

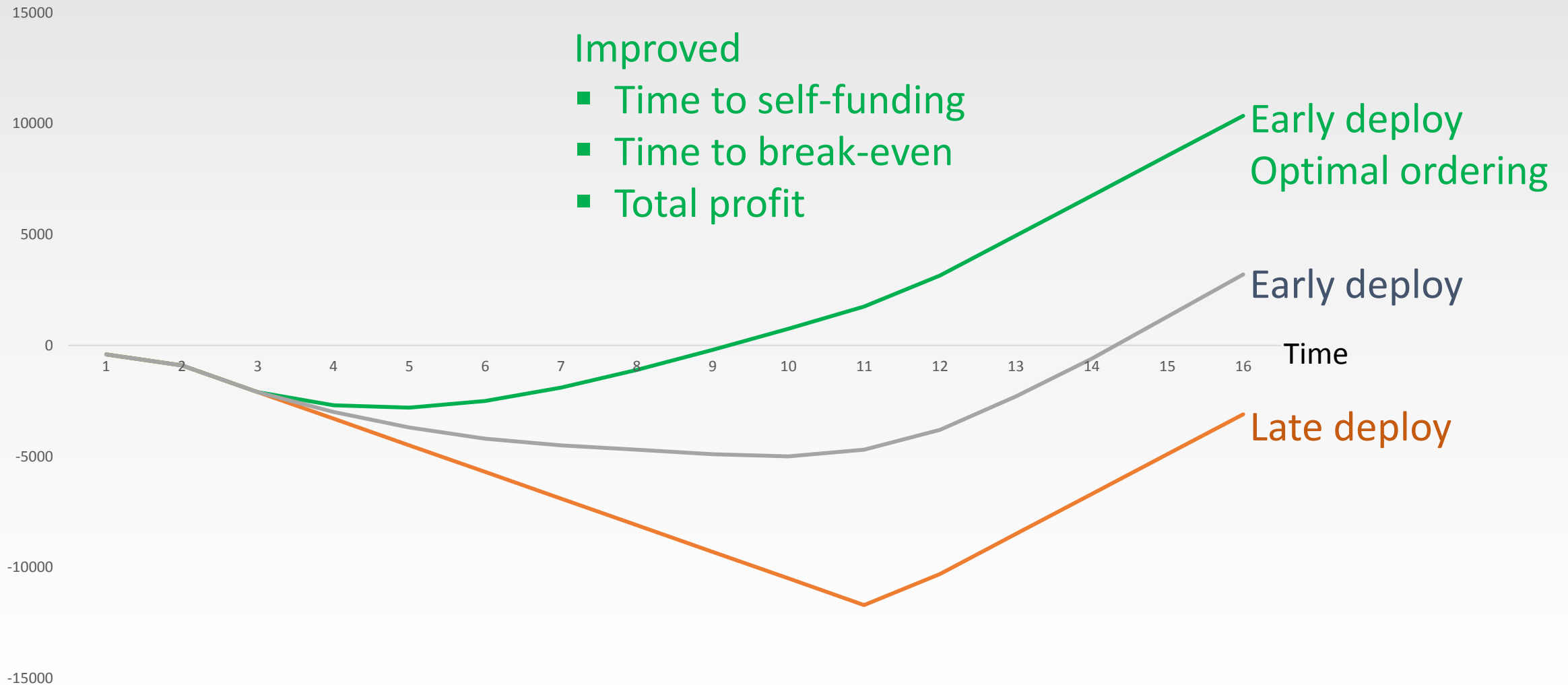
A framework for optimizing the return on software investments



