Challenges, Pitfalls and Practical Principles of Agile Business Change

by Tom Gilb, Hon. FBCS
and Kai Gilb
Gilb.com

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BCS Covent Garden, 1800 to 2000 frame

Host: Graham Land
<graham_land@episto.co.uk>

14 Pitfalls of Agile methods

- **Change** – Use of top-down, big-bang organization change, adoption, and institutionalization.
- **Culture** – Agile concepts, practices, and terminology collide with well-entrenched traditional methods.
- **Acquisition** – Using traditional, fixed-price contracting for large agile delivery contracts and projects.
- **Misuse** – Scaling up to extremely complex large-scale projects instead of reducing scope and size.
- **Organization** – Unwillingness to integrate and dissolve testing/QA functional silos and departments.
- **Training** – Inadequate, insufficient, or non-existent agile training (and availability of agile coaches).
- **Infrastructure** – Inadequate management and business change tools, technologies, and environment.
- **Interfacing** – Integration with portfolio, architecture, test, quality, security, and usability functions.
- **Planning** – Inconsistency, ambiguity, and non-standardization of release and iteration planning.
- **Trust** – Micromanagement, territorialism, and conflict between project managers and developers.
- **Teamwork** – Inadequate conflict management policies, guidelines, processes, and practices.
- **Implementation** – Inadequate testing to meet iteration time-box constraints vs. quality objectives.
- **Quality** - Inconsistent use of agile testing, usability, security, and other cost-effective quality practices.
- **Experience** - Inadequate skills and experience (or not using subject matter experts and coaches).

- (***Note**. Firms may prematurely "revert" to inexorably slower and more expensive traditional methods or "leap" onto lean methods that may not adequately address common pitfalls of adopting agile methods*.)

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- Source: David Rico http://davidfrico.com/agile-pros-cons.pdf

14 Promises of Agile methods

- **Value** – Delivers highest-priority customer capabilities, features, requirements, and needs.
- **Risk** – Reduces project scope, requirements, size, complexity, and risk.
- **Discipline** – Fast, flexible, and cost-effective, yet highly disciplined planning and delivery method.
- **Efficient** – Small strategy, portfolio, planning, process, work in process, batch, queue, and team size.
- **Feedback** – Uses planned and unplanned daily, bi-weekly, and release feedback cycles.
- **WIP Constraints** – Uses portfolio, capability, feature, user story, and iteration size constraints.
- **Teamwork** – Small, high-performing, fast, and cost-efficient cross-functional, multi-disciplinary teams.
- **Requirements** – Uses collaboration and rapid feedback to elicit hidden, inexpressible user needs.
- **Architecture** – Uses lean, just-enough, just-in-time, and high-performing architectures and designs.
- **Design** – High-performing, loosely-coupled functional slices validated and delivered one-at-a-time.
- **Flexibility** – Fast, inexpensive, and abstractive workflow, business change, and delivery technologies.
- **Quality** – Automated verification, validation, configuration mgt., documentation, and deployment.
- **Complete** – Combines of state-of-the-art business, lean, and technical principles and practices.
- **Improvement** – Built-in daily, bi-weekly, and release process improvement cycles.

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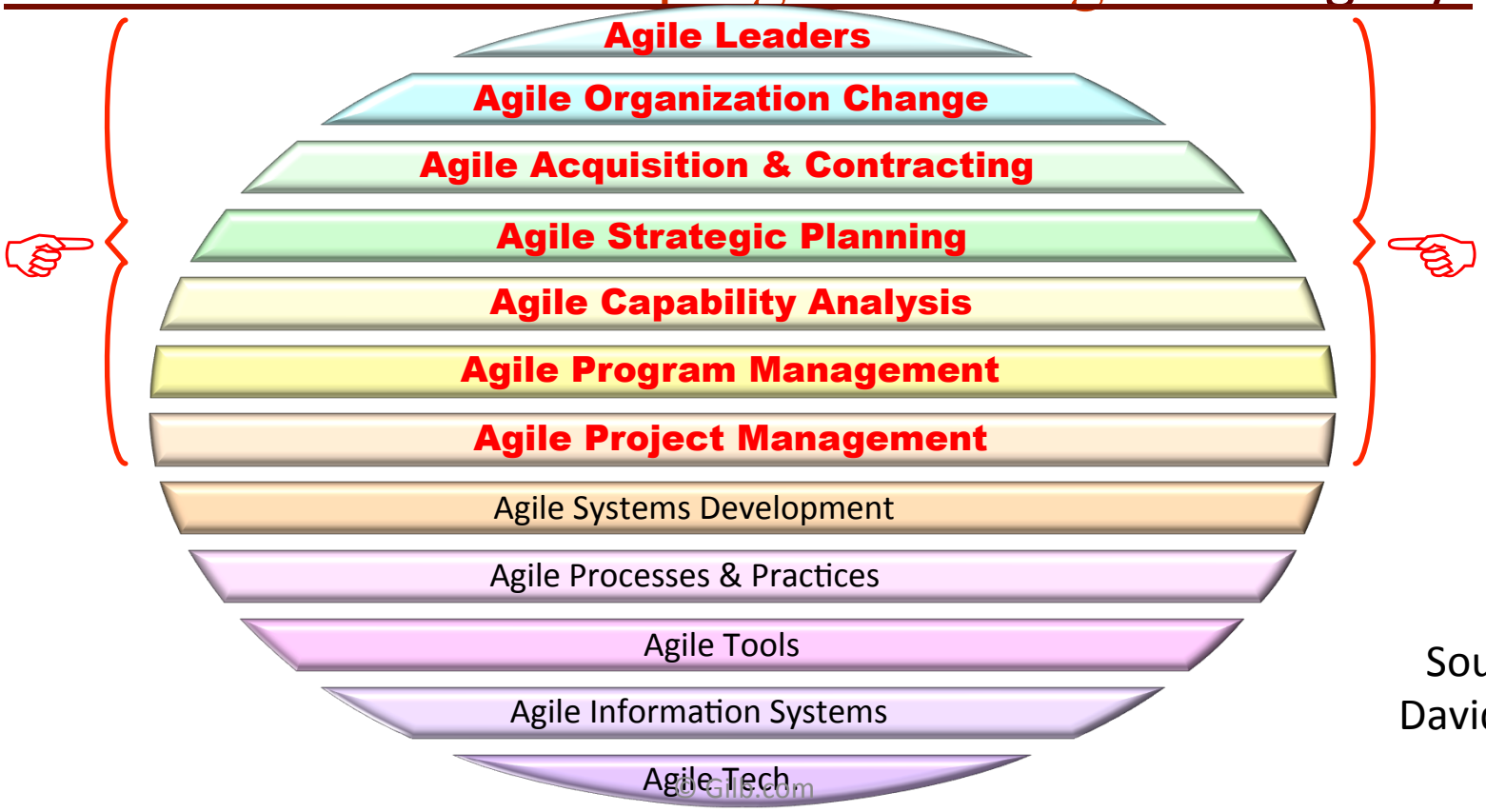
- "Agility" has many dimensions other than IT
- It ranges from leadership to technological agility
- The focus of this brief is program management agility



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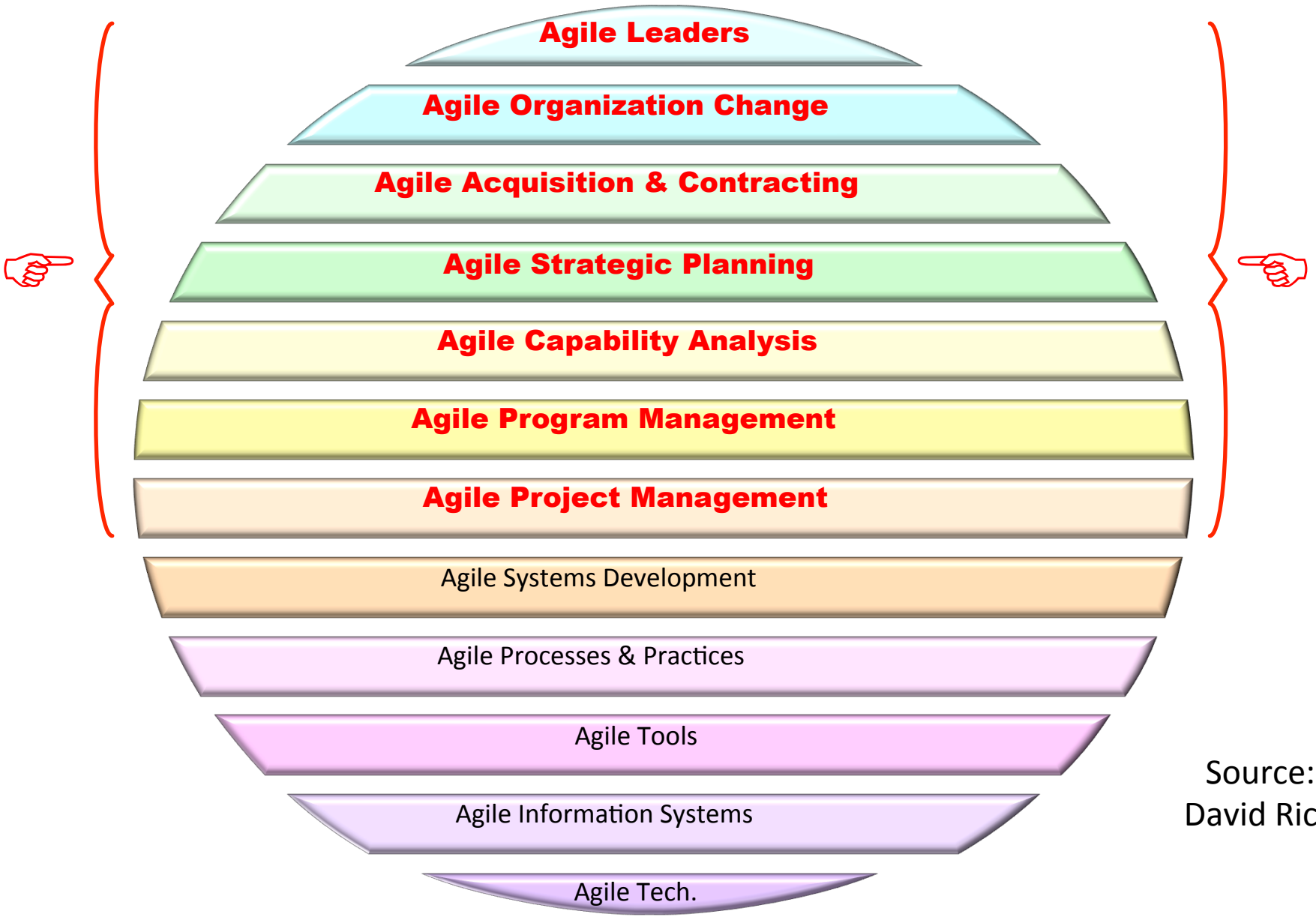

