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# ng & Implementing ERP Projects

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# Planning and Implementing E-Business Projects

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É **Business Process Renewal**

É **Business-Technology Alignment**

É **Milestones of an E-Business Project**



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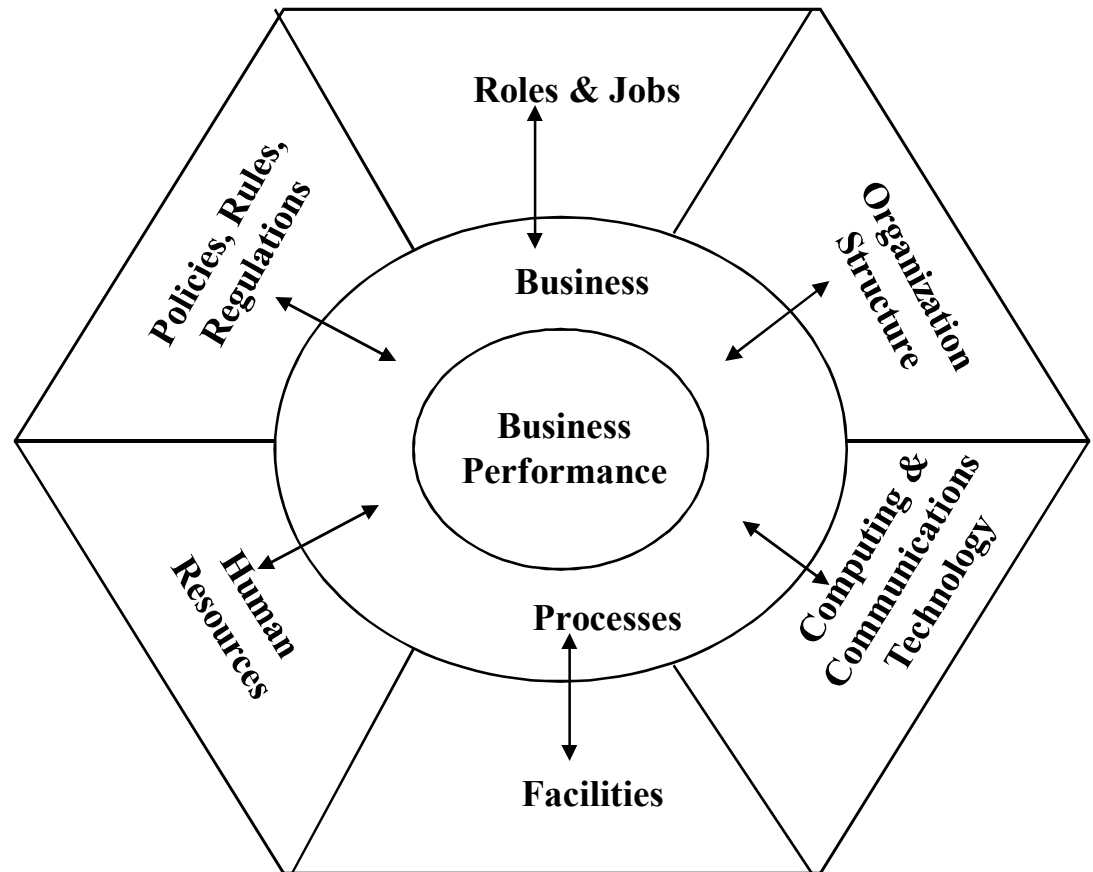
# **E-Business Projects are Business Process Renewal Projects**

## What is Business Process Renewal\*?

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The measurable improvement of  
business performance through  
synchronized changes to:

- a process
- its guiding factors
- its enablers





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**Process ?**

**It's everything we do!!**

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**Is triggered by an external business event.**

**Is comprised of all the activities necessary to provide the appropriate business outcomes in response to the triggering business events.**

**Transforms inputs of all types into outputs, according to guidance (policies, standards, procedures, rules etc.) employing reusable resources of all types.**

