

Defying Downturn through Innovation

Innovation Restructuring: re-investment as an alternative to lay-offs



Amid the restructuring of innovation activities that takes place in response to the recession, businesses must take care to position themselves to take advantage of the upturn when it comes. Successful innovators redirect part of the financial and personnel resources released through restructuring into growth and innovation programs. Only by simultaneously adopting a prudent approach to streamlining operations and focusing clearly on developing their technology, innovation and product portfolio will businesses be ready to grow when the economic climate improves. In fact, there has not been a better opportunity for a long time to acquire new technologies.

Downturn

Until recently the mechanical engineering industry seemed to be in a strong position. During the five-year boom that is now coming to an end, most engineering companies have remained lean: new capacity in high-wage countries has been added only very cautiously, or added only in conjunction with continuous productivity improvements and by taking on temporary workers.

During much of 2008, half-year and quarterly reports indicated record turnover and related profits for 2008. But this picture changed totally in the final weeks of the year: heavy reductions in orders received as well as the cancellation of orders were seen. The whole automotive industry was left reeling at the news of a sudden drop in turnover and dramatic cuts in forecast sales for 2009. Job cuts followed, with temporary workers being laid off and salaried employees made redundant.

The “natural” reaction of businesses during this phase of the economic cycle is to focus on reducing costs. However, focusing exclusively on costs has proved to be an unsuccessful strategy in the past. For example, despite the signs of an upturn at the end of 2004, a significant number of companies were laying off staff until the end of 2005 and even into 2006. What the companies did not consider was that in doing so, they were depriving themselves of the qualified workforce and core knowledge that they would soon require urgently. Nevertheless, during the downturn, there were some companies that had established growth and innovation programs and these

companies benefited from the momentum of the upturn and secured outstanding advantages. One businessman who recognizes the benefits of this approach is Intel Chairman Craig Barret. In early December 2008 he stated, “You can’t save your way out of a recession, you have to invest your way out.” This, incidentally, was a repeat of his response to the downturn of 2002, when his commitment to investment helped to bring Intel successfully through difficult times.

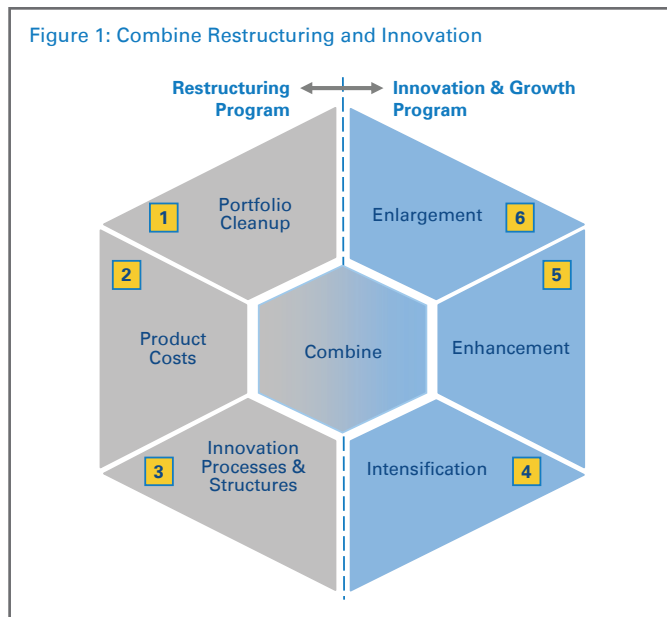
In light of the immense cost and efficiency pressure on companies during a downturn, focusing exclusively on “investing your way out” or on “saving your way out” is not the right approach. Both sets of levers – growth and innovation, and restructuring – need to be reset in order to develop an effective response.

The key questions for businesses are:

- Which elements of the product and technology portfolio should we keep and which could or should be eliminated?
- How should we deal with residual costs?
- How can we retain the know-how and the key people on which the company is built?

To survive, businesses must throw unnecessary ballast over board, yet they must also take care to ensure that their sails are still on board to take advantage of trade winds once they begin to blow again.

Cost-reduction measures and measures to stimulate sales through innovation and growth need to be carefully linked (Figure 1). The objective on the cost side is to identify opportunities for short-term, achievable cost savings and – if economic conditions become worse than expected – to realize those.



However, achieving a short-term reduction in costs through lay-offs is often not possible. Moreover, it is crucial to avoid cyclical behavior and the loss of critical know-how. A part of any resources released through restructuring should therefore be redirected in support of innovation and growth initiatives. Companies need to rebalance their operations in a way that prepares them to participate fully in the next upturn. During a downturn, many successful companies have used

the Technology & Innovation Management (TIM) principles described below alongside Arthur D. Little’s Innovation Restructuring methodology (Figure 2) to achieve this.