Source:
David Rico

- Agile management is delegated to the lowest level
- There remain key leadership roles & responsibilities
- Communication, coaching, and facilitation key ones

1	Customer Communication	Facilitate selection of methods for obtaining and maintaining executive commitment, project resources, corporate communications, and customer interaction
	Product Visioning	Facilitate selection of methods for communicating product purpose, goals, objectives, mission, vision, business value, scope, performance, budget, assumptions, constraints, etc.
	Distribution Strategy	Facilitate selection of virtual team distribution strategy to satisfy project goals and objectives
2	Team Development	Facilitate selection of methods for training, coaching, mentoring, and other team building approaches
	Standards & Practices	Facilitate selection of project management and technical practices, conventions, roles, responsibilities, and performance measures
	Telecom Infrastructure	Facilitate selection of high bandwidth telecommunication products and services
	Development Tools	Facilitate selection of agile project management tools and interactive business change environment
3	High Context Meetings	Facilitate selection of high context agile project management and business change meetings
	Coordination Meetings	Facilitate selection of meetings and forums for regular communications between site coordinators
	F2F Communications	Facilitate selection of methods for maximizing periodic face to face interactions and collaboration
	Performance Management	Facilities selection of methods for process improvement, problem resolution, conflict management, team recognition, product performance, and customer satisfaction

Maholtra, A., Majchrzak, A., & Rosen, B. (2007). Leading virtual teams. *Academy of Management Perspectives, 21*(1), 60-70.
Hunsaker, P. L., & Hunsaker, P. L. (2008). Virtual teams: A leadership guide. *Team Performance Management, 14*(1/2), 86-101.
Fisher, K., & Fisher, M. D. (2001). *The distance manager*: *A hands on guide to managing off site employees and virtual teams*. New York, NY: McGraw-Hill.

Agile Policy

- Focus Fanatically on **Early incremental delivery of real improvement**, *as defined officially in our Balanced Scorecard.*

- Do NOT allow long, large-funding projects to exist, *unless* they **produce** incremental results *early* and *often*

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What does ‘Agile’ really mean for The Company?

1. Frequent, Early, Continuous stream of **measurable results**, locked in

2. **Empowerment** to focus on the *results*; be judged by the *results*; and to decide frequently what *really* works, and what does not, based on facts.

3. Real ability **to learn fast** what works, and to **change,** both objectives and strategies, in response to external stakeholder needs.

Management Pre-requisites

- Tactics you have to master to be 'Agile'
  - 1. Project or Activity '**Decomposition by Deliverable Value**'
    - 20 Principles, 111111 Method (Gilb)
  - **2. Quantification** and later, Measurement of **Critical Objectives**, and sub-attributes (CPI's)
  - 3. Responsibility assignment for Results
  - Empowerment to choose and manage the 'means'

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Management Actions Sequence

- Overview
  - 1. agree to this Agile Policy
  - 2. Adopt initial set of Quantified Results Objectives
  - 3. Empower Managers and their Result Teams to go after the results

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Suggested Policy for Top level Objectives

- **Top level objectives shall:**
  - **Be expressed as one or more, quantified and measurable, relevant and critical, attributes**
    - **So we get extreme clarity of purpose, shared vision, trackable effort to get results**
  - **Contain one or more numeric 'benchmarks'**
    - **So we know exactly where we are, our baselines.**
  - **Contain one or more numeric *constraints***
    - **So we are well aware of the *worst acceptable* improvement, and can prioritise that level at least.**
  - **Contain a set of Targets (*to represent our ambitions and realities)***
    - **So we can select near-term wins, for critical, high-volume, cases**
  - **Contain a shortlist of critical Stakeholders (with direct contact)**
    - **So we know who to consult about content and changes**
  - **Contain Result Responsibility managers and groups**
  - **And much more (see Planguage templates, CE book, for specific ideas)**
    - **These Objectives are our primary purposes, and we need to invest deeply in them!**

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Agile Result Delivery

Policy

- Teams will normally deliver (prove on small scale) improved results weekly
- Successful results will be scaled up as fast as possible
- The basis for any increment will be the current organization and systems
- Investment will prioritise successful efforts and teams

Consequences

- Holistic thinking will be necessary
  - (not just 'IT' or 'code')
- Visible improvements will happen fast (this year)
- There will be no big infrastructure investments without gradual early proof of effectiveness

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The 12 Tough Questions

1. Why isn't the improvement quantified?

2. What is the degree of the risk or uncertainty and why?

3. Are you sure? If not, why not?

4. Where did you get that from? How can I check it out?

5. How does your idea affect my goals, measurably?

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6. Did we forget anything critical to survival?

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7. How do you know it works that way? Did it before?

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8. Have we got a complete solution? Are all objectives satisfied?

9. Are we planning to do the 'profitable things' first?

10. Who is responsible for failure or success?

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11. How can we be sure the plan is working, during the project, early?

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12. Is it a ‘no cure, no pay’ contract? Why not?

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10. Who is responsible for failure or success?

11. How can we be sure the plan is working, during the project, early?

12. Is it 'no cure, no pay' in a contract? Why not?

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There is a detailed paper on these questions at Gilb.com

http://www.gilb.com/tiki-download_file.php?fileId=24

The 12 Tough Questions

Free Paper explaining this is at

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- Or
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  - Downloads
  - Search '12 Tough'

The ‘Bring’ Case

- How Scrum Development can Fail the Business
- And How to make sure the Business succeeds
- By KaiGilb

Value Management (Evo) with Scrum development

- developing a large web portal www.bring.no dk/se/nl/co.uk/com/ee at Posten Norge

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history

- **Posten Norge AS bought a series of companies**
  - within Logistics, Package transport, CRM and Storage
  - in Norway, Sweden, Denmark, Finland, UK, Holland and Estonia.

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Some Players

Posten

Webteam - Value Management Certified

Project Owner: Anne Hognestad anne.hognestad@posten.no

Product Owner: Terje Berget terje.berget@posten.no

Lin Smitt-Amundsen & Kristin Nygård

Many Business Groups and internal stakeholders.

Kjetil Halvorsen kjetil.halvorsen@posten.no

Bekk & Ergo Group

Scrum Master: Fredrik Bach fredrik.bach@bekk.no

Technical Architect: Stefan M. Landrø: stefan.landro@bekk.no

Graphics: Espen Satver

Morten Wille Johannessen, Markus Krüger, Dag Stepanenko

NetLife Research

User Experience: Gjermund Also gjermund@netliferesearch.com Kjell-Morten Bratsberg Thorsen

