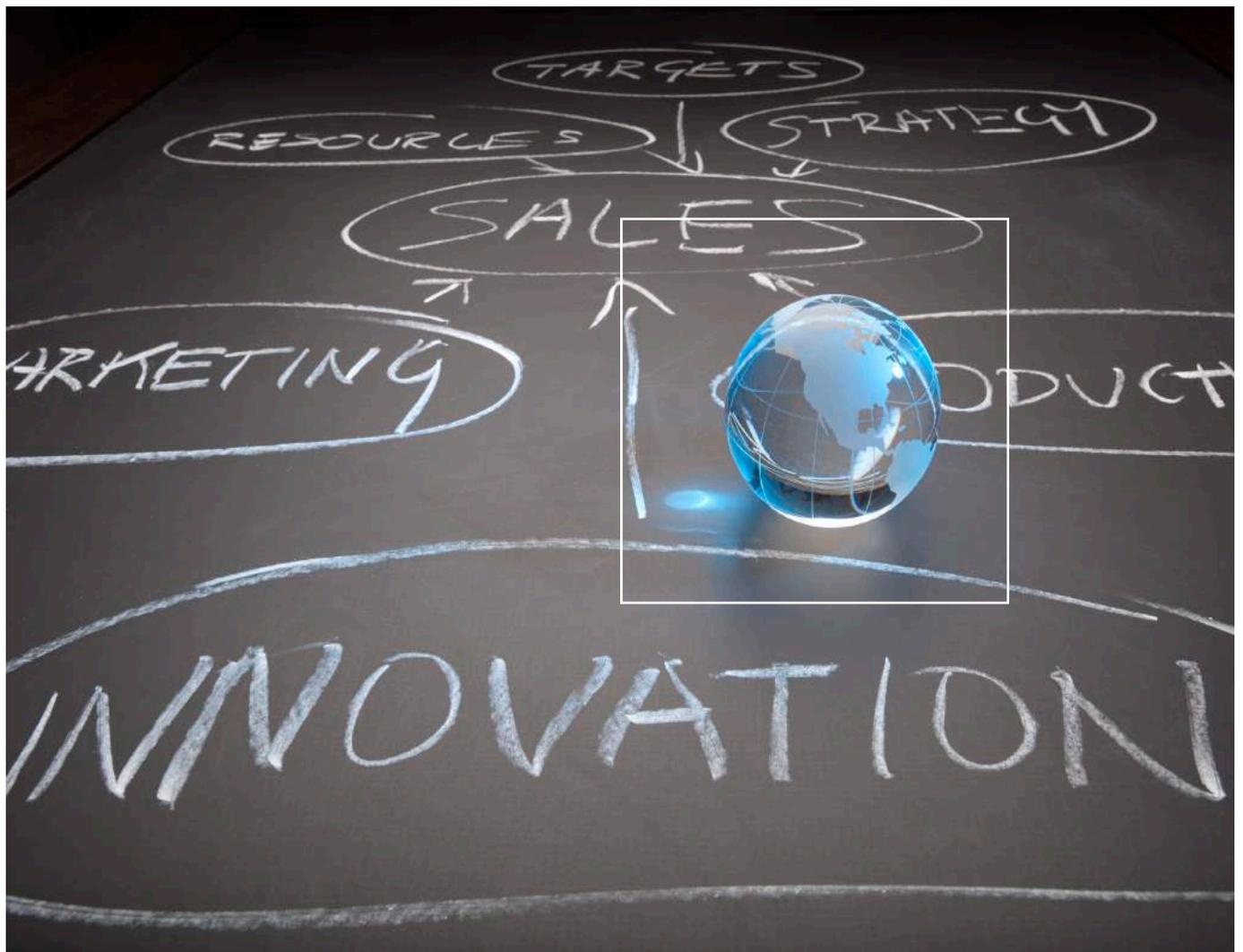


Getting a Better Return on Your Innovation Investment

*Results of the 8th Arthur D. Little Global Innovation
Excellence Study*



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Executive Summary

Arthur D. Little's latest Innovation Excellence Study provides new insights into what companies can do to achieve a better return on their investment in innovation management

Whilst there is no shortage of advice on innovation management, there seems to be relatively little empirical evidence about what really works in terms of managing the innovation process, and understanding what differentiates top innovators from other companies in different industries. To fill this gap, in January 2013 Arthur D. Little completed its 8th Global Innovation Excellence Study, a global, cross-industry survey of trends and best practices in innovation management. Uniquely, this study explores in some depth the processes and approaches used by companies for innovation management, shows how these contribute to innovation success, and enables participating companies to benchmark themselves against their peers. Drawing on over 650 responses, the study sheds new light on the basic key question: what innovation management techniques are most important in achieving a better return on innovation investment? The results are important for any company that wishes to stay competitive.

Overall we highlight six key insights:

1. There is strong evidence that excellence in innovation management based on Arthur D. Little's model leads to higher innovation performance

Our study shows a strong and statistically significant correlation¹ between using the best practice innovation management approaches according to Arthur D. Little's proprietary Innovation Excellence Model, and achieving higher innovation performance in terms of the rate of new product/service introduction, contribution to EBIT margins, time to break-even, process improvement and weighted company satisfaction in innovation activities. In other words, adopting the best practices in Arthur D. Little's model helps firms to achieve greater innovation success.

2. Top quartile innovation performers obtain on average 13% points more profit from new products and services than average performers, and 30% shorter time-to-break-even, although the gap is narrowing

Comparing top quartile performers with the rest of the sample, there is a significant gap of up to 13% points in terms of EBIT from recent product & service introduction, as well as a gap of 30% in terms of average time-to-break-even. However, the gap between the best and worst performers has narrowed in recent years, suggesting that underperformers can and do catch up, and that maintaining a lead in innovation performance is getting ever harder.

3. Innovation performance achieved has decreased on average since 2010, yet satisfaction with this level of performance has nearly doubled

Comparing 2010 and 2012 results, we found a significant overall decrease of up to 25% in innovation performance across a range of industries – this may be driven by the tough market conditions of recent years which have forced companies to focus on short term performance, as well as issues specific to certain industries. In contrast, we found that overall satisfaction with innovation performance increased significantly from 25% to 42%, although the majority of respondents are still dissatisfied. This may reflect a recognition that innovation success is getting harder to achieve.

¹ Throughout the study we report only statistically significant effects when these are significant at $p < 0.05\%$ (i.e. there is a less than 1 in 20 chance that the relationship is caused by chance). Statistically relevant findings are indicated as follows: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

4. There is a clear correlation between capability in innovation measurement and innovation success, yet less than 20% of companies believe they have a good innovation measurement capability

We found a strong and positive correlation between companies' assessment of their own capabilities in innovation measurement and the innovation success achieved. This underpins the long-accepted maxim supported by our own experience in working with clients, namely "If you can't measure it you can't manage it". Perhaps more surprising is that less than 20% of companies believe they are better than average in innovation measurement capabilities and indicates the level of dissatisfaction with their efforts to measure innovation performance. This underlines both the inherent difficulty of effective measurement of innovation, and the significant potential for companies to improve their capabilities in this area.

5. Certain innovation management practices have a particularly strong impact on innovation performance

Top innovation performers invest relatively more in radical improvements to products, services and business models, as opposed to incremental improvements. The study identifies four key cross-industry innovation management practices which are most consistently linked to strong innovation performance:

- Understanding important **technologies in terms of their contribution** to corporate goals.
- Using **external sources of business intelligence** in a structured way.
- Reacting to changes in targeted segments by **reviewing the product/service portfolio**.
- **Mobilizing the whole organization** to develop new ideas.

It is perhaps surprising that many companies still do not implement these basic practices effectively. In contrast, many innovation tools which are often referenced in innovation literature, such as Idea Jams, Idea Bootcamps and Crowdsourcing are not as widely used as may have been expected, and their contribution to innovation performance is less significant at present.

6. Top innovators do much better in adopting best practices in accelerating growth

The study looks at the relationship between innovation and approaches to accelerating growth. We find that top innovators are better at identifying unmet needs, fostering an entrepreneurial culture and leveraging existing key competencies. Interestingly, they have overcome important *internal* challenges that are keeping back others such as getting top-management support, enabling fast decision-making and establishing productive cross-functional relationships.

The main body of this report provides further background on these and many other important insights – we hope you enjoy the content.

The benchmark is still open to you

If you are curious about your innovation performance there is still an opportunity to become part of the benchmark. As part of our on-going work in innovation excellence, Arthur D. Little is making the toolkit developed for the study available for all firms interested in exploring innovation performance. This will give you the unique opportunity to position the innovation performance of each of your different BUs relative to their specific peers. Examples of the tailored feedback reporting you will receive are included at the end of this report. Details for Arthur D. Little contacts in the Technology and Innovation Management practice or relevant Industry practices are available on page 24. The toolkit can be accessed at www.adl.com/InnovationExcellence

Main Study Findings

Everyone agrees that innovation is important, and study after study proclaims that companies are putting the creation of new, innovation-based value at the heart of their business priorities. But as soon as we dig a little deeper into what is actually being done we find enormous variations in both innovation practice and performance.

