Customer Expectations and How a Corporate Ecosystem Could Help

Alexander Nazarov
Product Chief Engineer
Cummins Public
Our product is becoming complex every year
– Customer expectations are evolving
– Why an ecosystem is the answer?
  • Can assist companies with information flow
  • Meet government regulation requirements
Objectives:

– Product complexity drives new customer expectations
  • Poor information flow can cause a problem and lead to market share loss

– Systems will need to have a synchronized flow
  • To support product from the moment a customer enters an order through complete life cycle

– Government regulations are becoming more stringent
  • Ecosystems could protect the company from potential law suits and penalties
Agenda Items:

- Product complexity
- Synchronized flow
- Government regulations
Example of Product Evaluation

**Customer Expectations:**

- Power up and start dialing phone numbers
- Replace phone when it stops working

**Time to set up:**

- Immediately - after fully charged

**Customer Expectations:**

- Help assistance
- Network connection
- Protective cover
- Detail instruction to power up and set phone

**Time to set up:**

- 1 hour +
Engine and System Complexity

Cummins Tier 4 Engine with Aftertreatment system

- 300-500 hours design work for installation into equipment
- 3-5 days installation and validation
Customer Expectation

- Technical Services
- Complete Integrated Solution
- Support Design from Beginning to the End
- Field Support of the Product
Information Access

Product Produced

Singapore
Local
Systems

Product Operated
Market Share Loss

“This is the problem I always encounter with YOU in every project, you are not interested anymore after commissioning. Not like YOUR COMPETITION”
Agenda Items:

- Product complexity
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Product Design Flow

- **Input to Global System**
  - Product Specification
  - Installation Requirements
  - Service Requirements

- **Received from Global System**
  - Product Failure Information
  - Supplier Change Request
  - Product Deviation Request
Supply Chain Flow

- Received from Global System
  - Product Specification

- Input to Global System
  - Supplier Information
  - Supplier Change Request
Marketing Information Flow

- Received from Global System
  - Product Specification
  - Installation Requirements

- Input to Global System
  - Product and Option Price
  - Installation Information
  - Customer Information
  - Customer Order
  - Warranty Information
Production Flow

- Received from Global System
  - Product Specification
  - Cost and Price Information
  - Supplier Information
  - Customer Information and Specification
  - Product Registration Verification

- Input to Global System
  - Firm Build Schedule
  - Deviation Request
Service Information Flow

- Received from Global System
  - Product Specification
  - Warranty Information
  - Supplier Information
  - Product Service Information

- Input to Global System
  - Failure Incidence Reports
  - Warranty Reports
Service Information Flow (Continued)

- Input to Global Service System
  - Product Build Information
  - Product Specification by Serial Number
Distributor Information Flow

- Received from Global Service System
  - Product Specification
  - Warranty Information
  - Product Build Information
  - Product Service Information

- Input to Global Service System
  - Failure Incidence Reports
  - Warranty Reports
System Flow Synchronization
Agenda Items:

- Product complexity
- Synchronized flow
- Government regulations
Sarbanes-Oxley Act (SOX)

- Most systems have the capability to do financial reporting
  - P&L
  - Balance Sheets
- Most systems have the capability to eliminate conflict of interest
  - Goods receivable
  - Goods payable
- Most supported government regulation by ERP systems
- A good ERP system simplifies the audit process
Emission Regulation Compliance

Emission standards are legal requirements governing air pollutants released into the atmosphere

- Emission regulations have become more stringent
- An emission certified product will have many critical performance parts which can affect emission quality
- There is no “off the shelf” system, which can monitor emission critical parts from design through production
- System customization is necessary in order to protect company from penalties
- A system that monitors emission regulated components will give competitive advantage and customer confidence
International Traffic in Arms Regulations

International Traffic in Arms Regulations (ITAR) control the export and import of defense-related articles and services on the United States Munitions List (USML)

- A product which is supplied and used in US defense can have special designed components
- There is no “off the shelf” system which can monitor ITAR registered components and prevent getting them on export products
- Majority of the time it is handled by an internal grown system or manually
- System monitoring ITAR registered components will help eliminate risk of mistake and protect company from severe penalties
Other Examples Government Laws

- Poison Prevention Packaging Act (PPPA)
- FEDERAL HAZARDOUS SUBSTANCES ACT (FHSA)
- CONSUMER PRODUCT SAFETY ACT (CPSA)
- The Consumer Product Safety Improvement Act (CPSIA)
- Flammable Fabrics Act (FFA)
- National Fire Protection Association (NFPA)
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