

Global Supply Chains ...

Design for Optimization

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AGENDA

- **Background – Definitions, concepts, etc**
- **Hypothesis**
- **Our path forward at Air Products**
- **Panel Discussion**

Challenges of Operating Global Supply Chains

- **Increased lead times**
- **Planning complexity**
- **Multiple network nodes**
- **Need for Integration of diverse:**
 - **Cultures**
 - **Business Practices****Both:**
 - **Within your own company**
 - **With your suppliers and your customers.**

OPTIMIZING GLOBAL SUPPLY CHAINS

Hypothesis:

- **To truly optimize, we need to align the fundamental Global Designs around how companies choose to run their businesses.**

Tenets:

- **Intra and Inter-Company alignment - Global Design Concept.**
- **Global or Enterprise Design is the complete set of decisions, processes, tools, configuration and master data used to operate the Enterprise.**
- **Supply Chain Optimization = f(Maturity, Global Design)**
 - **Maturity can leverage a global design**
 - **Maturity cannot optimize a localized design**
- **Focus: People, Process, Technology**

SUPPORTING OBSERVATIONS

- **Today, most companies have:**
 - **Not designed Global Processes, Master Data, Systems design, and Organizations**
 - **Designs that differ by business, country, plant, profit center.**

... and therefore are quite limited in *global decision-making*.
- **Those who move faster on Enterprise Process, Systems, Roles dictate to trading partners.**
- **When the Enterprise Process Solutions do not match, it is very difficult to reconcile.**
 - **Results in “coordination”, higher cost**
- **Collaboration with Trading Partners is currently more focused on short term planning, than on Inter-Enterprise Designs.**

Thinking Globally ...

Optimization = f (Maturity, Global Design)

Why isn't Maturity enough?



Maturity Models ...

Are they enough?

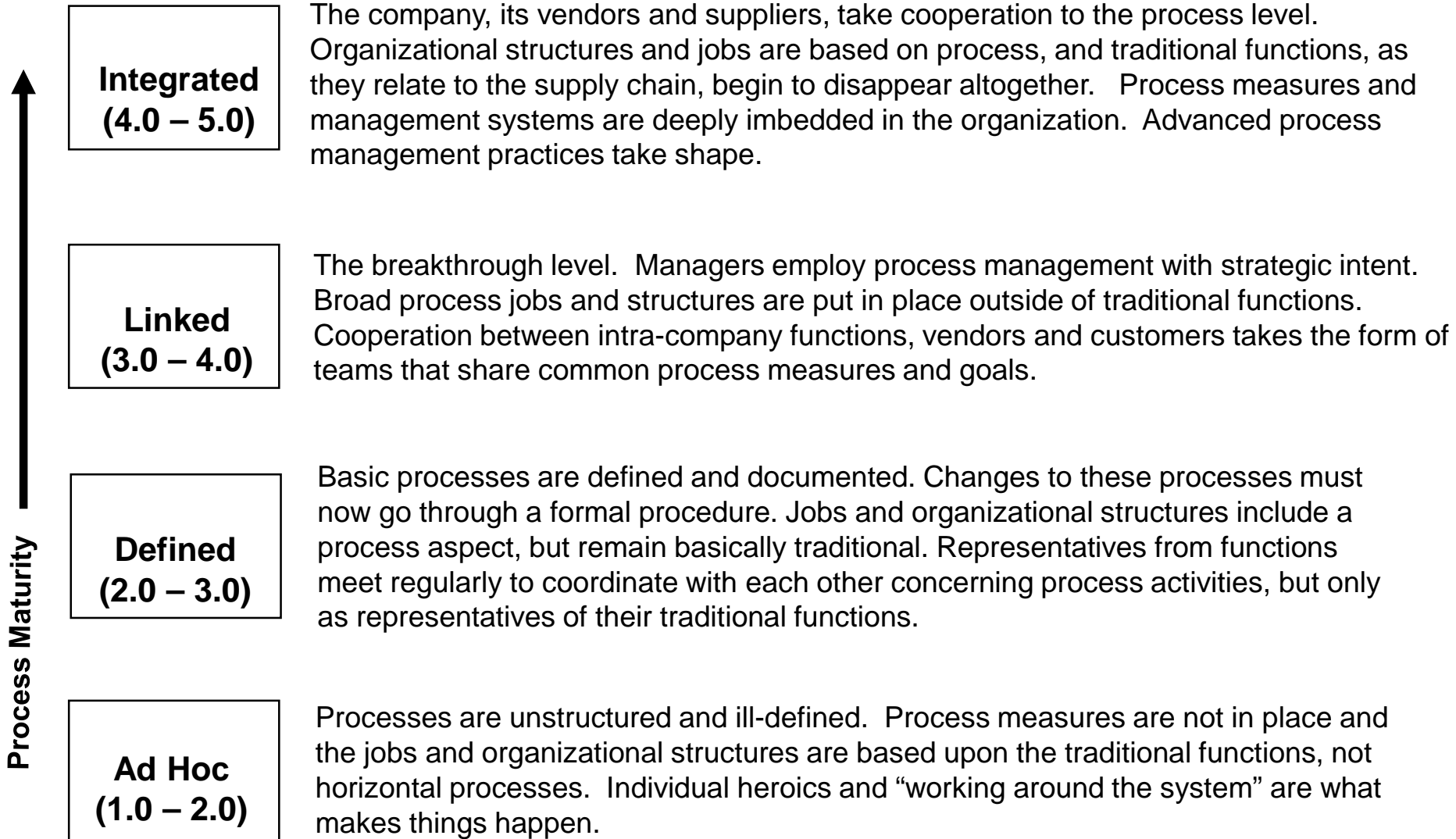
- **Maturity Models: Popular to check “wellness”**
 - Business Process Management
 - Supply Chain Excellence

