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Project Portfolio Management Best Practices Summary of Results

PPM Accelerate

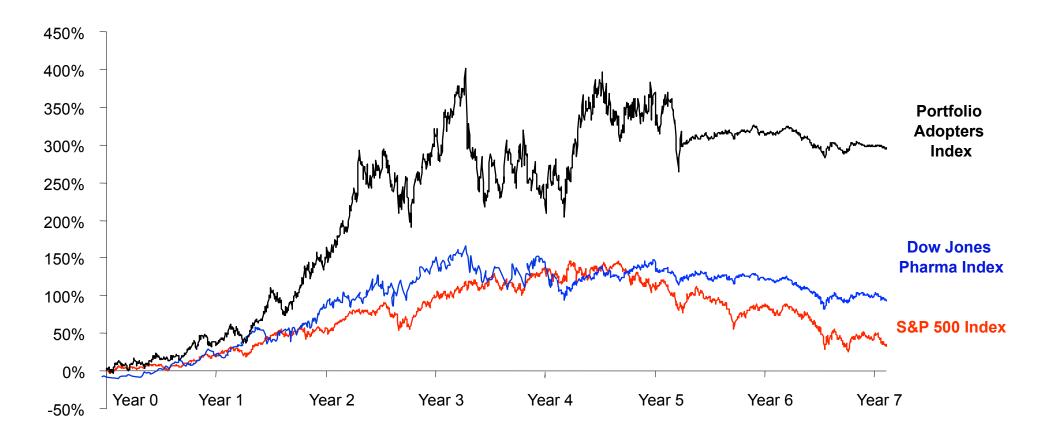
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> DAAG 2012, Chicago IL May 10, 2012

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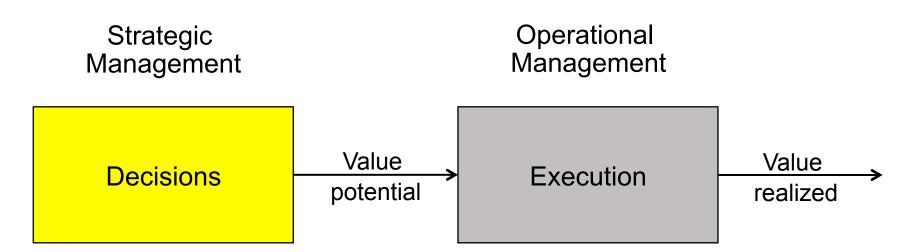
Portfolio management has strong decision content & is clearly associated with value creation in the pharmaceutical industry

Pharma Client* Stock Price Performance Relative to Dow pharma and S&P 500 indices



^{*}Includes client organizations who have "fully implemented" a value-based approach to resource allocation and portfolio management. (Timeframe mid-1990s to early 2000s

Strategic Management is the front end of Value Creation. Operations Management is the delivery vehicle.

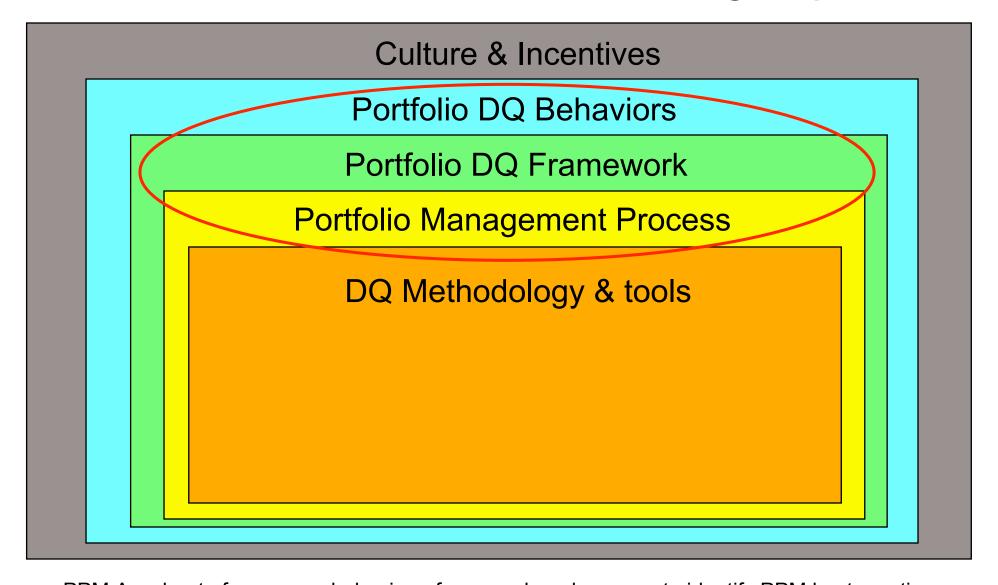


- Strategy development
- Strategic decision making
- Portfolio management
- Innovation
- < 5% of headcount

