Definition of the **On-Time Delivery Indicator** in Rapid Software Development

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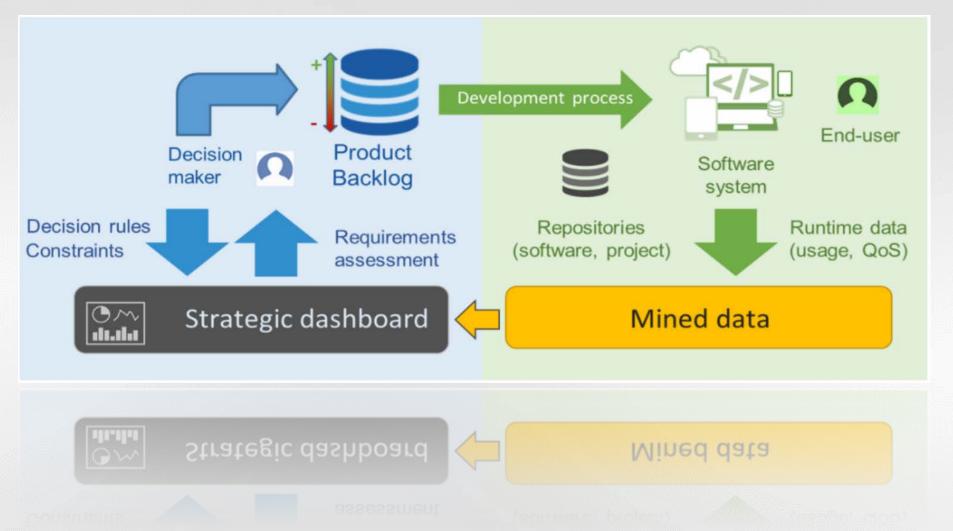


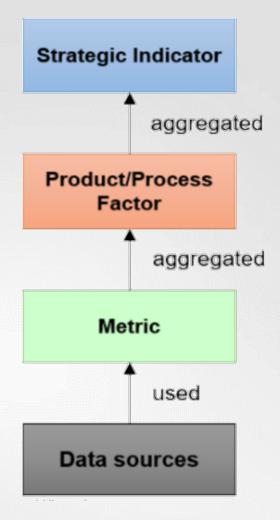


Rapid Software Development



The big picture: Q-Rapids





6 steps



Step 1: Initial interviews

The need to define On-Time Delivery emerged



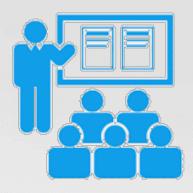
Step 2: Literature Review

- Time-to-Market in Software Development
- Software development time and effort
- Effort estimation in Agile Software Development
- Delivery capability in Agile Software Development



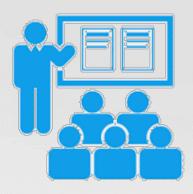
Step 3: Tentative proposal

Tentative On-Time Delivery indicator definition and its breakdown into factors and metrics



Step 4: Workshops

- Get feedback
- Add/modify/remove factors
- Vote those factors in terms of their relevance



Step 5: GQM Workshops

Elicit metrics of process performance



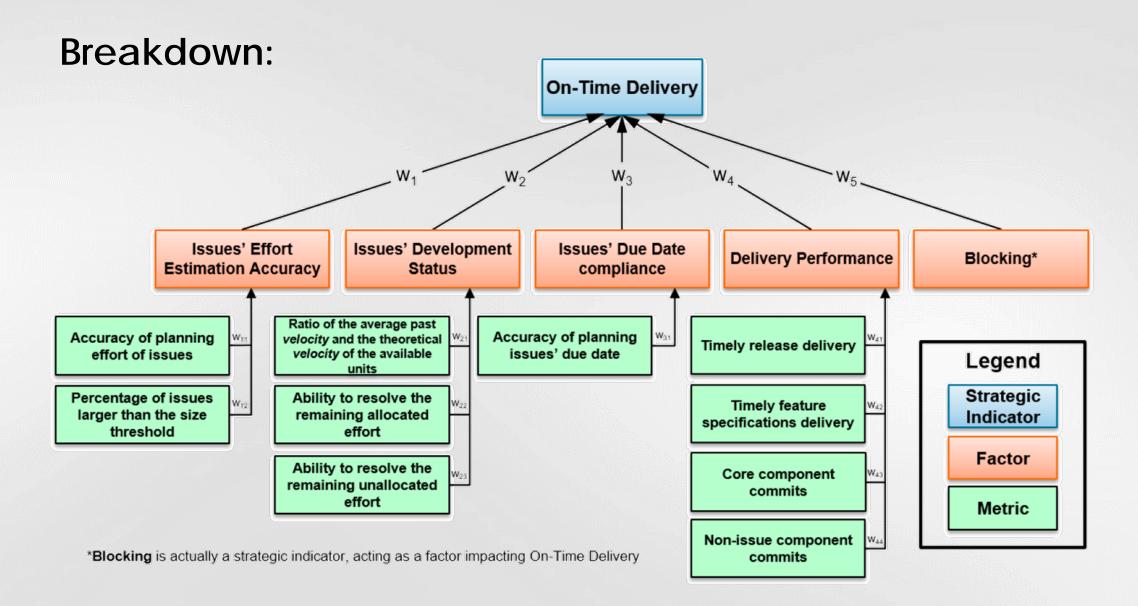
Step 6: Refining the proposal

Build-up the On-Time Delivery indicator definition and breakdown.

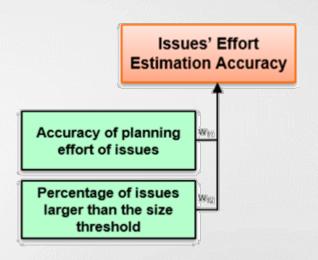
Definition:

Capability of fulfilling the issues planned for a specific release, meeting internal and external delivery schedules.

Computed with values: [0..1]

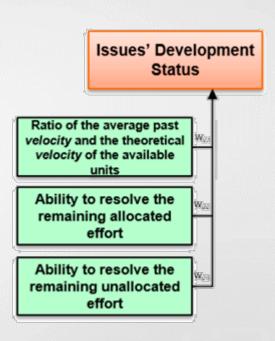


Breakdown:



How reliable the current tasks' effort estimation is in terms of the differences between the past planned efforts and the actual tracked ones.

Breakdown:



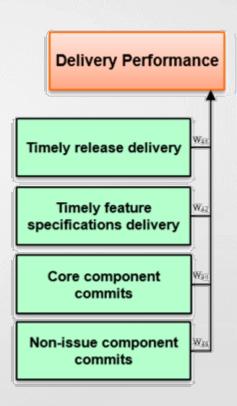
Refers to the development status in terms of the planned tasks, the assigned and unassigned effort, the average velocity of the development team, and the remaining time until the release ending date

Breakdown:



Refers to the percentage of past due dates' compliance.

Breakdown:



Constitutes metrics that measures a company's adherence to delivery schedules

Breakdown:

Blocking*

Refers to the blocking situations that arise when developing. It includes

- Feature Definition Completeness
- Delayed Tasks
- Test Failing
- Test Performance
- Low Quality Features

Conclusions and Future work

Conclusions:

- Definition of On-Time Delivery indicator
- Breakdown into factors and metrics

Future work:

- Evaluation using real data from industry partners
- Iterate/evolve our proposal
- A Method for assessing the indicator using Bayesian Networks

Thank you!