- **Look at depth of a company’s capability:**
 - Strategic Alignment
 - Governance
 - Methods
 - Information Technology
 - People
 - Culture

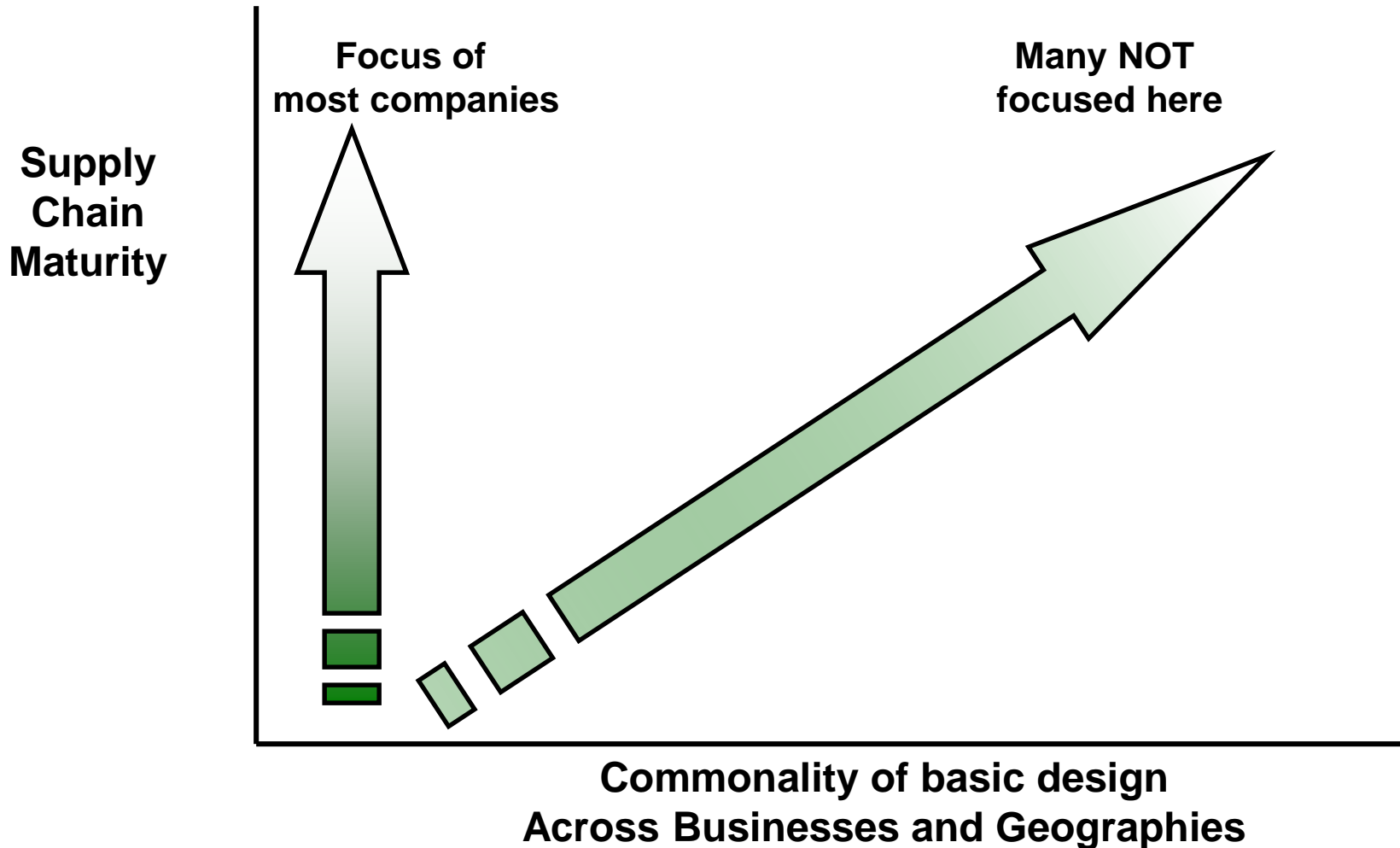
- **Focus is on sustaining the Design, but what if...**

