Best Practices for Internal Orders

Many companies face challenges with the placement and processing of internal orders, but surprisingly few research studies and practitioner articles exist on this topic. The Supply Chain Management Institute was commissioned by one of its member companies to determine the best practices for handling internal orders. This Research-in-Brief summarizes the research findings.

The Basics

Internal orders, as opposed to traditional external customer orders, are transactions against product/component inventory of the firm initiated by an employee within the company. Often these orders are triggered for various reasons such as to support marketing or new product development (NPD) projects and initiatives. As such, these types of orders pose important inventory record accuracy, stock availability, and product consumption challenges for companies because many ERP systems and company order management processes are not designed to handle the unique e-transaction requirements of these orders.

A member company of the Supply Chain Management Institute at the University of Wisconsin-Milwaukee’s Lubar School of Business, henceforth referred to as “The Company”, initiated an effort aimed at developing a field research base of knowledge around the practice of internal orders. Since few research studies on internal orders were found, four companies that process internal orders were identified and agreed to collaborate with UW-Milwaukee on this short research study. A set of semi-structured interviews was conducted with executives at the four participating companies. Feedback obtained from these interviews serve as the primary input for this Brief.

In discussions with The Company’s users of the current internal order system, the shortfalls of the current system were identified. The issues included the customization of the company’s ERP system, SAP; a lack of automated inventory monitoring; and the complexity of having several disjointed and legacy inventory tools. This leads to costly upgrades of SAP, poor visibility into stock availability, and confusion over conflicting inventory information.

Results of the Research

The interviews of the four collaborating companies (referred to here as Company A, B, C and D) revealed a number of solutions and diverse opinions on internal order management. All four focal companies face internal order challenges similar to those documented at The Company. Companies A, B, and D have a workforce of 5,000 people, 600 people, and 6,400 people, respectively. Company C is among the Fortune 100 with over 300,000 employees. It was found that company size is less important to the success of the company’s internal order system than the strategy used to manage these orders. The four focal companies also come from four different industries. Table 1 compares key data for the four collaborating companies in this research study.
Table 1: Internal Order Comparison for Four Companies

<table>
<thead>
<tr>
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<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
<th>Company D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Small Tools &amp; Accessories</td>
<td>Aerospace/Defense</td>
<td>Diversified Machinery</td>
<td>Recreational Vehicles</td>
</tr>
<tr>
<td>Annual Revenue</td>
<td>$2 Billion</td>
<td>$100 Million</td>
<td>$146 Billion</td>
<td>$6 Billion</td>
</tr>
<tr>
<td>Employees</td>
<td>5,000</td>
<td>600</td>
<td>300,000</td>
<td>6,500</td>
</tr>
<tr>
<td>Department Placing Majority of the Internal Orders</td>
<td>Field Service</td>
<td>Field Service</td>
<td>Field Service</td>
<td>New Product Development</td>
</tr>
<tr>
<td>Internal Order Solution</td>
<td>web store</td>
<td>web store</td>
<td>third party</td>
<td>homegrown</td>
</tr>
<tr>
<td>Source of Internal Order Solution</td>
<td>homegrown</td>
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<td>third party</td>
<td>homegrown</td>
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</tbody>
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**Companies A & B:**
Despite their difference in size, Companies A and B have very similar internal order processes. Both are entirely homegrown (legacy) and use a barebones online form to capture internal orders. Field service technicians and engineers originate the majority of the internal orders at both companies. Company A pursued this barebones design because the primary users know the part or SKU number required, thus minimal functionality was needed in the online form. Company B’s motivation was slightly different. The internal order management system at Company B was developed when the company was founded. It was a means to reduce the number of ERP/MRP licenses purchased and saved the company money during its start-up phase.

Companies A and B both recognized the need to serve the internal order needs of additional departments (Marketing and Customer Service Call Center, for example) and therefore each developed a second internal order management system. This second system at both companies was a user-friendly web store with shopping cart functionality. Company A described its system as having a look and feel similar to Amazon.com.

**Company C:**
Company C has grown to its Fortune 100 size, in part, through acquisition. It was clear to the executives that a configurable software package instead of a homegrown solution for internal orders would be the best fit for the company. The internal order management system required a backend framework that could be connected to a myriad of systems and tools from other acquired companies.

**Company D:**
The internal order system at Company D is different from the other participating companies. Unlike the other three companies, field service technicians at Company D do not originate the largest proportion of their internal orders. Rather, the New Product Development (NPD) team does so. Additionally, Company D uses an Excel spreadsheet instead of its ERP system to place and track internal orders.

**Conclusions**
Recommendations were made to The Company based on this research. One of the clearest differences was that none of the collaborating companies had configured their ERP system to handle internal orders. Companies A and B have a straightforward online interface linking to the ERP system. Companies A, B and C have a “web store” solution with product illustrations, descriptions, and stock availability for internal orders. Both of these solutions allow for the required user functionality without requiring customization to the company’s ERP system.

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