TIM Cost-side opportunities

(1) Portfolio cleanup

The product, R&D and technology portfolio is cleaned up and realigned following a systematic analysis. The resulting cuts may be painful but are highly effective as levers for restructuring. For one client in the mechanical engineering industry, for example, Arthur D. Little achieved cost savings of about 15% by eliminating products that made an insufficient contribution to margins and validating and updating development-project business plans.

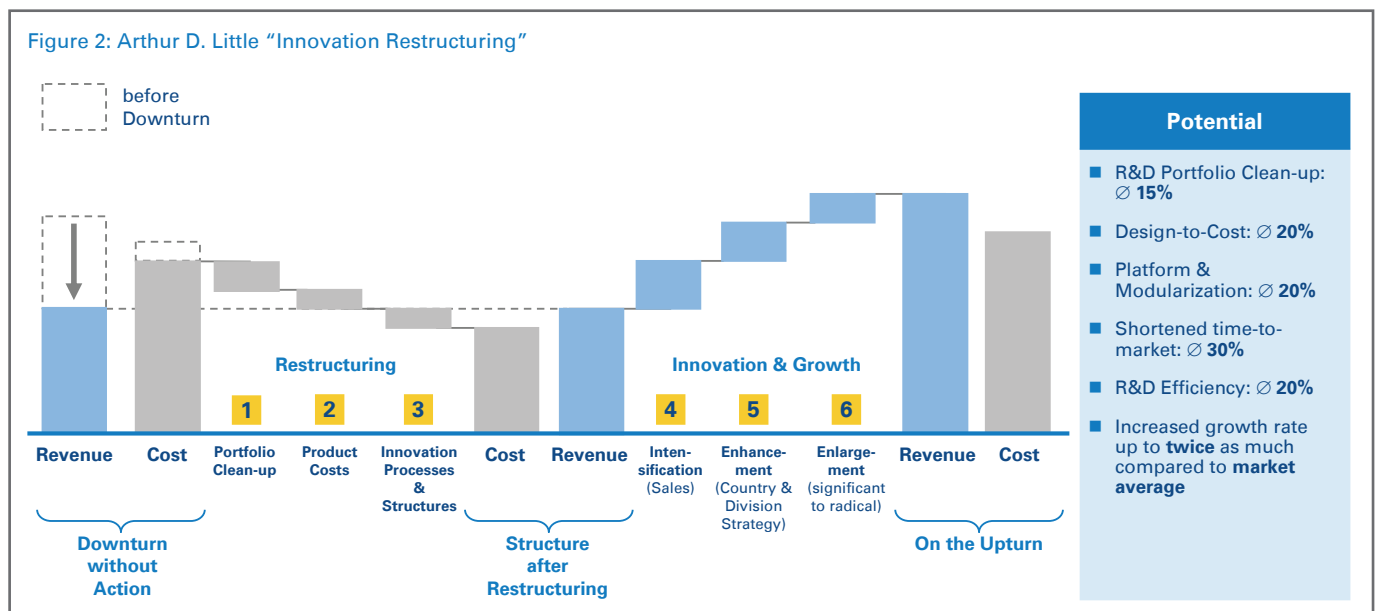
(2) Product costs

By using value analysis (Design-to-Cost) product costs can be reduced by around 20%. For a producer of packaging machines Arthur D. Little reduced machine costs by 18% while maintaining (and in some cases, even enhancing) product performance parameters.

Further levers for lowering product costs include:

- Standardization
- Modularization
- Technology and product platforms

These methods can reduce manufacturing costs by an average 15–20%. Projected across the total life cycle, the Net Present Value (NPV) of platform-based products can be double that of conventional ones.



(3) Innovation processes & structures

In order to optimize innovation processes and structures, companies need to address the following challenges:

- Introduce scalable reference models according to development type
- Establish unified quality specifications for each milestone
- Reorganize the R&D department according to growth and innovation types

In an efficiency improvement project for an automation company, Arthur D. Little reduced the personnel costs associated with product development by 20%.

Establishing clear tasks, competencies and responsibilities optimizes the interfaces between the participating parties and the product development process, delivering significant efficiency improvements as well as shortening development times. For a company in the medical industry, for example, Arthur D. Little was able to reduce time-to-market by 30%. In general, accelerated time-to-market produces additional revenues (time-to-cash) and market share.

TIM growth-side opportunities

Companies should use the current downturn to set a course for above-average growth during the next upturn. With the help of three growth levers companies can achieve growth rates up to twice the market average (Figure 3).

