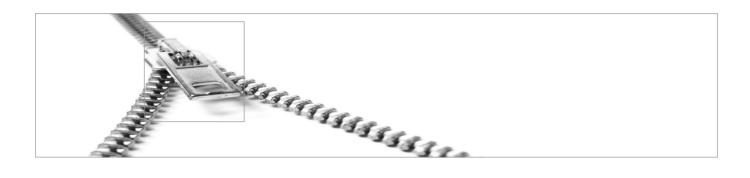
Arthur D Little

Post-Merger Integration of R&D

Reaping the full potential of post-merger integration



The competitive landscape is changing as the wipe out of less successful companies continues in the wake of the recession. For the audacious, there are opportunities to acquire other companies as a means to further strengthening their position for the next upturn. However, an in-depth study conducted by Arthur D. Little notes that while the potential gain of merging R&D departments is substantial, integration of R&D activities exposes the business to significant risks, is more difficult and takes longer than other areas – all factors that can spoil the affair. The solution is careful tailoring of a full R&D integration approach that deals with the "enablers" early on – such as common organization, governance, processes and performance metrics – and most importantly, persistent focus on the key synergy levers such as common product and technology strategies, common R&D IT systems, and overcoming cultural differences. By being persistent and actively managing the integration, companies can realize stronger synergies faster, while mitigating the risks that are typically triggered by M&A activities.

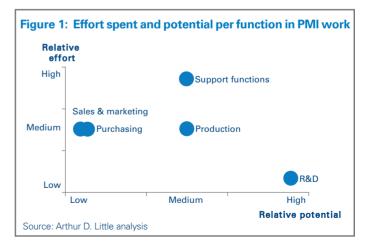
Introduction

In an in-depth study performed by Arthur D. Little, the majority of the interviewed executives reported that high to very high efforts were spent on the integration of support functions, marketing and sales, purchasing, and production, while only low to medium efforts were spent on R&D and innovation capabilities. Even though the most frequently mentioned motifs for an acquisition are economies of scale, expansion of product lines, and access to R&D capabilities, all areas where R&D plays an important role. Furthermore, of all areas addressed in PMI, R&D was perceived by all interviewed executives to yield the highest potential.

The lower efforts spent on R&D, despite the perceived higher potential, suggests an under-prioritization of R&D in integration activities.

Challenges in integrating R&D activities after a merger

Compared to other areas, synergies in R&D typically take the longest time to realize. While for other functions it only requires one to five years, managers looking to realize synergies in R&D may very well have to wait for up to a decade before full results can be seen. One of the key challenges is to manage the PMI work so that results can be realized within a timeframe significantly shorter than 10 years.



A second key challenge in the PMI work is that the merger of R&D departments exposes the business to a range of risks:

- Increased risk of bureaucracy, long licensing procedures and complicated rules in R&D
- Increased risk of R&D staff demotivation and slow down of staff creativity

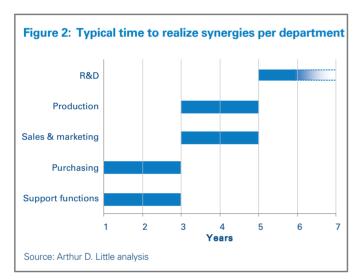
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Increased risk of quality problems and lost time to market due to R&D management becoming defocused from customers and daily operations

 Increased risk of leave of senior staff members and that competencies are not fully utilized

Finally, a third challenge is that synergies in R&D are particularly hard to realize. The synergies that are perceived to be most difficult to attain and often falling below plan are:

- Increased R&D output
- Shortened development time
- Lower product cost



The long and winding road to reaping the benefits of R&D integration

In order to reap the benefits from successful R&D integration, companies first need to select the appropriate level of integration. The second step is to determine which integration levers to pursue; and thirdly, to follow a structured approach throughout the process that begins before the merger.

Selecting integration approach

The path towards successful PMI begins with the selection of the optimal integration approach. There are four different levels of R&D integration: (1) fully independent departments, (2) independent departments with some collaboration, (3) partly integrated departments, or (4) fully integrated departments. Based on our experience and the study results, full integration of R&D activities with the merging of product portfolios, processes and organizations complemented with consistent metrics to follow up and measuring the achievements of the new unit has proven most successful.

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However, there are several factors to take into consideration that can affect the choice of PMI approach. Different levels of R&D investments, role of R&D in the company, product and technology differences, and differences in innovation culture are all important aspects to consider. Another factor affecting the approach is the respective sizes of the R&D units. Small units can more easily be integrated into larger ones, while if the R&D departments are equally large, the integration might instead be better off by starting with knowledge-exchange and transfer of activities; saving full integration for later.