What's more, there is no shortage of advice on innovation management, with new tools and approaches constantly being pushed out to companies – in 2011 there were over 17 articles in Harvard Business Review that covered innovation. These are typically based on the experiences of leading innovators – frequently focusing on a few iconic examples (such as Apple, eBay, or P&G) which are often inappropriate benchmarks for other industries. At the same time, there seems to be relatively little empirical evidence about what really works in terms of managing the innovation process, and understanding what differentiates top innovators within and across industries.

This is a major issue for companies that want to improve their innovation performance and need clear recommendations for the

strategic management of innovation. This is at the heart of the 8th edition of Arthur D. Little's Global Innovation Excellence Survey. In this report we provide an overview of the main study findings, including key insights, drivers of innovation success, and the link between innovation and growth in new business areas.

1. There is strong evidence that excellence in innovation management based on Arthur D. Little's model leads to higher innovation performance

Arthur D. Little's Global Innovation Excellence Studies (GIES) in 2010 and 2012 measured the innovation performance and innovation management practices for over 650 companies, breaking down the activities in constituent components of the Arthur D. Little Innovation Excellence Model. This is a well-established model that provides a structure to examine the different components of the innovation system and which also sets out a range of best practices companies can adopt to achieve high innovation performance (see Box 1). In this report we present trends across time (with over 650 responses) and responses to the 2012 survey (275 responses).

Box 1: The Innovation Excellence Model

Arthur D. Little's Innovation Excellence Model provides a structure to understand the different components of the innovation system, it can be divided into upstream (which are primarily concerned with making the right strategic choice i.e. "doing the right things" components B, C, D, E, F below) and downstream (which are the more operational activities that are needed to deliver results i.e. "doing things right," components G, H and I below) components. It was initially introduced in 1995 based on Arthur D. Little's consulting experience in the area of Technology and Innovation Management and has been gradually refined through extensive casework.

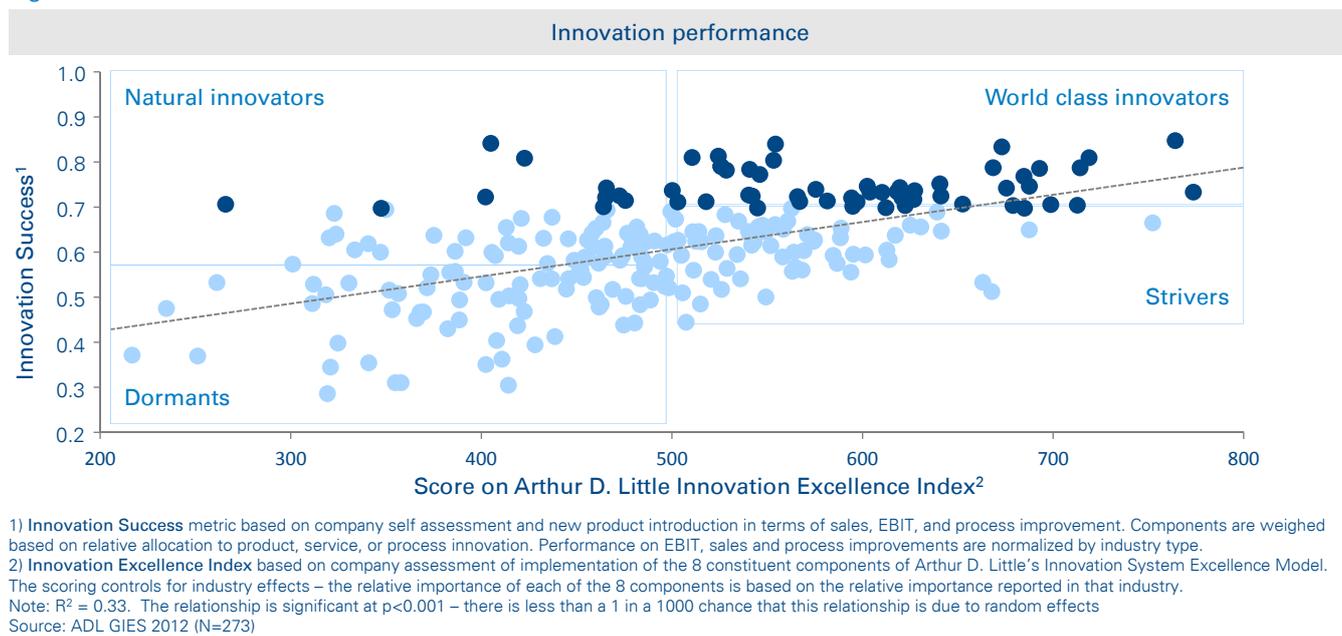
Structure of the Innovation Excellence Model and survey

A – Company details and innovation performance: Company details, overall capabilities and use of metrics and KPI's	F – Technology Portfolio Management: Prioritizing research and technology investments to be able to access required technologies
B – Innovation Strategy: Corporate strategic & innovation priorities	G – Development and Launch: All steps required to transform the original idea to a launched product/service/process
C – Business Intelligence: Tools and techniques used to identify, extract and analyze business data	H – Post Launch: Product upgrading and continuous improvement
D – Idea Management: Process to generate ideas for new products/services	I – Resource & Competence Management: Managing your internal and external capabilities
E – Product/Service Portfolio Management: Prioritizing creation, enhancement or termination of an offering, process or product feature	J – Special focus on growth: How to find and deliver growth, and the greatest challenges to do so through innovation

Source: Arthur D. Little



Figure 1: Correlation between Innovation Excellence Best Practices and Innovation Success



One of the most important and significant findings from our study was that across all industries – despite their huge diversity in terms of products, services, customers and dynamics – there is a strong correlation between how well companies implement the elements of the Innovation Excellence Model and the innovation success they achieve (see Figure 1).

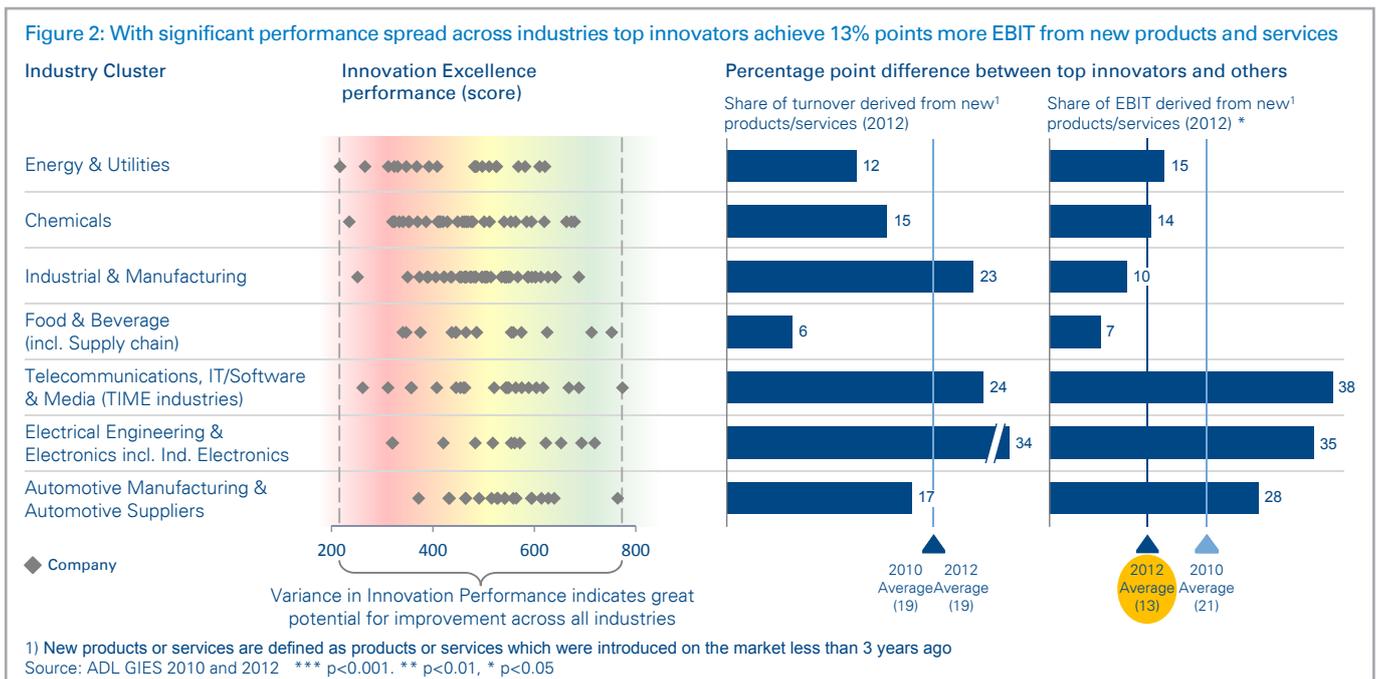
The chart shows the clear correlation between Innovation Success measured in terms of a composite score based on satisfaction with innovation performance, new product/service sales, new/product service EBIT, impact of innovation related process improvements and time to break-even and Innovation Excellence (measured in terms of how well the company has implemented the eight constituent components of the Arthur D. Little Innovation Excellence Model). Uniquely, this correlation provides real evidence that investing in the right innovation management best practices helps companies achieve greater innovation success.

