Outsourcing Manufacturing: A 20/20 view

Outsourcing Manufacturing is becoming a well-established approach for companies that want to strategically manage materials in today’s fast-paced business environment.

In return, manufacturers see various benefits from outsourcing to reliable manufacturing and logistics partners, including cost and asset reductions, access to skilled labor, third-party design, and manufacturing expertise, along with the ability to quickly scale production up or down. An outsourcing strategy also allows brand owners to focus on their core competencies of design, brand management, and sales, while relying on partners to manage manufacturing and distribution.

But has the promise of outsourcing truly been fulfilled over the past two decades?

To find out, Peerless Research Group (PRG), on behalf of Supply Chain Management Review and E2open, conducted a survey of 94 top supply chain executives in companies with US$250 million or more in annual revenues. The survey was commissioned to assess the current state and future plans for outsourcing manufacturing.

Researchers sought to better understand:

• how companies outsource their tasks;
• what the outsourcing forecasts look like for the next couple of years;
• what level of visibility there is over the end-to-end process; and
• how technology is being used to manage the process.

While feedback from respondents was varied, it’s clear that outsourcing is here to stay. Even with the current trends of reshoring and bringing manufacturing in-house, outsourcing remains a key strategy for most firms. While they may tactically “reshuffle” or rebalance in-house vs. outsourced manufacturing, there does not appear to be a wholesale move away from reliance on outsourcing.

Supply Chain Visibility as an Equalizer

Outsourcing is by no means a large company phenomenon. Technology advances have leveled the playing field, bringing benefits to small, midmarket, and large companies alike. The major drivers of outsourced manufacturing for smaller firms include access to expertise, while midmarket companies typically benefit from increased margins.

For companies of all sizes, and across all industries, outsourced manufacturing works best when brand owners/original equipment manufacturers (OEM) have broad visibility into and the ability to share forecasts, orders, and inventory across partners in the entire supply chain. With this visibility, companies can ensure continuity of supply, jointly resolve disruptions when problems occur, and gain access to expanded revenue opportunities. Improved visibility also enables better risk management of inventory liability and a host of opportunities for process improvement and cost reduction.
In assessing today’s typical manufacturing environment, business-to-business (B2B) information sharing remains largely manual point-to-point communication of important information such as forecast and inventory positions. This serial communication approach often leads to poor visibility for shipments and material stock and in turn prevents manufacturers from realizing the full benefits of their outsourced strategy.

By leveraging outsourced manufacturing and complementing it with visibility platforms, companies can increase the productivity of their partners’ external operations by more effectively negotiating, working, and collaborating with their business partners. With partner visibility and collaboration working in unison, additional benefits include faster time-to-market of new products with higher quality.

Key Findings

Outsourcing Manufacturing Tasks

The majority (84 percent) of organizations surveyed outsource their manufacturing production to some extent. Among those companies that do outsource, one in four subcontracts out more than half of their manufacturing processes.

The main benefits gained from outsourcing their production tasks include decreased manufacturing costs and associated costs of goods sold, and the ability to leverage core competencies from companies who have more knowledge and experience with manufacturing and logistics processes. (See Figure 1.)

---

**Main Reasons for Outsourcing Manufacturing**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce manufacturing/COGS costs</td>
<td>51%</td>
</tr>
<tr>
<td>Rely on third parties for manufacturing expertise/core competency</td>
<td>51%</td>
</tr>
<tr>
<td>Rapid growth/expansion</td>
<td>28%</td>
</tr>
<tr>
<td>Increase responsiveness/agility</td>
<td>25%</td>
</tr>
<tr>
<td>Asset reduction (asset-lite strategy)</td>
<td>18%</td>
</tr>
<tr>
<td>Product design expertise</td>
<td>17%</td>
</tr>
<tr>
<td>Regional/local expansion</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

---

**Outsourcing Manufacturing: A 20/20 view**
Due to these ongoing benefits, very few companies plan to decrease their outsourcing activities over the next two years, according to the survey. In fact, one in three firms predicts an increase in the level of outsourced manufacturing services that they use, while almost half (46 percent) plan to continue their current outsourced manufacturing strategy. (See Figure 3.)