The Design was not set up with Global Thinking.

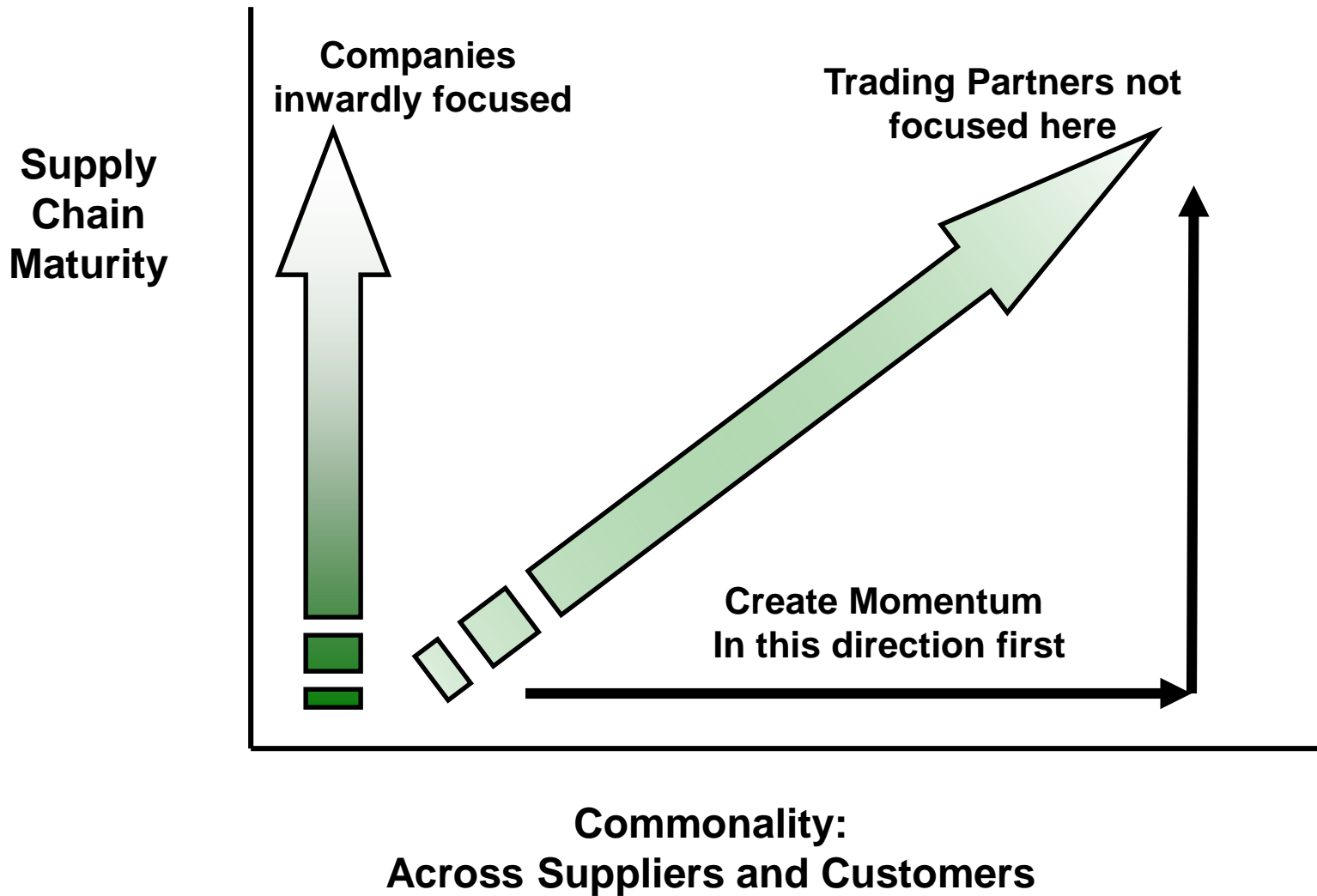
Business Value as a function of maturity



