in the mean time.”

Employees

Distribution of lengths [h] of logged effort



How long do you work for one project during one day?
Only 19%: at least 2 hours
81%: less than 2 hours



“Only 27% of the work days were such that the employee was working at most three projects / work areas. “

“On 58% of the work days the employee was working on at least five projects ¹¹ / work areas.”

“Employees are working on too many different tasks on each day and week. “

Less work gets done by the same effort because the effort used for task switching is waste.
(Poppendieck & Poppendieck 2007).

When knowledge workers have three or four tasks to do, they will often spend more time in resetting their minds as they switch to each new task than they spend actually working on it.
(Poppendieck & Poppendieck 2007)

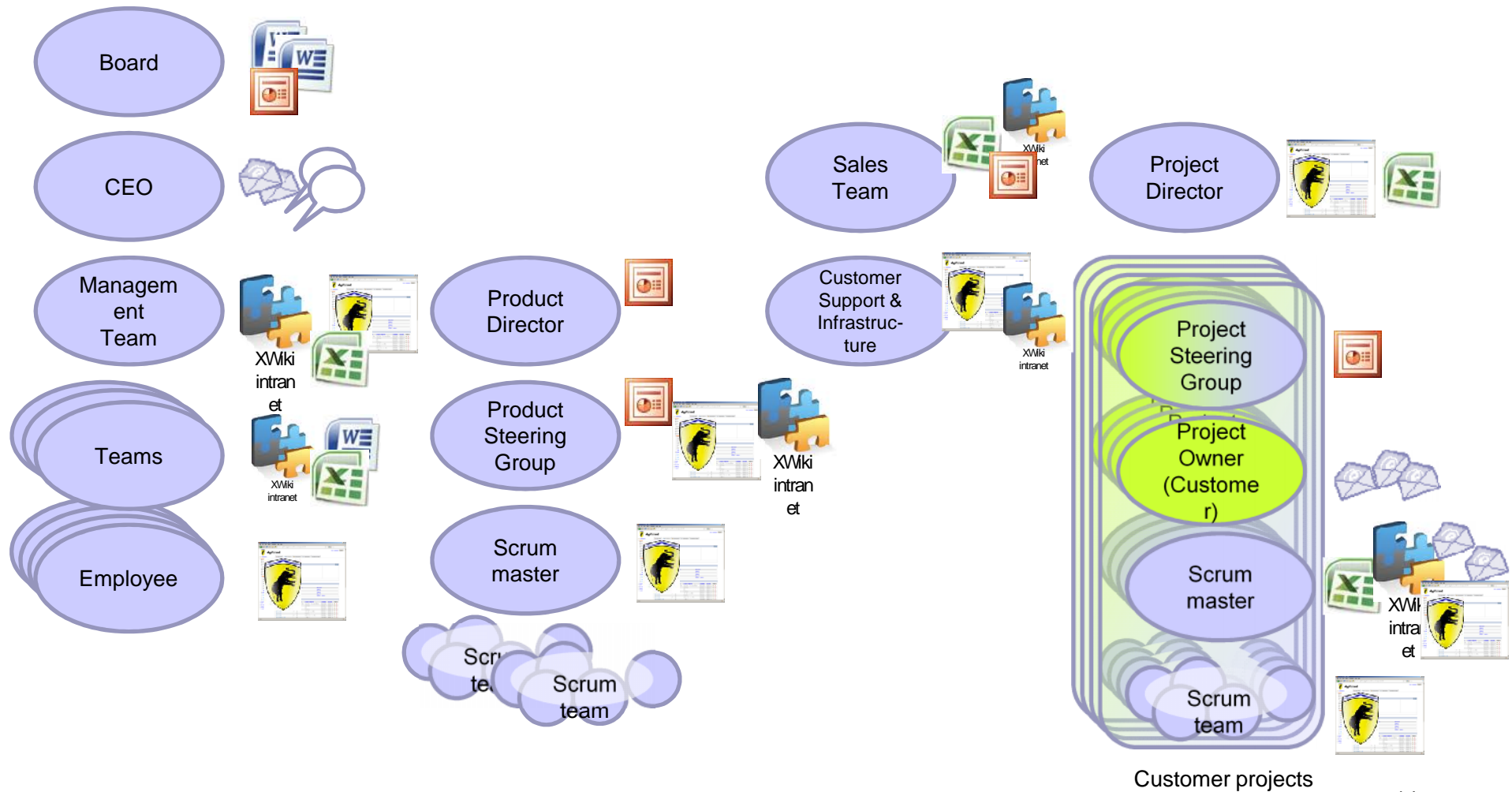
If more than 10 interrupts occur during a day, the time between the interrupts becomes too short to accomplish product development work.
(Solingen et al. 1998)

“The company has a significant potential for improvement in work effectiveness if the amount of tasks in-process at the same time is diminished.”

Why is this happening?
How can the situation be
improved?