**Contains activities which usually cross functions and often organizational units.**

**Has performance indicators for which measurable objectives can be set and actual performance evaluated.**

**Delivers a product or service to an external stakeholder or another internal process.**

**Usually connects to other processes.**

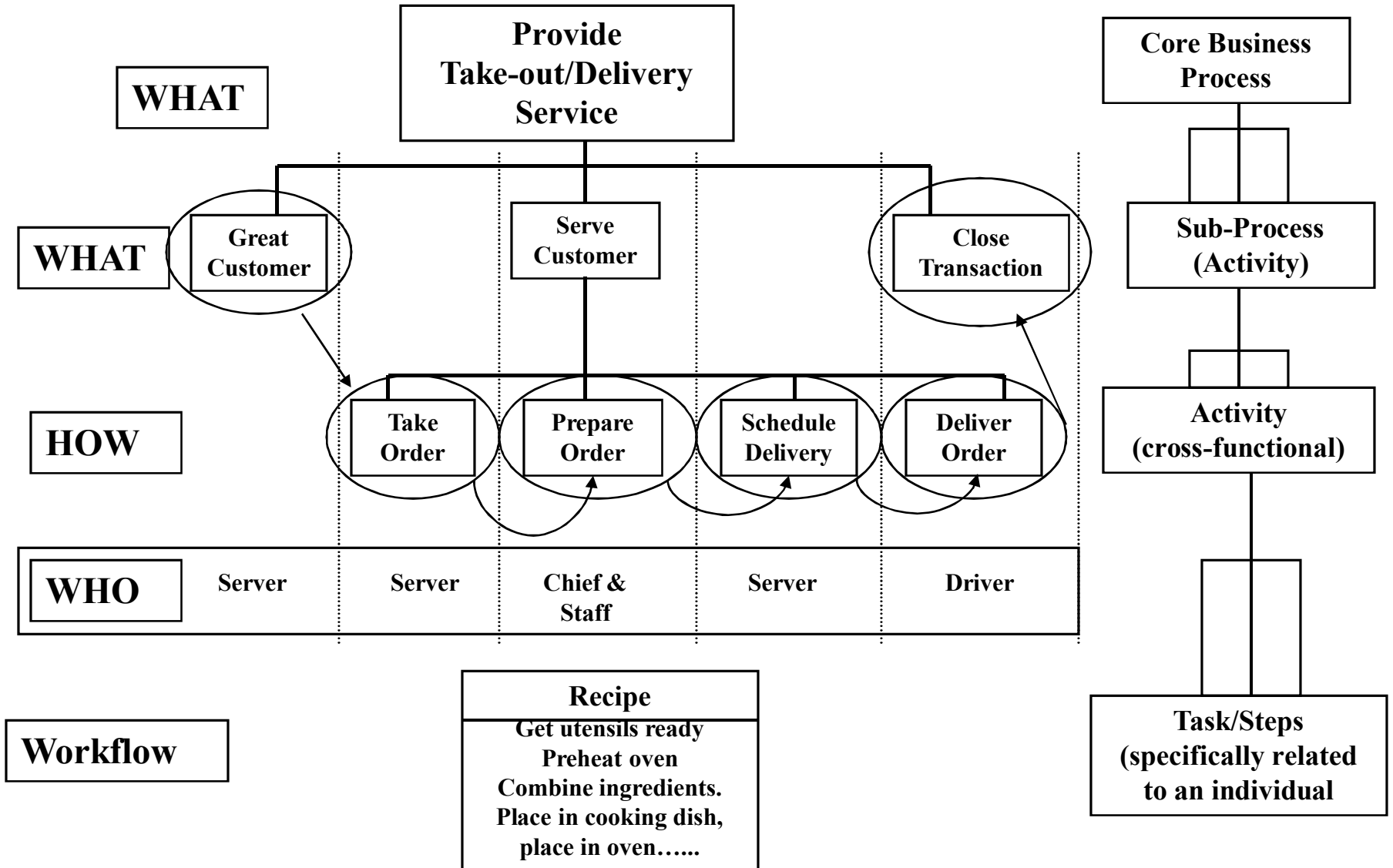
**It's HOW we do what we do!**

## Business Processes

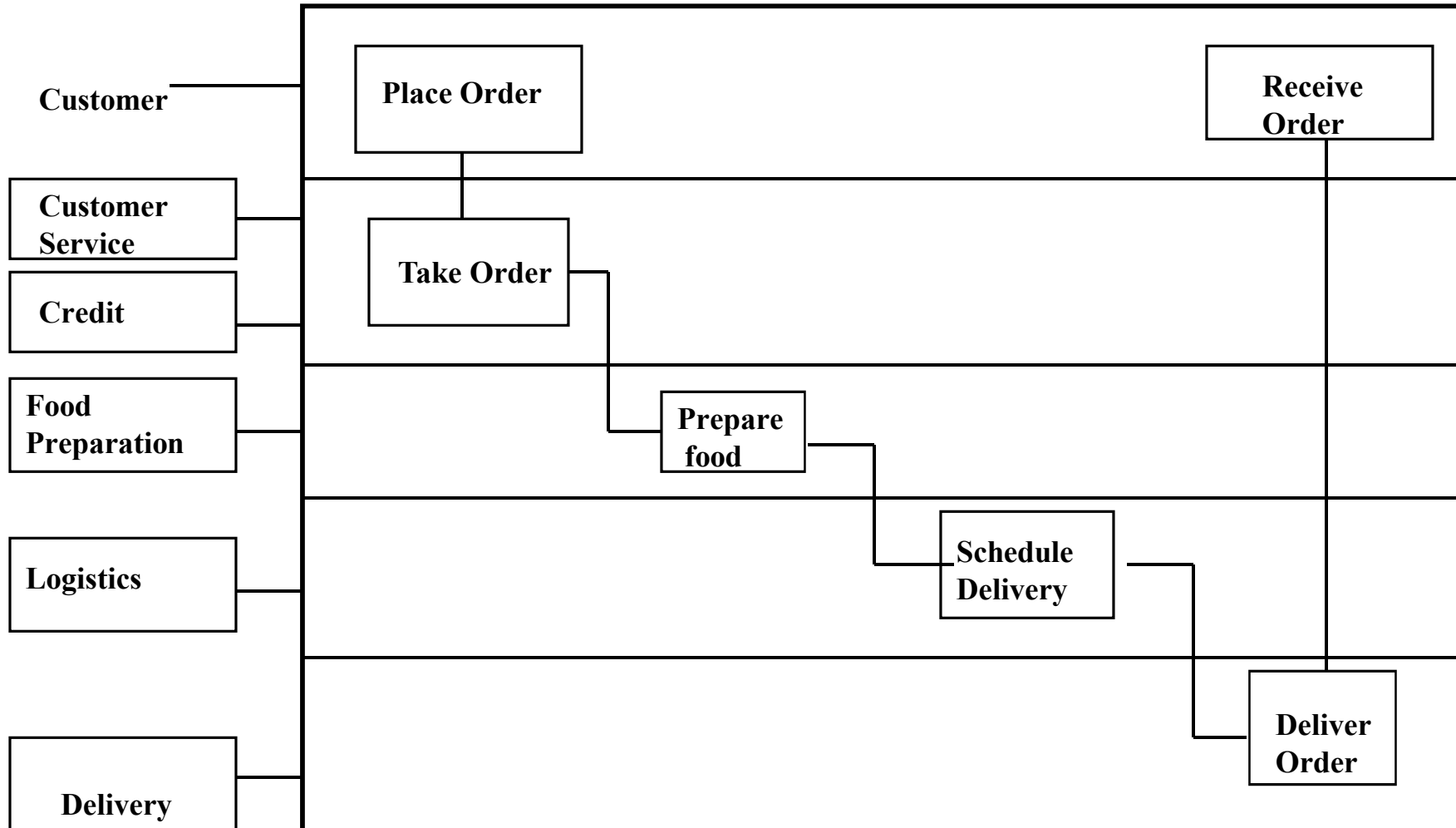
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<b>Characteristics</b>	<b>Service</b>	<b>Manufacturing</b>
<b>Ownership</b>	<b>Tends to be ambiguous, has multiple owners and crosses functional areas.</b>	<b>Usually clearly defined</b>
<b>Boundaries</b>	<b>Often unclear due to cross-functional nature.</b>	<b>Clearly defined</b>
<b>Control Points</b>	<b>Often non-existent, found in areas where TQM is in place.</b>	<b>Clearly established and defined</b>
<b>Measurements</b>	<b>Often non-existent, hard to find except in areas where TQM is in place.</b>	<b>Easy to define and manage</b>
<b>Corrective Action</b>	<b>Unusually reactive, organizational restructuring or technology a common solution.</b>	<b>Performed during and after the process</b>

# Breakdown



## business activities







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## Business Processes

**CORE business processes are linked directly to external customers and their values.**

**CORE business processes meet marketplace demands on a day to day basis.**

**CORE business processes guide, control, plan, enable or provide resources to the CORE and other SUPPORT business processes.**