The analysis also illustrates some useful categories of innovation performers. For example:

- **World class innovators:** These are companies in the top right quadrant. They achieve significantly better innovation success

than others, and they have developed and implemented sophisticated, modern innovation management approaches to support their success. They have all the elements of “doing the rights things” and “doing things right” in place and functioning effectively.

- **Natural innovators:** These companies achieve high levels of innovation success – yet they seem to do so without having all the best practice innovation management mechanisms in place. This may be a reflection of the inherent nature of the product/service, the dynamics and maturity of the industry and/or market, or the culture of the organization.
- **Strivers:** These companies are working hard on developing sophisticated innovation management practices They have already achieved good performance, but have not yet reached the levels of success enjoyed by the World Class innovators.
- **Dormants:** These companies have yet to move towards excellence in innovation. Their innovation success is limited, and they have also not yet implemented best practices. These companies generally have significant improvement potential.



Those companies that have participated in the study have been able to rank themselves versus their peers and see which category they belong to. This is a powerful vehicle for demonstrating the link between innovation investment and innovation success.

2. Top quartile innovation performers obtain on average 13% points more profit from new products and services than average performers, and 30% shorter time-to-break-even, although the gap is narrowing

One of the key findings from Arthur D. Little’s analysis is that for most companies there is ample scope to improve on innovation performance across and within industries. This may be seen from the comparison of top quartile versus average innovators as shown in Figure 2.

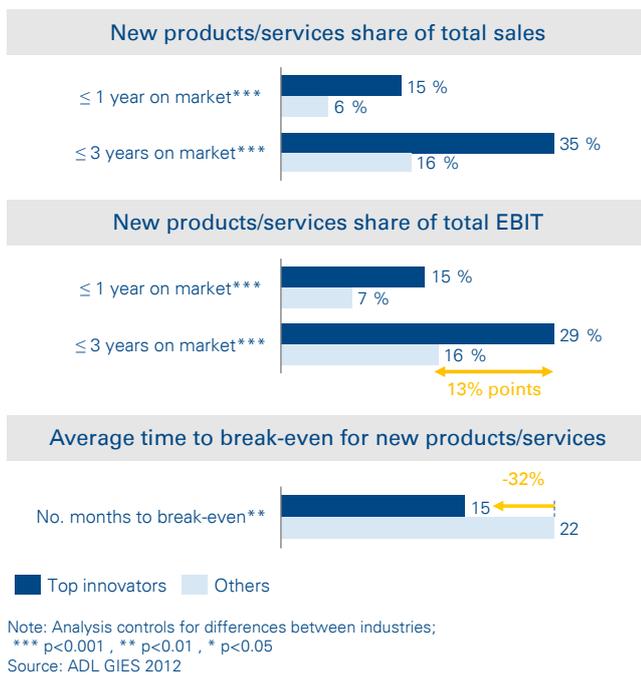
The chart shows for the 2012 study an average of 13% points difference in EBIT from new products and services between the top quartile innovators and the others, and an average of 19% difference in share of turnover from new products and services. The differences are especially pronounced in some sectors, such as Telecoms and Media, Automotive Manufacturing and Suppliers and Electrical Engineering and Electronics.

What is most striking is the tremendous potential for improvement of business performance through innovation. For example within the Chemical cluster, the most innovative company achieves a score of 675 out of a possible 800 for innovation excellence whereas an average performer will achieve around 460. To put this into perspective, the impact of achieving top quartile innovation excellence for products with less than three years on the market would allow the same average Chemical company to improve its EBIT from new products by up to 14% points², assuming it followed the same trend.

However, the performance gap between top innovators and the rest appears to be narrowing (on average from 21% (in 2010) to 13% (2012) in terms of additional EBIT). This may reflect a general improvement of innovation management standards across all companies in recent years as good practices become more widely embedded. Clearly underperformers can and do catch up, and maintaining a lead in innovation performance is getting ever harder.

2 Calculated as the difference between top quartile performers and others for EBIT contribution from products & services with less than three years on the market. For example, in Figure 2, the difference between top innovators and others shows a difference of 14% for Chemical companies.

Figure 3: Top innovators sustain significantly higher performance



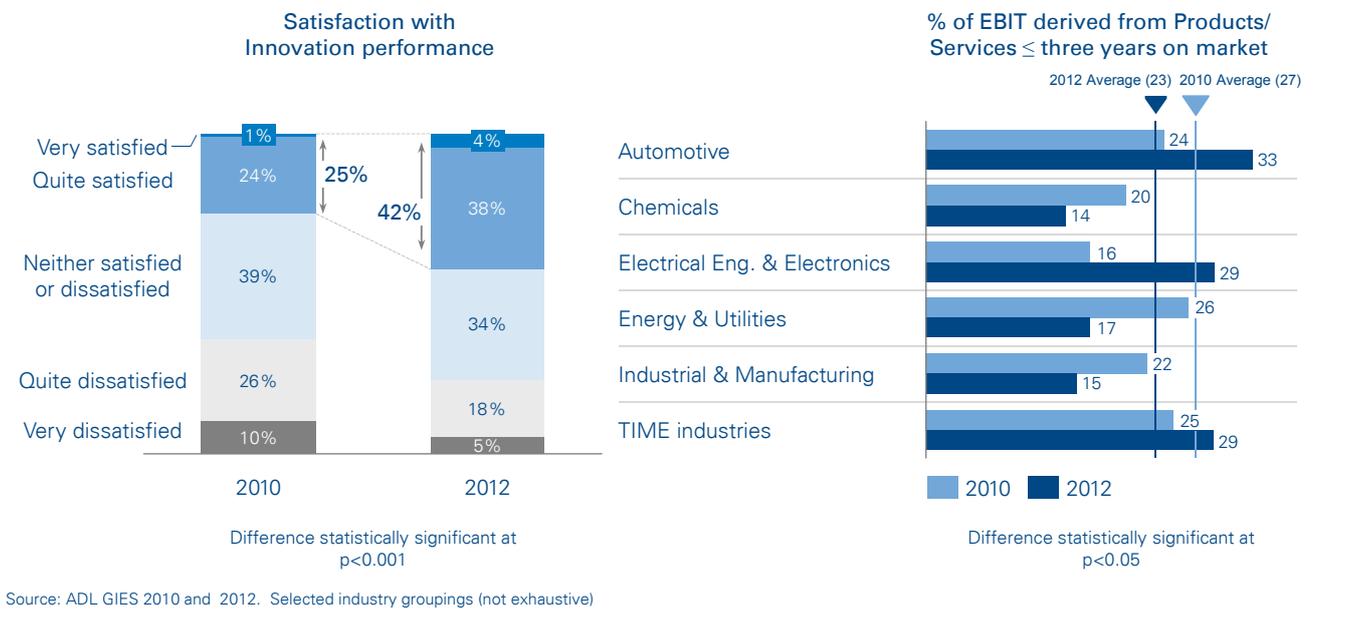
As may be seen in Figure 3, our study also shows that the top quartile innovators enjoy more than twice the proportion of new sales for new products/services (based on sales in last three years), nearly twice the EBIT and a 30% shorter time-to-break-even than the rest. This is a good illustration of financial (or economic) benefits of excellent innovation performance.

3. Innovation performance achieved has decreased on average since 2010, yet satisfaction with this level of performance has nearly doubled

Given this difference, it is not surprising that a considerable number of companies report an average or low level of satisfaction with their innovation investments. However what is striking is that across the 650 responses covering all industries, satisfaction with innovation performance is increasing significantly (from 25% to 42%), as shown in Figure 4 below.

This is likely to be a reflection of company satisfaction with the progress that is being made generally in improving innovation management practices, in an environment that remains tough for many companies. However, looking at the innovation success

Figure 4: Satisfaction with innovation performance has increased



achieved (as indicated by new product/service EBIT) there is a very mixed picture, with some sectors such as Automotive and Telecommunication/IT/Software and Media showing a marked improvement, and others such as Chemicals, Energy & Utilities and Industrial & Manufacturing showing a deterioration.