How Work Is Managed

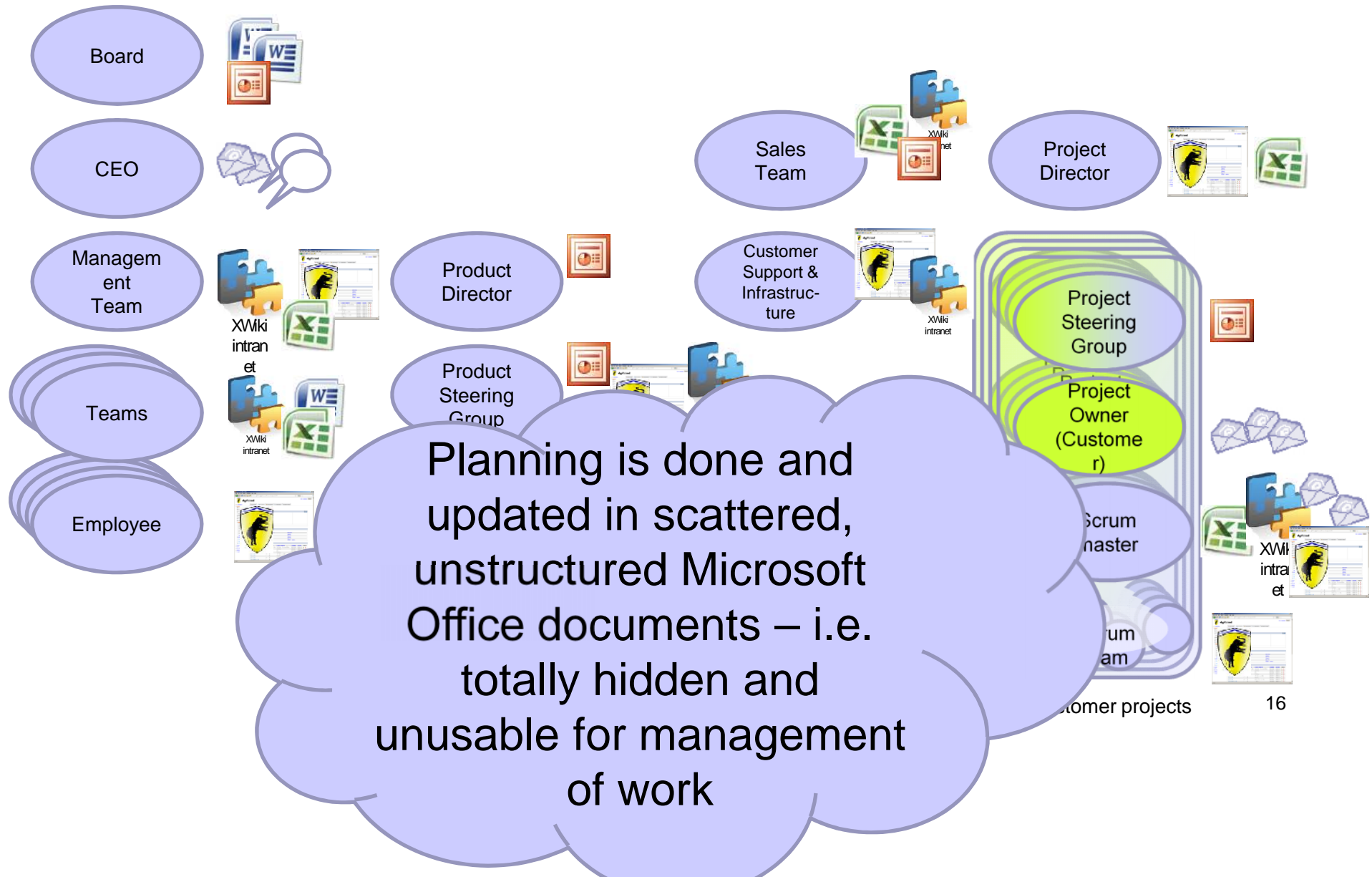
– Actors & Tools

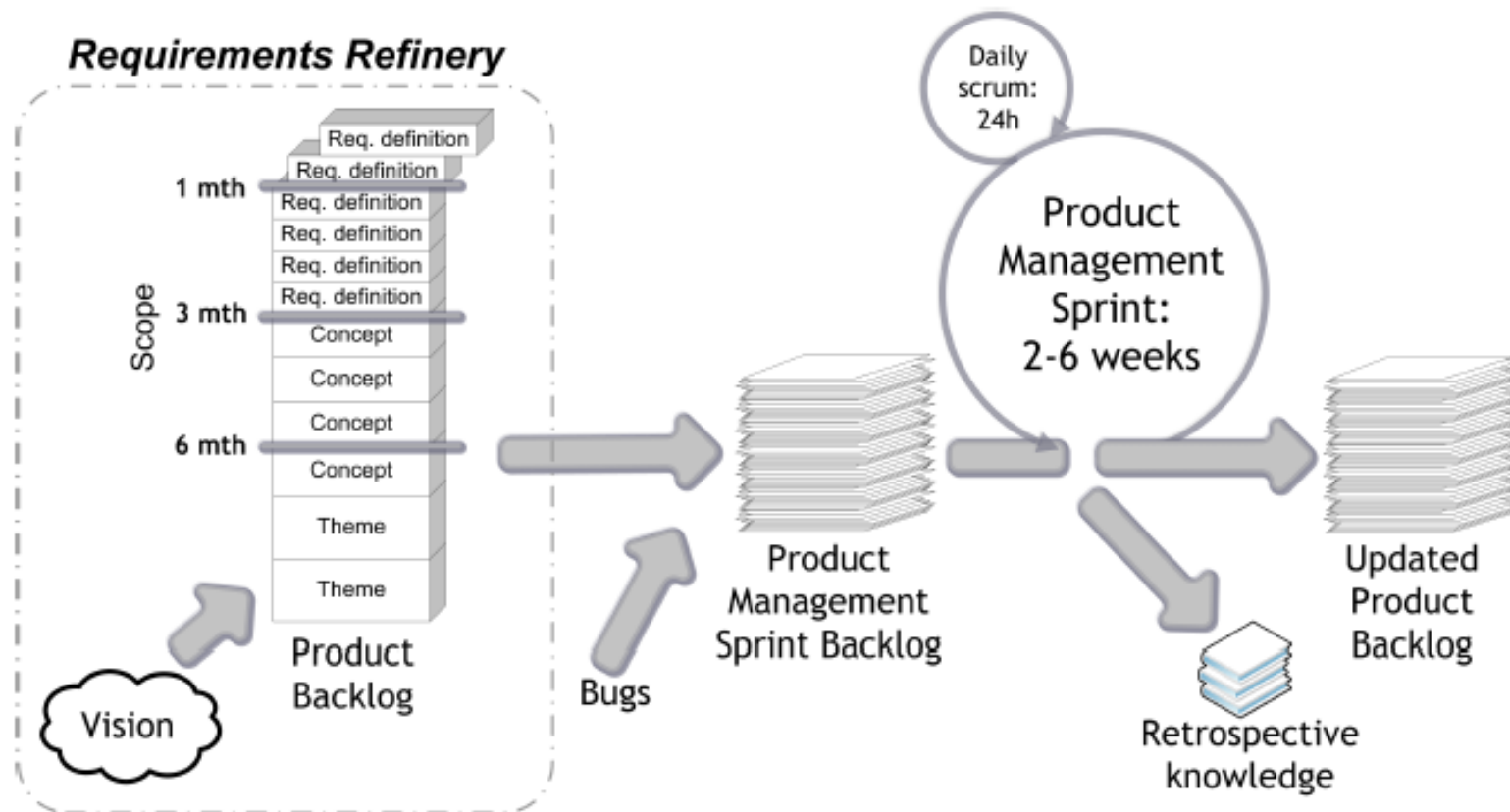


Improvement suggestions by management team members

Tools	22	85%
Management	8	31%
Future planning	15	58%
	26	100%

	Tool	Mgmt	Future
Suggested improvement			
Better model: How to react and interact if challenges are detected in a project		X	
Better model to communicate company level focus changes or progress in big subjects	X		X
Better model for agreeing who is responsible for each task	X		
- visibility of the responsibilities			
- communication of the changes in responsibilities			
- employees do not perceive their load			
Challenges at task level are not always notified. Agilefant is not highlighting the problems.	X		
More efficient tools and work model for gaining ideas and suggestions.	X	X	X
- support for many sources of ideas: internal processes, customer cases, sales cases, ..			
- big picture of ideas			
Quarter review of the strategy. Wider involvement by employees.		X	
More visibility on long-term goals and next quarter goals	X		X
- currently board is not making its decisions easily visible and understandable			
More visibility on how goals and strategy are linked	X		X
More functional planning tools	X		X
- in one place			
- decisions visible: what is done / what not			
Tools for prioritization of tasks between projects	X		X
- in most of the cases decision could be made by responsible			
Continuous collection of ideas	X	X	X
- management of received ideas			
Tool for working on roadmap for the board	X		X
- "one slide" → big goals, not necessarily tied to time			
- order of progress: what first, what then,			
- technology team goals (knowledge development)			