Kai Gilb: Management Coach: Kai

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Value Certificate
Decisions - Trained
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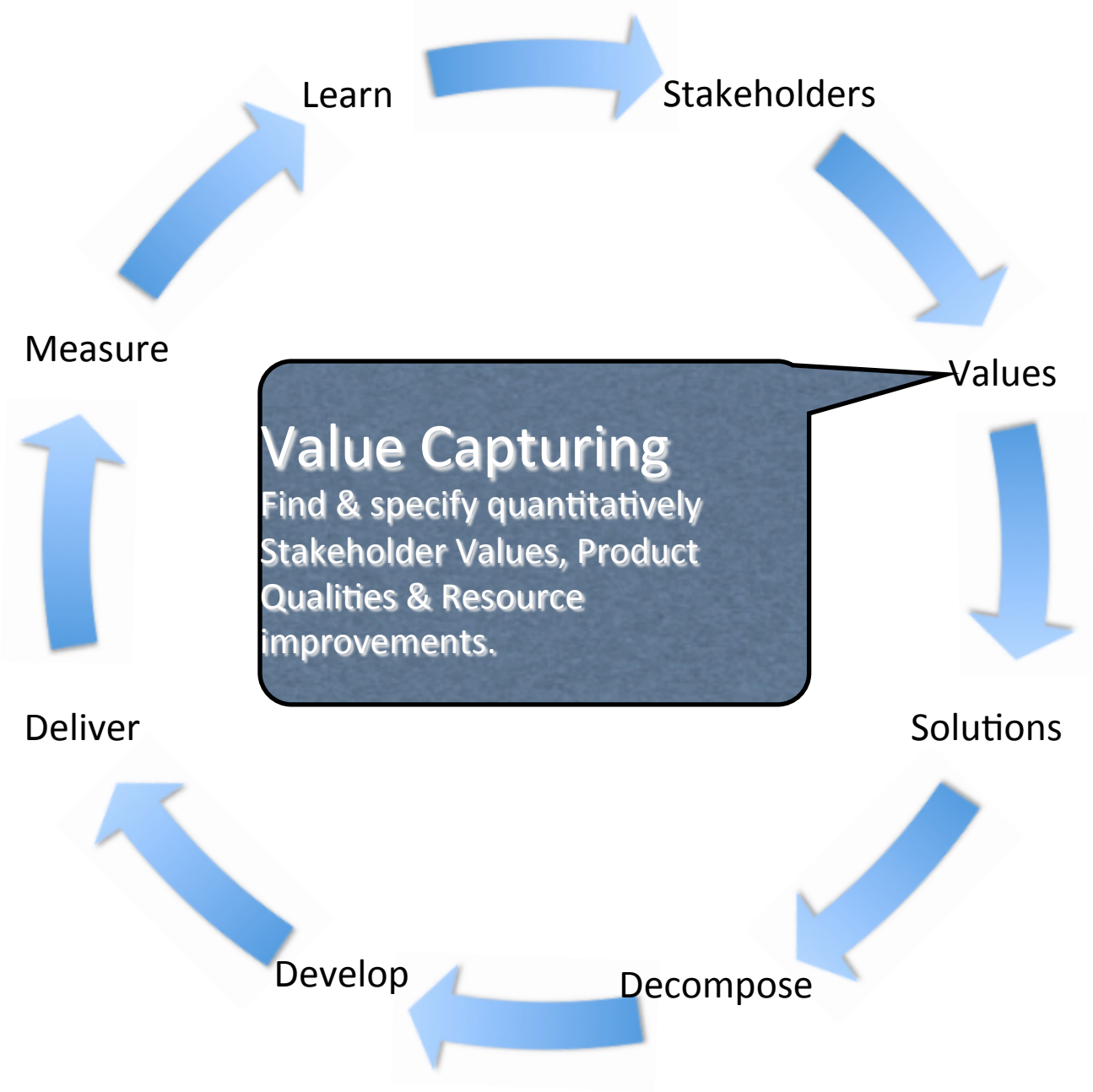

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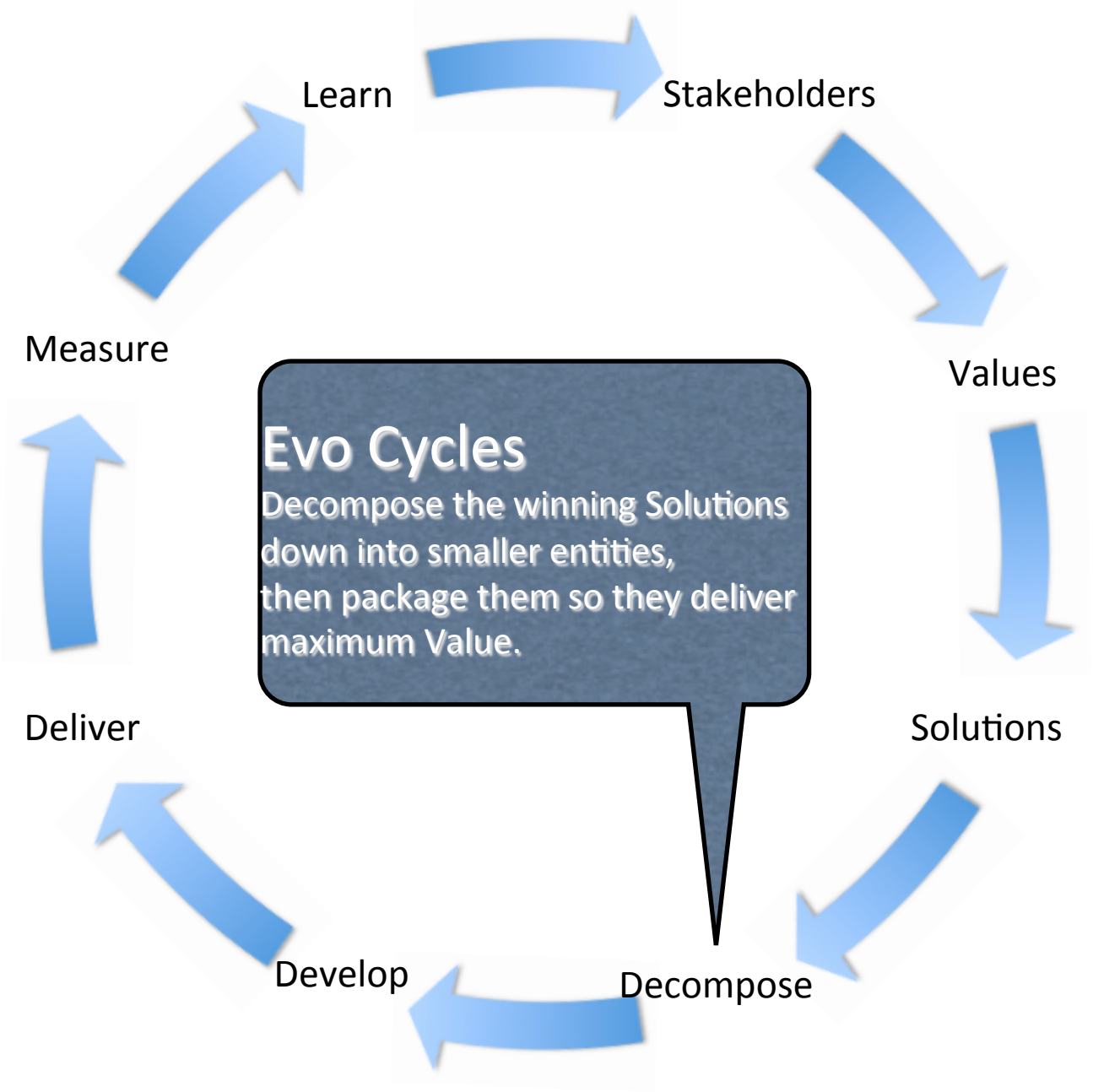

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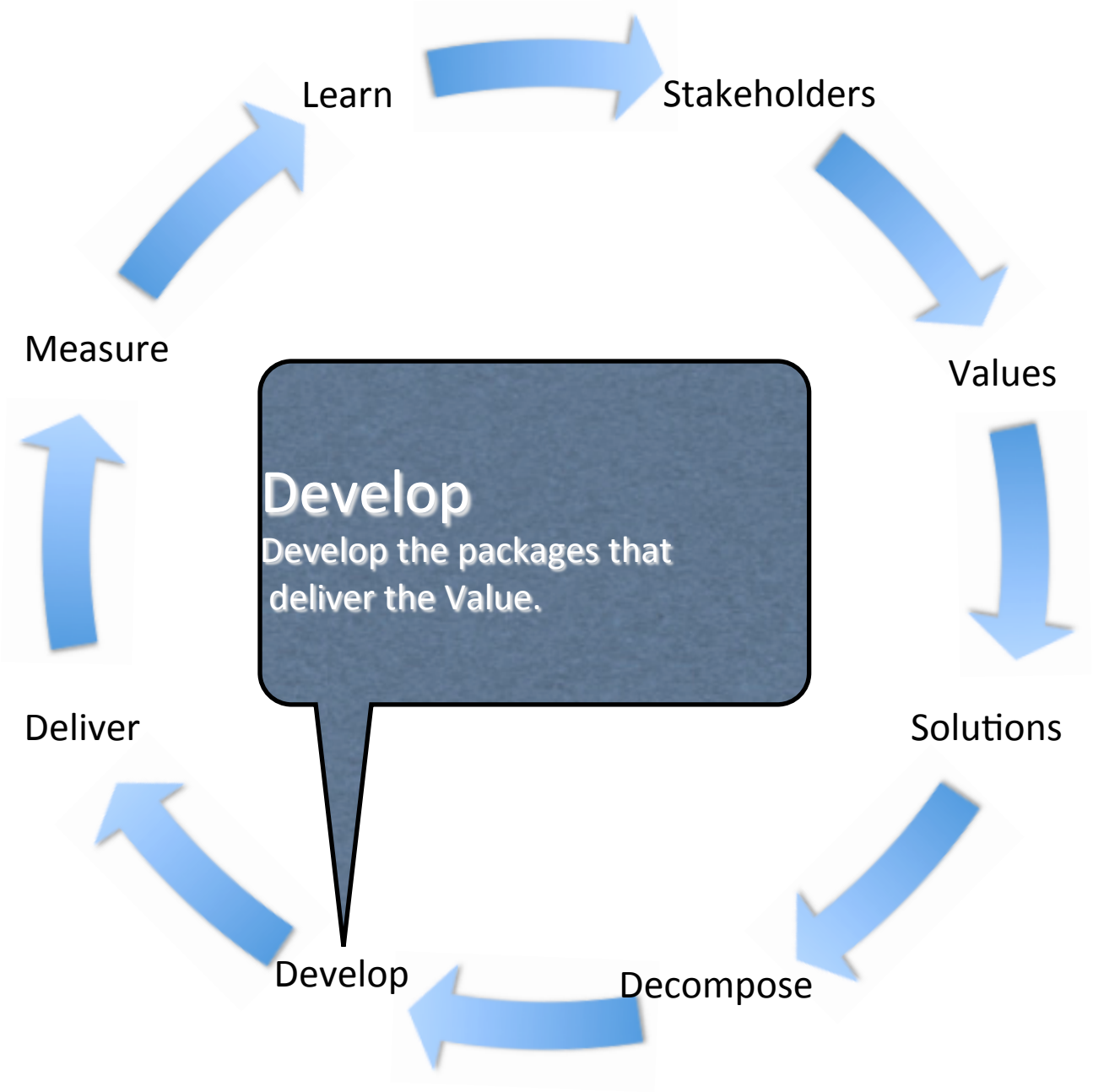