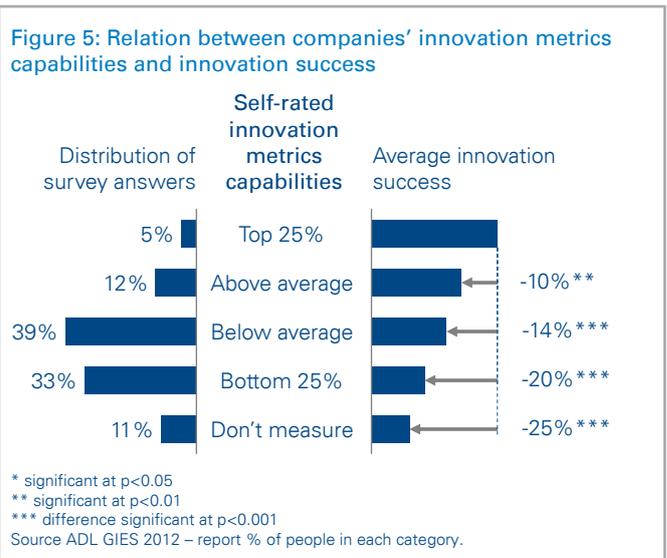
4. There is a clear correlation between capability in innovation measurement and innovation success, yet less than 20% of companies believe they have a good innovation measurement capability

One of the clearest trends that emerges from the study is the correlation between capabilities to measure and monitor innovation performance and innovation success. The left hand side of Figure 5 shows that only a minority (17%) of companies rate themselves either in the top quartile or above average in terms of innovation metrics capabilities. It also points to a high level of dissatisfaction with their efforts to measure innovation performance. This underlines the difficulty companies have in measuring innovation and suggests that a lot of companies know that measuring innovation is an important issue that has not been addressed.

The right hand side of Figure 5 shows that with decreasing performance in innovation metrics capabilities, innovation success also decreases significantly (dropping by an average of 10%, 14%, and 20% for each successive drop in quartile and by 25% for those who do not measure innovation activities). This indicates a clear correlation between effective measurement of innovation and innovation success, something which is often asserted in management theory and which is borne out by Arthur D. Little’s own experience working with clients.

“What gets measured, gets managed.”
Peter Drucker

It is true that there are more parameters than can be (and are) measured – for example, in a recent project with a manufacturing client we identified a list of more than 75 possible innovation metrics. In general, we see best practice as beginning with innovation strategy and objectives, focusing on a small number (less than 10) of innovation metrics which cover innovation, inputs, process, output and impact.



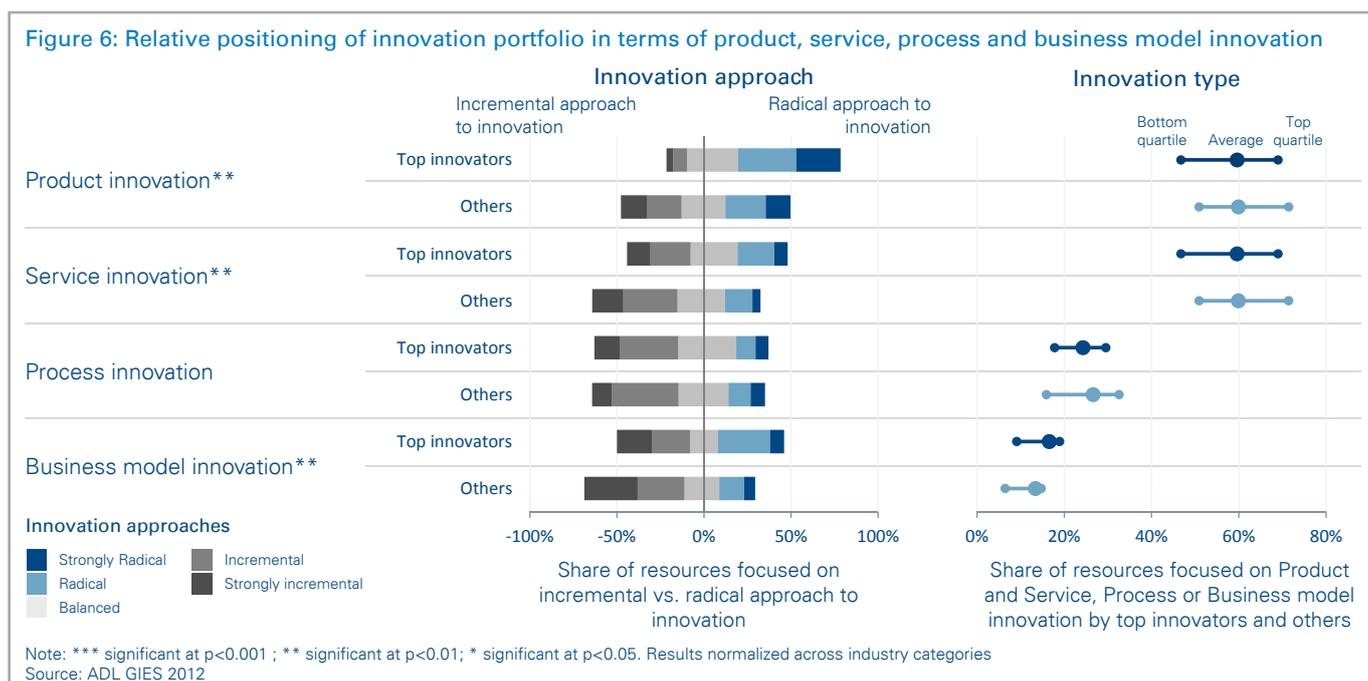
5. Certain innovation management practices have a particularly strong impact on innovation performance

Our analysis of different innovation investment practices allows us to identify some of the differentiating practices of top innovators, first of all in terms of the relative emphasis on incremental vs radical innovation.

Figure 6 (overleaf) looks at how resources are split across different innovation approaches. Across all industries we find that top innovators with leading innovation success tend to focus more on radical innovation than other innovators. The trend varies depending on whether innovation is being applied to products, services, process or business models.

In particular, top innovators:

- Focus their **product** innovation effort towards radical innovation (compared to more balanced product innovation by other innovators).
- Balance their **service** innovation efforts between incremental and radical innovation (compared to more incremental focus by other innovators).



- Balance their **process** innovation efforts more towards incremental innovation (very similar to other innovators). This may reflect the nature of process innovation which is generally associated with higher capital plant and longer investment cycles.
- Balance their **business model** innovation efforts between incremental and radical innovation (compared to a more incremental focus by other innovators).

It should be noted that within these overall trends there are some significant differences by industry (not shown in the Figure for brevity). For example:

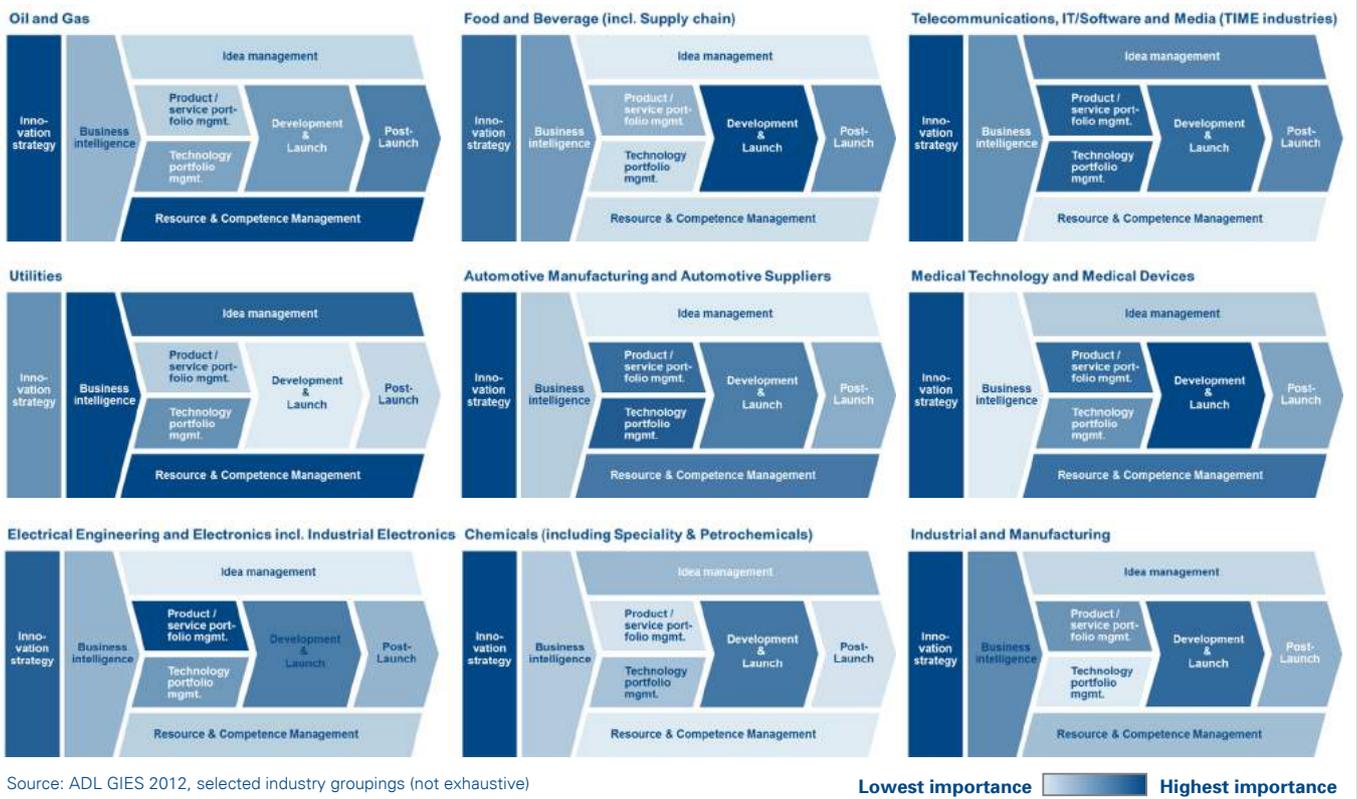
- Top innovators in the **Chemicals and Oil & Gas** industries focus their **process** innovation efforts more **towards radical innovation**.
- Top innovators in **Aerospace & Defence, Oil & Gas (downstream) and White Goods and Consumer Electronics** industries focus their **business model** innovation efforts even further towards **radical innovation**.