Better tools for technology team level	X		X
- for discussing and treating issues			
- team member status reporting			
- future load visibility and planning			
Company goals	X		X
- present the vision of optimal situation			
- more straightforward linkage to sales operations and goals			
Reduce the amount of work done without clear objective	X	X	
Road map of the future goals should be visible to all	X		
Management model of IPSS is not clear		X	
many views to steering (team leader, project manager, top mgmt)			
visibility of decision or suggestions made at different forums			
Technology team meetings are not useful enough. Technology team role clarification	X	X	
Project portfolio status report and forthcoming things shown in flat screens in the kitchen	X		
Activities better linked with Strategy.	X		X
Better visibility to resource usage and assignment. There is many parties who need this information, i.e. project manager, team leader, responsible employee	X		
Better tools for progress follow-up	X		X
- progress vs. goal			
- progress vs. forecast			
- progress vs. last check			
- effort lefts should be updated			
More effective communication of strategy to all	X		X
- focus and focus changes			
- progress and progress follow-up (clear, measurable goals should be defined, ability to measure)			
- activities required for success			
- linkage to knowledge development			
More concrete communication (→ easier to remember)	X		X
- in the future this should change..			
- in the future this is staying..			
Better linkage on company strategy and to areas team leaders need to improve knowledge in their technology team	X		X
Support mentoring to grow shared best-practices		X	



