Unleashing your growth potential
Product Innovation and Development
## Contents

1  Why change?  
2  Point of view  
3  PwC solutions  
4  PwC methodologies  
6  Why PwC?  
7  Track record
Why change?

Double performance

Leaders vs. Others

Leaders typically deliver substantially better Revenue Growth and Productivity than underperforming peers, as quantified by PwC’s global innovation benchmark.

Stage 0
Informal Management
Informal practices based on individual experience

Stage 1
Functional Management
Measurement of activities within functions to drive quality and consistency

Stage 2
Project and Product Excellence
Excellence within and across functions to drive effective, rapid execution across the product life cycle

Stage 3
Portfolio Excellence
Alignment of strategic processes and plans to drive profitability through innovation, platform and technology leverage, and sound portfolio decisions

Stage 4
Open Innovation
Alignment of processes and practice across multiple businesses and partners to deliver complete customer solutions and optimise innovation, productivity, and value

<table>
<thead>
<tr>
<th>Leaders</th>
<th>Other</th>
<th>Other</th>
<th>Other</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Growth</td>
<td>16%</td>
<td>19%</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>P.B.T. Growth</td>
<td>8%</td>
<td>8%</td>
<td>23%</td>
<td>54%</td>
</tr>
<tr>
<td>Time to Market</td>
<td>1.0</td>
<td>0.5</td>
<td>0.3</td>
<td>-</td>
</tr>
<tr>
<td>Productivity</td>
<td>1.0</td>
<td>1.2</td>
<td>1.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

(Based on PwC’s Global Product Innovation Benchmark)

Further indications the market agrees: numerous surveys have identified growth and innovation as one of the top two C-suite concerns:

PwC CEO Survey 2011
The proportion of CEOs relying on innovation (new products/services) to drive growth has doubled in five years

PwC caught in the Crossfire Global Executive Survey 2010
100 percent of all the executives surveyed cite growth as the goal for innovation
**Point of view**

Innovation-driven organisations can achieve sustainable value creation and profitable growth. This can be driven through both ‘back office’ operational innovations and ‘front office’ growth effectiveness capabilities.

*Innovation has nothing to do with how many R&D dollars you have. When Apple came up with the Mac, IBM was spending at least 100 times more on R&D. It’s not about money. It’s about the people you have, how you’re led, and how much you get it.*

Steve Jobs

---

**Additional Value**

<table>
<thead>
<tr>
<th>Time</th>
<th>Innovation</th>
<th>Operational Effectiveness</th>
<th>Growth Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Value Proposition Innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Product/Tech/Service Innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Process/Productivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Operating Model Transformation</td>
</tr>
</tbody>
</table>

**Growth can be delivered by a range of practices and capabilities. Successful companies are constantly evaluating opportunities across the spectrum.**

---

**Growth**

- Organic
  - Innovation
  - Segmentation
  - Geographic Expansion

- Inorganic
  - M&A

**Growth Effectiveness**

- • Value Proposition Innovation
- • Business Model Innovation

**Operational Effectiveness**

- • Product/Tech/Service Innovation
- • Process/Productivity
- • New Ecosystem Insights
- • Customer Engagement & Co-Creation
- • Market/Customer/Service Adjacencies
- • Regional/Global Growth
- • Post-Merger Integration/Execution
- • Portfolio Re-configuration
PwC Solutions

PwC’s Product Innovation and Development capability has 6 key client offerings, which work together to cover your entire product and service growth engine.

<table>
<thead>
<tr>
<th>Right products and services</th>
<th>At the right cost and quality</th>
<th>For maximum impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth through innovation</strong></td>
<td><strong>Global development operations</strong></td>
<td><strong>Product development productivity</strong></td>
</tr>
<tr>
<td><strong>Product strategy and portfolio</strong></td>
<td><strong>Development</strong></td>
<td><strong>Product development excellence</strong></td>
</tr>
<tr>
<td><strong>Global development operations</strong></td>
<td><strong>Product life-cycle management</strong></td>
<td></td>
</tr>
</tbody>
</table>

Helping our clients grow by developing innovative business models, products and services

<table>
<thead>
<tr>
<th>Helping our clients define winning product strategies, optimise portfolio and balance roadmap</th>
<th>Improve product development footprint for access to markets, ideas, talent, and for cost and tax efficiency</th>
<th>Increasing output and reducing costs by improving productivity, effectiveness and efficiency of product development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help our clients define winning product strategies, optimise portfolio and balance roadmap</td>
<td>Improve product development footprint for access to markets, ideas, talent, and for cost and tax efficiency</td>
<td>Increasing output and reducing costs by improving productivity, effectiveness and efficiency of product development</td>
</tr>
</tbody>
</table>