Use of Maturity Models: ... A different perspective



Move to Commonality ... as the first Premise



Air Products' Move to Global Thinking

- **Focus on People, Process and Technology**
- **Use Guiding Principles based on Global Thinking**
- **Design the Enterprise based on those Principles**
- **Govern the Design**
- **Organize to think Globally**
- **Optimize execution of Global Design**

Deliver the Difference

Our Guiding Values

Accountability

Each one of us feeling it's up to me.

Innovation

It's cherishing new ideas and translating them into actions.

Integrity

It's behaving ethically and being true to our words.

Respect

It's teams, achieving the goal through the contribution of each individual.

Safety, Health, and the Environment

It's responsibly caring for each other, our communities, and the global environment.

Our Working Environment

Our competitive global marketplace requires a working environment which visibly demonstrates our commitment to our people. We will foster trust through open communication and consistent actions. We will share a collective understanding of our company's success and, with a sense of urgency, combine our best efforts to achieve it. We will nurture ownership behavior through clear accountabilities, recognition, and rewards. We will promote new ideas and new ways of thinking. We will value diversity and insist on an inclusive culture. We will enable Air Products' people to contribute to their full potential.

The Air Products Difference

We will be the best company to work for, the best company to buy from, and the best company to invest in. We will do this through -

Our People

... their understanding, integrity, passion, and individuality

Our One Company Focus

... becoming shareholder-friendly by meeting our targets for return on capital and growth

Our One Company Focus

We will create shareholder, customer, and employee value through market, operational, and corporate leadership.

To win, we align and agree to:

Change

■ Visibly value our people in a positive work environment.

Portfolio Management

■ Continuously improve our return on capital and manage our portfolio.

Growth

■ Create growth through innovation and the creation of superior products and services for customers.

Work Process

■ Reduce our costs through work process simplification.

Our One Company Commitment

Means understanding and acting as One Company by:

■ Taking the best of the best

■ Providing value for our global infrastructure.

■ Simplifying and standardizing global work processes.

■ Globally uniting by sharing our knowledge across regions, businesses, and groups.