# Process Based Change

## Political Commitment Management

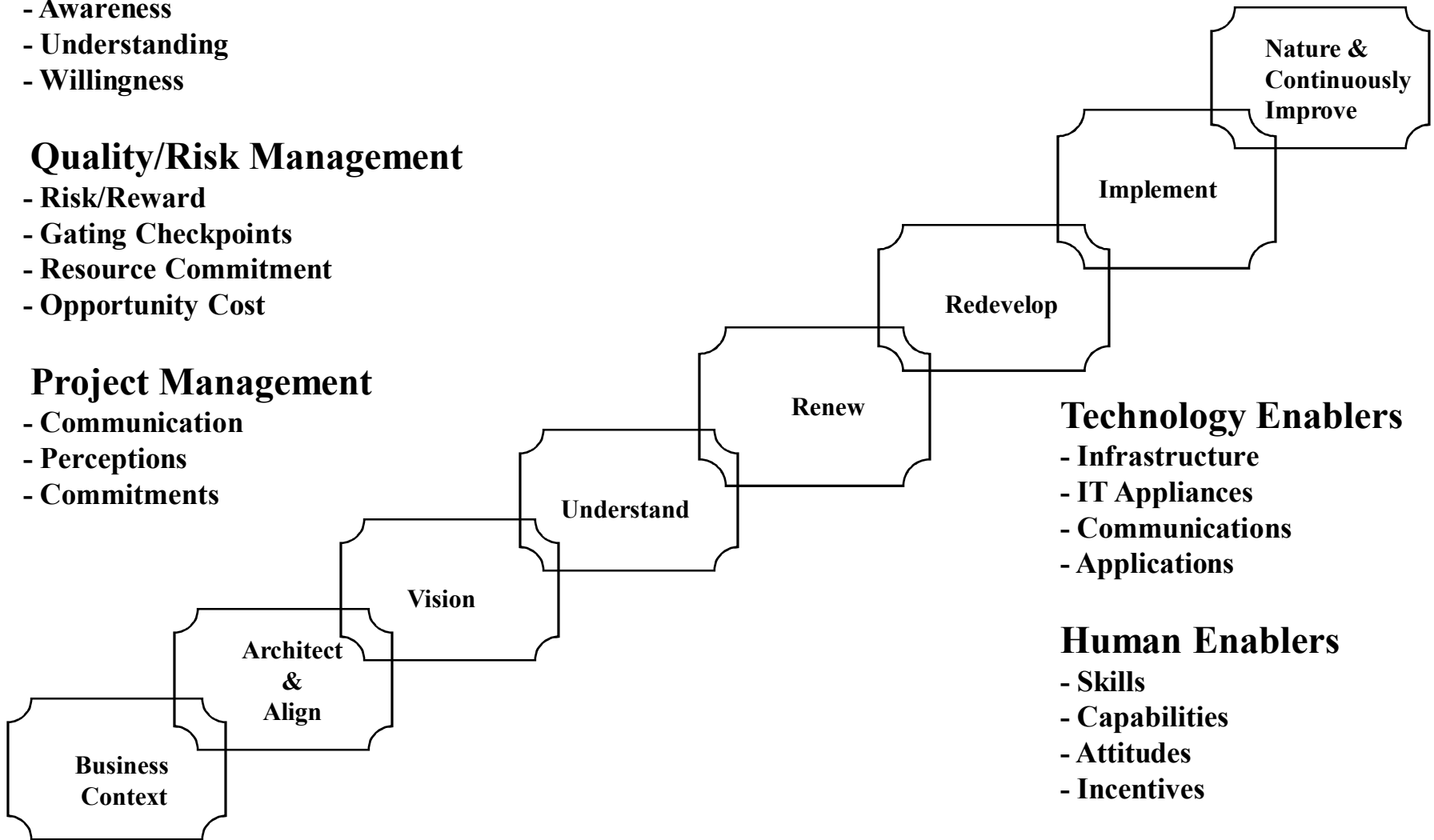
- Awareness
- Understanding
- Willingness