- Business planning
- Functional/project planning
- Pipeline management
- Project management
- > 95% of headcount

Because decisions do not lead directly and immediately to results, their impact is very difficult to measure. However the results from pharma industry portfolio adopters and Chevron are very encouraging.

Good portfolio decisions begin with a conducive culture, effective behaviors, a DQ framework and a good process



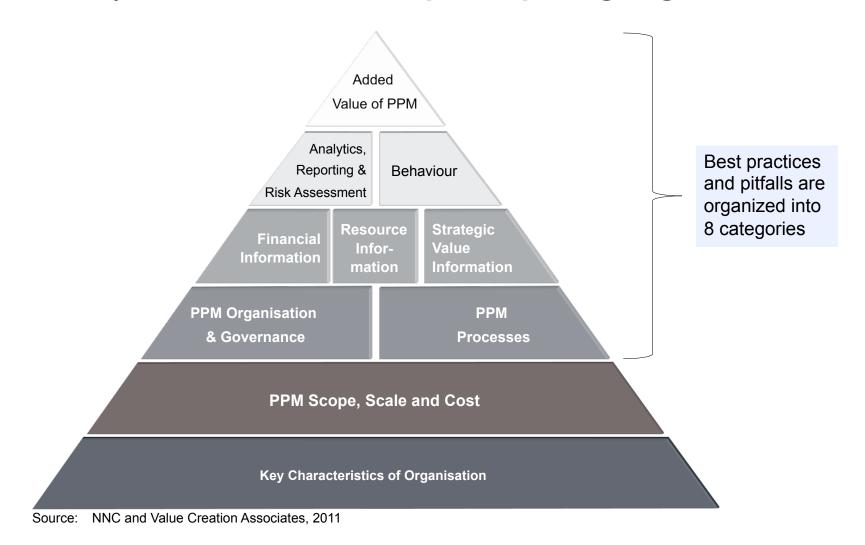
PPM Accelerate focuses on behaviors, framework and process to identify PPM best practices

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We used this framework 1) to organize 50 best practices and 25 pitfalls and 2) to characterize the participating organizations



The Best Practices and Pitfalls were based on 30+ years of practical experience and extensive literature research; see final slide for additional details on our sources

Some of our best practices and pitfalls are almost common sense, while other are more subtle but still very important

Examples of the 50 best practices

- A1 Pursue three overarching objectives in portfolio management: strategic alignment, strategic balance and maximize return
- B5 Show impact of project risk on future project and portfolio value
- C2 Decision making by management is knowledge-based, transparent and consistent
- D3 Measure the strategic & financial value of portfolio decisions using a business case
- E3 Do not overload the project pipeline or the people (resource projects adequately)
- F1 Have a well-defined business strategy and communicate it to all employees clearly and often
- G1 Portfolio governance should be clearly defined and understood
- H1 Use a consistent PPM process, language and tools across all levels and functions

These organizations participated in the PPM Accelerate study, with a current total of 41 participants

Participants Round 1



















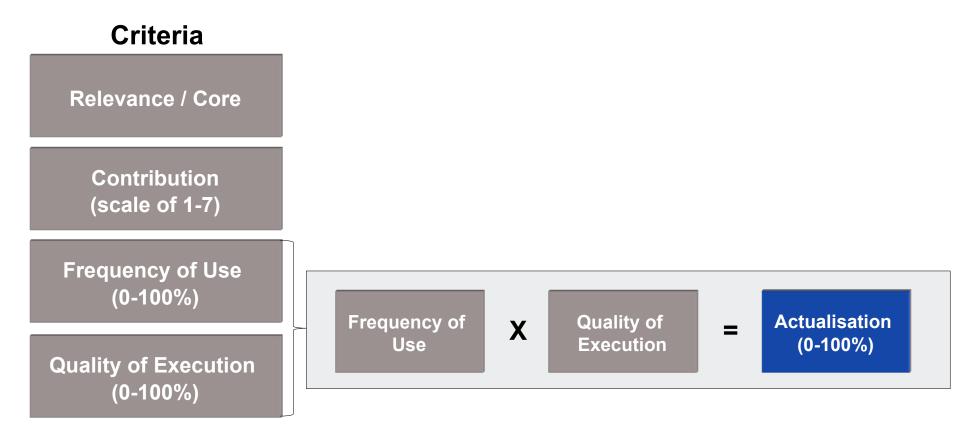
This presentation is based on data from Round 1 of the benchmarking; Round 2 analysis is underway