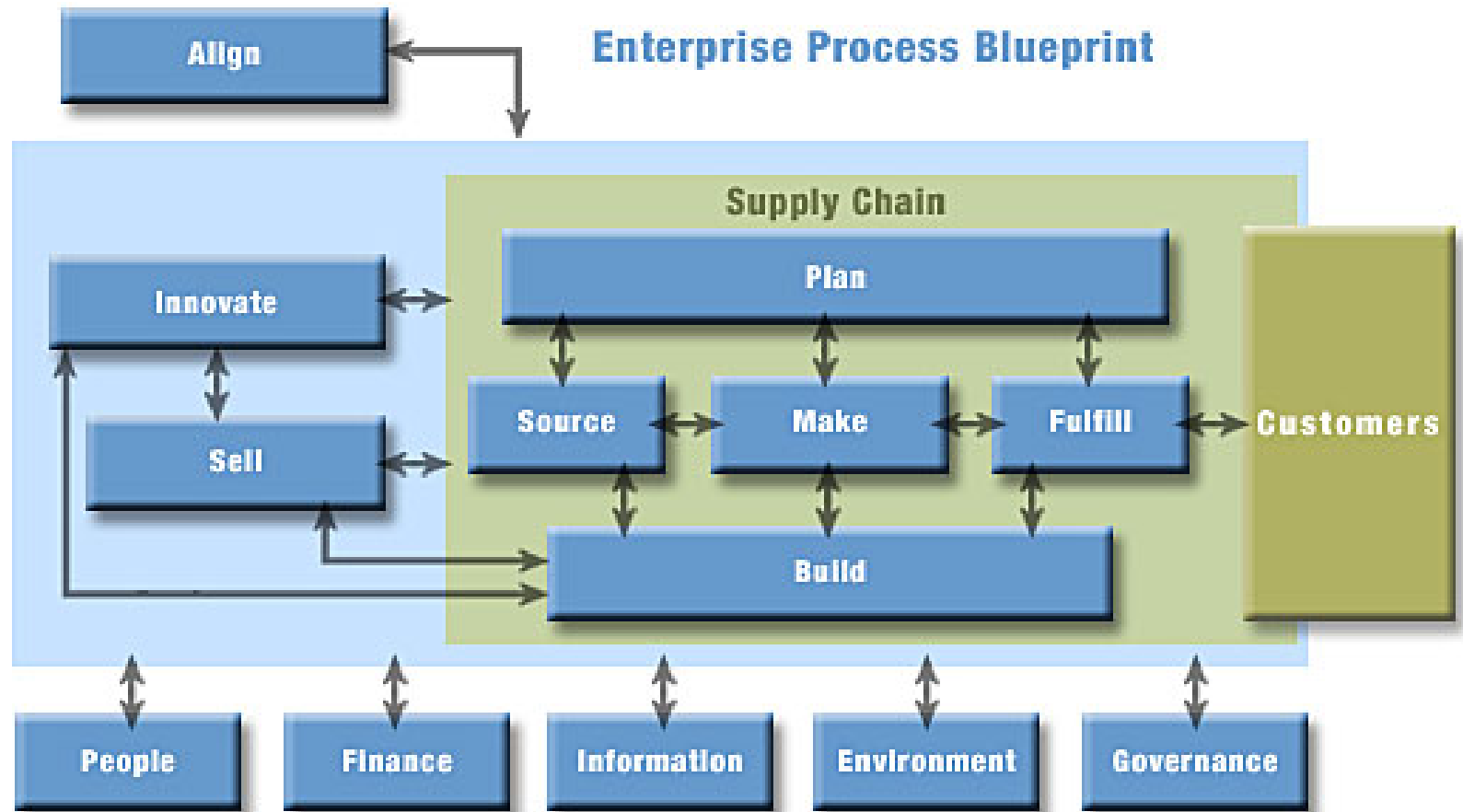
Simplifying and standardizing global work processes

