The growth dilemma
How engineered component manufacturers build a second act
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Sustained top-line growth is one of the clearest avenues to driving shareholder value. After years of creating value through cost efficiencies, growth has once again become a focus for business leaders and investors. At Parthenon-EY, we regularly work with industrial companies and their investors to identify growth opportunities. In our experience, there is one group of companies whose characteristics pose unique challenges to maintaining long-term growth. We define these companies as “engineered component manufacturers.” We are interested in these companies due to the place they occupy in the value chain and their growth characteristics. Our research indicates that many of these companies deliver above-average profitable growth for a time. However, they invariably reach a point where it is difficult for them to sustain their momentum and build a second act. We call this “the growth dilemma.”
A virtuous niche

Engineered component manufacturers are companies that sell highly technical components to original equipment manufacturers (OEMs). They occupy a “virtuous niche” in the product value chain, which allows them to achieve above-market growth and profitability. These companies’ products share three distinct features:

1. **The components are highly technical and value-added.** These companies develop components that outperform existing market solutions, sometimes significantly so. In addition, the components require unique technical knowledge and are sometimes patent-protected, making them difficult to recreate. This creates high barriers to entry, making them less susceptible to competition. The result is rapid adoption and high penetration rates, leading to above-market growth rates and high margins.

2. **The components are often “spec’d in” by OEMs.** This is a technical sale, and OEMs often choose to single-source these products. Many even design their products around the component capability. This significantly raises customer switching costs, reducing customer churn.

3. **The components are mission-critical and have a high cost of failure relative to their cost.** The end user will experience costly repairs or downtime if the component fails. Because these components are mission-critical and are usually low-cost relative to the cost of failure, OEMs are willing to pay a high price premium.

We have seen engineered component manufacturers carve out this virtuous niche in many different industries, such as consumer electronics, photonics, test and measurement, fluid handling and power transmission. Table 1 summarizes the characteristics that lead to high growth and margins for engineered component manufacturers.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Raw Materials</th>
<th>Components/Subsystems</th>
<th>OEMs/SIs</th>
<th>End customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company size</td>
<td>Very large</td>
<td>Mid-size</td>
<td>Varied</td>
<td>Large</td>
</tr>
<tr>
<td>Engineering Value Add</td>
<td>Low</td>
<td>Very high</td>
<td>Low</td>
<td>Varied</td>
</tr>
<tr>
<td>Customer Switching Cost</td>
<td>Low</td>
<td>Very high</td>
<td>Low</td>
<td>Varied</td>
</tr>
<tr>
<td>Competitive Environment</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Varied</td>
</tr>
<tr>
<td>Relative Market Share</td>
<td>Varied</td>
<td>High</td>
<td>Low</td>
<td>Varied</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Varied</td>
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components and contrasts them with characteristics of players in other places in the value chain:

- **Raw material suppliers** generally provide commodity products and compete on scale. Competition is fierce and share gain opportunities are limited. Their growth is dependent on end-user demand and margins are low. Examples include steel and plastics providers.

- **OEMs** may have more attractive competitive dynamics, but often are no more than component/subsystem integrators. As such, their engineering value-add can be low and differentiation may be difficult. Growth is limited by end-market demand and margins are suppressed. The personal computer industry is the classic example.

- **Commodity component companies** also generally depend on scale and are often dual-sourced by OEMs; competition is high and margins are low. This is true of electronic components, such as printed circuit boards, and certain automobile parts, such as radiators.

Consider the metal cutting laser industry as an example. Laser manufacturing requires many commodity components, such as electronic componentry, where growth and margins are low. OEMs in this industry add considerable expertise and value, but they are only able to grow as fast as their customers’ demand for metal cutting applications. Competition in relatively undifferentiated products can lead to margin pressure.

The highly engineered optical components company we highlight in Figures 1 and 2, however, has significantly outperformed its OEM peers over an extended period of time. Its technical expertise allowed it to grow rapidly as it penetrated the laser OEM customer base while maintaining high operating margins.
Traditional growth options may not be available

The same dynamics that make these companies so attractive will eventually cause their growth to stagnate. Once the companies achieve high penetration, it becomes difficult to grow above the market rate. When the OEMs have adopted the technology, the component manufacturers’ growth will track the growth of those OEMs, mirroring end-user demand growth.