Companies that outsource manufacturing have realized valuable improvements from their decision to offload activities to reliable partners. For nearly half (44 percent) of respondents, operating margins have grown and nearly a third (32 percent) are seeing earlier new product introductions. One continuing challenge is increased lead times: improved collaboration could help companies manage to this constraint. (See Figure 2.)
Outsourcing Manufacturing: A 20/20 view

Unfortunately, visibility appears to be inadequate for many companies. While companies see the greatest level of visibility with their tier 1 contract manufacturers, visibility with these partners still lags for many: just over half (52 percent) of the firms say visibility with these top tier trading partners is either on medium or low levels. Visibility with partners in other tiers is even lower: 66 percent of organizations surveyed assess visibility with their tier 2, tier 3, and tier 4 suppliers to be, at best, medium or low. (See Figure 5.)

Outsourcing Strategies
The survey found that companies are most likely to use outsourced manufacturing either with newly developed products or those with long production cycles. Products that have shorter production cycles, or are more highly tailored, tend to be handled in-house. (See Figure 4.)

Circumstances When Manufacturing is Outsourced

Out of the different circumstances, more than half (58%) of the respondents said that manufacturing is outsourced for longer lifecycle products. In contrast, only 13% of respondents said it is outsourced for short life cycle products. About 30% of respondents said it is outsourced for new products. (See Figure 4.)

Level of Visibility into Suppliers Who are...

Unfortunately, visibility appears to be inadequate for many companies. While companies see the greatest level of visibility with their tier 1 contract manufacturers, visibility with these partners still lags for many: just over half (52 percent) of the firms say visibility with these top tier trading partners is either on medium or low levels. Visibility with partners in other tiers is even lower: 66 percent of organizations surveyed assess visibility with their tier 2, tier 3, and tier 4 suppliers to be, at best, medium or low. (See Figure 5.)

Level of Visibility into Suppliers Who are...

Tier 1—Contract manufacturer
- Low: 20%
- Medium: 32%
- High: 48%

Tier 2—e.g. System/component supplier
- Low: 25%
- Medium: 43%
- High: 32%

Tier 3—e.g. Part(s) supplier
- Low: 32%
- Medium: 34%
- High: 34%

Tier 4—e.g. Raw materials
- Low: 35%
- Medium: 29%
- High: 36%
An opportunity exists for improved visibility beyond the first tier of trading partners.

In assessing how specific tasks are handled by today’s manufacturers, the data shows there are a few key segments most likely to be outsourced. Supply chain planning, fulfillment operations and product design, for example, are largely managed internally, while third-party partners are more apt to have “ownership” of manufacturing tasks and kitting. There is still a great dependency on partners for information, which is why collaboration is vital to the success of outsourcing manufacturing. (See Figure 6.)

**Collaborative Planning**

The responsibility for managing raw materials, components, and finished goods is divided between the original equipment manufacturer (OEM) and the contract manufacturer (CM). Either the OEM obtains components directly from the supplier and sends them to the third-party manufacturer or it has the supplier send parts directly to the CM. (See Figure 7.)

### How Components are Managed and Supplied

- **Contract manufacturer orders from supplier**: 54%
- **Brand owner/OEM sends components to CM**: 47%
- **Brand owner/OEM orders from supplier and supplier sends directly to CM**: 46%
- **Other**: 4%

---

**Primary Management Responsibilities for…**

- **Product design**: 57% In-house, 15% Shared, 20% Outsourced, 2% Varies by product, 6% Other
- **Supply chain planning authority**: 74% In-house, 9% Shared, 2% Outsourced, 2% Varies by product, 13% Other
- **Manufacturing**: 24% In-house, 23% Shared, 13% Outsourced, 4% Varies by product, 36% Other
- **Fulfillment**: 59% In-house, 15% Shared, 16% Outsourced, 6% Varies by product, 4% Other
- **Final assembly of kits**: 34% In-house, 14% Shared, 19% Outsourced, 10% Varies by product, 23% Other
Outsourcing Manufacturing: A 20/20 view

In most instances (60 percent) the brand owner/OEM has clear visibility into the CM’s component inventory, according to the survey. Yet, as previously cited, visibility is lacking for about one in four (23 percent) of companies, while 17 percent of organizations report they are “unsure” of the brand owner/OEM’s visibility. (See Figure 8.)

As for supply chain visibility, access to data regarding in-stock position, purchase orders, and in-transit inventory are among the top processes for which suppliers have visibility. A potentially large benefit to the brand owner exists for supplier visibility to upside availability, effectively what could be sold, given the availability of product. Brand owners have an opportunity to drive increased revenue directly through supplier collaboration and visibility to this category of demand. (See Figure 9.)