One Company Focus

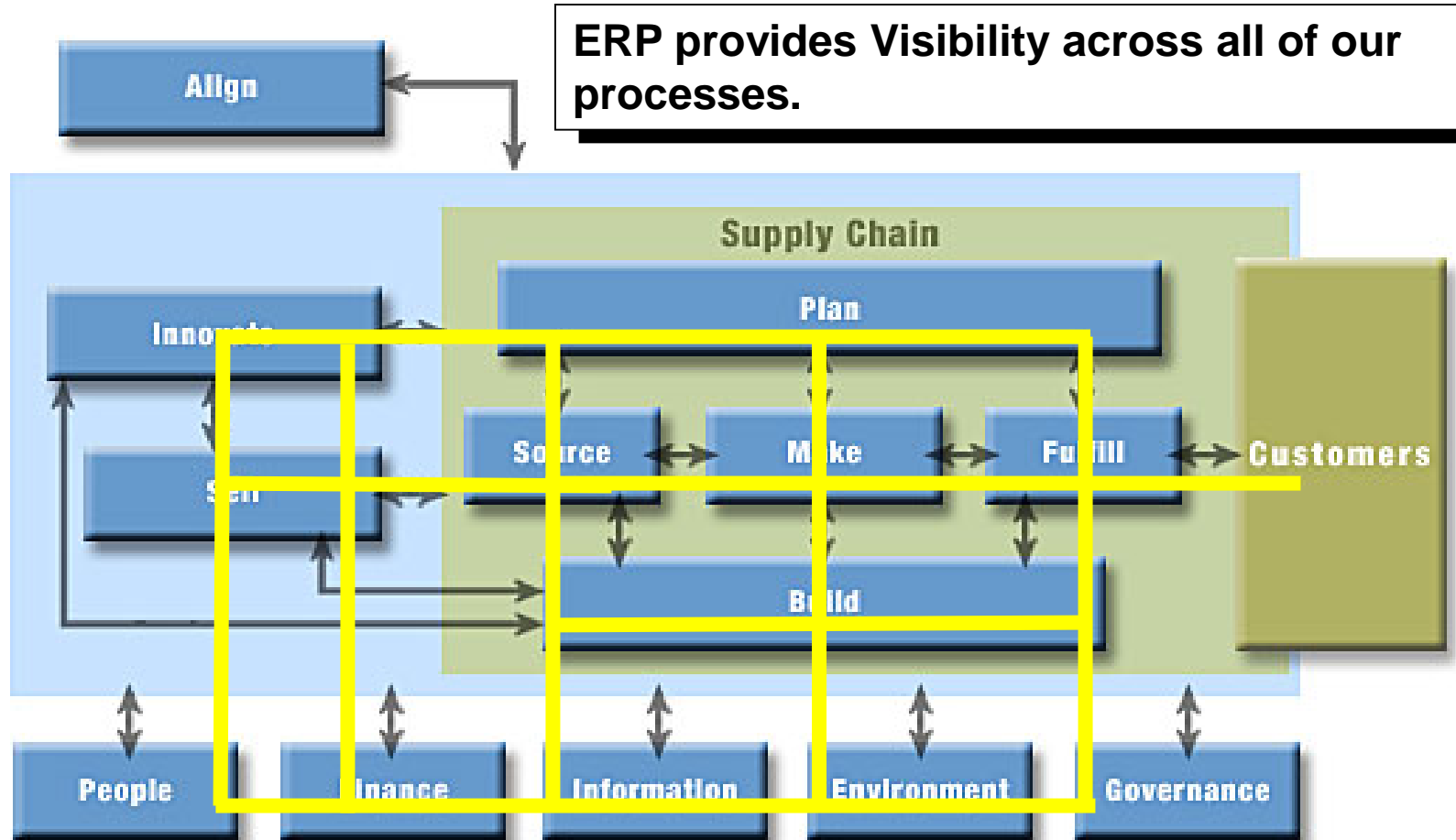
- **Manage work through global work processes**
- **Provide value through one IT infrastructure**
- **Emphasize enterprise value of initiatives**
- **Consolidate/globalize organizations**
- **Visibility of information targeted as strategic**