Whilst the Arthur D. Little Innovation Excellence Model is generally relevant across all industries, there are some differences in terms of which elements of the model are most important and have the highest impact on innovation success. In our study we asked respondents to rate the relative importance of different elements (see Figure 7 overleaf).

It is possible to see how the relative importance of different elements relates to the nature and dynamics of the industry, for example:

- For virtually **all industries**, Innovation strategy is confirmed as being of highest importance.
- **Oil & Gas** attaches most importance to Resource Development – reflecting the increasingly problematic skill shortages in the industry, and possibly also conservatism in technological innovation.
- **Food & Beverage** attaches most importance to Development & Launch – in Food & Beverage, product development cycles can be less than three months, marketing innovation

Figure 7: Relative importance of innovation activities in different industries



is often more important than technological innovation, and time-to-market is critical.

- **Automotive** values Product/Service and Technology Portfolio Management as critically important. This reflects the importance of product platforms in the industry, the focus on creating dedicated portfolios of products to meet fast-evolving customer needs, and complex technologies required to support product development.
- **Utilities** attaches high importance to Business Intelligence, possibly reflecting the complex industry environment, fast evolving technologies and changing roles and bases of competition for utilities providers.

Companies participating in the study are able to rate their performance in each element of the model. Often the most significant reason for underperformance is neglecting a part of the Innovation Excellence Model that is critical for their industry.

In the next section of the report we explore further how some specific innovation management practices seem to have a particularly significant impact on innovation success.

Levers for Innovation Success

Four practices stand out as drivers of innovation success

The data provide clarity on which innovation activities have the greatest impact on innovation success. Although top innovators tend to perform significantly better across all areas of the Innovation Excellence Model, we find that there are some innovation approaches which are absolutely critical to overall innovation success and some which are particularly associated with Product, Process, or Business Model innovation. We carried out an in-depth statistical analysis based on multifactor regression of all 70+ questions related to innovation approaches in the study to understand impact on innovation success.³

We identified four practices that stand out in terms of their association with innovation success – of which two are associated with improving linkages between innovation activities and business goals, and two with leveraging the most important resources to achieve better performance.

The four most significant factors of innovation success identified in our statistical analysis are:

- Understanding each technology in terms of its quantified contribution to corporate goals.
- Using external sources of business intelligence in a structured way.
- Reacting to changes in targeted segments by reviewing the product/service portfolio.
- Mobilizing the whole organization to develop new ideas.

Understanding each technology in terms of its quantified contribution to corporate goals

Developing a detailed understanding of how different technologies in the technology portfolio contribute to corporate goals has three important impacts:

- It requires companies to **review what capabilities they possess** and what they should possess for the future from a functional perspective (what it enables for the customer

as opposed to a technical solution). This exercise identifies the strong and the weak areas for the company, and typically triggers identification of new opportunities and synergies.

- It requires companies to attempt to **quantify the value of technology** on a consistent basis. This is not an easy exercise but it provides an outstanding opportunity to understand value drivers from technology and the benefits of developing technology (internally or in collaboration) vs sourcing technology from third parties.
- It forces technology managers to seek **alignment with corporate strategy** – or at least it forces a discussion on what the corporate goals are and how technology might contribute to their attainment by explicitly linking technology with Products, Process or changes to the Business Model.

Combining these three impacts allows companies to regularly re-align and reprioritise their technology investment portfolio to support corporate goals and reduces the potential for waste in technology development (see Box 2 for case example). The trend is particularly pronounced in the Automotive, Aerospace and Defence and Telecoms and Media industries.

Using external sources of business intelligence in a structured way

All too often business intelligence is based on internal perceptions of what is important, and business data and information is filtered through internal sources (typically sales or customer service functions, or existing company databases). Making direct use of external sources of business intelligence – for example lead users, suppliers, external technical experts, creative patent structure analysis, crowd sourcing etc – provides a “messier” but ultimately more reliable approach for capturing valuable data. However this data does need to be suitably structured and translated into intelligence. External sources with multiple data points must be tested and verified against internal know-how before they can be used. What is particularly relevant here is that companies should aim to become proficient at **attracting and developing intelligence instead of relying on finding it**. This means positioning yourself in public and across suitable networks as being keenly interested in certain fields, and projecting an image of being a hot spot of activity in these fields. This will help to make people and organizations with valuable intelligence contact you.

3 Analysis was based on multifactor linear regression. The statistical model has an adjusted R² of 0.371 (F= 17.5, p<0.001). Analysis showed the four factors identified were all highly significant (p<0.01) and positively associated with innovation success even when introducing two control factors for a) firm size and b) relative effort on product innovation vs process and business model innovation. Neither of the control factors were significant.

Box 2: Case study MedTechCo: Understanding each technology in terms of its contribution to corporate goals

MedTechCo is a world leading company active in most parts of the world. MedTechCo had lost its innovation leadership and the innovation pipeline looked patchy. Within this area of medical technology, the winners are found among those who can build products on competitive technologies that are well protected. The company had difficulty in deciding where to focus the Research and Technology development effort, and there was little coherence in make/buy/collaborate decisions with respect to technology development and exploitation. MedTechCo needed to raise the role of technology in the company, develop an ambition-driven technology strategy and roadmap supported by adequate models to value technologies, and incorporate this in the annual business and investment cycle supported by a suitable governance structure.

A key component of the technology strategy was a new segmentation model to guide strategic choice and focus, combining treatment therapy and product type. This provided stretch opportunities to address new segments and niches for radical technology exploration, as well as to develop current areas of competition in core, and close-to-core, segments and niches. The underlying segment analysis identified more than 70 key technology gaps with high business potential. In addition, a core competence assessment and strategy was developed for the Research and Technology organization to deliver on the set technology ambition.

MedTechCo was also able to identify the “technology springboard effect” (in other words the one-to-many relationship between a technology and its fit with products and solutions) which is a key component to define the impact of a technology in a product portfolio as well as to value its financial contribution to the portfolio business case.

Through applying these techniques MedTechCo can decrease time to market, increase R&D efficiency, align product and technology strategies and enhance transparency and control of millions of US\$ of annual investments.

This approach brings proactivity to decision making and planning, and enables well thought through decisions and development of capabilities to “surprise” the competition – no matter whether you are an innovation leader or an innovation follower. In addition, a structured intelligence management approach provides significant advantages to product and technology managers as they seek to optimize their portfolios over time, balancing incremental and radical innovations. Good intelligence from multiple external sources can also help foresee competition beyond classical industry borders, which may otherwise bring disruption and turbulence to those that are taken by surprise.

“Great leadership isn’t about solving problems after the fact, but foreseeing potential problems and eliminating them before they occur”
Jack Welch, former CEO of General Electric

Reacting to changes in targeted segments by reviewing the product/service portfolio

This practice is concerned with reviewing the **product/service portfolio frequently, and in a structured manner**, in order to meet potential changes in targeted segments. Managing the portfolio of projects/services under development enables companies to optimize their resource allocation in line with changes in their target segments, removing “waste” from the portfolio of projects.

The best companies review and manage their product and service portfolio throughout the lifecycle, i.e. in product planning mode, in product development mode and in maintenance mode. Business cases in product management are built through a combination of strategic fit and business contribution, discounted by risk. This requires a clear “phase in/phase out” logic, and is an essential capability to drive business performance at desired levels of commercial, technical and regulatory risk.

Top innovators are able to guide portfolio direction and demonstrate the rationale for reprioritizing projects by adopting a distinct and robust segmentation model as a key component of the product and technology strategy. In addition, top innovators optimize their

portfolio offering through careful synchronization of product and service planning. A systematic review will need to outline *where*, *when* and *against whom* the company chooses to compete. The decision on *how* to compete is then translated into a product and service portfolio that needs to be managed over the lifecycle, populated and made responsive to business changes, new innovations, new ideas and revised strategic directions.

Top innovators are rewarded for applying best practices in this field, for example in terms of:

- Clear strategic direction at an adequate level of detail from the CEO and his/her executive team down to the delivering units.
- Full transparency and rapid overview of how strategic priorities drive project and portfolio response.
- Clear responsibilities and accountabilities at different levels of the organization.
- Evidence-based discussions to reduce volatility and uncertainty in R&D priorities.
- Optimized R&D spend both at company level and Business Unit/Division level.
- Better guidance and governance to enhance ability to manage research and technology spend.

Mobilizing the whole organization to develop new ideas

A common mistake in idea generation is to let a single R&D Group or an Innovation Unit solely lead the process. The **whole organization** (one could even say the whole world) has to be mobilized in order to improve:

- a) the chances of coming up with a great original/new idea and;
- b) the opportunity to enrich and get feedback on “new ideas” from a wide range of business functions early on.

