SW productivity benchmark & performance diagnostic for a telecom equipment OEM

Background

Client situation

- A global telecom company with R&D spread across 4 continents

- Recently made heavy investments in new tools and design methods, but unable to assess impact

- Great diversity of tools and practices between groups; unsure which were the "best practices" leading to the highest performance

- Looking for opportunities to improve productivity & reduce R&D costs

Engagement objectives

- Deliver ongoing performance measures as part of an executive dashboard to identify areas of best practice and teams that need help

- Quantify the ROI of recent investments in new tools & make a decision whether to roll out new capabilities more broadly

- Uncover additional opportunities for improving R&D productivity

Approach

Establish performance baseline

- Measure productivity, lead time, on-time performance and quality of multiple product lines & R&D sites

Develop performance dashboard

- Combine Numetrics' productivity measurements and industry benchmarks with other internal metrics to create a comprehensive, standardized dashboard on R&D efficiency for senior executives

Identify best practices

- Identify improvement opportunities & best practices by comparing each baseline vs. internal and external benchmarks
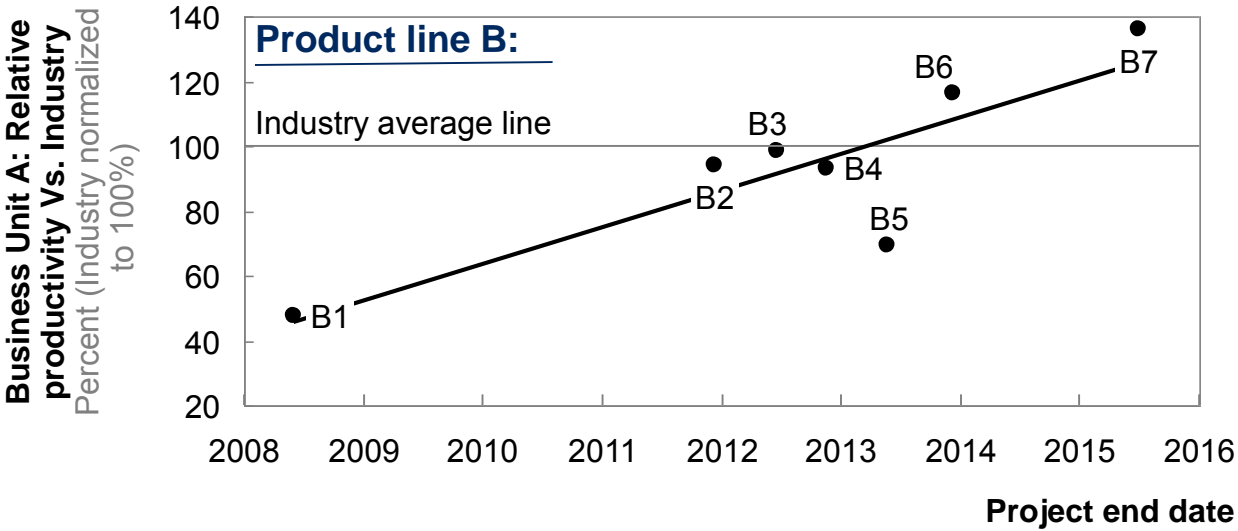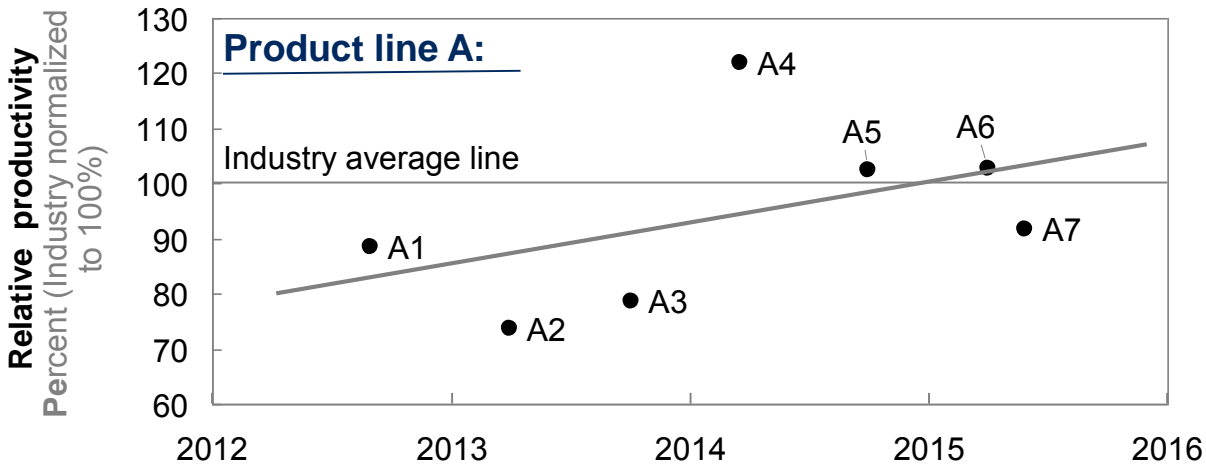
Improve productivity

- Use root cause analysis techniques to uncover systemic root causes of poor performance as well as opportunities to improve

Impact

R&D productivity & transparency

- Provided a comprehensive industry benchmark across product lines and design sites

- Increased R&D transparency by establishing a performance dashboard for management

- Provided proof of the impact of recent investments in continuous integration and development methodologies, leading to a decision to standardize these practices across the company

- Enabled client to identify performance gaps and set performance improvement targets tailored for each product group

- Identified 7 actionable initiatives to improve productivity by: making changes to suppliers management, customers interactions, work allocation across sites, new release planning, prototype software approaches.

Continuous benchmarking showed continuous improvement and impact from Client's initiatives

Relative productivity Vs. industry (industry indexed to 100%)

- Provided transparency by establishing a continuous performance dashboard for management

- Analytics proved that productivity was indeed improving following recent investments in continuous integration and development methodologies