Common Global Processes across Businesses



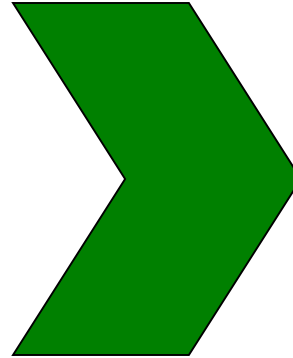
Common IT Infrastructure



Designed for Global Decision-making

Enterprise Guiding Principles

- **Simplification**
- **Standardization**
- **SAP Centricity**



We strategically choose to follow this path

**Because we believe that these will help us
*Win in the 21st Century***

Design the Enterprise

- **Enterprise Design is “how we do business”.**
- **The way we *choose* to run our company**
 - One Company set of common processes
 - Using common tools.
- **Includes manual and IT-enabled processes**
- **Enterprise Design includes the:**
 - Complete set of decisions, work process maps, related documents, configuration, and master data.

Foundation of Enterprise Design



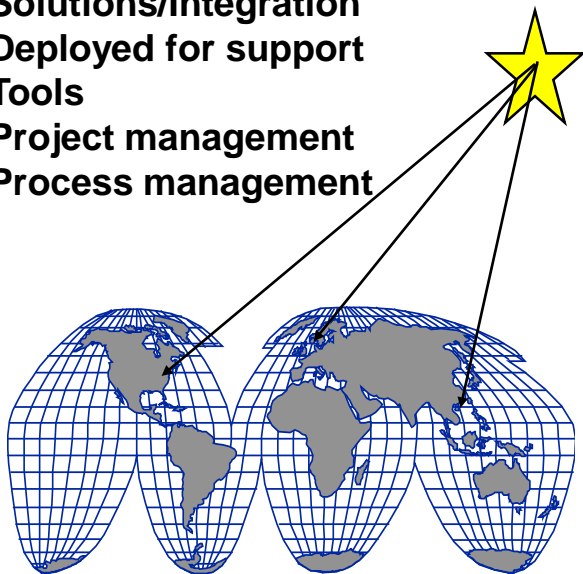
Organize for Global Thinking

Global Governance:

Integrated Supply Chain

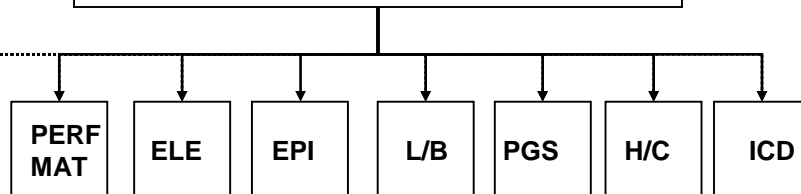
Center of Excellence

- Building Capability
- Solutions
- Global Strategy
- Global Processes/Systems
- Performance Measures
- Education
- Solutions/Integration
- Deployed for support
- Tools
- Project management
- Process management



Global Businesses:

