Agile Portfolio Management

John Rudd
President and Managing Director, SolutionsIQ

Bryan Stallings
Vice President and Managing Principal, SolutionsIQ

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Speaker Introduction: John Rudd

- Co–owner and Managing Director of SolutionsIQ
- Specialized in operational & financial restructurings, mergers & acquisitions, and interim management
  - Lead Principal at a financial consulting and restructuring firm
  - Lead Principal at an investment banking firm
  - Filled multiple interim executive roles including CEO, President, CFO, and Chief Restructuring Officer
  - CFO of a West Coast oil company
  - Commodity lender for ING
- BS in Economics from the University of Minnesota
- MBA from the University of Southern California
Speaker Introduction: Bryan Stallings

- Vice President and Managing Principal at SolutionsIQ
- Certified Scrum Trainer
- Agile practitioner since 2004
  - Led the largest multi-team implementation of Scrum up to that time
  - Experienced Agile Coach to Scrum teams, and their management
  - Expertise in defining and leading organizational change programs
- Background in IT, Operations, Process Improvement, Project Management, and Organizational Change
- BA in Spanish and Business Administration from Utah State University
- MBA in International Business from the Moore School at the University of South Carolina
It’s good to see you again

Thanks for meeting for lunch
Do you remember how we did capital strategy at OldCo?

Sure...
Business Strategy and Innovation

- Legacy business performance no longer a given
- Continuous innovation a must
- Business strategy must change rapidly
- Annual budgeting may be too slow

IT’s corporate role

- IT consults with business on feasibility of solution strategies
- IT operates as a strategic partner
Annual budget allocated by sectors based on strategic considerations

- Emerging market sector targeted for lots of innovation
- Legacy business sector may be earmarked for more conservative investments
- IT is informed on emerging strategy & advises on feasibility

Funding is quarterly allowing for potential new projects
Use of real options analysis

- Seed money to investigate ideas
  - Including ideas that in the past would have been rejected as too risky
- Real options analysis is used to compare alternatives in a stepwise manner
- Possibilities are explored incrementally, variable by variable
- Many more ideas make it to the next step—business case analysis
Real options mechanics

• Sector determines discovery investment
• T-shirt size initial ideas or opportunities
• Small investments in weekly sprints
  – Market analysis, Spikes, Technology prototypes, Cost forecasts
• After gaining enough information determine if you move to a business case
  – As long as the level of uncertainty is acceptable
Factoring in Uncertainty

- Business cases are valued using internal rate of return (IRR)
- Business case uncertainty receives a Beta score
- IRR is adjusted by applying the beta score: $\text{IRR}^+$
- $\text{IRR}^+$ factors business volatility into estimated return
- $\text{IRR}^+$ allows us to compare “innovation” bets along side traditional business investments
Factoring in Uncertainty

- The business case is comprised of
  - variables around project cost, revenue, and expense
- Higher beta scores of these variables means higher project uncertainty.
  - To compensate expected return is adjusted downward
- The IRR+ is the expected return modified to include uncertainty
- Higher Beta scores can be mitigated by
  - High revenue beta: lower revenue expectations
  - High (uncertain) cost beta: reduce scope and/or funding allocation
  - High (uncertain) emerging market beta: reduce time to market
Business Case Summary

- Smaller cap projects weighted more favorably
- IRR+ considers project uncertainty when estimating expected return
  - Higher risk is offset by greater idea diversification
  - New projects can compete for capital with funded projects
- Capital spread across many more possibilities, which diversifies portfolio investments
Active Portfolio Management: Project Selection

- Capital budgeting is done annually, but funding is done quarterly
- All investments are re-examined each quarter
- Newly approved business cases compete for capital with previously funded projects
- Approved business cases are ranked along side portfolio projects by IRR+
- Under-performing projects can be replaced
- Final decision dependent upon optimal portfolio performance
More coffee?

Yes, please.
Active Portfolio Management: Optimization

Project performance
- Nesting prioritized projects
- Cost of delay or early exit
- Sunk costs
- Project metric: IRR+

Portfolio performance
- Portfolio divided into sectors
- Each sector has its own IRR+
- Each project change impacts the portfolio sector
- Projects selected to optimize aggregate portfolio sector performance
- Portfolio metric: sector IRR+
Active Portfolio Management: Optimization

Project “Nesting” (matching projects with people & resources)

- Persistent teams
- Technology match
- New team ramp time
- Capacity planning
- Buy vs. build
- Outsourcing

Portfolio Optimization

- All of this will impact the expected return
- Interactive process to find the optimal solution
Agile Project Management: Dynamic Project Charter

• Each iteration scope, cost, and schedule are revised to:
  – reflect the current pace of delivery
  – forecast release date and expected features

• Each month IRR+ is revised by reviewing:
  – sales & marketing forecasts,
  – projected savings or
  – other factors that might impact return

• Each quarter projects:
  – are assessed by impact on portfolio sector IRR+
  – compete for quarterly capital funding
Agile Project Management Metrics

- **Cost and schedules** are maintained through the release burn up chart
- **IRR+** gives continuous uncertainty-adjusted rankings
- **Dollar Risk** is determined by earliest time to market and write-off risk (with and without sunk costs)
- **Cost and value of change**: Every time the backlog changes, we calculate the impact to cost, release date and IRR+
- **Quality**: We focus on definition of done and sprint quality metrics to confirm code quality every two weeks
Portfolio Governance

Return standards:

• Business case IRR+ needs to be at the appropriate threshold and compared within its sector against current projects and other unfunded candidates.

Uncertainty threshold:

• Acceptable Beta scores by sector help limit those projects that present uncertainty beyond what is acceptable to the organization.

People and Resource Allocation:

• The PMO determines the optimal start for projects, based on available teams, contract costs, cost of delay and cost of early exit for existing projects.
Portfolio Governance (cont.)

Quality:
• The organization sets the technical quality standards, which are confirmed every sprint through the definition of done and other metrics

Return Optimization:
• Each quarter or sooner the portfolio is realigned shifting capital to those projects that will provide the best opportunity for optimal return
What he said was...

I'm having a bit of trouble putting it all together...
Active Portfolio Management: Putting It All Together

- Strategy is set through sector “bucket” allocation
Active Portfolio Management: Putting It All Together

- Capital budgets are set annually by sector—not by project
Active Portfolio Management: Putting It All Together

• Real options helps you make small “bets” to determine winning business cases
Active Portfolio Management: Putting It All Together

- IRR is adjusted to reflect uncertainty so projects can be more evenly ranked
Active Portfolio Management: Putting It All Together

- IRR+ determines quarterly project priority for both new and existing projects
- Project selection is based on portfolio—not project—optimization
Active Portfolio Management: Putting It All Together

- Expected return is continuously updated, and is based on project and market data
Active Portfolio Management: Putting It All Together

- Project performance feedback informs the quarterly active portfolio review
Active Portfolio Management: Putting It All Together

- Active Portfolio management is the center of continuous collaboration between IT & the business
Oh, and here's the check.

D'oh!
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About SolutionsIQ

With more than 30 years of experience, SolutionsIQ has a deep understanding of software delivery excellence.

Our broad range of consulting services – from training and coaching and talent acquisition services to total outsourced development – are essential to any Agile project or transformation, and give customers the tools and collaboration they need to succeed.

www.SolutionsIQ.com
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