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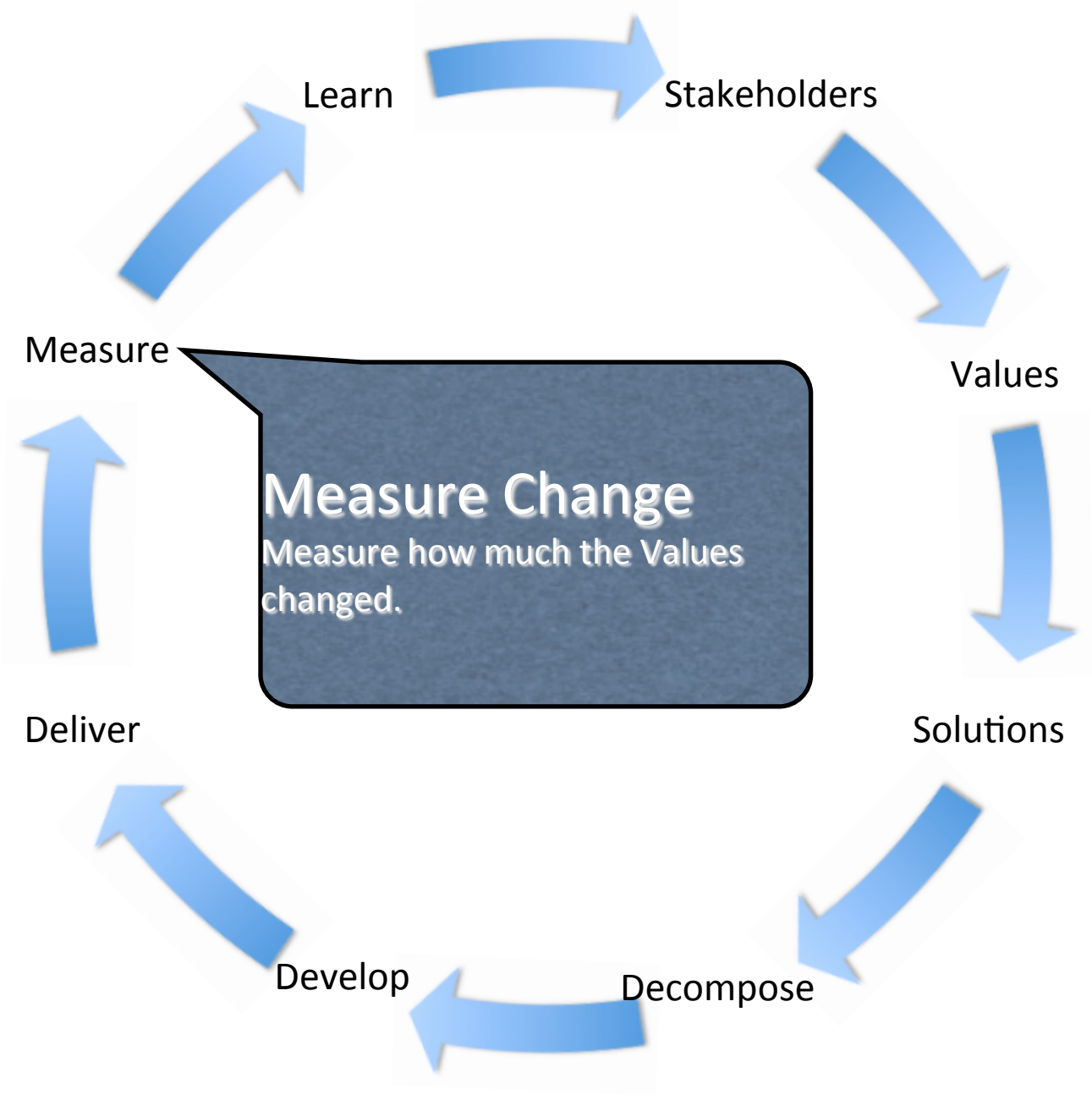

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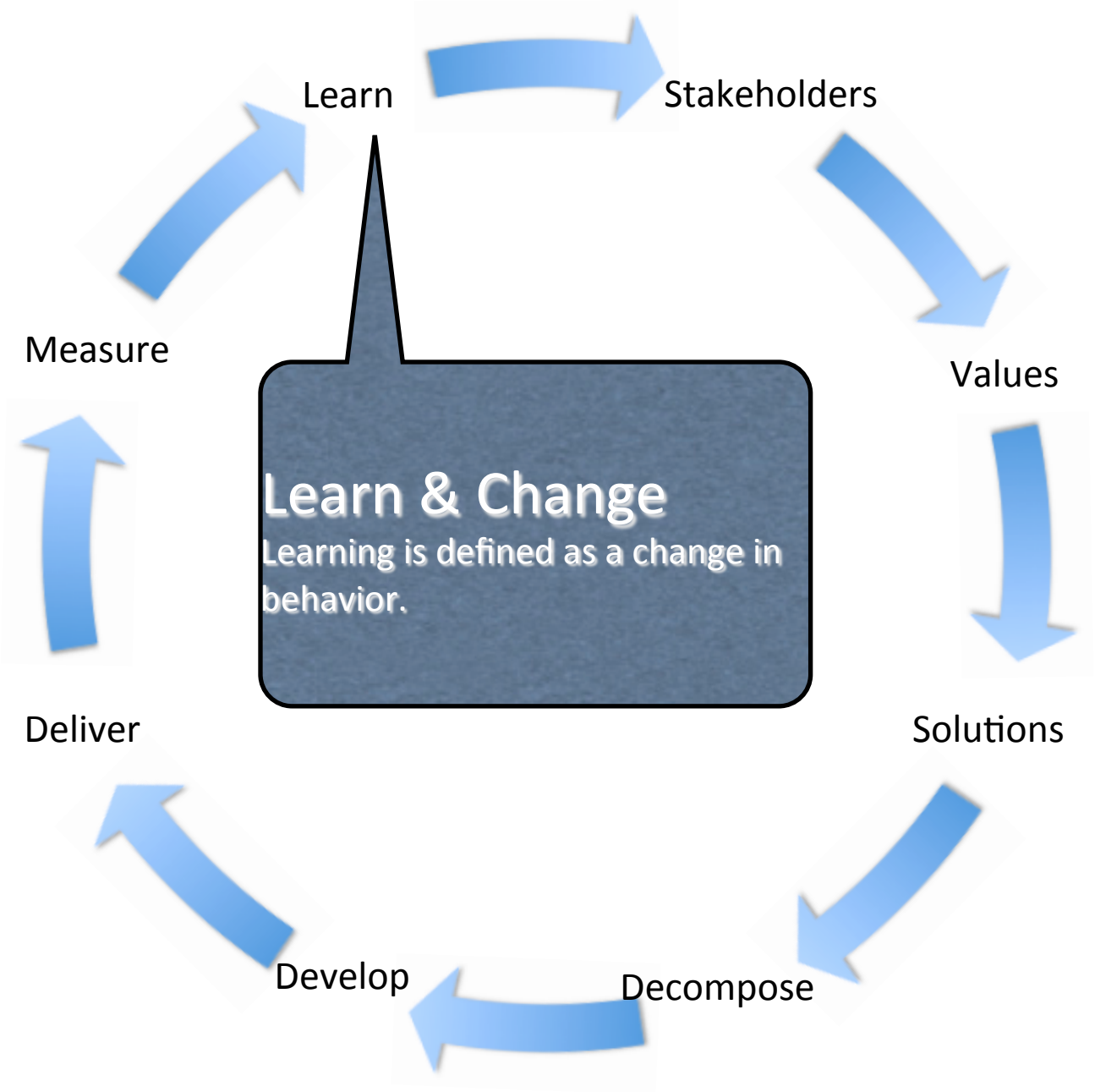