Global Business VP's

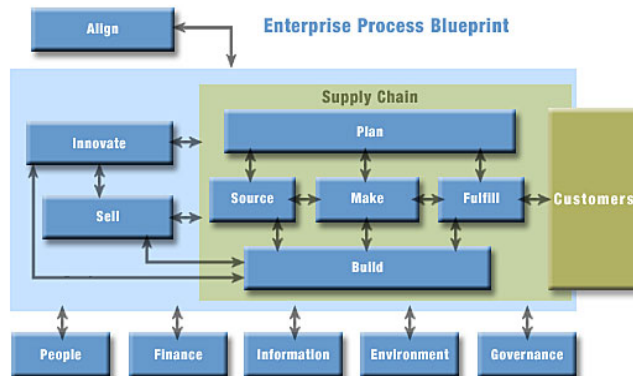


Supply Chain Directors

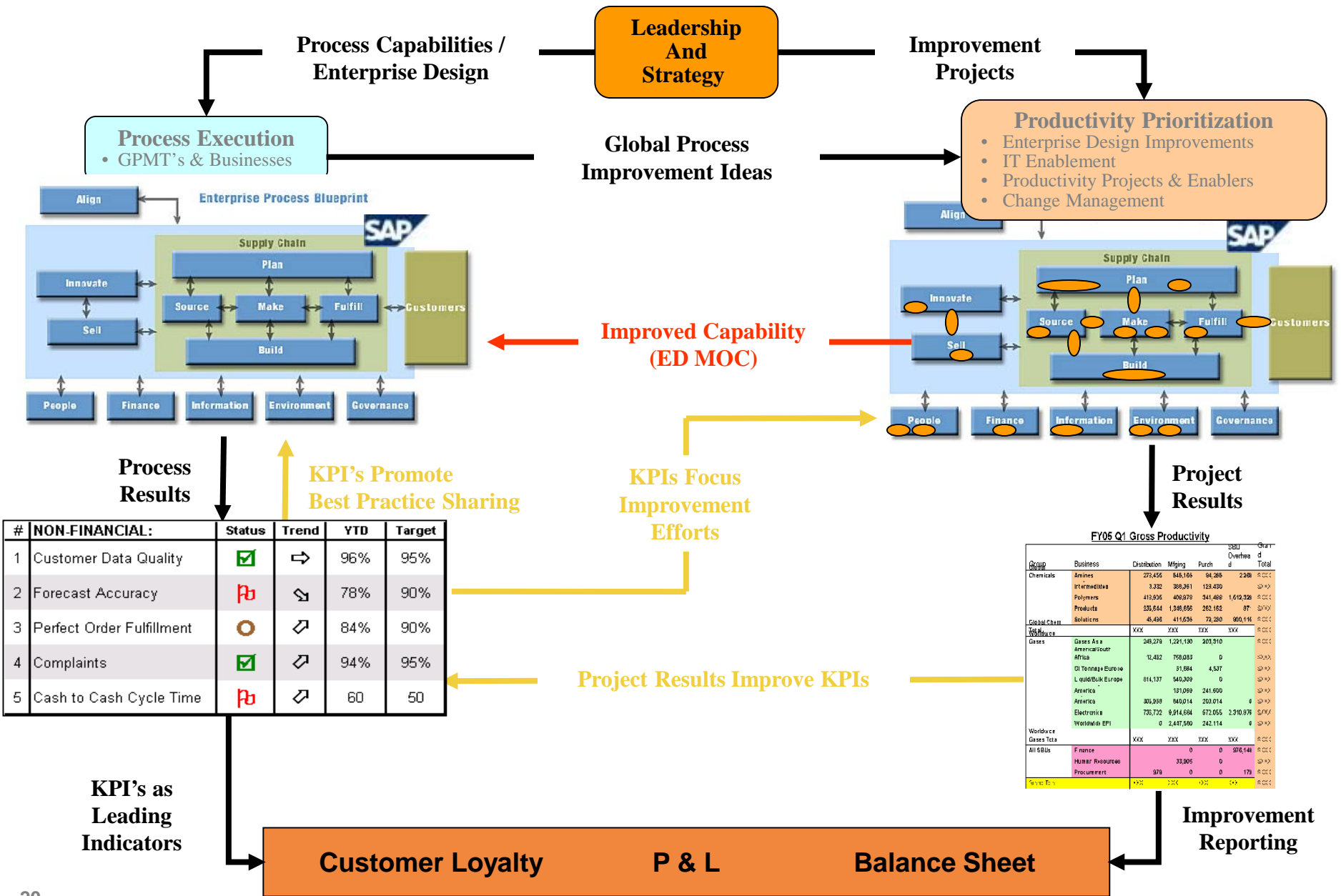
Deployment/Execution

- Demand Forecasting
- Demand Planning
- S&OP
- Order Management
- Customer Engagement
- Production Mgt
- Trans Planning
- Replenishment
- Execute global processes locally

Global Processes:



Optimize Performance



Make Decisions Globally

- **People, Process and Technology**
- **Use Guiding Principles based on Global Thinking**
- **Design the Enterprise based on those Principles**
- **Govern the Design**
- **Organize to think Globally**
- **Optimize execution of Global Design**

For maximum leverage, collaborate with your trading partners on the Global Design

Panel Discussion

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Questions