We help our clients

<table>
<thead>
<tr>
<th>Identify innovative value propositions</th>
<th>Identify innovative product &amp; service strategies</th>
<th>Setup and optimise multi-site product development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify innovative value propositions</td>
<td>Identify innovative product &amp; service strategies</td>
<td>Setup and optimise multi-site product development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Set up and optimise multi-site product development</th>
<th>Understand tax implications of their operational strategy</th>
<th>Upgrade processes, governance, metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup and optimise multi-site product development</td>
<td>Understand tax implications of their operational strategy</td>
<td>Upgrade processes, governance, metrics</td>
</tr>
</tbody>
</table>

The value we deliver

<table>
<thead>
<tr>
<th>Increased growth</th>
<th>Enhanced growth and profitability</th>
<th>Reduced tax burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased growth</td>
<td>Enhanced growth and profitability</td>
<td>Reduced tax burden</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New revenue sources</th>
<th>Executive alignment</th>
<th>Reduced overall labour cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New revenue sources</td>
<td>Executive alignment</td>
<td>Reduced overall labour cost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balanced demand and supply</th>
<th>Increased product development capacity</th>
<th>Increased products out the door</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced demand and supply</td>
<td>Increased product development capacity</td>
<td>Increased products out the door</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deliverable portfolios and roadmaps</th>
<th>Increased talent pool</th>
<th>Reduced or controlled R&amp;D spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable portfolios and roadmaps</td>
<td>Increased talent pool</td>
<td>Reduced or controlled R&amp;D spending</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enhanced market share</th>
<th>Increase addressable market</th>
<th>Reduced slippage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced market share</td>
<td>Increase addressable market</td>
<td>Reduced slippage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faster products to market</th>
<th>Technology leaderships</th>
<th>Increased market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster products to market</td>
<td>Technology leaderships</td>
<td>Increased market share</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control of as designed, as built, as maintained and as installed bill of materials</th>
<th>Through life management</th>
<th>Higher revenue and profit per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of as designed, as built, as maintained and as installed bill of materials</td>
<td>Through life management</td>
<td>Higher revenue and profit per product</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product quality</th>
<th>Product assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product quality</td>
<td>Product assurance</td>
</tr>
</tbody>
</table>
What the industry says about our capability

“Because of PACE®, we are resourcing our high profile projects better than we have in the past and getting them out earlier.”

“The firm and its Product and Service Innovation practice are among the most results oriented of consultancies and build strong ROI business cases into its offering.”*

“PACE® forced segments of the organisation that might not otherwise interact to work as partners.”

PwC’s proprietary Product And Cycle-time Excellence® (PACE®) framework is “the single most robust blueprint for successful product development and commercialisation in the marketplace”*

* Kennedy Information R&D Strategy and Product and Service Development Consulting Marketplace 2009–2012 Product and Cycle-time Excellence* and PACE® are registered trademarks of PwC LLP
PwC framework – PACE®
(Product And Cycle-Time Excellence)

Target Product Innovation Operating Model - PACE®

PwC’s PACE® is a comprehensive framework designed to assist with adoption of the leading-practices organisations need to compete and achieve optimal performance. PwC has helped over 1400 organisations assess their capability, identify their deficient practices, and implement changes to drive step change improvements and tangible outputs.

Functional Excellence
- Organisation and Skills
- Functional Procedures, Standards, and Tools
- Performance Measurement

Project Excellence
- Voice of the Customer
- Project Governance
- Cross-Functional Core Teams
- Structured Development Process
- Decision-Making Process

Product Excellence
- Idea Management
- Product Governance
- Product-Line Teams
- Product-Line Planning
- Lifecycle Management Process

Portfolio Excellence
- Opportunity Exploration
- Portfolio Governance
- Market Attack Teams
- Market and Technology Strategy
- Portfolio Management Process

Product And Cycle-time Excellence® (PACE®) is a registered trademark of PwC LLP
Why PwC?

We serve the boards, executive teams and private equity owners for many of the largest and highest growth product and service based companies in the world.

Our results are delivered by hands-on teams with deep expertise in: Benchmarking, Performance Improvement/Recovery, Transformation and Business Results Delivery.

... And PwC is Recognized as a Product and Service Innovation Leader by Kennedy Information...

