PCB Assembly Manufacturer Advances Efficiency with SAP Business One<sup>®</sup> and Vision33







### Company

Name: Advanced Assembly

**Location:** Aurora, Colorado

**Employees**: 100 +

#### Industries served:

Transportation, Automotive, Public Sector, Communications, Medical, and Technology

#### Services:

Printed Circuit Board (PCB) Assembly

#### **Customers**:

Engineers and buyers involved in the development and production of innovative electronic products

Visit them at <u>www.aapcb.com</u>

### **Business Challenges**

ABOUT ADVANCED

- Outgrown capabilities of proprietary system due to sustained year-overyear growth
- Need for consistent and repeatable processes
- Limited visibility into process `bottlenecks
- Manually integrated applications

### **Benefits**

- Creation of a Manufacturing Execution System (MES) for streamlined operations
- Real-time reporting for a snapshot of company performance
- Visibility into work order status for quicker manufacturing turn times and customer satisfaction
- Common business platform to support continued growth
- Tracking of manufacturing throughput to support growth planning

#### Why Vision33

- Certified and knowledgeable SAP Business One consultants
- Detailed understanding of manufacturing, and accounting processes

### **Existing Environment**

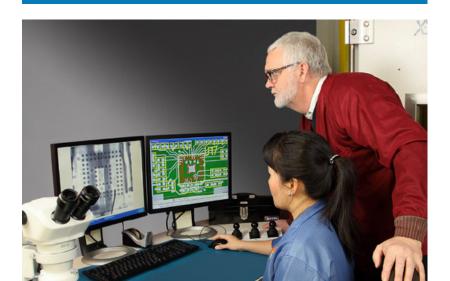
- Proprietary software
- Spreadsheet software

With SAP Business One, we now have a solid foundation to build our manufacturing solution and continue growing the company.

Kevin Ryan, President, Advanced Assembly, LLC



All great inventions start with an idea. When engineers need printed circuit board (PCB) assembly services for prototyping, it takes a meticulous focus on design details, quality components, assembly process and quick turnaround to bring their ideas to life. That's why Advanced Assembly chose SAP Business One; to accelerate the ideas of customers through efficient PCB assembly -87% faster than the competition.



Identifying a gap in the market for a low-volume PCB assembly service, Aurora, Colorado-based Advanced Assembly designed a successful business by offering engineering firms a rapid way to prototype their next big idea. "Design engineers know that board assembly is a big hassle," explains Kevin Ryan, President, Advanced Assembly. "You need to first buy the boards, source the parts, verify the design to identify and eliminate potential errors, then assemble it; it is a very complex process."

By offering quick-turn assembly for low to mid-volume orders, Advanced Assembly's customers save both time and money so that they can focus on other aspects of the engineering process; a welcomed alternative to hand assembling boards, which often result in quality and reliability issues. Advanced Assembly continually invests in leading edge equipment and machine places all Surface Mount Technology (SMT) parts, even for just one or two boards. The result is smooth, high quality assemblies every time

It's a successful service that has left an imprint on customers, who range from sole proprietors, garage engineers to small and mid-sized engineering firms and Fortune 500 corporations. As Advanced Assembly IT Director Jason Gibb points out, the company's growth over the last ten years owes not only to customer dedication, but also to the positive word of mouth and referral business from its satisfied customers. Today, you can find Advanced Assembly's PCBs in everything from stadium scoreboards and medical devices, to drone helicopters – just to name a few applications.

# Blueprint for Future Business Growth

Like any good idea, it takes multiple revisions and a commitment for constant improvement to ensure success. No stranger to rapid iteration, Advanced Assembly realised that to meet the growing demand for its assembly services, the company needed to revisit and evaluate the efficiency of its business and production processes.

When the company was smaller, it was possible to carry out business processes such as work orders manually. However, after investing in more equipment and processing more customer orders, the company needed to integrate its business back-end with its many manufacturing processes for a more connected system. "Many of the existing processes had been added organically, which worked for the company in the past, but when you move from a small business to a multi-million dollar company, you need more consistent and repeatable processes," explains Ryan.

To maintain efficient operations, the decision was made to move to a fullfeatured business management solution to replace the company's existing custom software and proprietary production processes.

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# Plugging into SAP Business One, All Across the Board

During a thorough selection process, Advanced Assembly established key criteria that the chosen business management solution would require to achieve its long-term objectives for growth. "We were really looking for a solution that could be a solid foundation for Advanced Assembly; software that had the potential to plug into our production and manufacturing processes as the company continues to grow," says Gibb.