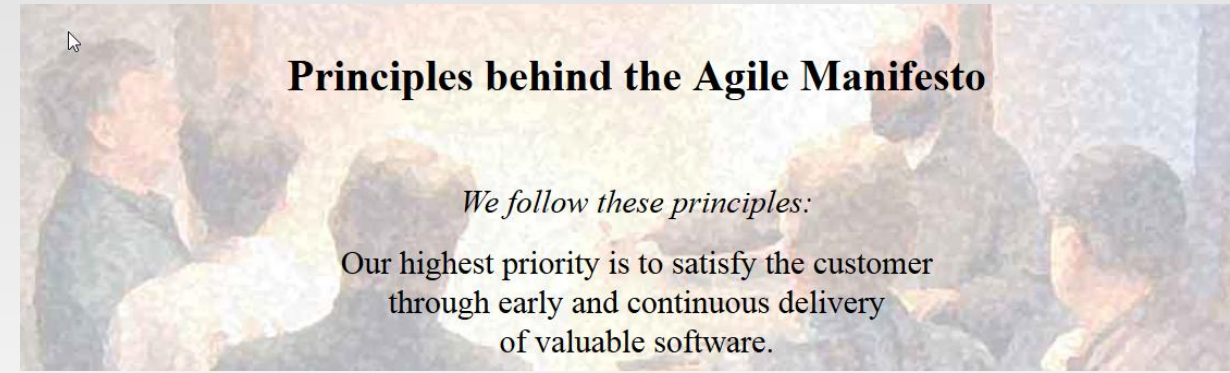
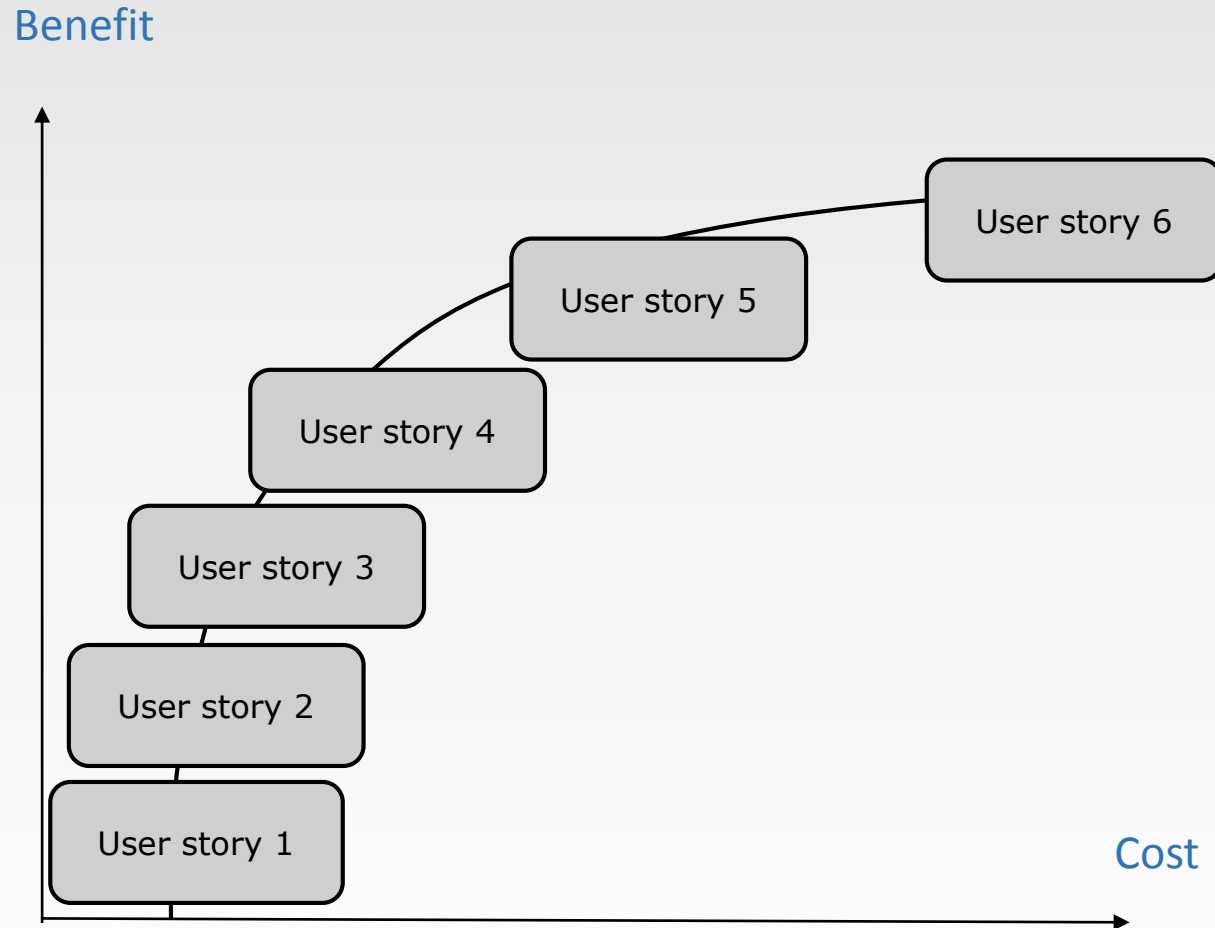
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Earlier deployment of valuable features makes a huge difference to the economy of a project