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Each participant scored all 50 Best Practices on four criteria

Scoring mechanism



Source: Value Creation Associates, 2011

This scoring mechanism is quite simple yet produces many powerful insights when analyzed

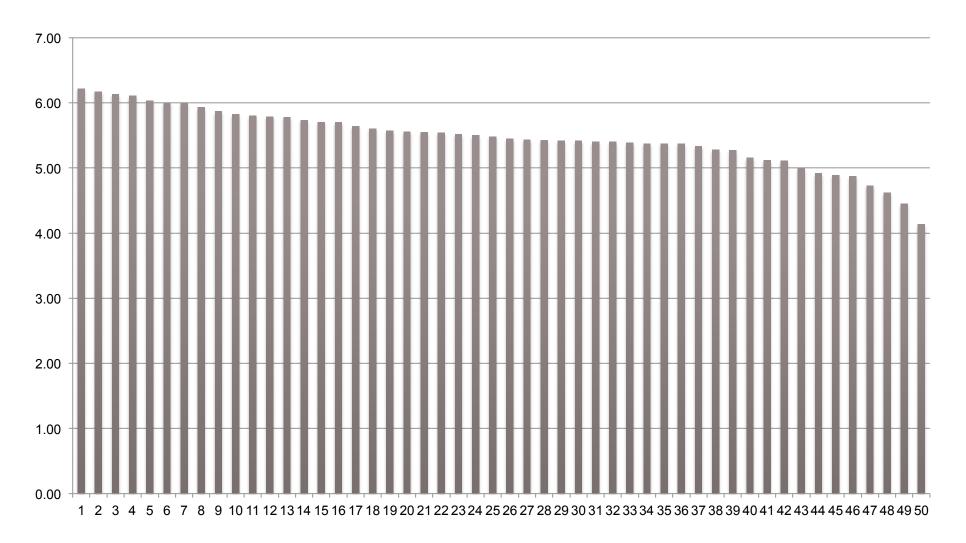
Some general observations on the 50 best practices

- All except 3 practices are considered Core by 8 or more organizations and one by 25
 - Every practice is considered relevant by at least 15 organizations and 10 by 30!
- 7 of the 50 best practices have an *average* contribution of 6.0 or higher (on a scale of 1-7, only including the Y and C scores) and only 7 have average contribution below 5.0

We believe this demonstrates that these best practices are a valid and powerful set

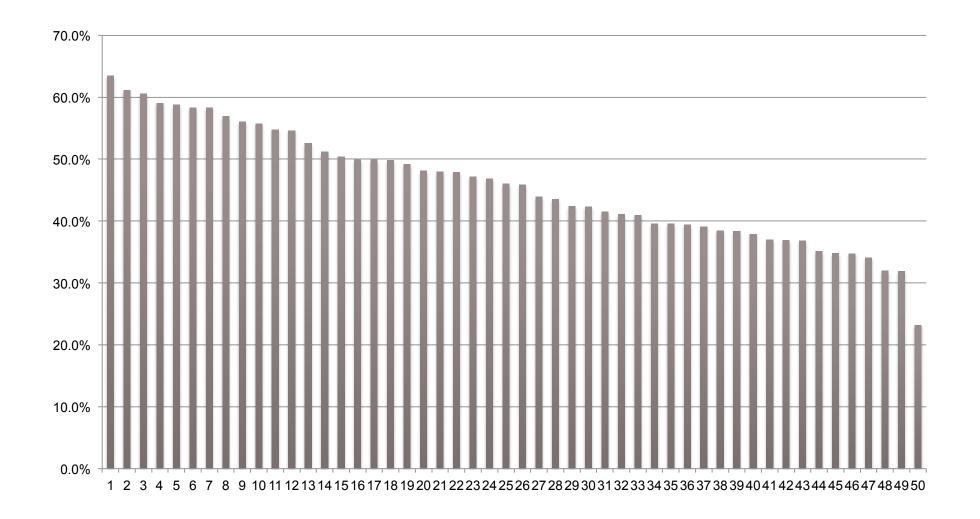
- Average best practice actualization drops rapidly from 63% to 22%, a significant 'range'
 - However the actualization of the top 10% (i.e. top 3 organizations) is usually above 80% and is occasionally 100%! Organizations can do these practices if they want to.
- Best practices with actualizations below 44% are fertile ground to explore for gaining competitive advantage, especially when you or the group consider them important
- One third scored their PPM performance against peer organizations as 6 or 7 (out of 7),
 one third scored it 5 and one third scored it 4 or lower
- There are many synergies among the best practices they work well together