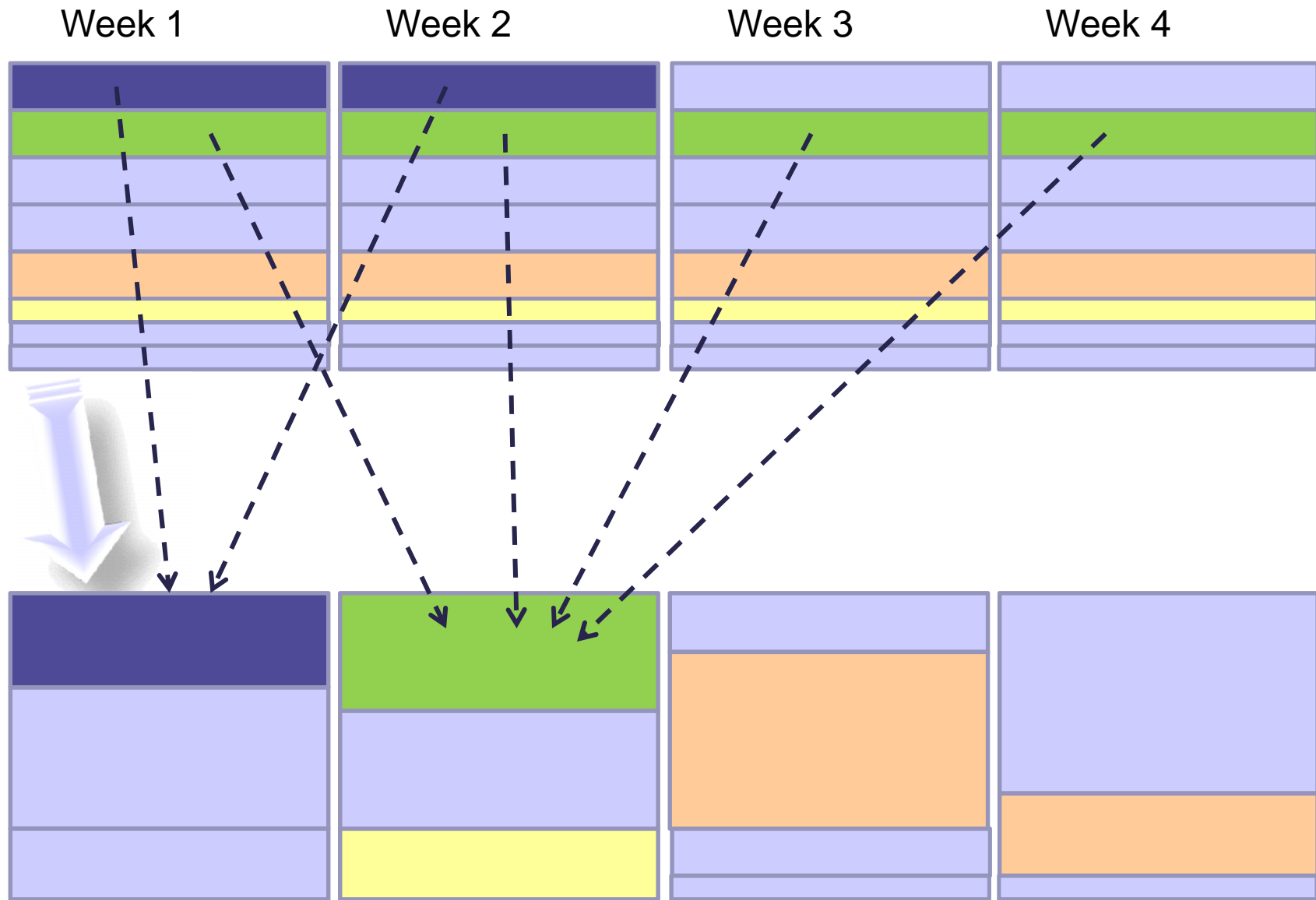


Agile Software Product Management by Vlaanderen et al. (2009)

NOTE:

- 1) Only 48% of work is currently in projects
- 2) The company is a small company
→ small number of employees, many functions & tasks to perform