Aggregated profit

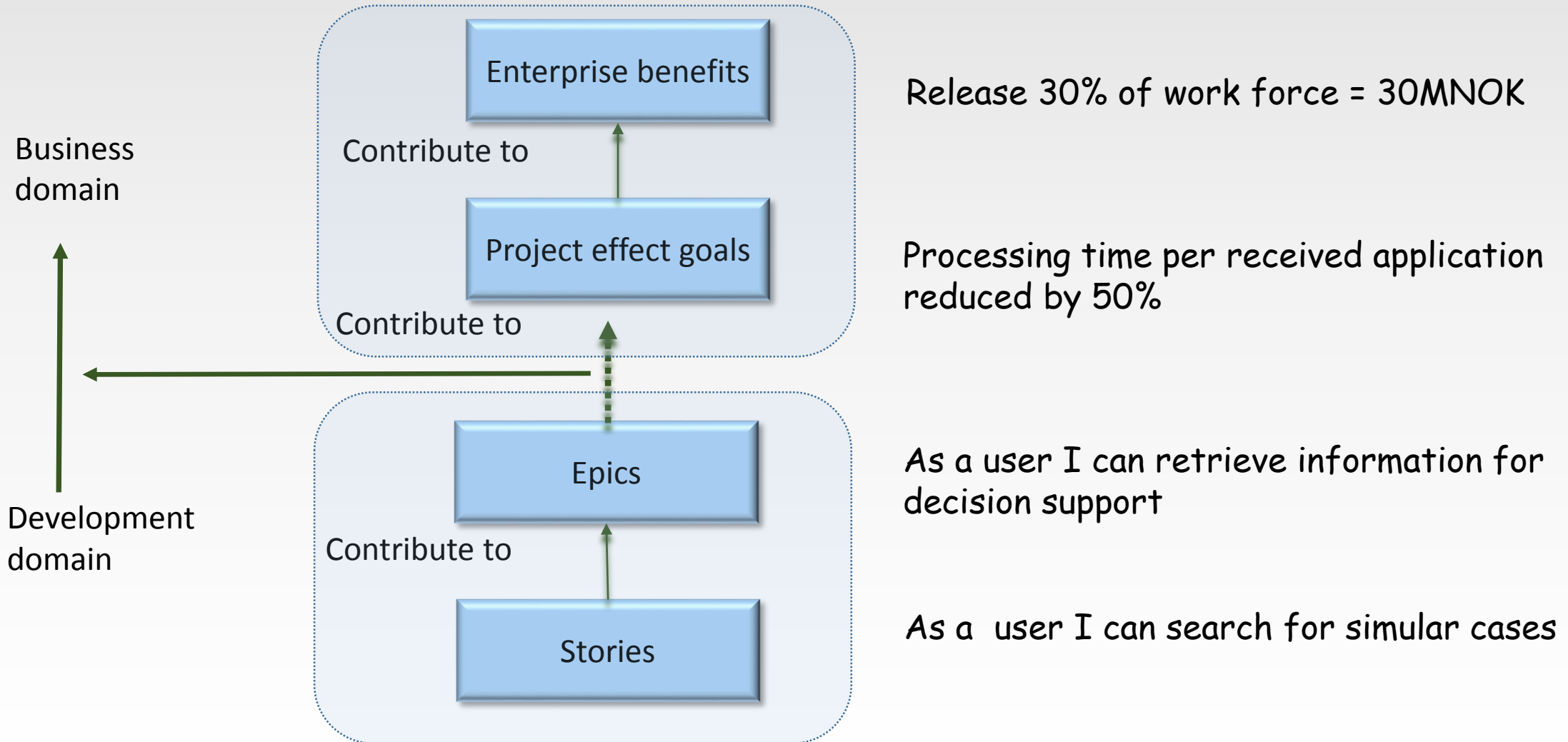


Order the product backlog according to $\frac{\textit{Benefit}}{\textit{Cost}}$ to ensure early return on investment



All this fully according to Agile Principles
But...