A growing number of companies realize that they have **failed to make innovation the business of everybody** and that this is costing them dearly. This is witnessed by companies that make a real effort to engage everyone and discover the benefits: more and better ideas, and great ideas arising from unexpected corners of the organization.

Box 3: Case study AutoCo: Continuously revise the product and service portfolio to meet changes in target segments

AutoCo, a world-leading producer of commercial vehicles, felt that their pipeline of products was not as strong as desired, and that the strategic dialogue within the company with respect to the product and service portfolio was insufficiently detailed and fact-based. AutoCo also suffered from a product development approach which was dominated by the sales function, where those shouting the loudest exerted the highest influence on the product “wish list”.

AutoCo needed a fact-based product portfolio strategy, aligned with corporate ambitions, to support better decision-making. With this AutoCo could better balance the product and service development portfolio in terms of short, medium and long term perspectives, and thereby optimize the complete offering. Top executives also needed greater transparency and control to be able to robustly challenge the current project portfolio and related investment plans.

AutoCo’s first step was to build the product portfolio strategy based on a unique segmentation model, which combined application type and product type in a matrix structure. Each segment was analyzed in detail and business plan ambitions were translated into segment ambitions. Already at this stage, the logic of this approach paid off, as the feasibility of business plan ambitions were able to be properly tested, highlighting major disconnects.

The new product portfolio strategy, including its segment priorities, enabled clear translation of the strategic ambitions of the company into product and service portfolio choices at a suitable level of detail. In applying the strategy to the current project portfolio, significant misalignments were found. For example, AutoCo found that the available R&D funding over five years would fall far short if current project portfolio priorities remained. AutoCo also found that 25% of the total R&D spend for new product development was actually allocated to projects targeting low priority segments outside the top 15. These misalignments had not been visible previously.

By adopting a fact-based product and service portfolio strategy approach based on a powerful segmentation model, AutoCo was able to build capabilities at both top and middle management layers to ensure that the product and service portfolio investments responded to ongoing changes in the marketplace whilst remaining aligned with strategic ambitions.

Finding new ideas can follow either a “push” logic within which idea generation is stimulated for pre-defined opportunity areas supported by a structured enrichment process and reward systems; or a pull-logic with less/no guidance. No matter what the approach is, a company will benefit from involving the whole organization in generating and enriching ideas. (See case study in Box 4).

Some top innovators support company wide idea generation through time allowance on a regular basis in creative environments (e.g. visionary rooms) within which individuals and/or teams with complementary profiles and competences from different parts of the company mobilize and come together to brainstorm and enrich ideas. Some companies provide facilitated brainstorms, some do not. The process to enrich, select, park and kill ideas should be properly structured and consistently applied. Recognition and reward systems should be well developed. Different companies may be more or less “open” in terms of idea generation, but many companies include stakeholders from the extended enterprise such as customers, suppliers and research partners.

Use of newer tools

As may be seen from Figure 8 overleaf, there are some innovation management practices, tools and methodologies that are not as widely-used as might have been expected. It is especially noteworthy that some of the newer tools that are often cited in innovation literature, such as social media tools, crowdsourcing for idea generation, idea jams and bootcamps, apply only in a minority of cases and are only weakly associated with innovation success when used on their own.

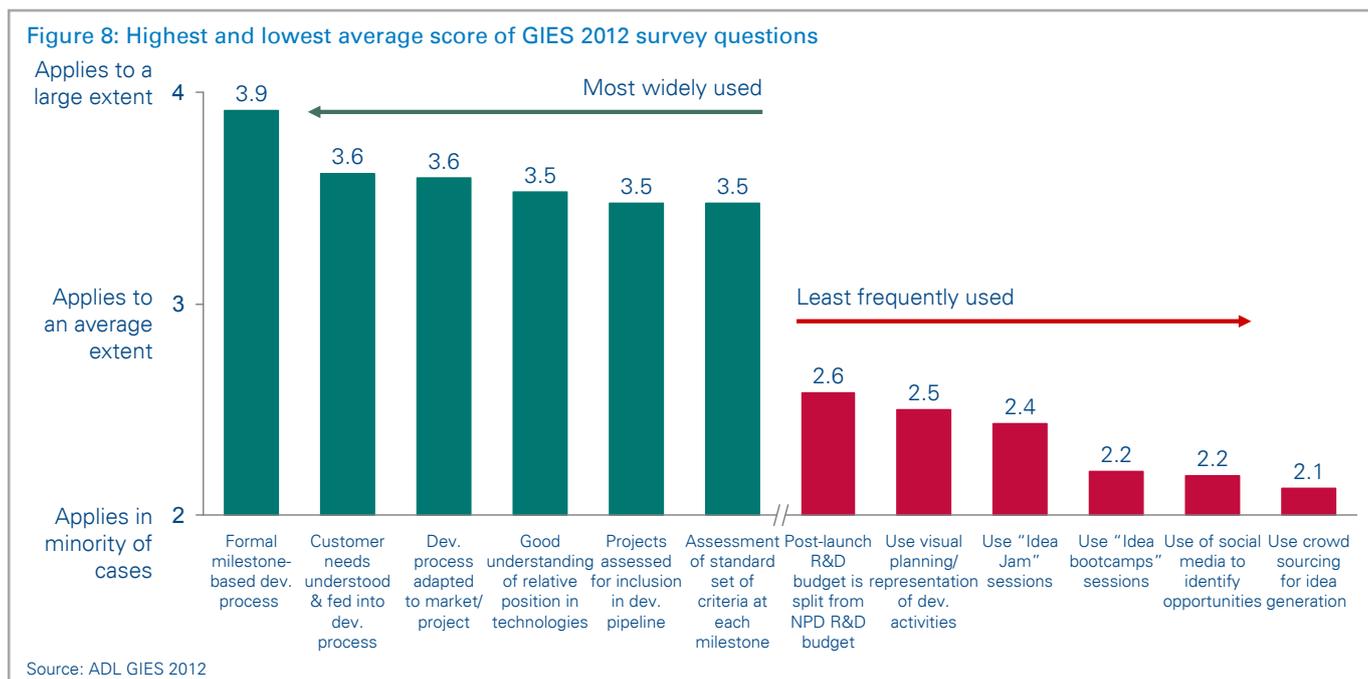
The implication from this is that innovation success depends first of all on getting the basics right – such as alignment with strategic and financial goals, well-managed product and service portfolio optimization and effective idea management. If this is not in place, then application of tools such as bootcamps and crowdsourcing will have little effect.

Box 4: Case study GlassCo: Mobilizing the whole organization to develop new ideas

GlassCo, a world leading company in its industry, realized that only about one in ten employees were actively engaged in innovation. Given the importance of innovation, Management decided to launch a programme to engage 15,000 people, mainly blue collar workers located in over 100 sites. The programme was articulated around four human traits:

1. **Collecting:** people like to collect as many ideas as possible. This is good for business because the more ideas we collect, the more we implement and the higher the benefits (motivation of people and financial).
2. **Social validation:** people with ideas become visible actors in the company. This is good for recognition and motivation.
3. **Commitment:** Management is seen to be committed to make it happen and likes to be associated with the creation of new value.
4. **Discovery:** all ideas are visible to all employees (no filtering), which stimulates the urge for discovery.

The programme is now up and running, and generates several hundreds of ideas per year of which about 10% get implemented, making a net contribution to the bottom line of multiple million € per year.

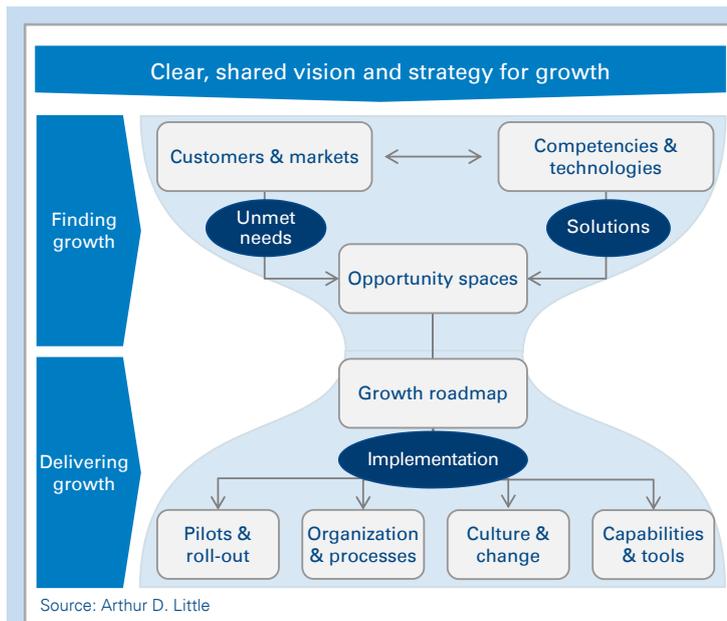


Finding New Growth Opportunities

So far, we have looked at the things companies need to do to ensure that their innovation engine does what it is supposed to do: creating valuable new products, processes and services. Increasingly, however, many companies face a challenging growth agenda. In an earlier survey we found that, CTO's expect the revenue share of their company in new business areas to double from 20% in 2010 to close to 40% by 2020.⁴

There are different reasons for this surge in expansionism: companies may see their longer term growth and profitability

prospects dwindle in their current businesses; or they be lured by growing unmet needs elsewhere to which they can offer new solutions. Whatever the intention, hitting the growth accelerator poses additional requirements to a company's innovation engine. We bring together best practices in how leading companies manage to find and deliver profitable above-market growth into Arthur D. Little's Growth Accelerator Model (Box 5) and included its main features in our 8th Global Innovation Excellence Study as a special focus topic.