Better planning

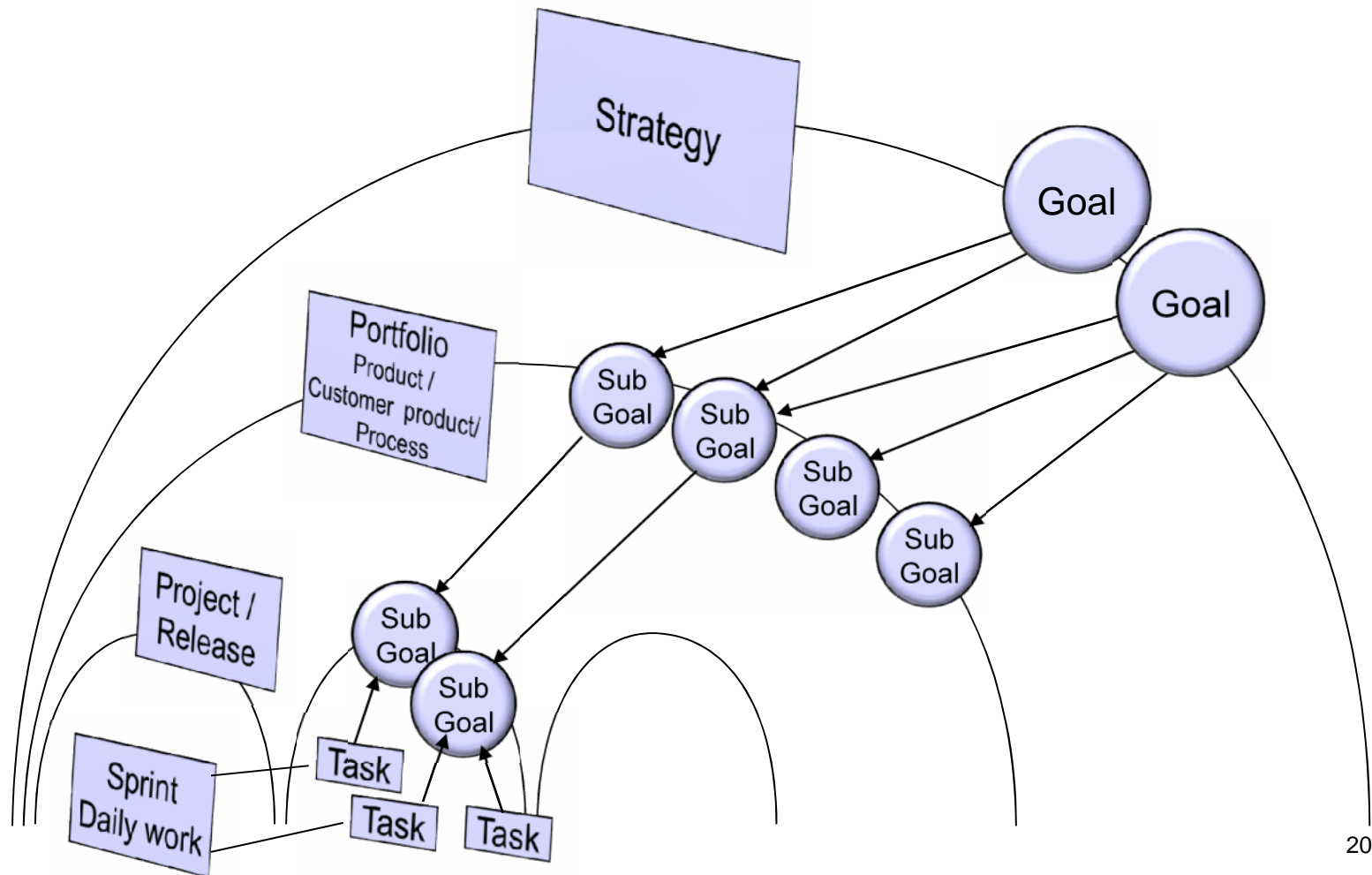


A suggestion for a tool to support *strategy implementation*

Scope

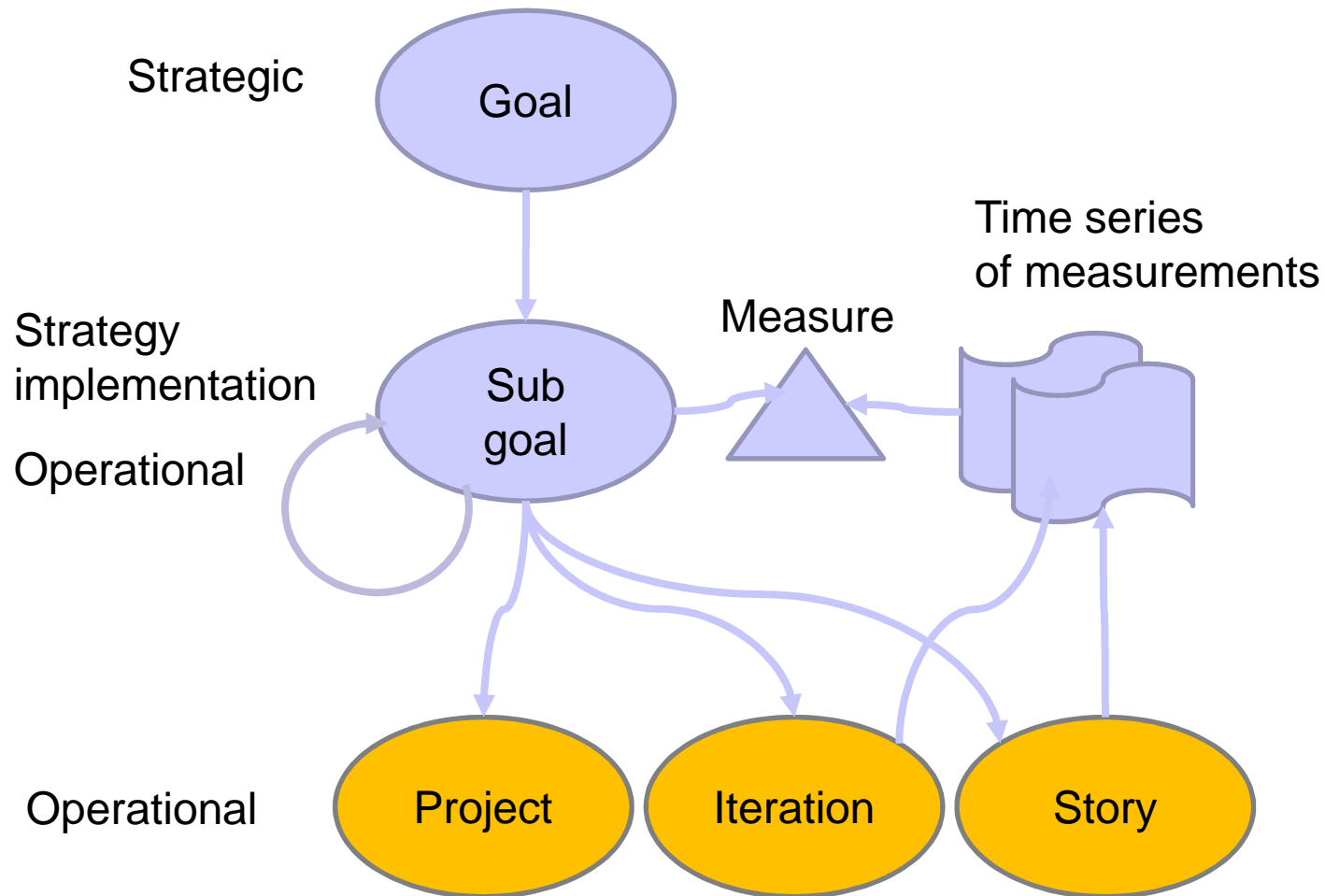
- All work – not just projects
- Tool(s) for planning the forthcoming work (choices, focus / priority, schedule)
- Suitable tools for a Small Company i.e. very simple and very practical