Key challenge is to connect the development domain to the business domain



Quantify the relative benefit of epics with respect to each effect goal

- Business experts quantify relative benefit using *benefit points*: 0,1, 2, 3, 5, 8, 13, 20, 40, 100

$$\frac{20*60 + 3*40}{60 + 40}$$

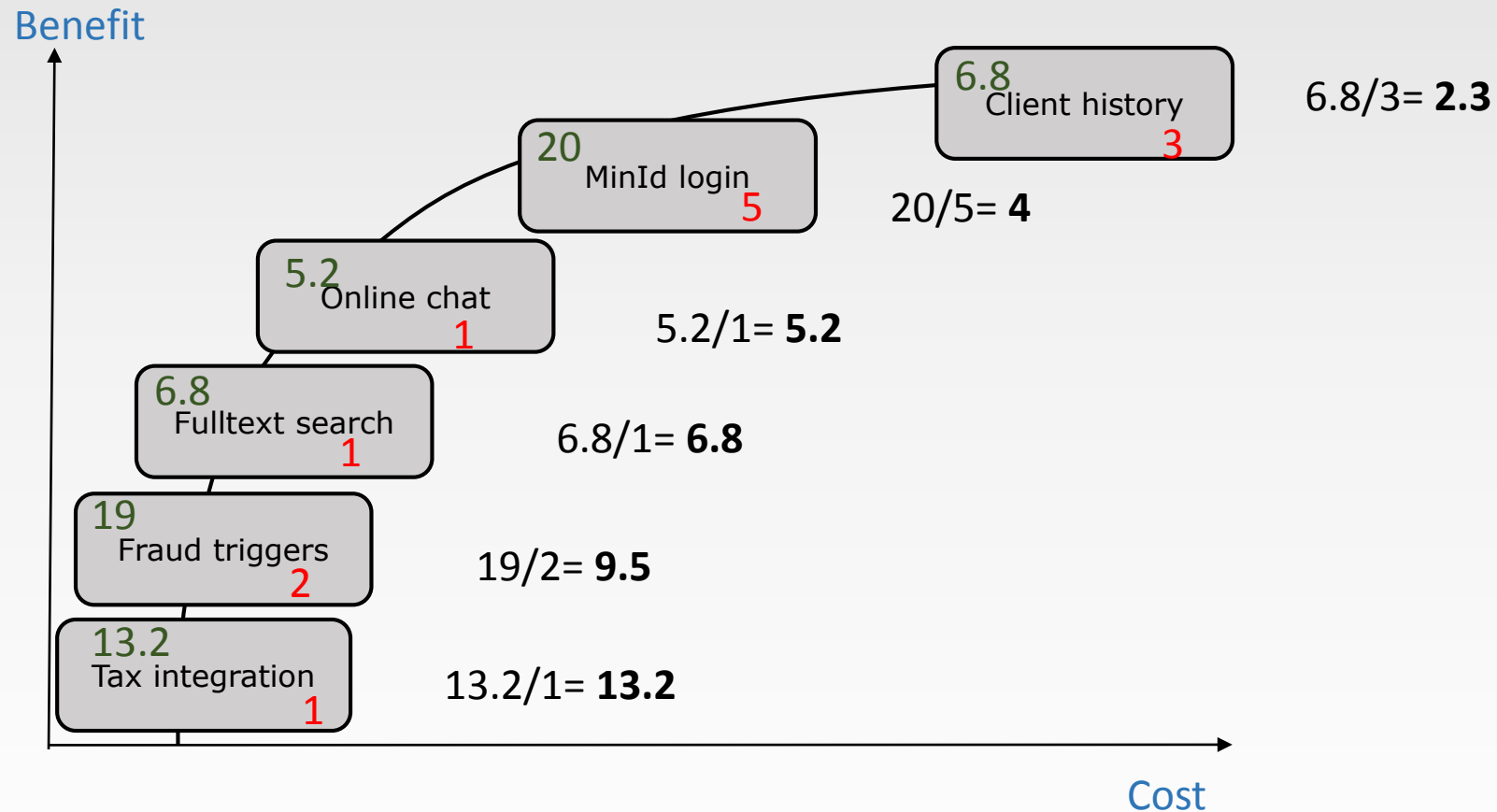


	60MNOK Processing time per received application reduced by 40%	40MNOK Accuracy in fraud detection increased by 70%	Weighted average
Tax integration	20	3	13,2
Fraud triggers	5	40	19
Fulltext search	8	5	6,8
Online chat	8	1	5,2
MinId login	20	20	20
Client history	8	5	6,8

Using group sessions...