The company decided on SAP Business One because it offered comprehensive business management functionality in addition to supporting production and project management - features not offered out-of-the-box by other ERP applications on the market. Beyond comprehensive business management functionality, another key selling point was the solution's scalability to grow with the company; SAP is well known for its comprehensive ecosystem of industry-specific solutions designed to meet the needs of growing manufacturing and production companies.



## Goals, Go-Live, and SAP Gold Channel Partner Vision33

For the SAP Business One implementation, Advanced Assembly partnered with SAP Gold channel partner, Vision33, the largest global reseller of SAP Business One. With local offices throughout North America, Vision33's proven methodology leverages twenty years of industry-specific knowledge to ensure a detailed understanding of each client's business and goals for implementation.

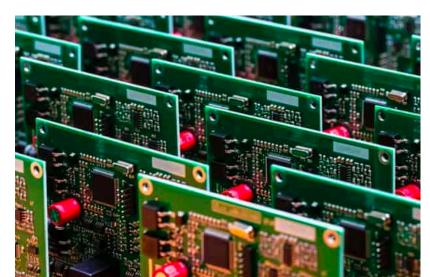
Advanced Assembly partnered with Vision33's Midwest office for the implementation of the business solution, which included SAP Business One implementation as well as the Vision33 TOTAL Care customer support program. The company was impressed with the hands-on approach and consultant expertise: "Vision33's certified consultants have a very high level of understanding of accounting and manufacturing systems," says Gibb. "They're more than software implementers, Vision33 consultants are business process implementers."

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# Keeping Track of Moving Parts

The SAP Business One implementation included a business process optimisation (BPO) where Vision33 consultants examined Advanced Assembly's existing processes."Vision33's consultants reviewed all of our processes and found redundancies that we could eliminate, especially in the manufacturing area," comments Gibb. "They challenged our business processes to determine if they were effective, which really helped to streamline our whole work process."

Equally important in the implementation was to ensure that SAP Business One provide visibility into the company's business processes. Advanced Assembly's complex PCB assembly processes had made it a challenge to maintain real-time visibility into production. From the initial sales contact, the customer's design files are submitted for a quote, then moved to the sourcing and purchasing departments. From there, the files go to manufacturing stations and finally to accounting for customer invoicing. Before adopting SAP Business One, the company was unable to easily determine the status of a customer order. "This is one of the biggest benefits of working with Vision33. Through the implementation process, we identified areas where there were internal process bottlenecks that we didn't recognise before," added Gibb.



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# Setting the Stage for Efficient Assembly

Focused on replacing non-integrated processes and applications, Advanced Assembly now has a common platform for its manufacturing processes. "On the manufacturing floor, each station now tracks the stage of PCB assembly and our new work orders streamline the process," adds Gibb.

With SAP Business One and implementation partner Vision33, the high-turn manufacturer has an idea for the future – further building upon its Manufacturing Execution System (MES). "We'll be able to track actual throughput. We'll know how long a job takes at each stage of the assembly process. This will give us capacity planning and growth rate planning when we add additional machines or staff. Prior to SAP Business One and Vision33, we had no way of doing that," remarks Gibb.





## One Good Idea After Another

Advanced Assembly's customers aren't the only ones with great ideas. Moving forward, the company plans on deeper integration with accounting, ordering, sales, document control, and auditing - all of which will lead to more value for its customers. This will be key in ensuring faster turnaround times for quotes, PCB delivery turn-time, and pricing that is consistent with the customer's expectation for high quality assembly services.

"With our rapid assembly of smaller quantity orders, we have a quickturn service that is unique in the manufacturing world. The expertise of Vision33, along with the capabilities of SAP Business One, allows us to process more orders faster with consistently high quality. What this means is that we can continue to grow the company and provide more value to our customers," concluded Gibb.



Vision33 transforms business processes and results for customers by delivering value through the promise of technology and its benefits for growing businesses. For over 30 years, Vision33 has helped companies integrate and automate their business processes and applications to better serve their customers, employees, and stakeholders. The technologies may have changed drastically in 30 years, but Vision33's mission has never wavered.

With over 1,000 customers worldwide, Vision33 helps manufacturers, distributors, service firms, and SaaS businesses outperform their competition and lead their industries with successful technology investments. With nearly 500 employees, Vision33 offers product expertise, business experience, and innovative technology leadership. Whether a global company with 100 subsidiaries or a small business, Vision33 works alongside every customer to meet their goals.

Vision33 also has formal partnerships to resell, implement, and support leading ERP applications, is a leader in cloud deployment, and has developed exclusive products, including Saltbox (saltbox.io) and iDocuments (idocuments.io).

## For more information about Vision33, visit **www.vision33.co.uk.**

Contact your nearest Vision33 sales office to discuss how we can help transform your business.

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