The highest average contribution is 6.2 and then drops off slowly until the last few practices



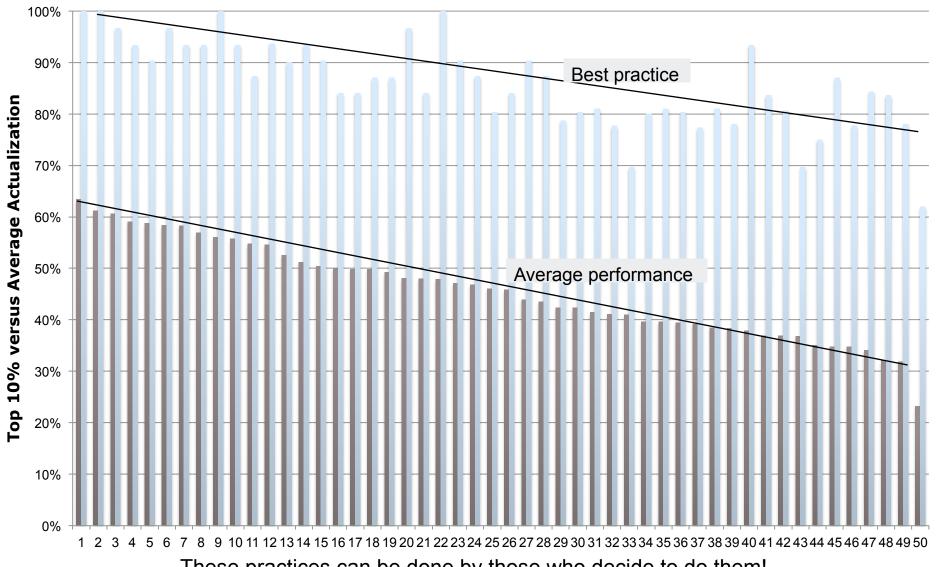
Our benchmarking population believes that most of these practices are quite important

Average actualization begins at 63% and drops off fairly rapidly and steadily

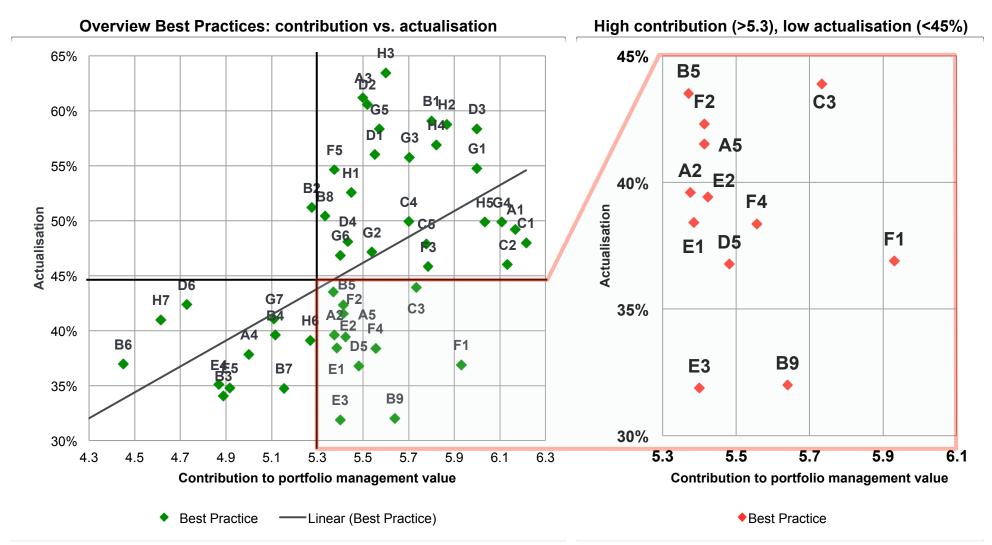


But the practices are not actualized in proportion to their importance

The Top 10% (Top 3 of our group) average actualizations are quite high, establishing a true benchmark for excellence in portfolio management