Box 5: The Arthur D. Little Growth Accelerator Model

The Growth Accelerator model is based on Arthur D. Little's work in helping companies identify and develop growth opportunities based on unmet needs and new markets. It helps to answer the two fundamental questions of growth: *Where do we find new growth opportunities and how do we deliver on the growth strategy?*

The Growth Accelerator modules provide best practices across Strategy, Finding Growth and Delivering Growth:

A. Growth Strategy

The prerequisite for growth is a clearly articulated and shared vision and strategy for growth in new and adjacent business areas.

B. Finding Growth

Opportunities for growth can be found by understanding the fundamental forces of change in markets and technologies and by finding **unmet needs** of existing

and new customers and markets and **innovative solutions** through existing competencies and emerging technologies. These are brought together in a module called **opportunity spaces**; for selected opportunities we create actionable **growth roadmaps** covering different growth horizons.

C. Delivering Growth

Growth will only be effectively delivered if there is continuous learning, testing and adjusting. **Pilot projects** are recommended to deliver early wins. **Organization and processes** need to be aligned – is it wise to go alone or should the innovator work with partners? **Culture and change** management should be an explicit part of the program. New **capabilities and tools** are often required to realize the growth potential in new areas.

For more information on the Growth Accelerator also see the Insight reports or contact an Arthur D. Little contact person in your region.

Source: Arthur D. Little 2011 CTO/CIO survey; ADL Growth Accelerator Framework Insight July 2012

⁴ As part of the ADL 2011 CTO/CIO survey we interviewed 85 Chief Technology Officers and Chief Innovation Officers of companies in Europe, Americas and Asia on their view of the future of innovation management.

From the study we identified two important insights:

1. There is a strong correlation between adoption of new business growth practices and achieving innovation success.
2. Top innovators are more effective at dealing with internal barriers to achieving growth than other innovators.

6. Top innovators do much better in adopting best practices in accelerating growth

The study confirmed that adoption of good practices for achieving growth in new and adjacent business areas has a high impact on innovation success with a strong correlation being apparent – top innovators use these practices some 15-20% more than other innovators (see Figure 9).

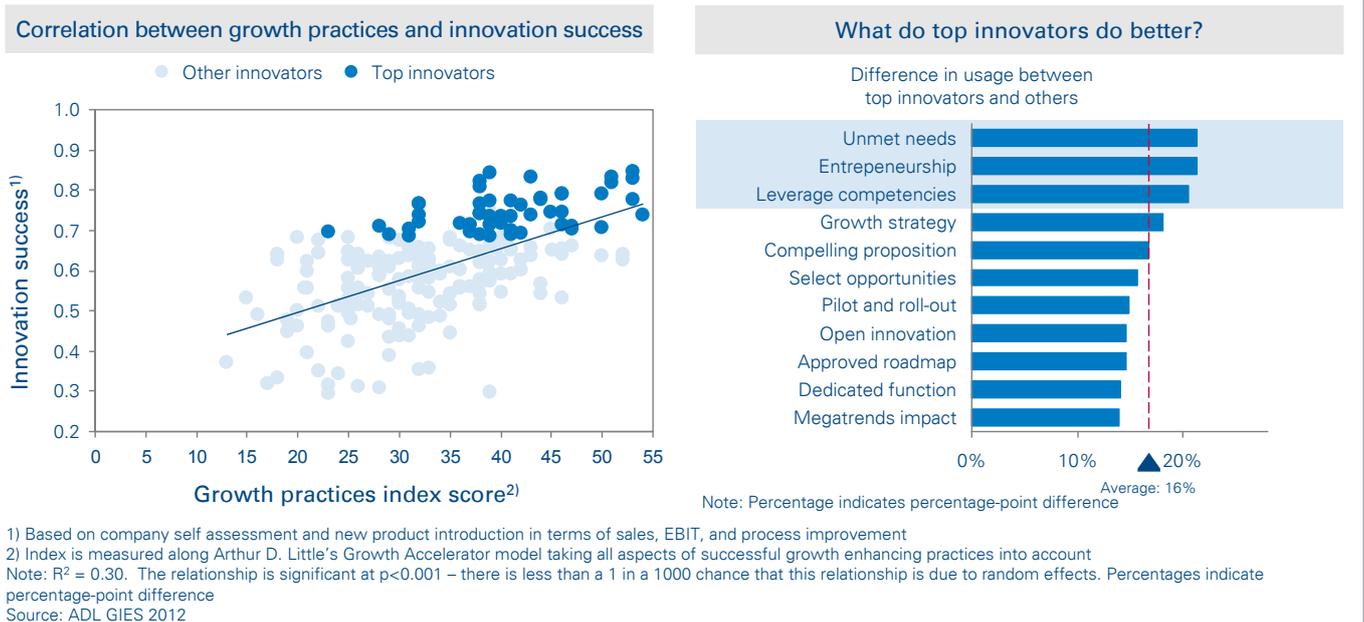
As may be seen from the way good practices are split, Strategy, Finding growth and Delivering growth are all almost equally important, with top innovators outperforming others in all three of these areas.

Zooming in to the level of individual modules in the Growth Accelerator model, it becomes apparent that whilst all the modules are important, top innovators have the largest lead (21%-point higher) over others on the following three topics (see Figure 10 overleaf):

- Identifying unmet needs
- Entrepreneurial culture
- Leverage of existing key competencies

This result underpins what we often see as the most difficult challenges that companies face in innovating to develop growth in new business areas: identifying those new unmet needs which can be addressed by leveraging existing competencies – and then being able to apply the entrepreneurial skills and culture to build new businesses, something which may be hard to find especially in large corporations with mature core businesses.

Figure 9: Positive relationship between growth practices and innovation success



Top innovators are more effective at dealing with internal barriers to achieving growth than other innovators

All innovators report that they face a variety of challenges to achieve growth through innovation, as illustrated in Figure 10.

Most frequently encountered challenges include obtaining good market intelligence, balancing incremental versus radical innovation, ensuring the availability of resources, securing top management support and entering into new markets.

Top innovators are not immune to these challenges. Interestingly, however, they appear to have dealt with *internal* hurdles much better than others. Commonly mentioned internal challenges that are *not* reported by top innovators are:

- Securing top management support
- Reaching a common vision and strategy for growth
- Being effective in making decisions
- Establishing cross-functional relationships
- The need to minimize bureaucracy

Figure 10: Challenges faced in identifying and capturing growth through innovation (all respondents)

Word-cloud analysis of challenges mentioned¹⁾ by participants in growth acceleration

Which common challenges have they overcome?



- Font sizes are proportional to frequency of mentioning; similar answers were clustered to facilitate interpretation
- Yellow topics are indicated by most innovators but not by top innovators

¹⁾ Answers to open question “What are the greatest challenges you face in identifying and capturing growth through innovation?”
Source: ADL GIES, 2012

Conclusions and Opportunity for Benchmark Participation

Arthur D. Little’s 8th Global Innovation Excellence provides valuable and unique insights into what companies need to do to obtain a better return on their innovation investment. The study:

- Shows a clear link between key innovation management best practices and innovation success achieved.
- Illustrates the massive business improvement potential for companies who want to move from being average to being top innovators.
- Highlights the specific innovation management best practices that can provide the most improvements in terms of innovation success.

We hope that you find these insights interesting and valuable.

