

Technology Challenges From Components to Systems

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The Challenge

As we demand additional features from our vital operational systems and as vendors look for cost efficiencies, even more electronics and software are being put into the systems that keep our patrons safe and on-time. Unlike the simple mechanical systems of the past, these new technologies have different failure mechanisms, require different engineering methods, and demand new talents from our maintenance staff. This session looks at how different organizations are integrating technology into their vital operational system lifecycle planning to achieve not only greater safety, but also greater operational reliability.

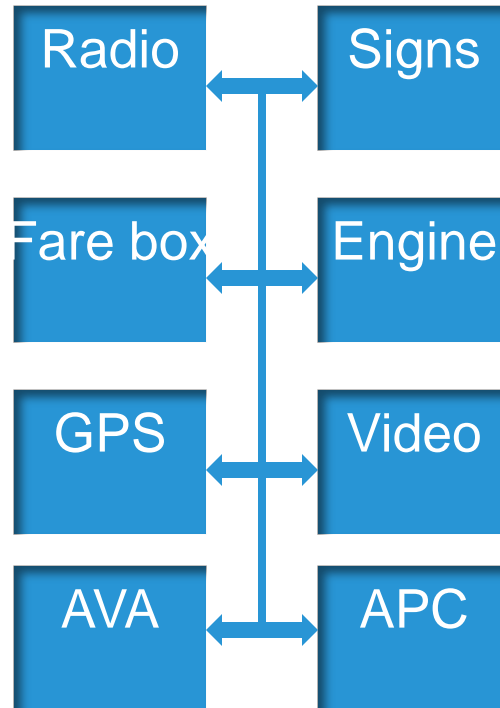
Down Memory Lane



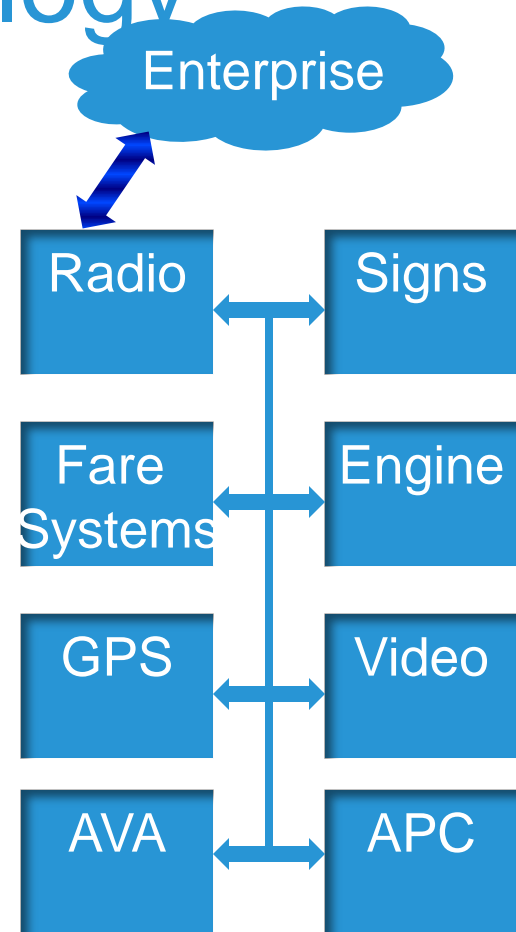
The Evolution of Technology



Independent
Components
Low Complexity

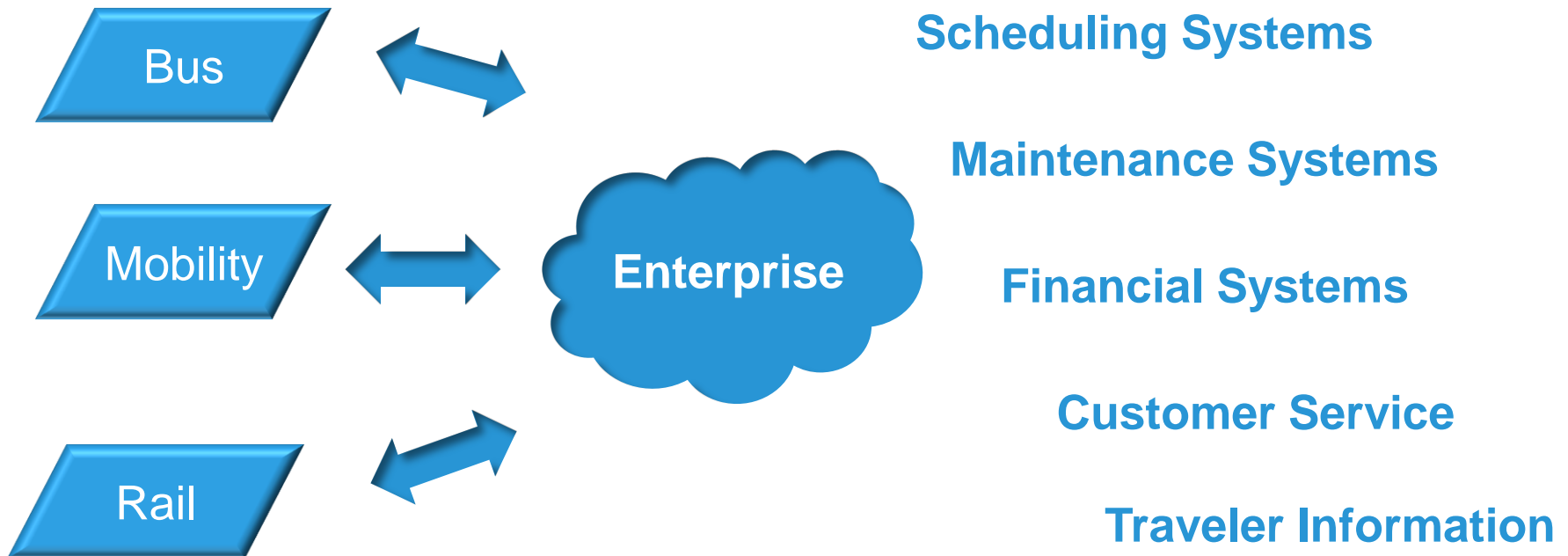


Increased Functionality
Moderate Integration
Medium Complexity



Maximize Functionality
Dependent Integration
High Complexity
Data Integration

Data Is Driving System



Life Cycle Planning

Vital Systems

- Define what is vital

Organization

- Establish clear lines of ownership for maintenance
- Establish a defined multi-level maintenance approach

Skills

- Develop realistic skills objectives for your maintenance staff
- Manage information overload

Life Cycle Planning

Understand the skill blend for each position

- Software
- Electrical
- Mechanical
- Systems

Develop Strategy for In House or Out Sourced Maintenance

Develop comprehensive long term training program

Establish system level monitoring and maintenance