All of the business units shown in Figures 3 and 4 saw rapid market adoption between years ~4 and ~10, but struggled with growth once their market share reached a certain level. This is the growth dilemma for engineered component manufacturers: how can these companies continue to achieve above-market growth once their products have seen widespread adoption?

A compounding factor is that many of the standard growth options are unavailable to engineered component manufacturers, as illustrated in Table 2 (see next page). Market share and share of wallet are not options once high penetration has been attained. Both forward and backward integration require entering completely different businesses, and are therefore not reasonable options. And acquisition/consolidation is rarely available, due to the unique technology content and high market share. In fact, once high market share is attained, the company’s position is so favorable that other acquisitions can seem unattractive.
Building a second act

We have identified potential growth options that may be suited to component manufacturers, each with its own set of unique challenges:

- **De-feature technology**
  De-featureing a technology or providing lower performing components can open up new, sometimes larger, customer opportunities. However, engineers accustomed to designing highly engineered products very often have difficulty designing a cost-competitive, defeatured product.

- **Repositioning technology**
  Repositioning the technology for new applications opens up new markets/customers and can reignite high growth through new market penetration.

However, penetration often requires application knowledge that may not exist within the company.

- **Subsystems Opportunities**
  If subsystems exist that are dependent on the component for performance, often times the component manufacturer can “move up the value chain” to become a subsystem provider. However, subsystem opportunities don’t always exist. If they do, it may require competing with current customers, an often difficult transition to manage.

We have seen companies attempt to pursue these options, only to fail because they did not fully understand the challenges. Each option requires in-depth research and careful analysis to decide whether or not it can and should be employed to drive profitable, above-market growth.
The Parthenon-EY approach

Parthenon-EY has developed an opportunity identification process that helps business leaders of component manufacturing companies efficiently identify, prioritize and act on available opportunities.

The approach is fact-based and rigorous and relies heavily on a deep understanding of the precise market in which companies operate. It is collaborative, incorporating input from all levels of the organization, and is repeatable and systematic, built around frameworks that allow an organization to refresh its strategy over time.

Through the process of identifying potential growth strategies, assessing the operating requirements of each, quantifying the likely impact of each and developing an action plan to take advantage of the most promising, component manufacturers can build a second act for their companies out of a single product line.

Parthenon-EY’s opportunity identification strategy

Approach conclusion

In an environment where it is increasingly difficult to drive above-market growth, engineered component manufacturers are able to deliver consistently. However, the characteristics that make these companies so attractive also can cause growth challenges long term. Only through a systematic and in-depth evaluation of market dynamics and internal capabilities can business leaders choose the growth strategy that will deliver maximum value to the organization. By following this approach, investors and business leaders can extend a component manufacturer’s above-market growth indefinitely and overcome the growth dilemma.
About Parthenon-EY

Parthenon joined Ernst & Young LLP on 29 August 2014. Parthenon-EY is a strategy consultancy, committed to bringing unconventional yet pragmatic thinking together with our clients’ smarts to deliver actionable strategies for real impact in today’s complex business landscape. Innovation has become a necessary ingredient for sustained success. Critical to unlocking opportunities is Parthenon-EY’s ideal balance of strengths – specialized experience with broad executional capabilities – to help you optimize your portfolio of businesses, uncover industry insights to make investment decisions, find effective paths for strategic growth opportunities and make acquisitions more rewarding. Our proven methodologies along with a progressive spirit can deliver intelligent services for our clients, amplify the impact of our strategies and make us the global advisor of choice for business leaders.

About Parthenon-EY Diversified Industrial Products practice

Parthenon-EY’s Diversified Industrial Products practice advises a broad range of products and services companies across every major industrial sector. We deploy tested analytic tools and draw upon a deep bench of experienced professionals to help mid-market industrial companies achieve above-market growth and operational improvements. Our experience has allowed us to address an array of business challenges, including market entry strategies, commercial due diligence, value-chain positioning and pricing strategies, competitive assessments, and cost optimization for clients throughout North America, Asia, and Europe.

For more information on our Diversified Industrial Products practice and our team, please go to www.parthenon.ey.com