Best practices with high average contribution but low average actualization are good places to seek competitive advantage

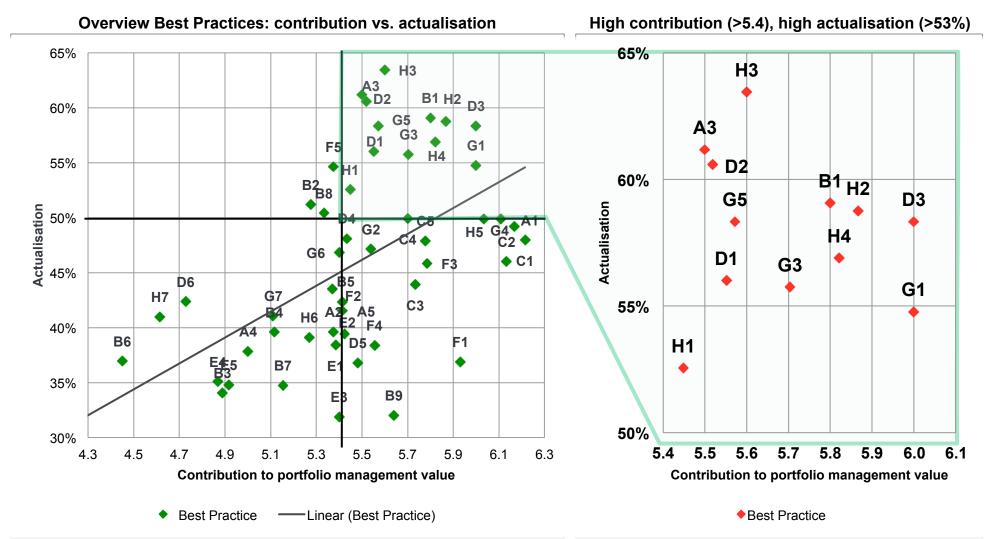


If you can actualize these high contribution low average actualization practices well above average you can create competitive advantage

| | Selected Best Practices: high contribution, low actualization |
|-----------|---|
| E3 | Do not overload the project pipeline or the people |
| F1 | Have a well-defined business strategy and communicate it to all employees clearly and often |
| F4 | Confirm that the projects in the portfolio are sufficient for the strategy to succeed |
| E1 | Identify and monitor resource bottlenecks |
| E2 | Manage the balance between resource demand and resource supply (capacity management) |
| A5 | Communicate the added value of PPM to the organization frequently and explicitly |
| В5 | Show impact of project risk on future project and portfolio value |
| C3 | Portfolio management results in an allocation of resources to projects and programs |

Almost everyone recognizes that these practices are quite important but most organizations admit they are not doing them very well!

Best Practices that score high on both average contribution to portfolio management value <u>and</u> average actualization are "essential for excellence"

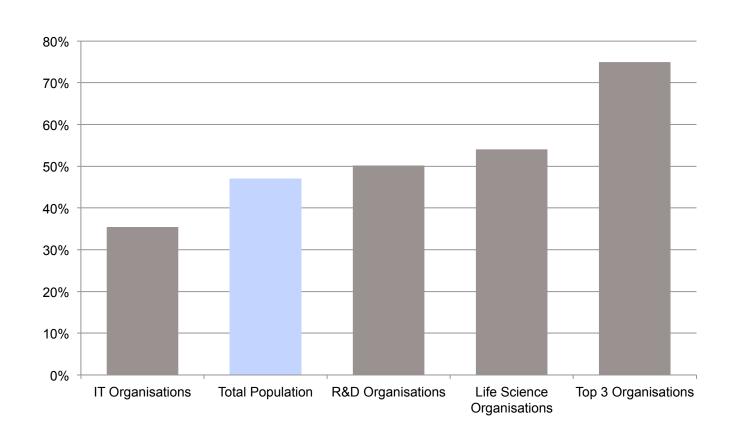


Organizations whose actualization on any of these practices is significantly below average are at a competitive disadvantage