OEMs (49 percent) and Tier 2, Tier 3 and Tier 4 suppliers (42 percent) share fairly equally in the ownership of parts inventory. (See Figure 10.) This proves that there is a sense of “sharing” or collaboration across the supply chain, where both brand owners and suppliers take equal responsibility for purchasing and maintaining stock levels necessary for servicing end users. Unfortunately, there remains a lack of visibility across these various pockets of inventory, as illustrated in Figure 8.

### Information Types for Which Suppliers have Visibility

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-stock position</td>
<td>80%</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>64%</td>
</tr>
<tr>
<td>In transit inventory</td>
<td>58%</td>
</tr>
<tr>
<td>Upside availability</td>
<td>40%</td>
</tr>
</tbody>
</table>
Purchasing and Inventory
In looking at changes that have taken place due to outsourced manufacturing, inventory throughout supply chain networks remains mostly higher for outsourced products. Slightly more than one in three companies (39 percent) say inventory is higher, more than one in four (27 percent) believe it’s lower for products outsourced, and about one-third (34 percent) have seen no change in inventory levels. (See Figure 11.)
Outsourcing Manufacturing: A 20/20 view

Summary and Conclusions

The outsourcing trend is expected to continue into 2016 and beyond. Whether a manufacturer is looking to scale up quickly (and is unable to do so using internal resources), expand globally, or focus on core competencies, outsourcing can provide these capabilities.

The promise of outsourced manufacturing: saving money; reducing manual, error-filled communication; and improving visibility and control in the supply chain is showing results. But there exists a real opportunity to unlock even greater efficiencies and effectiveness with:

- extended visibility across multiple tiers of suppliers;
- still untapped upside responsiveness between brand owner and suppliers; and
- mutually beneficial approaches to reducing overall inventory liability.

Nearly half share forecast data only with their CMs (48 percent). Other brand owners/OEMs share data further down the process. (See Figure 12.) Interestingly—yet perhaps not surprisingly—the majority of businesses still share forecast data with their suppliers using conventional methods, such as spreadsheets sent via e-mail (54 percent). Only slightly more than one in three organizations employ an integrated B2B systems approach, while a small percentage (6 percent) of companies surveyed report that they don’t share forecast information at all with suppliers. (See Figure 13.)

Partners for Forecast Data Sharing

- Tier 1—Contract manufacturer 48%
- Tier 2—Systems/Component suppliers 21%
- Tier 3—Parts suppliers 14%
- Tier 4—Raw materials 17%

Ways in Which Companies Share Forecast Data with Suppliers

- Manual via spreadsheet and e-mail 54%
- System to system integration 37%
- Do not share forecasts with suppliers 6%
- Other 3%
Applicable for companies of all sizes, outsourcing works most efficiently when brand owners/OEMs have complete end-to-end visibility of their supply chains—something many have not yet achieved. To meet this goal, moving supply chain networks onto an integrated, collaborative platform can empower brand owners and their partners to see, share, and act on the best possible information in real-time—a single source of truth—when plan deviations can still be turned into cost savings or revenue opportunities. This degree of collaborative planning and execution enables brand owners, suppliers, distributors, and customers to leverage the collective brainpower of their trading partner communities to manage end-to-end supply chain processes and to respond intelligently to continuous change in supply, demand, products, and partners.

Methodology
This research was conducted by Peerless Research Group (PRG) on behalf of Supply Chain Management Review magazine for E2open. This study was executed in March 2015 and was administered over the Internet among subscribers to Supply Chain Management Review.

Individuals were prequalified as being personally involved in decisions that relate to sourcing, outsourcing, and supplier relationship management.

The findings are based on information collected from 94 top supply chain executives employed by businesses with estimated 2015 revenues in excess of $250 million.

Respondents are predominantly supply chain management (29 percent), logistics management (18 percent), corporate or executive management (14 percent), procurement and sourcing management (13 percent), and operations management (13 percent). A range of industries are also represented including consumer packaged goods, electronics manufacturing, automotive and parts, and industrial machinery.

About E2open
E2open is the leading provider of cloud-based, on-demand software solutions enabling enterprises to procure, manufacture, sell, and distribute products more efficiently through collaborative planning and execution across global trading networks. Enterprises use E2open solutions to see and control their trading networks through real-time information, integrated business processes, and advanced analytics.

Contact Information
E2open
9600 Great Hills Trail, Suite 300E
Austin, TX 78759
Toll-Free: 1.866.4.E2open
Phone: 1.512.425.3000
e2open_us@e2open.com