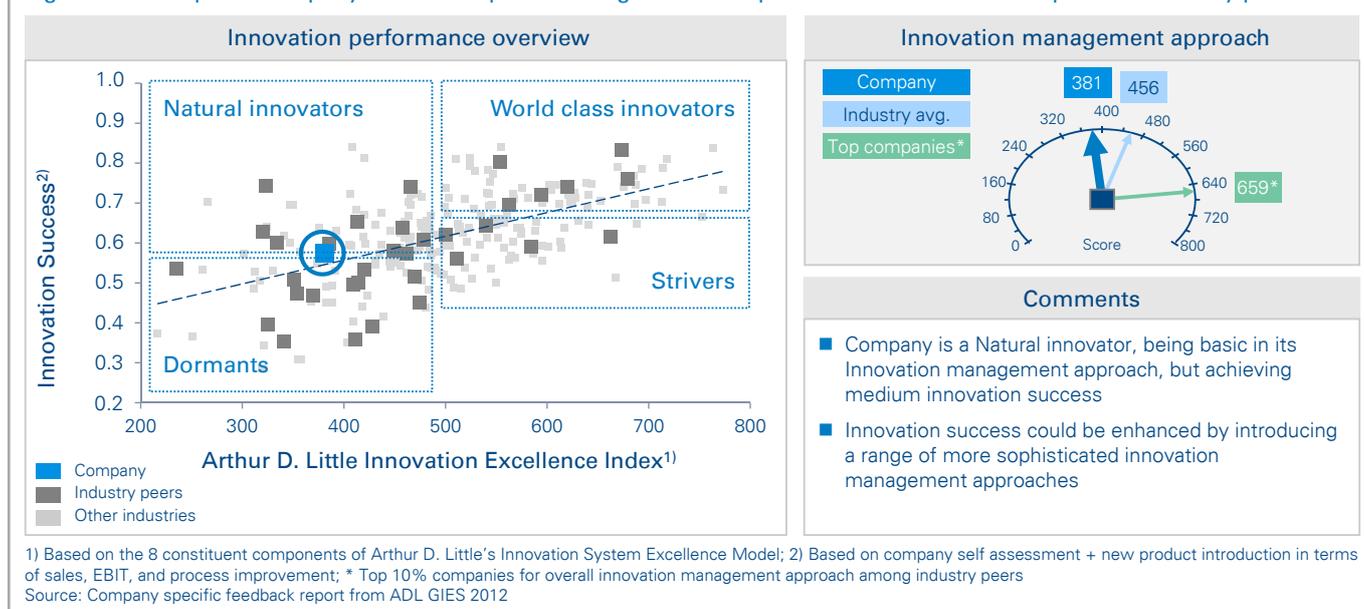
The benchmark is still open to you

As part of the study each participating company is provided with detailed feedback on its performance against industry peers and top innovators. Given the wide variety of innovation advice available, the feedback of performance and identification of key areas of underperformance provides an effective way to prioritise specific areas for improvement.

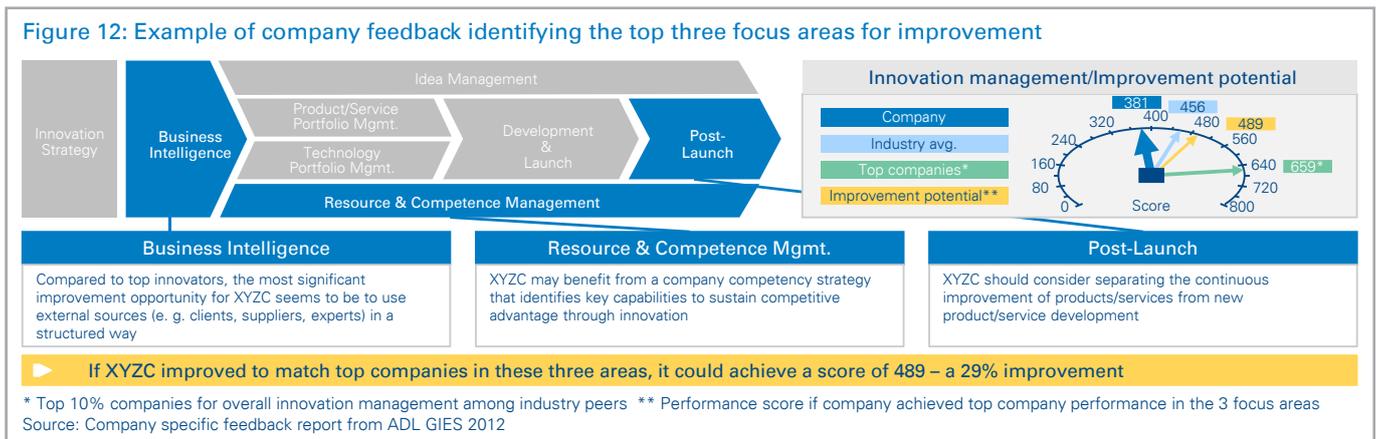
If you are curious about your innovation performance there is still an opportunity to be part of the benchmark – as part of our ongoing work in innovation excellence, Arthur D. Little is making the toolkit developed for the study available for all firms interested in exploring innovation performance. This will give you the unique opportunity to position the innovation performance of each of your different BUs (or company levels) relative to their specific peers. The Figures below provide examples of company specific feedback. Industry sector data is also available.

1. Overall positioning

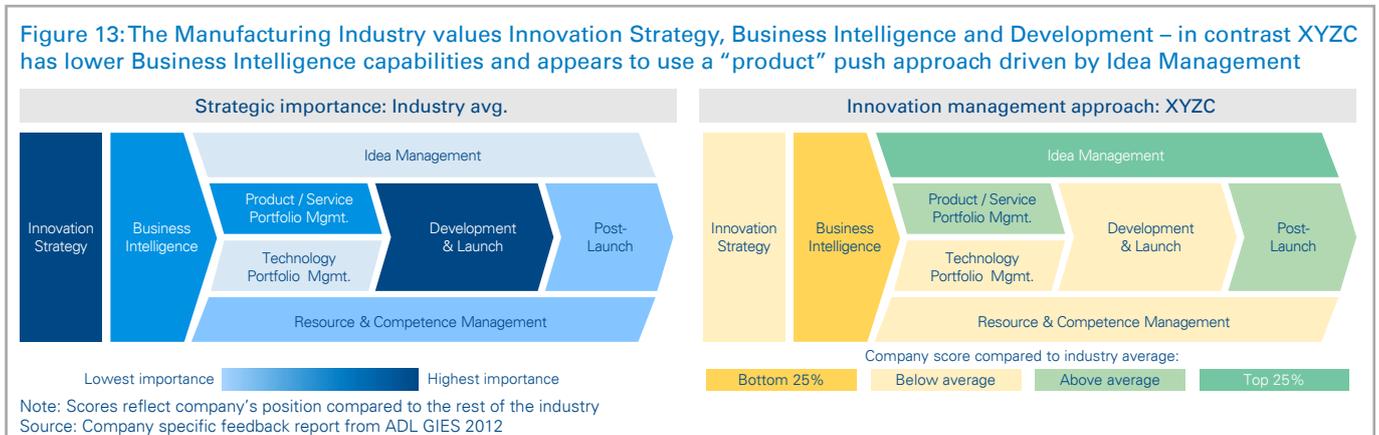
Figure 11: Example of company feedback report showing Innovation performance overview compared to industry peers



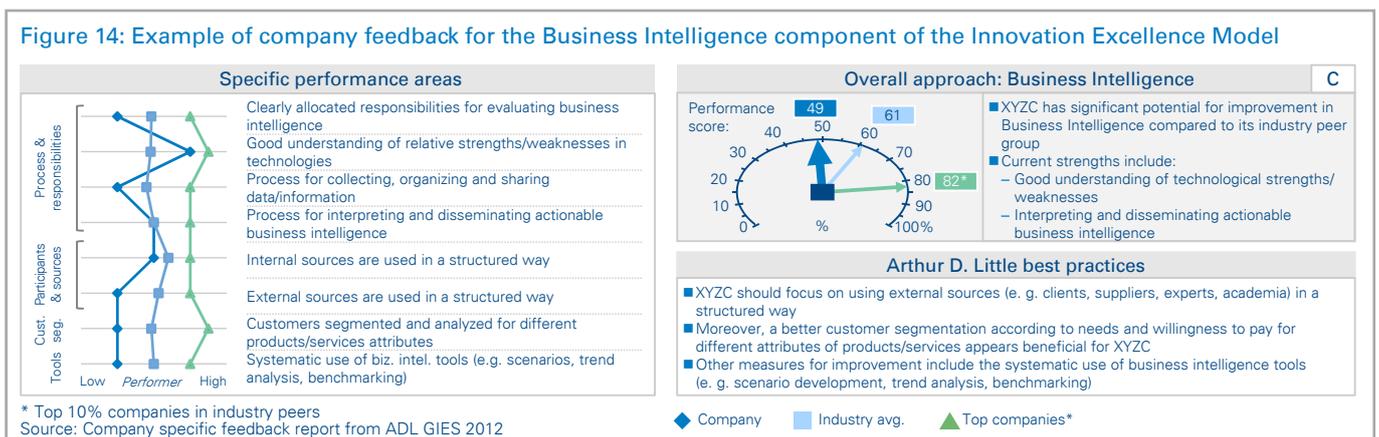
2. Focus areas for improvement



3. Capabilities compared with industry view of strategic importance



Profile of strong and weak elements of your innovation capability





Contact

Please get in touch with the [author team](#) or your local contact point below, if you would like to obtain a free benchmark report on your organization's innovation performance.

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Arthur D. Little

As the world's first consultancy, Arthur D. Little has been at the forefront of innovation for more than 125 years. We are acknowledged as a thought leader in linking strategy, technology and innovation. Our consultants consistently develop enduring next generation solutions to master our clients' business complexity and to deliver sustainable results suited to the economic reality of each of our clients.

Arthur D. Little has offices in the most important business cities around the world. We are proud to serve many of the Fortune 500 companies globally, in addition to other leading firms and public sector organizations.

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