| | Best Practices: high contribution, high actualisation |
|----|---|
| Н3 | Use an idea-to-launch process with decision (e.g. stage/phase) gates |
| А3 | Use a value/return measure that is aligned with shareholder value (e.g. eNPV) |
| D2 | Align PPM with regular planning and control processes such as the capital budget process |
| В1 | Use clear and user-friendly reports that meet the needs of decision makers |
| H2 | Evaluate projects in a standardized way combining quantitative and qualitative measures |
| D3 | Measure the strategic & financial value of portfolio decisions using a business case |
| G5 | Use cross-functional teams to ensure high quality and broad acceptance of decisions |
| H4 | Require a comprehensive business case early in the process; update at each decision gate |
| D1 | Monitor a mix of financial information (NPV / eNPV / etc.) |
| G3 | Have a well-documented and implemented set of decision criteria, business rules and internal controls regarding PPM |
| G1 | Portfolio governance should be clearly defined and understood |
| H1 | Use a consistent PPM process, language and tools across all levels and functions |

The average of the total population is about 10% above the IT peergroup, but about 10% below the Lifescience average and well below the benchmarks

Average Actualisations over all 50 Best Practices



Source: NNC and Value Creation Associates, 2011-2012 Note: Cutoff date for results shown is April 11, 2012

This overall comparison hides important areas of strength and weakness

There is little difference among the groups in actualizing strategy practices, but in other categories IT organizations are well below average while R&D and pharma/lifescience organizations are well above average

Category Average Actualization Scores

| Section | IT | Total Population | R&D | Life Science | Тор 3 |
|---------|-----|------------------|-----|--------------|-------|
| Α | 30% | 45% | 52% | 53% | 77% |
| В | 28% | 42% | 46% | 53% | 69% |
| С | 38% | 50% | 53% | 56% | 77% |
| D | 41% | 50% | 52% | 58% | 78% |
| Е | 25% | 36% | 39% | 45% | 65% |
| F | 41% | 44% | 42% | 43% | 73% |
| G | 42% | 52% | 55% | 60% | 83% |
| Н | 39% | 53% | 58% | 61% | 77% |
| Average | 35% | 47% | 50% | 54% | 75% |

Source: NNC and Value Creation Associates, 2011-2012 Note: Cut off date for results shown is April 11 2012

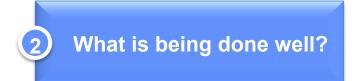
Most of the lifescience organizations are also contained in the R&D peergroup

Some of the main findings from Round 1 of the benchmark



Main findings

- Pharma / Healthcare is the best performing industry group
- Organizations executing mostly R&D projects do well
- Organizations doing mostly IT projects are below average



- Use of both quantitative and qualitative measures
- Having well established / implemented decision criteria
- PPM well aligned with regular P&C processes
- PPM Process, Organization and Governance

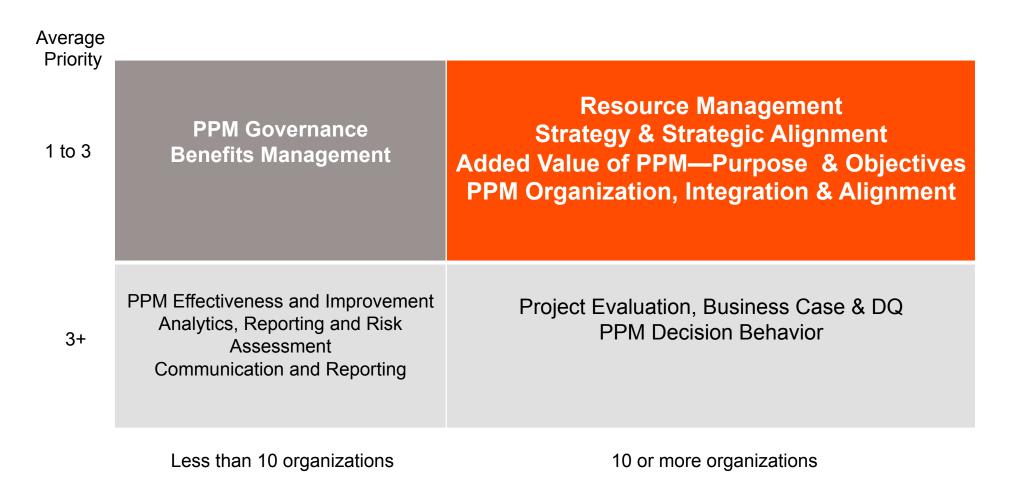


- Insufficient integration of PPM and resource management
- Portfolio not well aligned with strategy; strategy unclear
- Risk considerations/elements not reflected explicitly
- Portfolio management not aligned across tiers/functions
- Benefits management frequently not executed (no lookback)