## Quality/Risk Management

- Risk/Reward
- Gating Checkpoints
- Resource Commitment
- Opportunity Cost

## Project Management

- Communication
- Perceptions
- Commitments



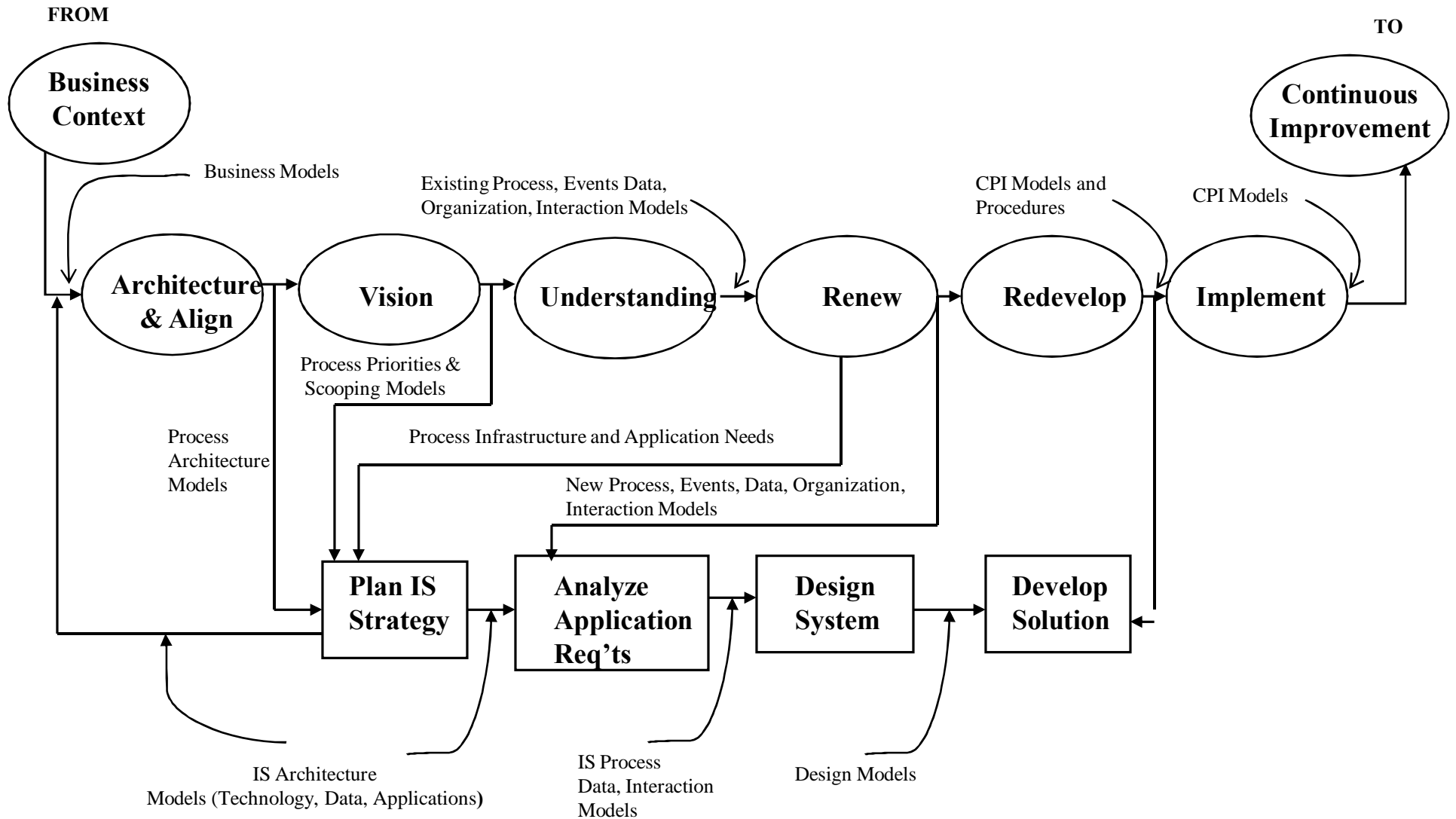
## Technology Enablers

- Infrastructure
- IT Appliances
- Communications
- Applications

## Human Enablers

- Skills
- Capabilities
- Attitudes
- Incentives

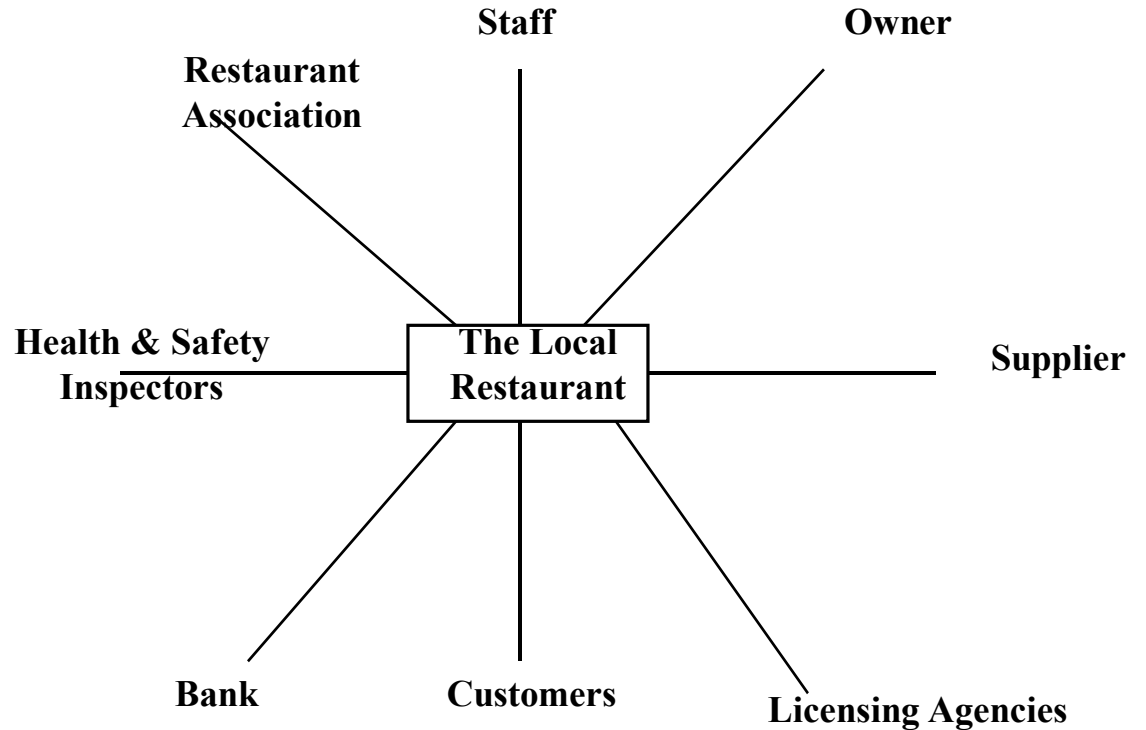