For instance, one executive in the automotive industry with recent M&A experience reported that the markets of the firms were so local in character that it did not make sense to integrate product portfolios and strategies. Focus was instead directed to technology strategy and sourcing issues. The end result was two separate R&D departments collaborating only on a few selected issues.

Determining integration levers to pursue

In the work with integrating the R&D departments, it is essential to focus on the key synergy levers. That is, the activities that are both important and require significant effort to realize, as well as quickly securing the "enablers". In addition there are a number of secondary levers that also need to be pursued in due time, especially in a full integration approach.

The enablers

The enablers in PMI of R&D departments are considered to be relatively easy to achieve. Yet they are perceived as being very important as they enable other objectives. It is therefore crucial that these are addressed early on in the process in order to gain momentum and secure the prerequisites for the other areas. The enablers are:

- 1. Common R&D governance and organization
- 2. Common product development processes and project models
- 3. Transparent metrics and balanced scorecards

The key synergy levers

Four levers stand out as being more important and difficult to accomplish than the others. These key levers should be assigned the highest level of importance, and be proactively managed and followed-up throughout the PMI process:

- 1. Common product strategy
- 2. Common technology strategy
- 3. Common R&D and related IT systems, methods and tools
- 4. Overcoming differences in culture and values

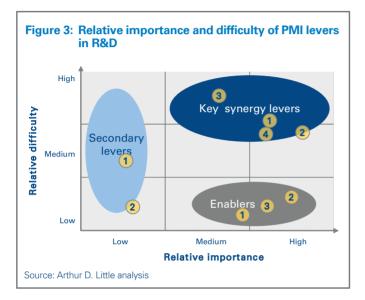
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Secondary levers

When going for full integration, a successful PMI approach also needs to consider the secondary levers that are perceived to be of less relative importance from a PMI perspective but often not without effort. These secondary levers are typically:

- 1. Common product and technology platforms
- 2. Common supplier and resource base



Example 1: Product portfolio & strategy - ForceQuip

Following the acquisition of one of its main competitors, ForceQuip (a leading OEM of electro-mechanical products) chose to follow a structured approach to product strategy and product portfolio integration.

The benefit of a joint product strategy – to free up resources from overlaps in the product portfolios to be invested in additional product lines – was made clear for everybody from the beginning, creating a common goal.

The outcome was that ForceQuip was able to cover an additional 20% of its market with its existing resources by reducing overlaps and duplication of efforts.

Example 2: Merger of automotive OEM suppliers -AutoComp

AutoComp, an OEM supplier in the automotive industry, merged with two competitors in order to gain access to new markets and realize synergies in product development and production.

Following the merger, AutoComp quickly reinvented itself and created a new R&D organization that unified and empowered staff to drive efforts in innovation, continuous improvement and commonality issues globally. Key success factors were:

- A new organization that brought together engineers at all three companies and organized them around "product systems"
- Interdisciplinary "product system teams", empowered to take a holistic approach to technology strategy, innovation and commonality issues
- Common goals, clear performance measurements and authorization to design and launch initiatives to improve KPIs

Conclusion

Arthur D. Little's review of post-merger integration challenges in R&D pinpoints access to new markets and sales channels as well as economies of scale in R&D, production and purchasing to all be justifications of some recent mergers in manufacturing industries.

But as attractive as the M&A route may look, especially today with several companies restructuring and becoming insolvent, just as difficult and risky it is. Integration of R&D activities is considered more difficult, takes longer than other areas, and exposes the business to significant risks. The difference between doing PMI "right" and "wrong" is the difference between strengthened or diminished innovation capabilities.

One way to deal with PMI risk is to reduce the ambition of integration efforts, i.e. by going for partial integration or keeping the R&D departments separate. But this reduces synergy potential, the very reason for doing the merger in the first place. Instead, we propose a full integration approach that starts before the merger and is given the necessary attention throughout the process.

In order to succeed with full integration, executives must secure the enablers and address a number of integration levers. The enablers relate to the new organizational structure, including governance, common product development processes and project models, as well as transparent metrics and balanced scorecards.

Executives with fresh experience of PMI projects agree that four key levers are the most critical: 1) common product and 2) technology strategy, 3) common R&D and related IT systems, methods and tools, and 4) handling of differences in culture and values. They are more important and harder to accomplish than the other activities. However, if these areas are given the necessary attention and resources from the beginning and throughout the post-merger integration process, they are the keys to unleashing increased innovation power and significant synergy potential.

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Arthur D. Little and PMI

Arthur D. Little has a long and successful track record of helping clients with post-merger integration and R&D issues. Typical support during mergers includes assistance in designing and planning the PMI program, staffing the program office, and leading specific projects. Our experts can help you in the early phases with design of the change program, as change agents during the integration, or both.

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Arthur D. Little

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