Source: NNC and Value Creation Associates, 2011

The preliminary results from Round 2 are very siimilar to these

These are the primary PPM improvement challenges we saw, organized by the frequency of occurrence and the priority of the challenge



Many organizations need to focus on the challenges in the upper right

Frequency of occurrence

PPM Accelerate delivers value for the participants in four ways

What are the benefits?

Get to know best practices and see how well you perform against a well defined set

Understand your performance compared to total sample as well as relevant peer groups

Receive a custom report and recommendations for improvement based on your answers relative to group averages and top performance benchmarks

Increase knowledge and exploit networking opportunities among members via meetings, PPM Accelerate LinkedIn group and webinars

Source: NNC and Value Creation Associates, 2011

And we provide you with many recommendations & suggestions for potential PPM process improvement

Much of the individual feedback is driven by how each organization compares to the benchmarks (Top 3 actualizations) on all 50 practices—here focused on the EE and CA practices

12 PRACTICES ESSENTIAL FOR PM EXCELLENCE

| | Client | Client | GAP TO | |
|------|--------|--------|--------------|----|
| CODE | CONT. | ACT. | TOP 10% | |
| H3 | 7.0 | 63% | -37% | EE |
| A3 | 7.0 | 80% | -20% | EE |
| D2 | 5.0 | 25% | -72% | EE |
| B1 | 7.0 | 35% | -58% | EE |
| H2 | 7.0 | 48% | -42% | EE |
| D3 | 5.0 | 25% | -72% | EE |
| G5 | 7.0 | 40% | -53% | EE |
| H4 | 7.0 | 63% | -30% | EE |
| D1 | 7.0 | 64% | -36% | EE |
| G3 | 7.0 | 30% | -63% | EE |
| G1 | 7.0 | 30% | -57 % | EE |
| H1 | 7.0 | 30% | -60% | EE |

Note multiple G and H practices

12 PRACTICES FOR GAINING COMPETITIVE ADVANTAGE

| | Client | Client | GAP TO | |
|------|--------|--------|-------------|----|
| CODE | CONT. | ACT. | TOP 10% | |
| E3 | 7.0 | 25% | -53% | CA |
| B9 | 7.0 | 30% | -54% | CA |
| D5 | 7.0 | 40% | -32% | CA |
| F1 | 7.0 | 64% | -17% | CA |
| F4 | 7.0 | 40% | -38% | CA |
| E1 | 7.0 | 30% | -51% | CA |
| E2 | 7.0 | 30% | -50% | CA |
| A2 | 5.0 | 64% | -16% | CA |
| A5 | 7.0 | 30% | -51% | CA |
| F2 | 7.0 | 40% | -40% | CA |
| B5 | 7.0 | 30% | -57% | CA |
| C3 | 7.0 | 20% | -70% | CA |

Note multiple E and F practices

On the theory that no organization is striving to be "just average"

You should also consider improving practices that you (and others) consider important but that have large gaps to benchmark performance

ALL OTHER PRACTICES (sorted by Gap to Top 10%)

| | Client | Client | GAP TO |
|-----------|--------|--------|-------------|
| CODE | CONT. | ACT. | TOP 10% |
| B8 | 7.0 | 10% | -80% |
| E5 | 7.0 | 15% | -72% |
| C5 | 7.0 | 30% | -70% |
| B7 | 7.0 | 10% | -68% |
| G4 | 7.0 | 20% | -67% |
| A4 | 7.0 | 30% | -63% |
| B2 | 5.0 | 30% | -63% |
| G2 | 7.0 | 30% | -60% |
| F3 | 7.0 | 25% | -59% |
| H6 | 7.0 | 20% | -58% |
| A1 | 7.0 | 30% | -57% |
| D4 | 7.0 | 40% | -57% |
| E4 | 5.0 | 20% | -55% |
| C1 | 7.0 | 30% | -54% |
| C4 | 7.0 | 30% | -54% |
| D6 | 5.0 | 25% | -54% |
| B6 | 7.0 | 30% | -54% |
| F5 | 7.0 | 40% | -54% |
| B4 | 5.0 | 30% | -51% |
| C2 | 7.0 | 30% | -50% |