# Between BPR and systems Development



# Enterprise Interactions (Flows)

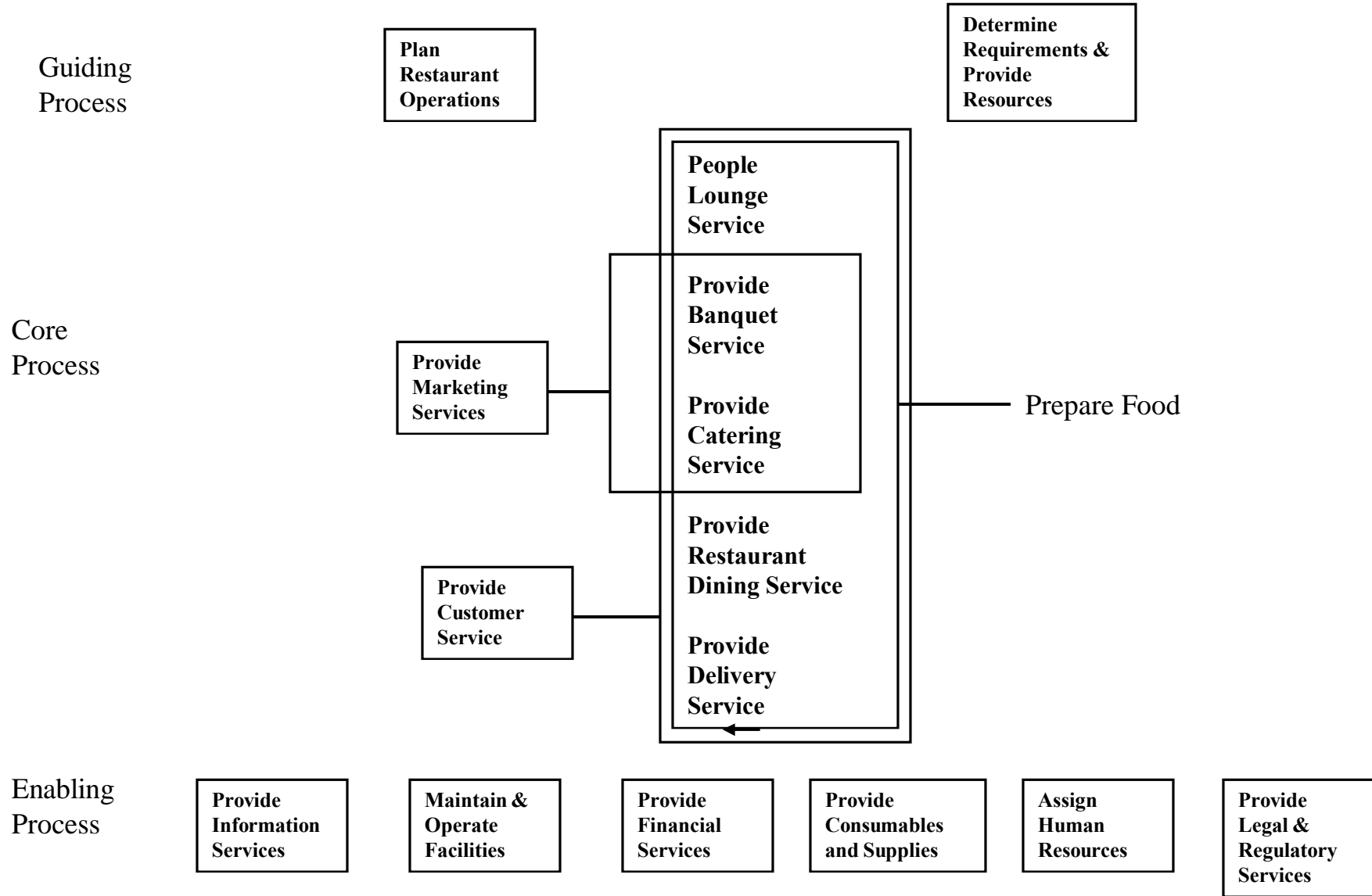
## (Business Context)

1. \$
2. Orders
3. Incentives
4. Awareness, Advertising
5. Complaints, Feedback
6. Supplies (Food, Non-Food)
7. Time
8. Training
9. Applications
10. Jobs
11. Trends
12. Requirements
13. Operating Info. (Financial)
14. Regulations
15. Approvals, Violation Notices
16. Applications, Requests