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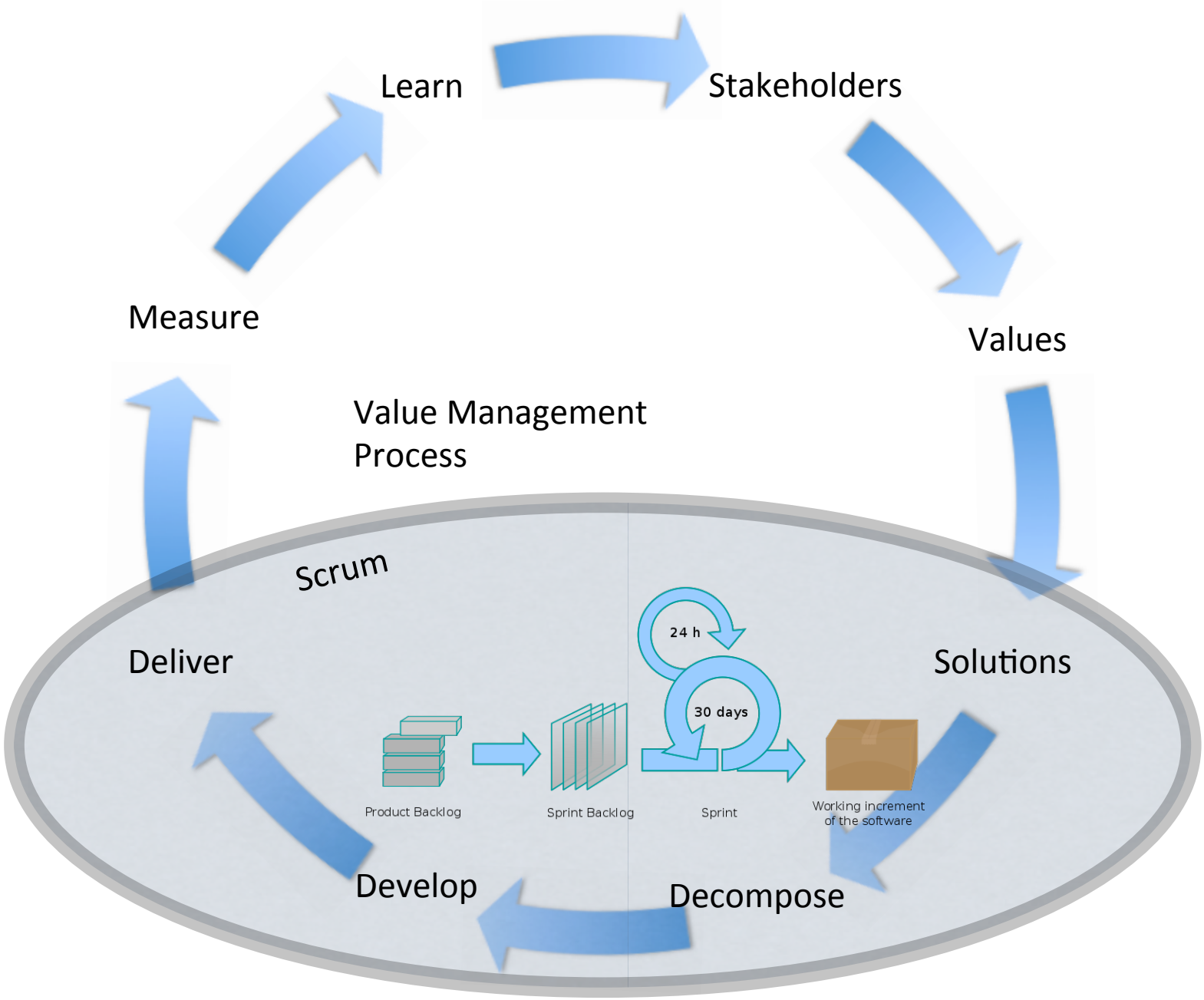

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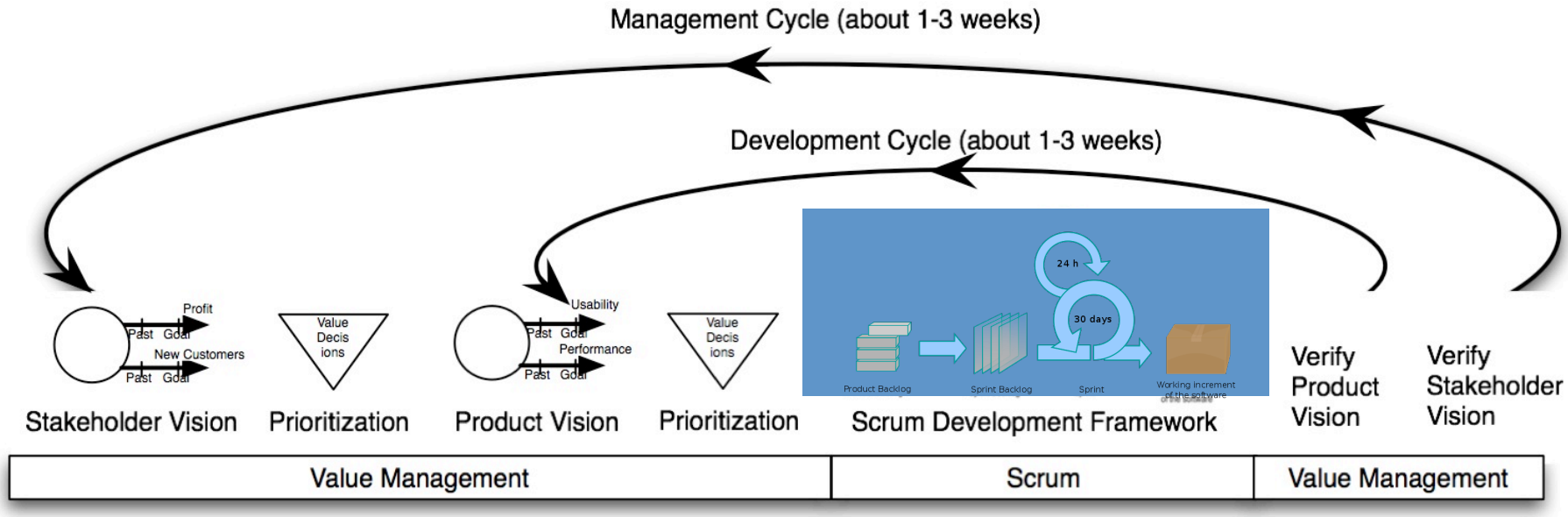
Value Management



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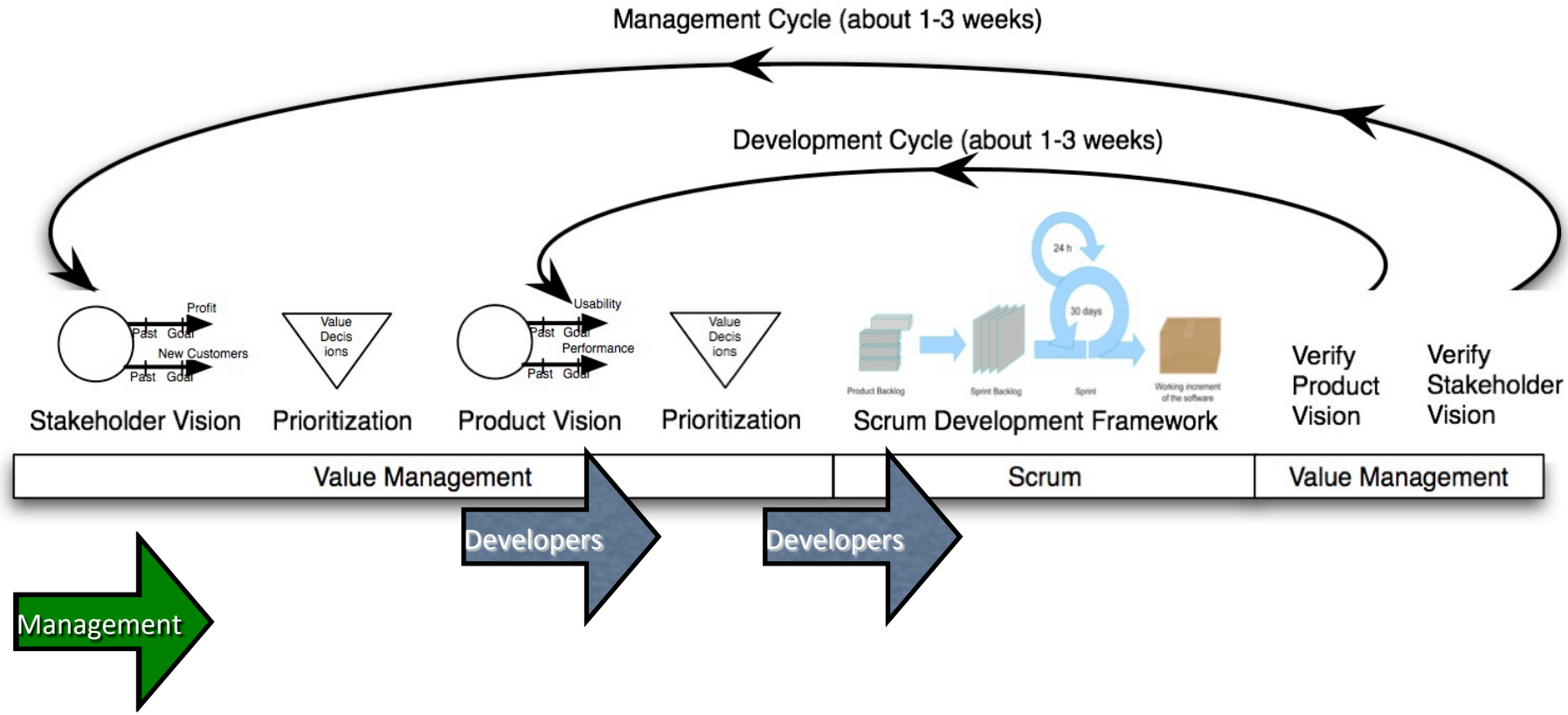

