

Application Engineering

We address operational and financial challenges throughout your manufacturing organization with innovative software solutions that reduce operating costs and create new revenue opportunities.

We take a business outcome approach to Application Engineering



Real-time access to data for decision making



AI and ML for operational efficiency to gain insights



After-market sales and services to drive revenue



Automation of shop floor operations to decrease costs



Visibility into the supply chain to improve forecasting



DevOps integrations and accelerators for better outcomes of projects

Our capabilities in Digital Transformation, Product Development and Manufacturing Applications support the growing demands of the digitally enabled manufacturing organization. We support the full SDLC and have a skilled DevOps team. ThoughtFocus also has experience in establishing software engineering Centers of Excellence for clients using an innovative offshore model.

Digital Transformation

- UI/UX
- Analytics & Visualization
- Mobile Platform
- Cloud Technology

Product Development

- Custom Development
- Quality Engineering
- IoT Applications
- Product Configuration
- DevOps

Manufacturing Applications

- Supply Chain
- eCommerce /Catalogs
- Package Implementation
- System Integration



Examples of Our Work

Application Redesign



Overview

Caterpillar Inc. was experiencing reporting delays in its Lab Reporting System (LRS) that supports the company's field labs around the world. The system was unable to keep up with increases in number of users and security requirements, and was unresponsive even when tests were minimal. ThoughtFocus developed a next generation laboratory reporting solution to save hours of work for lab technicians and enable Caterpillar's IT team to augment additional features seamlessly. The new application is maintainable, durable and scalable.

Benefits

- Built-in concurrency for multiple users to work simultaneously, reducing the average wait time by over 5 hours
- New multi-lab support functions enable technicians to access lab reports from other labs
- Security mechanisms to restrict data access to authorized users with alerting mechanisms in case of access intrusion

Solution Highlights

ThoughtFocus identified the causes affecting application performance and worked with the security teams to understand data access and encryption requirements.

- The application architecture was redesigned using the latest technology stacks
- Data rendering mechanisms were changed to allow for faster data communication
- Critical bottlenecks were targeted to achieve quick performance gains
- Encryptions were placed at the data level for better security and control

- Traceability was increased by implementing activity logging

New Product Development



Overview

GenAlpha, a provider of after-market sales software for manufacturing, sought product engineering expertise and scalable infrastructure to develop a suite product offerings. ThoughtFocus worked with the company to develop its GenSuite eCommerce product. This platform includes a parts catalog that employs an innovative visual representation of the part to make ordering easier. GenSuite was recently used with major ERP deployment in the automotive industry.

Benefits

- Product suites across multiple customers in the US and Europe were successfully implemented in keeping with the predicted schedule
- Creative technology solutions led to development of automation tools which reduced implementation costs by 200%
- GenAlpha gained access to a reliable resource pool of technology leaders and developers, resulting in more effective execution of its product strategy

Solution Highlights

ThoughtFocus partnered with GenAlpha to build a fully functional dedicated development team with full product ownership. Major activities:

- Roadmap development based on GenAlpha's business vision
- Product engineering activities streamlined
- Focus on creating agile capabilities to support revenue generation
- Full transparency on all costs with periodic reporting and expense approvals

ThoughtFocus helps forward-looking companies and organizations in the financial services, manufacturing, and higher education/public services sectors innovate and achieve a better future faster. ThoughtFocus' innovative and cutting-edge technology solutions enable its customers to deploy new capabilities faster, deliver better user experiences, and drive operating efficiencies. We do this through executional excellence and mitigating the risk of change. With headquarters in the U.S., the Company has more than 2,100 employees in locations spread across five countries.

For more information, please visit the company website www.thoughtfocus.com.