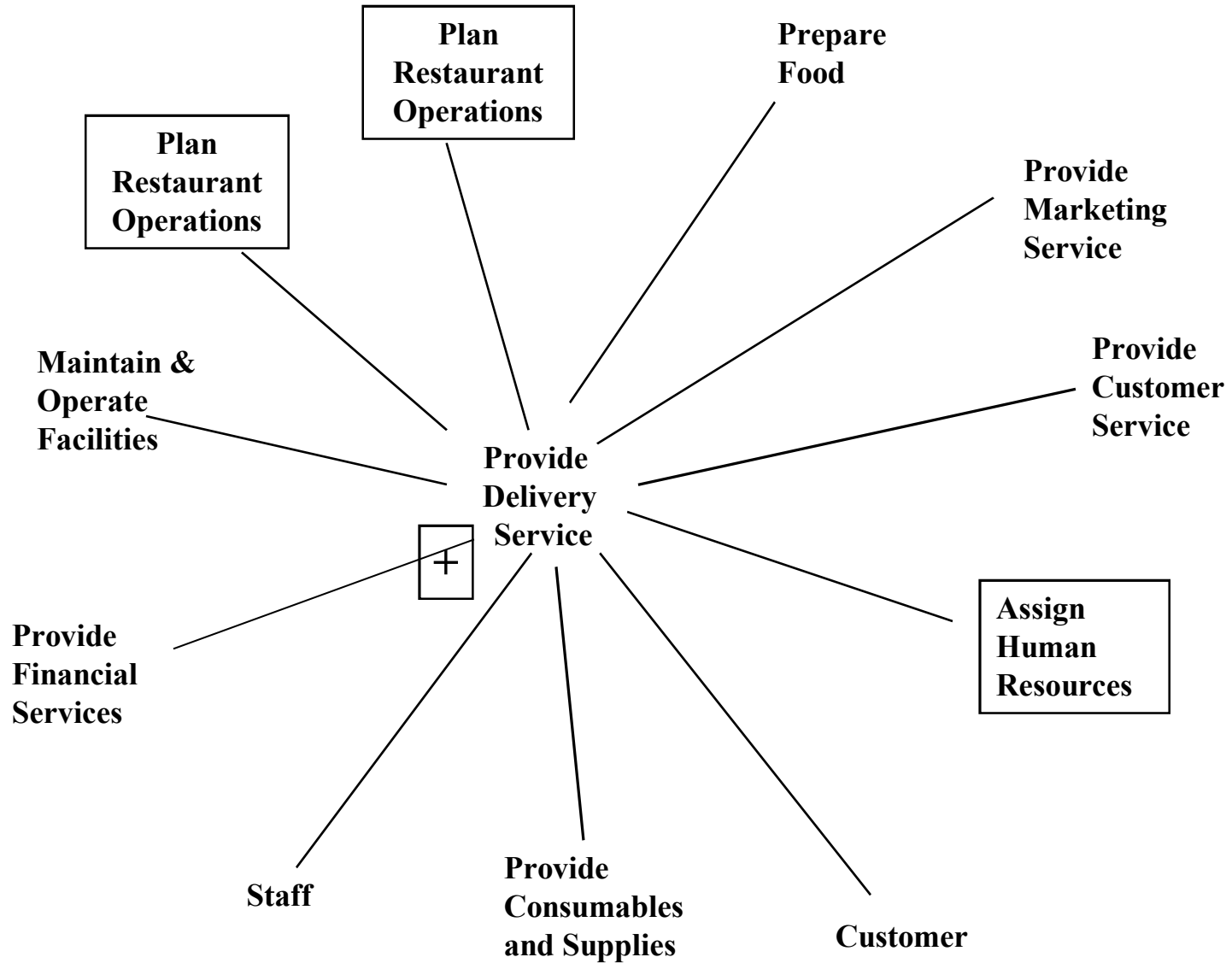


**Everything which flows must link to at least one process**

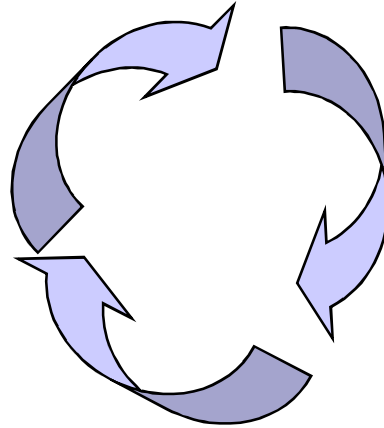
# Structure Diagram



## Process Interfaces”



## SO important?



### **Technology**

- Directly supports processes
- Naturally cross functional and organizational boundaries

### **Business Differentiation**

- Competitive Advantage
- The question is not whether to change, but how to change

### **Financial Pressures**

- Reduced Costs
- Increased Output
- Consistent Quality

## Business and Project Vision

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**Vision:** Provide Customers with a quality product delivered in 30 minutes or less.