.. to populate the epic/effect matrix

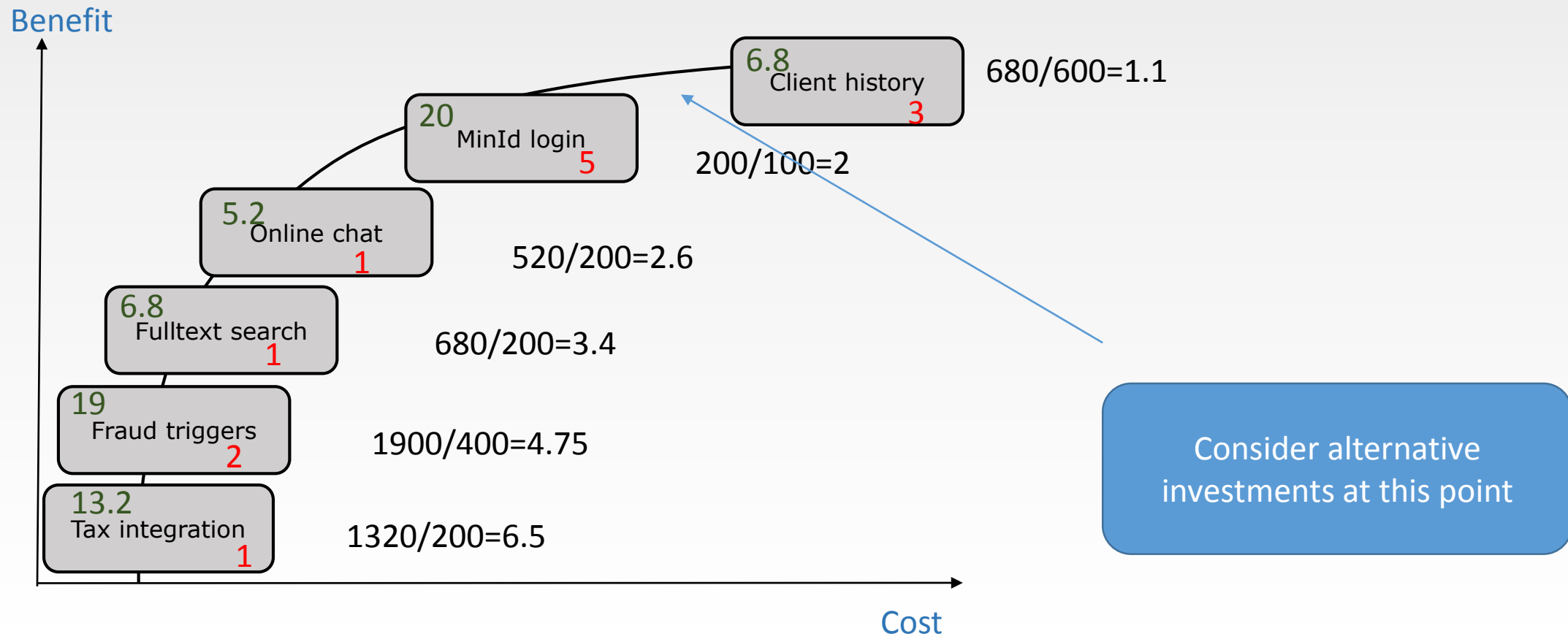
Use weighted benefit points in pair with relative cost, in «story points», to schedule development



As development progresses, project can be managed according to estimated benefits

- Convert benefit points and story points to real currency
- How much bang have we created for the buck?
- Is there a business case for the remaining product backlog?

1 story point=200KNOK
1 benefit point=100KNOK



Section for unanswered questions

- How to distribute benefit points to the epic's stories
 - Pairwise comparison recommended – not covered here
- How to handle soft benefit
- How to handle uncertainty



To integrate soft benefits, the project owner compares such benefits with financial benefits

(MISHRI – Model for Integrating Soft and Hard Return on Investment)

Release 30% of work force = 60MNOK

Improved public reputation =



«Equally important»