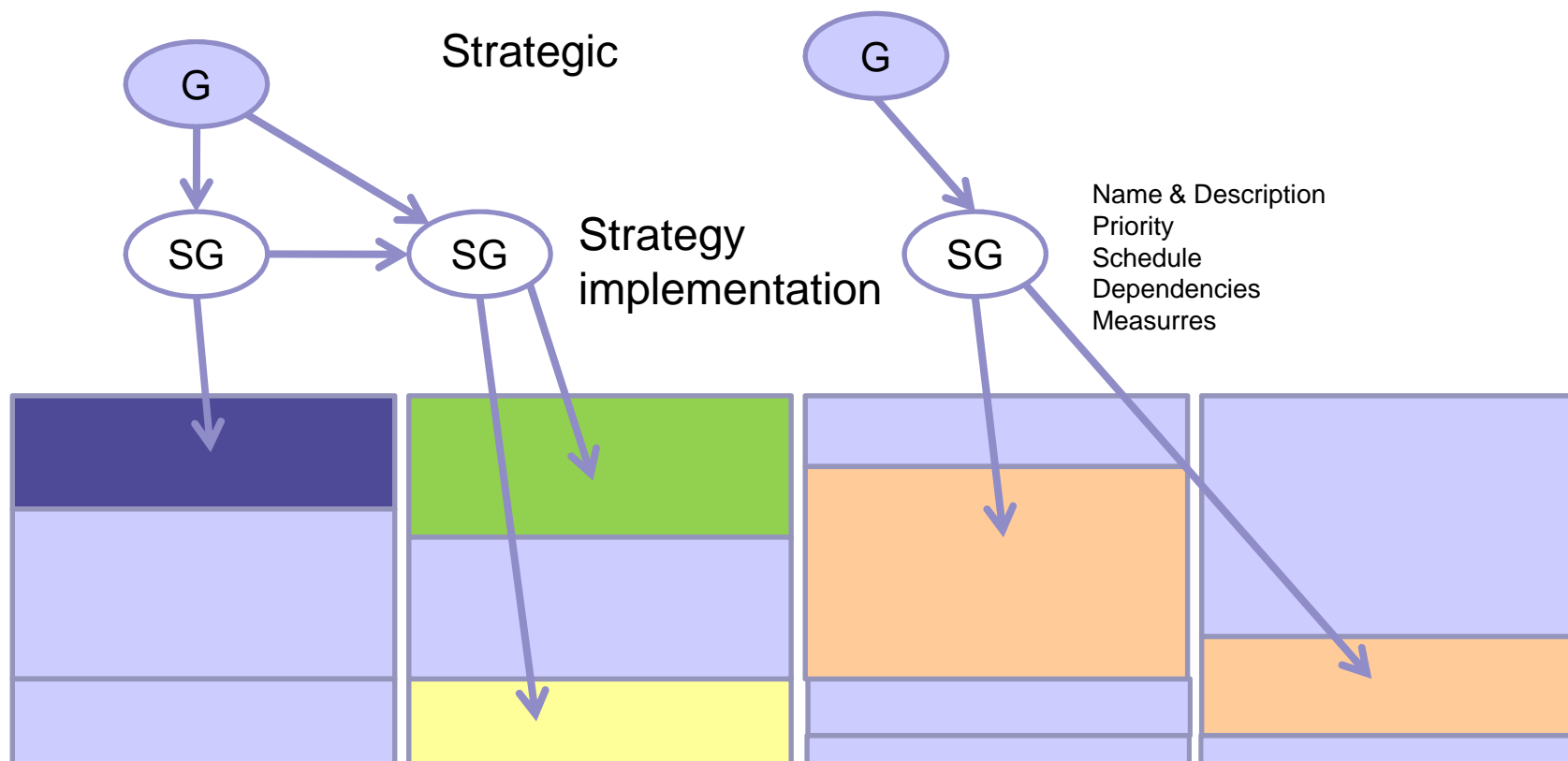
Goal – Sub Goal Model Idea



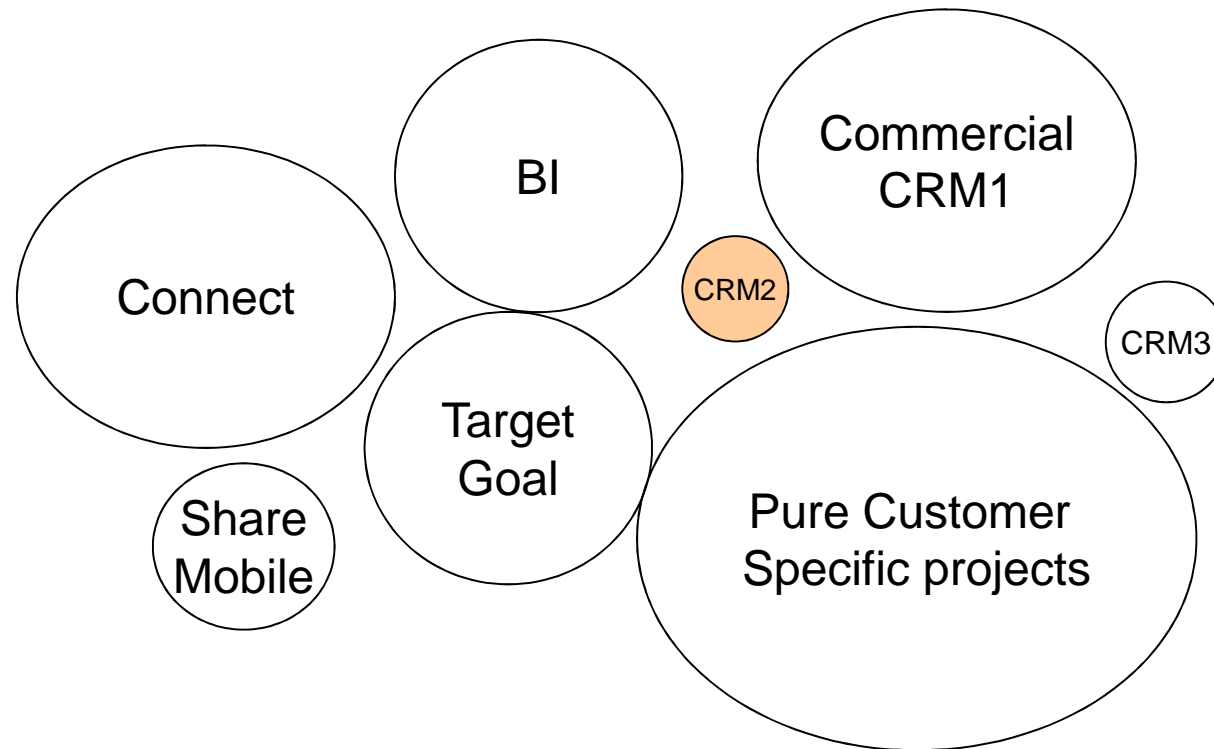
Goal - Sub Goal Model

Entities & Structure

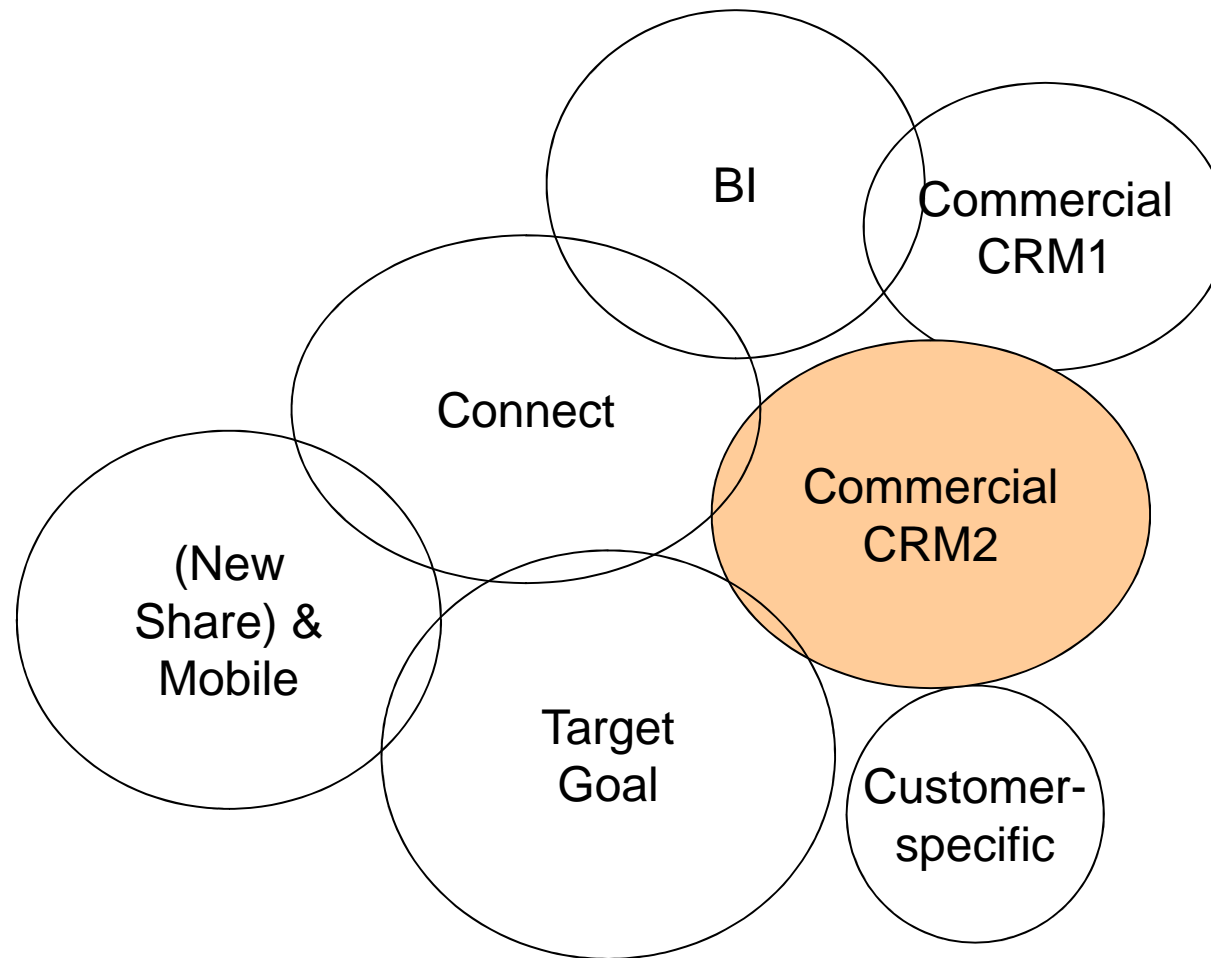




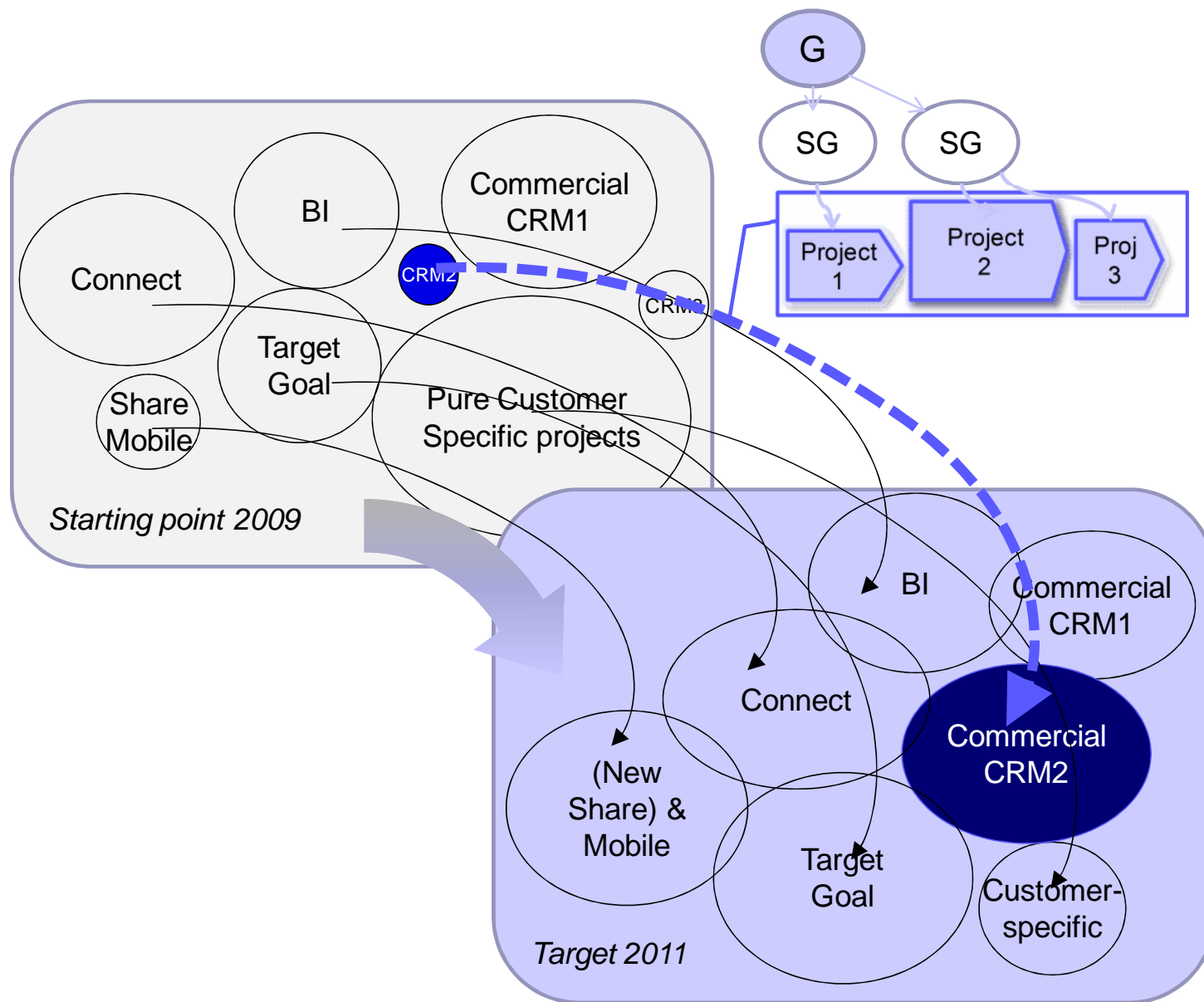
Example of strategy implementation



Current business areas of the company by
volume at 2009



Goal for 2011: Targeted business areas by volume. The company sees much opportunity in CRM2 area for example.



Examples pages from the piloted Xwiki implementation

XWIKI
GOAL
TERHO NORJA
LOG-OUT

IPSS
search...