Note the big gaps for 4 of 5 behavior practices, C, plus C3 at -70% on the previous page! Behavior is clearly a major issue for this organization.
 And all of these behavior practices make the maximum contribution to achieving objectives.

| Practice | Cont. | Act. | GAP |
|-----------|-------|-------|------|
| C5 | 7.0 | 30% | -70% |
| C3 | 7.0 | 20% | -70% |
| C1 | 7.0 | 30% | -54% |
| C4 | 7.0 | 30% | -54% |
| C2 | 7.0 | 30% | -50% |
| | 7.0 | 28.0% | -60% |

Grouping the practices into related clusters helps focus the recommendations

"The PPM Accelerate Framework was valuable to us in several ways"

"Post PPM Accelerate, we're now coding all projects to strategic element and investment type to ensure alignment

We're now shifting primary focus from only business case economics to a more balanced approach which includes strategic category, segmentation, ecosystem value creation, etc

We've reallocated some resources to intermediate term surer bets versus longer term risky bets

For a project list sorted by descending order of payback, we now focus nearly all discussion and decision making on the bottom 15% funded and top 15% unfunded versus the whole list."

Actual feedback from one of the top performing Round 1 clients

"PPM Accelerate also identified high contribution practices that helped us sharpen our focus"

"Our 10 key principles of pipeline project management have been edited and re-priortized

We've adjusted required training to better explain why several key metrics are valuable and will be required

Two of 5 key internal reports have been reworked as the result of insights from PPM Accelerate

Constraints became better known, resulting in redeployment and selective hiring to fill gaps"

Actual feedback from one of the top performing Round 1 clients

Unilever R&D has participated in both Round 1 and Round 2 of PPM Accelerate. Prior to participation in Round 1:

- Unilever already had a well-developed and formulised stage-gate process and supporting IT system for its near-term go-to-market project portfolio management.
- However, we wanted to undertake an enterprise-wide review of our long-term R&D innovation funnel.
- We started with the typical approach: design the data collection to support portfolio decision-making; collect data by circulating spreadsheets; then run a probabilistic analysis off-line; and report and review results with senior decision-makers.
- Even though the approach was flexible, we soon pushed up to its intrinsic limitations: long turnaround times; labour intensive; version control; etc.
- We then started designing what an IT platform might look like, including what compromises we would need to make.

What happened in Round 1

- Our objective for taking part was primarily to see how our current and planned approach matched against other similar companies: Were we on the right tracks? Had others solved some the problems we encountered? Can we discover insights that help us design the next phase? Etc.
- The output from Round 1 was a pleasant surprise! We were more aligned to best practice than we initially thought!
- PPM Accelerate validated our decisions to keep focus on supporting decisions for active portfolio value management, rather than collecting too much data and straying into project management systems.
- The results of PPM Accelerate excited senior R&D management and were widely circulated to the wider stakeholders. This accelerated and reinforced senior management pull for the next phase.
- Senior management are now driving closer connections between the long-term and near-term portfolios, tracking progress and using the portfolios for active strategy implementation.

Why we are taking part in Round 2

- We have now implemented the first wave of our IT platform that supports the long-term portfolio and are working closely with the near-term portfolio project team to drive connectivity
- We now want to benchmark our end-to-end process, from idea to market application, and identify opportunities for further improvement.
- The results from Round 2 will help us design next phase of implementation, and will provide us with external validation of our progress.
- And the results of Round 2 show clearly that Unilever has made significant progress in improving its portfolio process based on what they learned in Round 1.

Brief descriptions and contact details of the supporting organisations

Value Creation Associates

 Value Creation Associates (VCA) is a networked consulting firm focusing on the front end of the value chain: identifying, evaluating, selecting and acquiring the most valuable opportunities to grow businesses profitably and help organizations achieve their strategic goals



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NOLAN, NORTON & CO.

 Nolan, Norton & Co. (NNC) consults and guides the senior management of international companies in the development and implementation of their corporate and business strategies



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Please feel free to contact us for additional information

We determined these best practices and pitfalls based on 30+ years of portfolio management experience plus extensive literature research?

Sources

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^{*}Articles and presentations marked with an asterisk are available from Value Creation Associates