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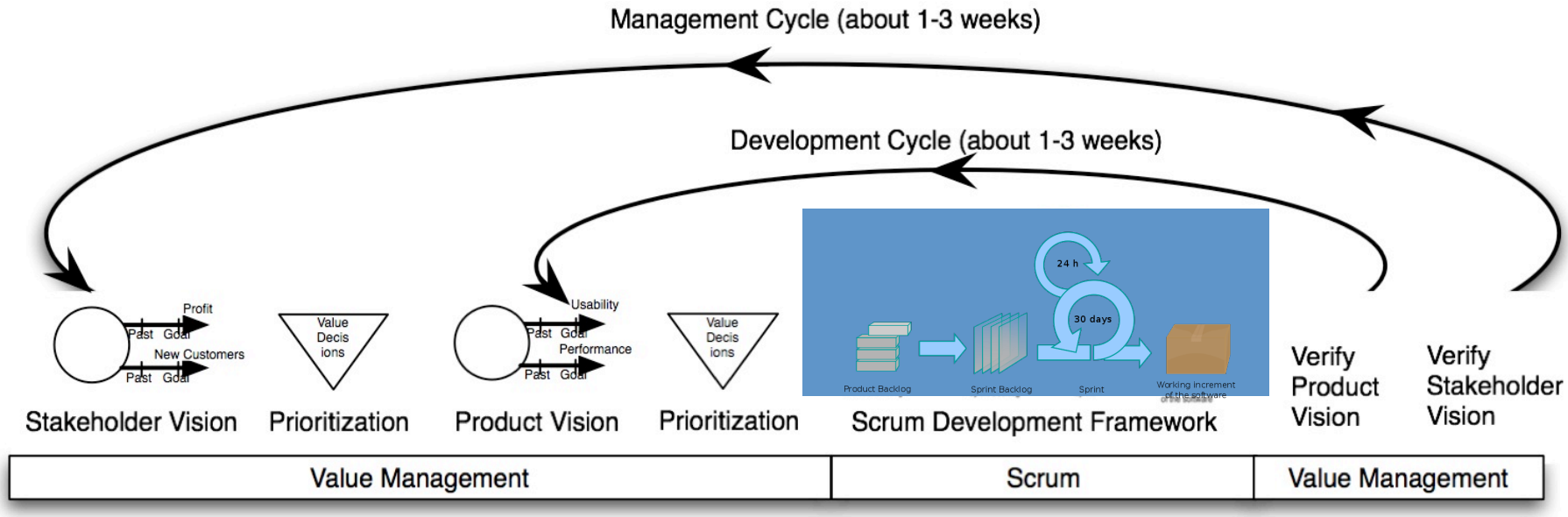

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Value Decision Tables

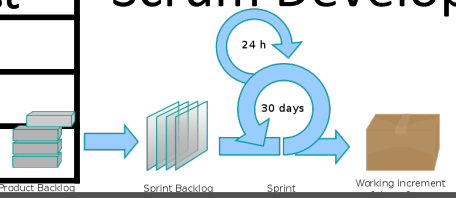
Business Goals	Stakeholder Value 1	Stakeholder Value 2
Business Value 1	-10%	40%
Business Value 2	50%	10%
Resources	20%	10%

Stakeholder Val.	Product Value 1	Product Value 2
Stakeholder Value 1	-10%	50 %
Stakeholder Value 2	10 %	10%
Resources	2 %	5 %

Product Values	Solution 1	Solution 2
Product Value 1	-10%	40%
Product Value 2	50%	80 %
Resources	1 %	2 %

Prioritized List
1. Solution 2
2. Solution 9
3. Solution 7

Scrum Develops



We measure improvements
Learn and Repeat

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Value Decision Tables

Business Goals	Training Costs	User Productivity
Profit	-10%	40%
Market Share	50%	10%
Resources	20%	10%

Stakeholder Val.	Intuitiveness	Performance
Training Costs	-10%	50 %
User Productivity	10 %	10%
Resources	2 %	5 %

Product Values	GUI Style Rex	Code Optimize
Intuitiveness	-10%	40%
Performance	50%	80 %
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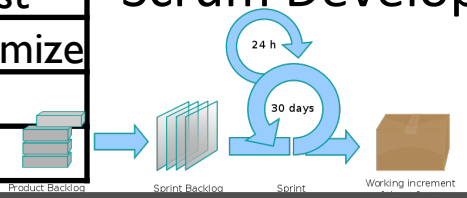
Prioritized List
1. Code Optimize
2. Solution 9
3. Solution 7

Scrum Develops



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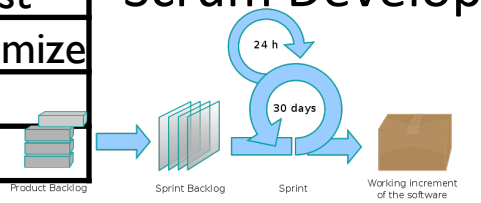

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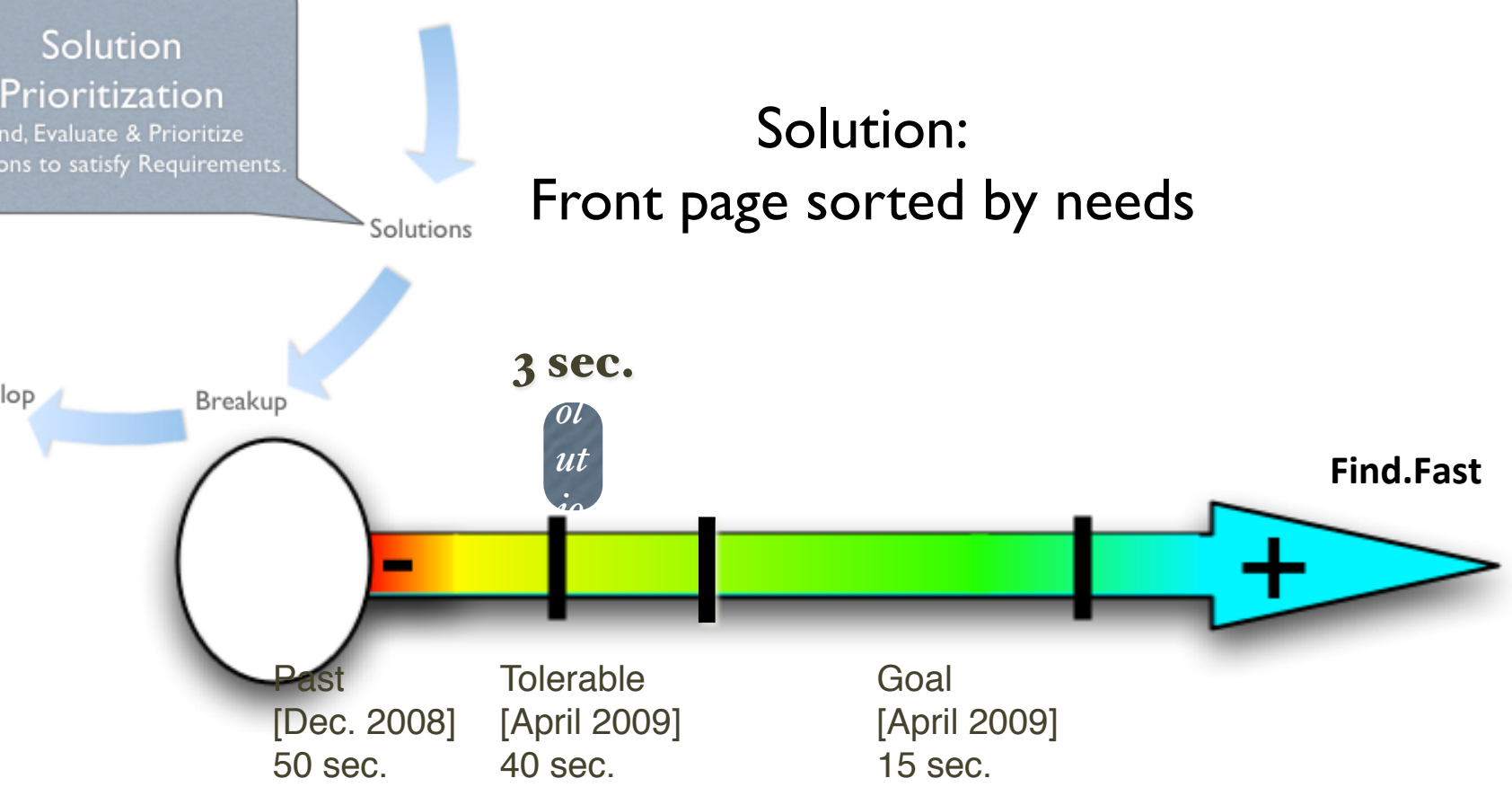
Solution:
Front page sorted by needs