(4) Intensification

Most effective Intensification levers encompass measures to protect and increase turnover of existing products within

the existing customer base. Innovative channel- or account-management initiatives have proven to be very effective during past downturns. For a client in the electronics industry, Arthur D. Little was able to double the turnover with several major customers within a year by quantifying and clearly demonstrating application-specific product benefits.

(5) Enhancement

Internationalization, pricing and variant management are some of the approaches that can be used to enhance a company's customer and country base, as are modifying and enhancing product functionality. For a client in the automation industry, for example, Arthur D. Little adapted the product portfolio to meet country-specific technical requirements laying the basis for successful international expansion.

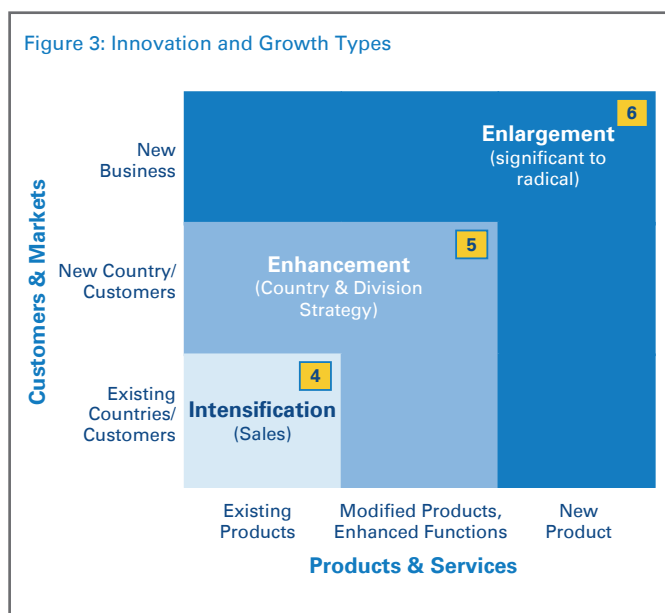
Intensification and Enhancement are closely aligned with the existing optimized organization and optimized processes, and aim to stimulate sales in the short and mid term.

(6) Enlargement

Enlarging the technology and product portfolio by incorporating new applications and business models has a mid- to long-term horizon. Enlargement targets can be achieved through: technology development, technology acquisition, commercialization of new technologies from a company's own portfolio, identification of new growth markets (e.g. new applications) and even the development of new business models. Approaches such as business opportunity scanning and corporate venturing can be used effectively during the downturn.

In time of crisis, projects to develop new business models or radical innovations are very often the first victims of cost cutting. Some members of a company's 'establishment' may see menace in unfamiliar cost structures, customers and supplier bases. In addition, because innovation projects tend to be small in their initial stages, they have relatively few supporters internally. As a result, stronger voices within the company are usually quick to propose innovation projects as the first candidates for elimination.

It is for this reason that it is necessary to differentiate innovation initiatives from less radical activities. Arthur D. Little's experience shows that innovation projects are best carried out by a separate unit. Trying to implement radical growth projects within the same structures used for type-4 and type-5 projects is a common mistake and a strategy that usually fails, whatever the prevailing economic conditions are.



The Arthur D. Little Approach: Innovation Restructuring

Arthur D. Little consultants understand that the key to successful restructuring and innovation lies in a coherent approach that aligns activities that have an impact on the cost with those that have an impact on the revenue side.

For example, the optimization of the technology portfolio needs to be aligned with the analysis of technology venturing. During a downturn in particular, there are many opportunities to acquire technologies on favorable terms. Conversely, companies with valuable technologies that have no strategic significance should sell them or integrate them into strategic partnerships.

With the help of Arthur D. Little's platform and modularization strategies markets can be conquered more quickly. So, having improved their cost position, companies can address additional attractive niche markets.

Design-to-Customer-Value both reduces product costs significantly and ensures customer needs are better addressed through enhanced functionality. This approach combines cost cutting and sales stimulation.

Installing a lean innovation organization involves introducing efficient innovation processes and structures, which must be aligned to the specific requirements of a company's Enhancement and Enlargement strategies.

Additionally sales stimulation activities, such as increasing the sales of products with low market share, have a significant impact on the product portfolio cleanup. Arthur D. Little's Portfolio-for-Value approach provides intelligent guidance on key decisions in this area.

Conclusion

Arthur D. Little's analysis and project experience shows that companies can realize significant gains through innovation restructuring.

The overriding goal during a downturn should be to simultaneously reduce costs appropriately and to prepare the technology, innovation and product portfolio for the next upturn.

At Arthur D. Little, finding solutions to the questions posed by innovation and restructuring is in our genes. We have been addressing the challenges of technology and innovation for over 120 years, a track record that equips us to offer unrivalled expertise and support to your business. In the last ten years alone, we have successfully implemented almost 600 projects for clients in the area of Technology & Innovation Management.

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