EDIT
EXPORT
MORE ACTIONS
WATCH

Goal Management

Goal Management

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IPSS Goals

G	Goal	Description	Sta	Sub goals SG
GFin	IPSS is financially profitable	Stay profitable, profitability >10% of turnover	●	SG-ProjResu, SG-Sales, SG-F2010, SG-Keep, SG-Effi, SG-P-Exis, SG-PD-Contact, SG-Mktng, SG-PD-Target, SG-NC-Siebel, SG-NC, SG-SaaS
GProd	Build new products and enhancements to current products - and get them successfully sold	1) Build new products creating value for customers or 2) enhance current products creating more value and 3) get products successfully sold.	●	SG-ProdDRM, SG-PD-Target, SG-PD-Contact, SG-Know, SG-Effi, SG-Wellf
GImp	Make successful customer Implementations and create good references	Strong implementation and support partner in software having big market share and/or opportunity CRM: Siebel, Salesforce.com, Microsoft Dynamics, iSTEER Contact BI: BO, Oracle BI, Pentaho, Cognos Integration: web services to ERP, Finance, etc.	●	SG-Know, SG-Partner, SG-P-Exis, SG-Wellf, SG-Effi, SG-NC, SG-NC-Siebel, SG-NC-SF, SG-SaaS
GGrow	IPSS grows constantly	Keep growing: increase our ability to build products. Increase company value.	●	SG-Sales, SG-PD-Contact, SG-ProdDRM, SG-P-Exis, SG-PD-Target, SG-NC-SF, SG-NC, SG-Mktng, SG-Keep, SG-NC-Siebel, SG-Partner, SG-F2010, SG-EmpGr, SG-Wellf, SG-Know, SG-Effi

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List of SubGoals

Examples pages from the piloted Xwiki implementation

XWIKI
GOAL

TERHO NORJA
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IPSS

search...

EDIT
EXPORT
MORE ACTIONS
WATCH

Goal Management » GFina Financial Profitability

GFina Financial Profitability

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Goal Description

Stay profitable, keep profitability at least 10% of turnover.

Customer projects need to create positive cash flow and be quite profitable to support also strong investing in product development.

Implementation in SaaS model creates more income from monthly service business.

Sub Goals supporting Goal

SG	SG Name	Imp	Comment	St	Results
SG-ProjResu	Run customer projects profitably	5	Crucial. Most of the income comes from project work. It cannot be backed up with other income sources.	●	Fiscal-2009 Fair, most projects profitable, still some bad projects also
SG-Sales	Develop and run sales	5		●	
SG-F2010	Financial goal for fiscal 2010: Turnover > 2,7 M€	5	Near term goal	●	[Not yet measured]
SG-Keep	Keep profitable customers	5	Very important. At least as far as new customer inquisition does not work better.	●	Fiscal-2009 Good, customer base stable
SG-Effi	Improve effectiveness of work & human resource usage	5	Important as long term success factor.	●	Good - improvements constantly made and road map ahead promising
SG-P-Exis	Get new projects from existing customers	5	Very important, most of IPSS business comes from existing customers. And projects after first project tend to be more profitable than the first ones.	●	Fiscal-2009: weak, no new projects of reasonable size (>20k€)
SG-PD-Contact	Develop and start selling ISTEER Contact	4		●	
SG-Mktng	Develop marketing material, run marketing operations	4		●	
SG-PD-Target	Develop ISTEER Target as Customer Dialogue management tool	4		●	
SG-NC-Siebel	Gain new Siebel customers	4	Very important.	●	Fiscal-2009: actual poor, but promising, no new customer got, good prospects
SG-NC	Gain new customers	3	Important to improve profitability and grow share from licenses and monthly service.	●	Fiscal-2009: poor, only small new customer got
SG-SaaS	IPSS's services delivered profitably as SaaS	2	Promising: SaaS model open new possibilities to make profitable projects.	●	Fiscal-2009: profitability ok, volume going down
			TOTAL	●	Fiscal-2009: expectations were set low ... and met!

Mon Jun 07 06:21:16 EEST 2010

Examples pages from the piloted Xwiki implementation

XWIKI GOAL

[TERHO NORJA](#) [LOG-OUT](#)

EDIT EXPORT MORE ACTIONS

WATCH

[Goal Management](#) » [Sub Goals](#) » SG-Effi Improve effectiveness of work & human resource usage

SG-Effi Improve effectiveness of work & human resource usage

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Active projects

Project	Descr	Imp	Status	Status comment
Lean Enterprise progress 04-06/2010	Lean-mallin suunnittelu ja toteutus IPSS:ssä	5	●	Some risks on gaining enough resources
Develop IPSS portfolio management, decision making and strategy deployment	Tavoitteiden hallinta, tavoitteiden ja tekemisen välinen suhde.	5	●	Project not gaining enough resources

Measures

Group	Measure	Description	Results Past 1/2 Y	Past 1M	Forecast 1M	1Q

Depending Goals and Subgoals

G/SG	Name	Imp
GFin	IPSS is financially profitable	5
GImp	Make successful customer implementations and create good references	3
GProd	Build new products and enhancements to current products - and get them successfully sold	3
GGrow	IPSS grows constantly	2
SG-F2010	Financial goal for fiscal 2010: Turnover > 2,7 M€	5
SG-P-Exis	Get new projects from existing customers	4
SG-ProjResu	Run customer projects profitably	4
SG-SaaS	IPSS's services delivered profitably as SaaS	4
SG-Welf	Increase welfare at work	3
SG-NC-IST	Gain new ISTEER customers	2
SG-NC	Gain new customers	2
SG-NC-SF	Gain new Salesforce customers	2
SG-NC-Siebel	Gain new Siebel customers	2

SubGoal Description

● Conclusion

- The company studied has a significant potential for improvement in work effectiveness
 - the amount of tasks in-process simultaneously should be diminished
- A promising way to improve was designed

● Next steps - Discussion

- Further development and integration of G-SG tool
- Impact of implementation of G-SG tool to be studied
- Is the difficulty in managing simultaneous work-in-process a general challenge for companies of size <50 employees
 - Major restricting factor for growth of small companies?

Thank you

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