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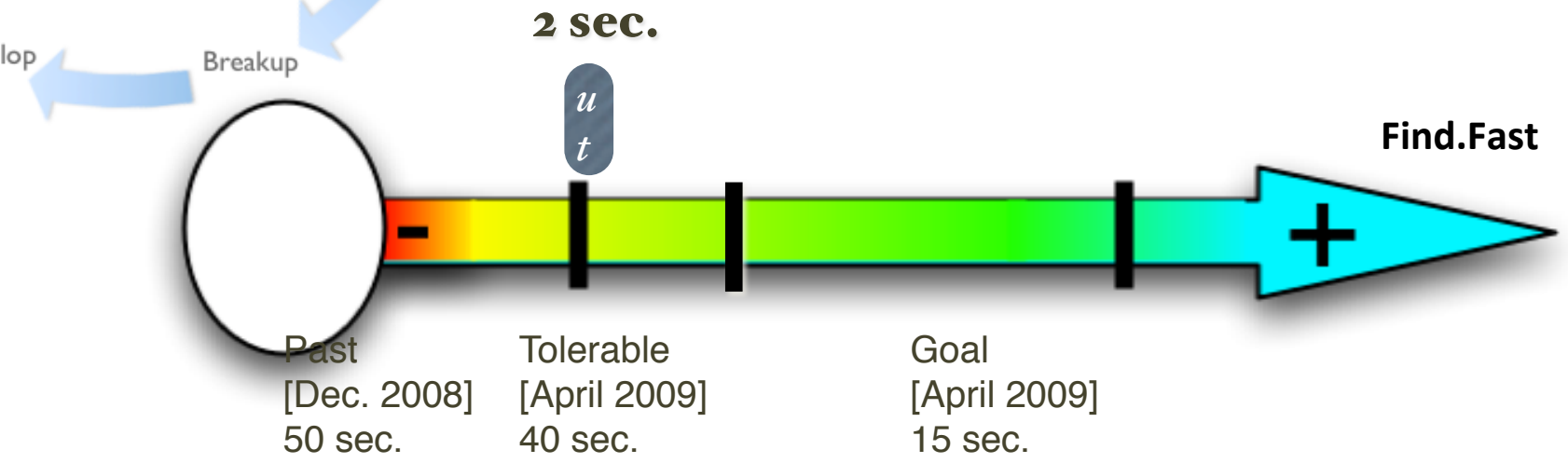
Solution:
Opportunity to buy from search-results page



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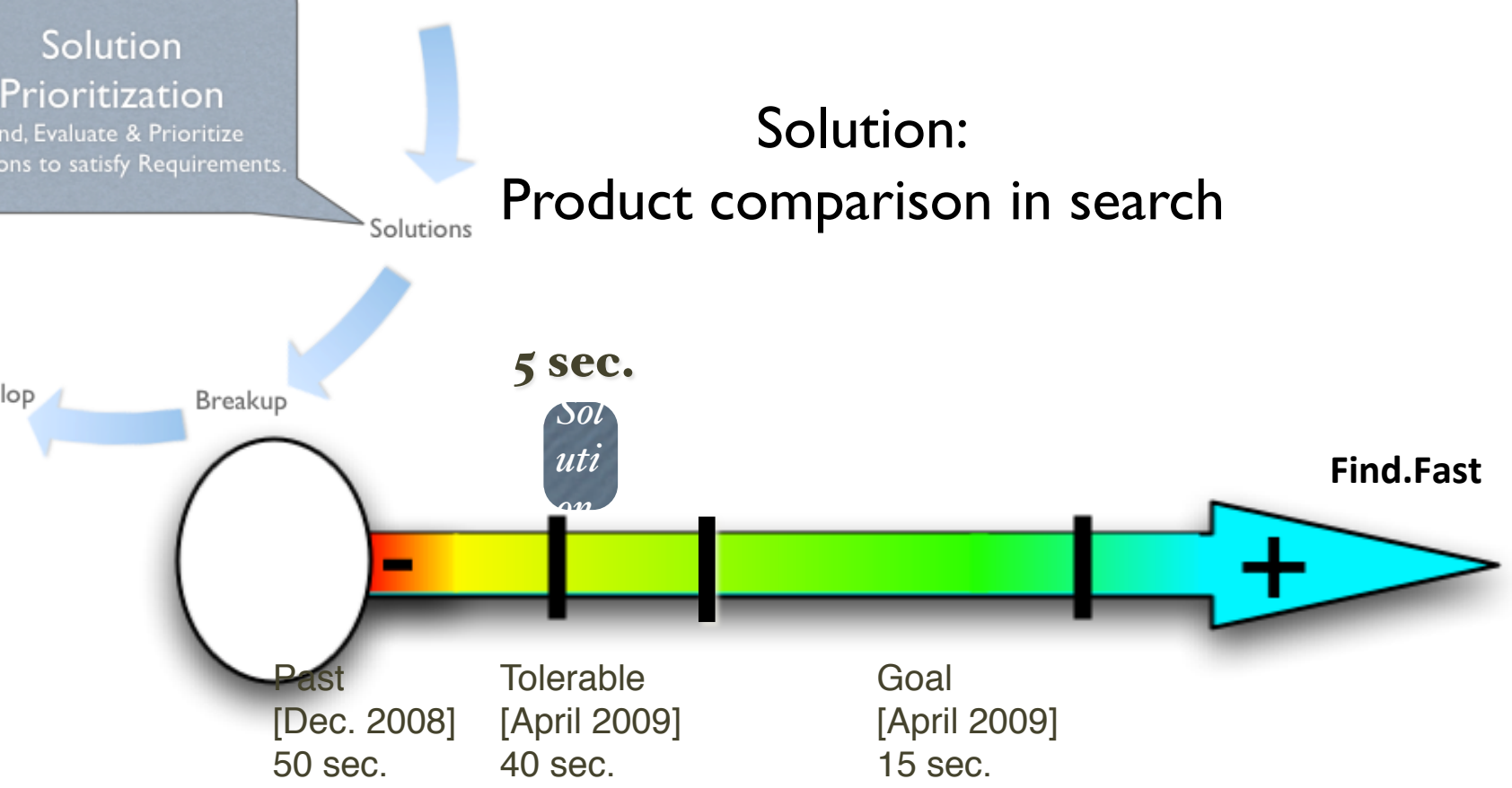
Solution:
Product comparison in search



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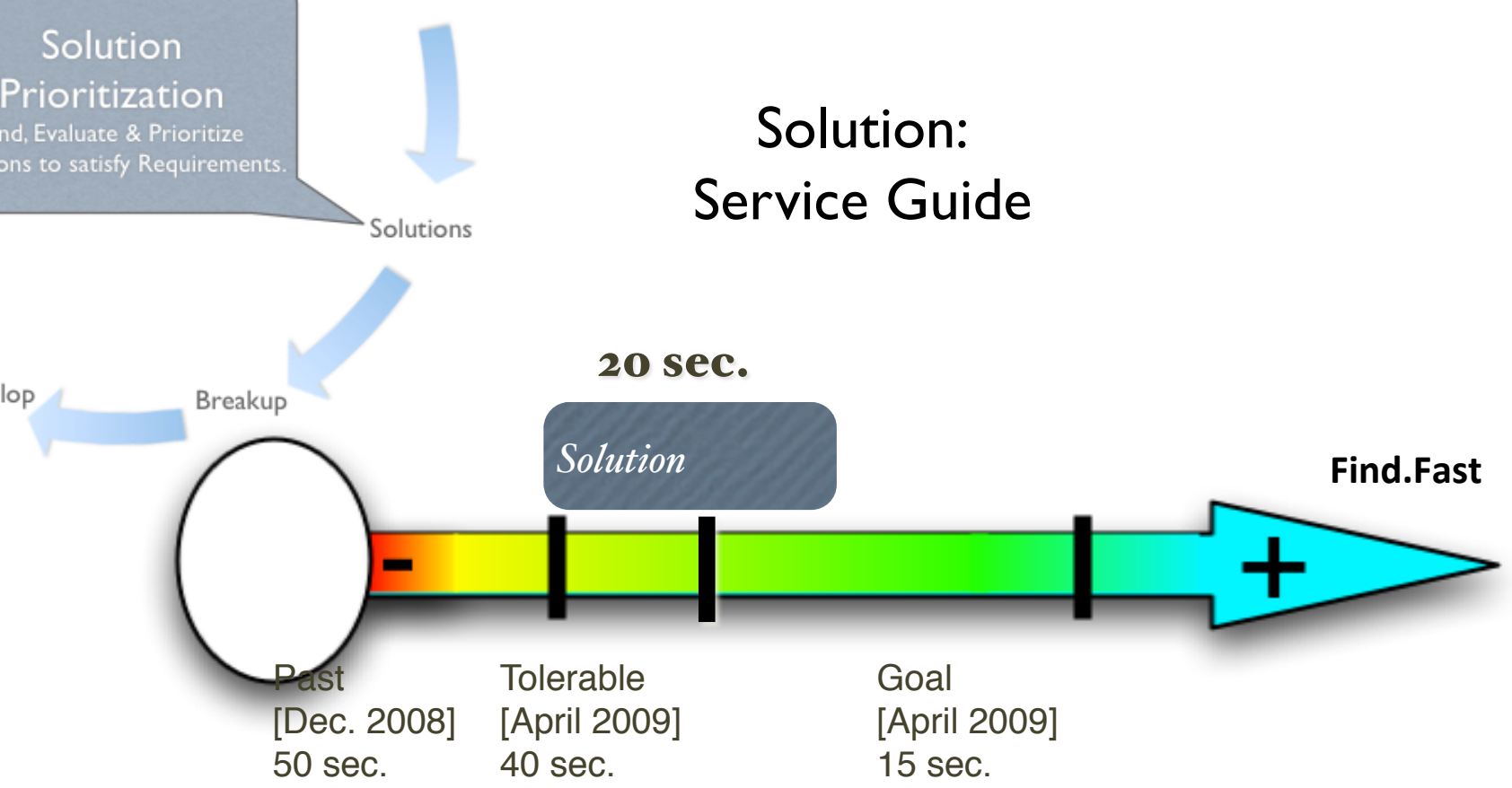
Solution:
Service Guide