# 1 – R&D Methodological Strength and PI&D Consulting Approach
# 1 (tied) – Innovation Solutions Across All Consulting Areas
# 1 – Product and Service Launch Operations

... with unparalleled experience

1400 Innovation projects worldwide
Track record

Large industrial Company – Improving quality and reducing time to market to beat competition
Functional and Project Excellence

Client Issue
Company was increasingly being threatened in traditional and emerging markets with engineering and product quality not at required levels, and project cycle-times often more than double than those of competitors. The key issues included lack of standardised engineering processes, methods and tools, weak programme and project governance, low performing project teams and line organisations, informal development process missing to align key functional areas and activities, such as system engineering, new product introduction, supply chain and supplier ramp-up.

Our approach
Reviewed and improved key engineering capabilities, processes and practices and the overall product development approach, covering project governance, development process, project management and cross-functional teams and operating model. Initiated and implemented a comprehensive transformation project to radically change and improve the Engineering and Product Development in the company
- Improved Functional Excellence to allow the engineering organisation to drive quality, consistency and enhanced capabilities into the engineering function.
- Implemented effective cross-functional Project Excellence across the key development units.

Benefits delivered
Increased Product Development productivity by more than 30% and reduced Time To Market by close to 50%
- Secured earlier revenue and increased cash-flow through reduced Time To Market.
- Improved productivity by doing more projects with the same resources.
- Achieved significant first mover advantage in key strategic projects.
- Reduced waste and rework due to higher engineering standards and ‘doing it right first time.’

Manufacturer of telecoms network equipment – Product development throughput
Project Excellence

Client Issue
The client had won several multi-billion dollar contracts and had committed to a roadmap of product releases that were falling behind schedule. The client needed rapid improvements to get their next release out on time and to improve their overall development process.

Our approach
We implemented our Critical Project recovery approach, taking an active role in ensuring no more slippage, and the delivery of working equipment as soon as possible. We eliminated bottlenecks in the development process and rebalanced the organisation. We implemented a robust end to end project management approach to ensure consistent responsibility of all products and a metrics structure to manage the performance/throughput of the organisation.

Benefits delivered
The total value from implementing product development improvements added up to € 43 million recurring savings:
- Doubled development throughput
- Critical project was released on time to the delight of the end customers
- Immeasurable positive impact on future revenues from increase in market confidence
**Track record**

**Internet communications company – SW as a service provider and private equity**

**Product Excellence**

**Client Issue**

Our client, a private equity company, had recently bought a brand name communications software company that had been stalling under its previous owner. The goal was to increase revenues from $100m+ to $350m+ then sell the company for a 3x mark up. Our role was to significantly increase the productivity of the large software organisation suffering from multiple products, poorly defined architectures, silo’d ways of working, lack of key competencies and low morale.

**Our approach**

We implemented large scale enterprise Agile development methods across the organisation. We defined new Product Manager roles, and restructured the Product Management, Engineering management and Quality functions. We organised system development activities forming independent product teams. We implemented continuous integration and testing.

**Benefits delivered**

The increase in output was so significant that the client re-established market leadership and was bought for $8bn against a cost of $1.5bn.

---

**Pharmaceutical manufacturer – IT and development strategy**

**Portfolio Excellence**

**Client Issue**

Client struggled with weak governance, controls and working practices for – (a) translating business strategy into process and systems improvement projects, (b) business and IT leaders to prioritise investments based on business needs, (c) getting alignment across process areas on how to make investment decisions. Proliferation of decentralized, and at times redundant, investments was creating an unmanageable model.

**Our approach**

PwC adapted its PACE® methodology to create a structured process and governance model for managing the portfolio of business improvement investments across Clinical Development. The team also facilitated the decision-making teams to rationalise the portfolio by aligning projects to business improvement strategies and goals.

**Benefits delivered**

- Aligned business improvement investments and priorities with business strategy and goals
- Improved portfolio planning, analysis, and decision-making
- Improved value of business improvement investments:
  - 30% greater ROI by better planning and greater achievement of forecasted statement of benefits
  - 20% reduced investment by cancelling lower value projects
  - 25% improved throughput by aligning on priorities, tighter collaboration, and clarifying governance roles/responsibilities
PwC Sweden is the market leader within auditing, accounting, tax and advisory services, with 3,800 staff members and 130 offices spread across the country. Using our experience and unique business knowledge, we enhance value for our 66,000 clients, who are comprised of global companies, major Swedish companies and organizations, smaller and medium-sized companies, primarily local, and the public sector.

PwC Sweden is a separate and independent legal entity. We are the Swedish member firm of the PwC global network. Close to 180,000 people in 158 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.