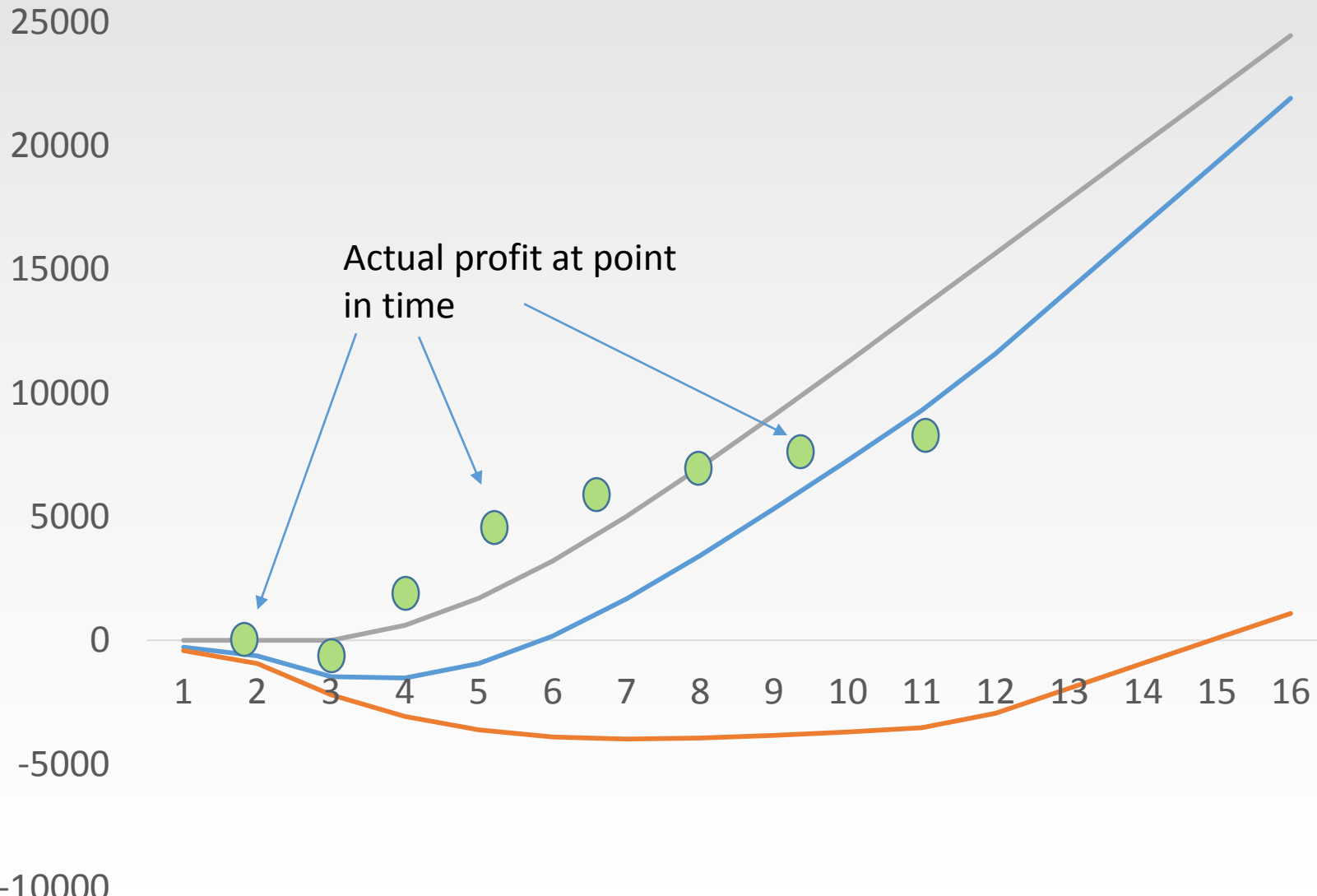


- Distribute the «soft money» over the effect goals, and recalculate weighted benefit points

	110MNOK Processing time...	50MNOK Accuracy in fraud detection	Weighted
Tax...	20	3	23,5
Fraud...	5	40	25,5
Fulltext...	8	5	11,3
Chat...	8	1	9,3
MinId...	20	20	32
History...	8	5	11,3

Uncertainty: Measure, report and act according to best-case, most likely and worst-case scenarios

Aggregated profit



	Optimistic benefit	Most likely benefit	Pessimistic benefit
Q1	0	0	0
Q2	0	0	0
Q3	0	0	0
Q4	780	600	390
Q5	1430	1100	715
Q6	1950	1500	975
Q7	2340	1800	1170
Q8	2600	2000	1300
Q9	2730	2100	1365
Q10	2795	2150	1397,5
Q11	2860	2200	1430
Q12	2860	2200	1430
Q13	2860	2200	1430
Q14	2860	2200	1430
Q15	2860	2200	1430
Q16	2860	2200	1430

Summary

1. Quantify benefit of epics and stories with respect to the project's effect goals
2. Order the product backlog according to $\frac{Benefit}{Cost}$ to ensure early return on investment
3. Manage the project according to benefit/cost rather than cost alone



Questions and comments?

Ressurser

- ITPP sertifisering, se <http://www.smidigeprosjekter.no/>
- Verktøy for innsamling av nytteestimer, se <http://www.expertware.no/>

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