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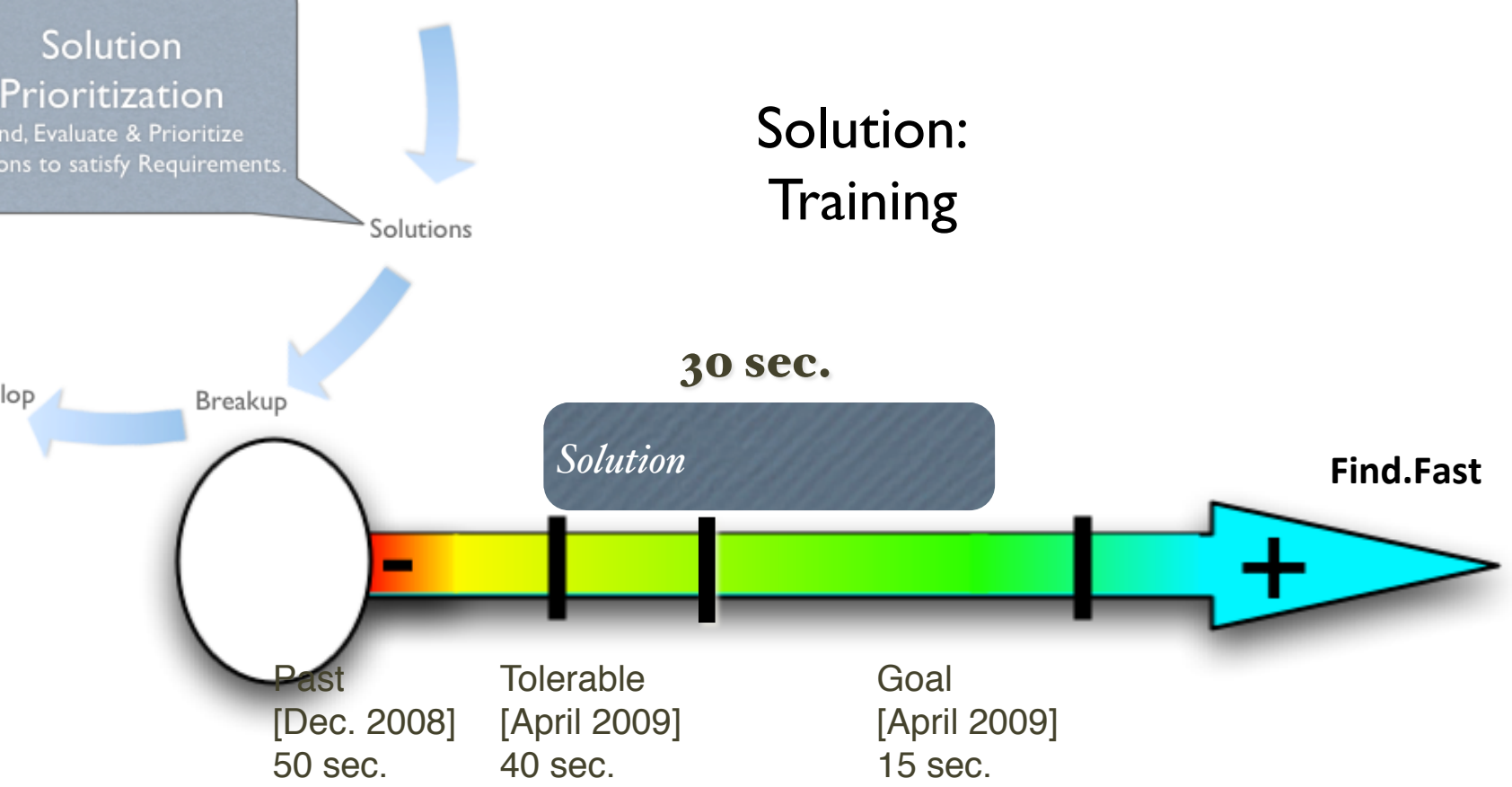
Solution: Training



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Wargame
Value Decision Table

Core-Pro-Funct **Posten Portal**

Value Result Requirements Status when	Tolerable when	Goal when	*Next-Level*	Sorted Needs		Service Guide	
				units	*% of Goal*	*units*	*% of Goal*
Find Fast				-3	**5 %**	-20	**35 %**
70	30	13		10	-18 %	-5	9 %
14.12.2008	31.03.2009	31.03.2009		0		0,7	25 %
					% of Goals		*% of Goals*
			Sum Impact		**28 %**		**138 %**
			Sum ± Variation		132 %		53 %
			Sum Conservative Impact				97 %
Development-Resources				*units*	*% of Budget*	*units*	*% of Budget*
Resources External			*Impact*	100	3 %	400	**13 %**
1000	4310	4000	*Variation*	10	0 %		
18.12.2008	01.05.2008	01.05.200			-7 %		-27 %
Resources Internal				30	**1 %**	100	**2 %**
0	5700	5440					
18.12.2008	01.05.2008	01.05.2008			-1 %		-4 %
					% of Budget		*% of Budget*
			Sum Impact		**4 %**		**15 %**
			Sum ± Variation				
			Sum Conservative Impact		-8 %		-30 %

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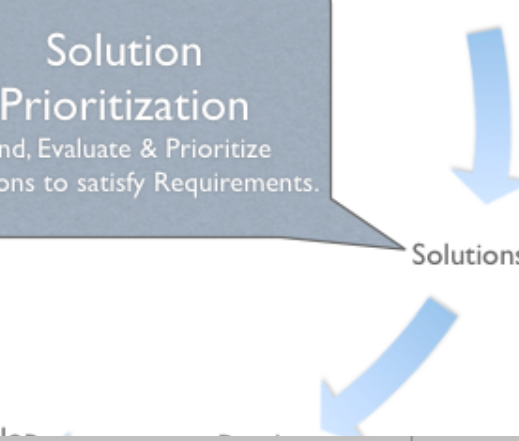

Wargame
Value Decision Table

Core-Pro-Funct **Posten Portal**

Value Result Requirements			*Next-Level*	**Behovsorientert inndeling**		**Produktveileder**		**Kjøpsmulighet fra treffsiden i søk**		**Utnytte høyrekolonne**		**Ta i bruk**
Status when	*Tolerable when*	*Goal when*		*units*	*% of Goal*	*units*	*% of Goal*	*units*	*% of Goal*	*units*	*% of Goal*	*units*
Finn.Raskt				-3	**5 %**	-20	**35 %**	-2	4 %	-1	2 %	
70	30	13		10	-18 %	-5	9 %	-2	4 %			
14.12.2008	31.03.2009	31.03.2009		0		0,7	25 %	0,6	2 %	0,4	1 %	
					% of Goals		% of Goals		% of Goals		% of Goals	
			Sum Impact		**28 %**		**138 %**		**7 %**		**125 %**	
			Sum ± Variation		132 %		53 %		7 %		88 %	
			Sum Conservative Impact				97 %		4 %		83 %	
Development-Resources				*units*	*% of Budget*	*units*	*% of Budget*	*units*	*% of Budget*	*units*	*% of Budget*	*units*
Budsjett - eksterne ressurser			*Impact*	100	3 %	400	**13 %**	50	2 %	50	2 %	
1000	4310	4000	*Variation*	10	0 %							
18.12.2008	01.05.2008	01.05.200			-7 %		-27 %		-3 %		-3 %	
Interne timer				30	**1 %**	100	**2 %**	10	**0 %**	100	**2 %**	
0	5700	5440										
18.12.2008	01.05.2008	01.05.2008			-1 %		-4 %				-4 %	
					% of Budget		% of Budget		% of Budget		% of Budget	
			Sum Impact		**4 %**		**15 %**		**2 %**		**4 %**	
			Sum ± Variation									
			Sum Conservative Impact		-8 %		-30 %		-4 %		-7 %	
					ratio		*ratio*		*ratio*		*ratio*	
					7,26		9,09		3,75		35,64	
					-24,70		5,60		0,00		10,65	
							-3,18		-1,03		-11,83	
					17,81		-1,43		0,84		0,67	

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