### **STEP: Identify Project Performance Improvement Targets**

<b>KPI's Objectives:</b>	<b>Customer Satisfaction</b> <b>Eliminate non-value-added activities</b> <b>Reduce # of exceptions</b> <b>Improve the reliability of delivery</b> <b>Increase customer satisfaction</b>
<b>CSF's:</b>	<b>Food Delivery within 30 minutes or less of order</b> <b>Satisfied Customers</b>
<b>Constraints:</b>	<b>Delivery service vehicles are unreliable</b> <b>Delivery by taxi is not within our complete control</b>

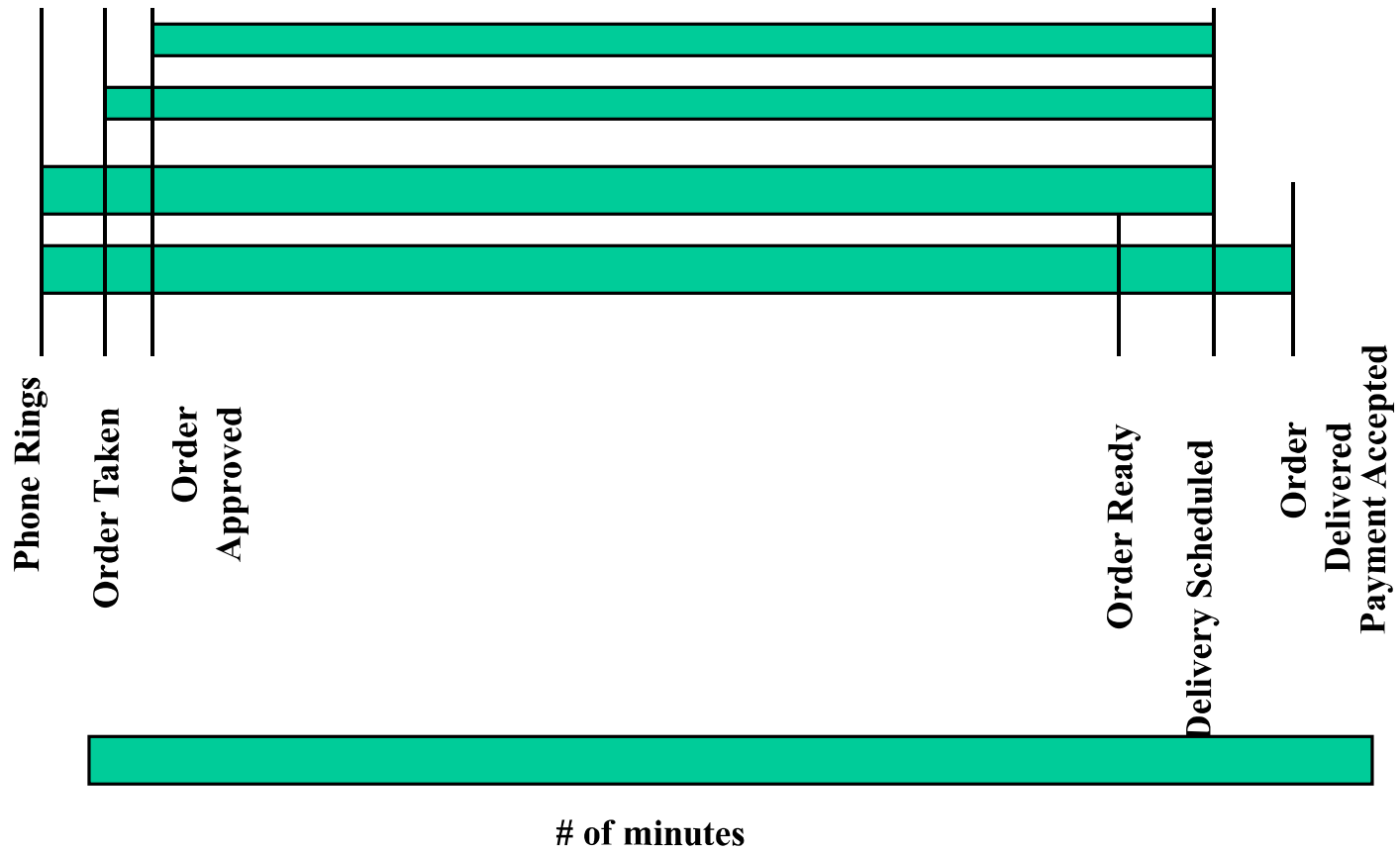


# Process Boundaries

Where does the “Process” begin and end?

Clarify Perceptions

Comparability - before & after “apple-to-apples



## lements: What else do we need to know?

### IGOE\*= Input, Guide, Output, Enabler

- Input:** Something that is utilized consumed by or transformed by an activity (process); Connects to left side of 'box'
- Guide:** something that determines how or when an activity occurs but is not consumed; Connects to top of 'box'
- Output:** something that is produced by or results from an activity/process; Flows from right side of 'box'
- Enabler:** something (person, facility, system, tools, equipment, asset or other resources) utilized to perform the activity; Connects to bottom of 'box'  
**Note: Enablers are NOT consumed.**

An IGOE might be a physical object, rule, goal, principle or piece of data, a machine, a computer system or anything that is relevant to the process.

\*Note: These concepts are based on upon the principles and rules of IDEFO, which refers to IGEOs as Inputs, Controls, Outputs, and Mechanisms - ICOMs); ICOM=IGOE



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## and Outputs

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# Inputs Transformed into Outputs

**Physical transformation**

**Ingredients**

**Prepare Food**

**Locational transformation**

**Restaurant**

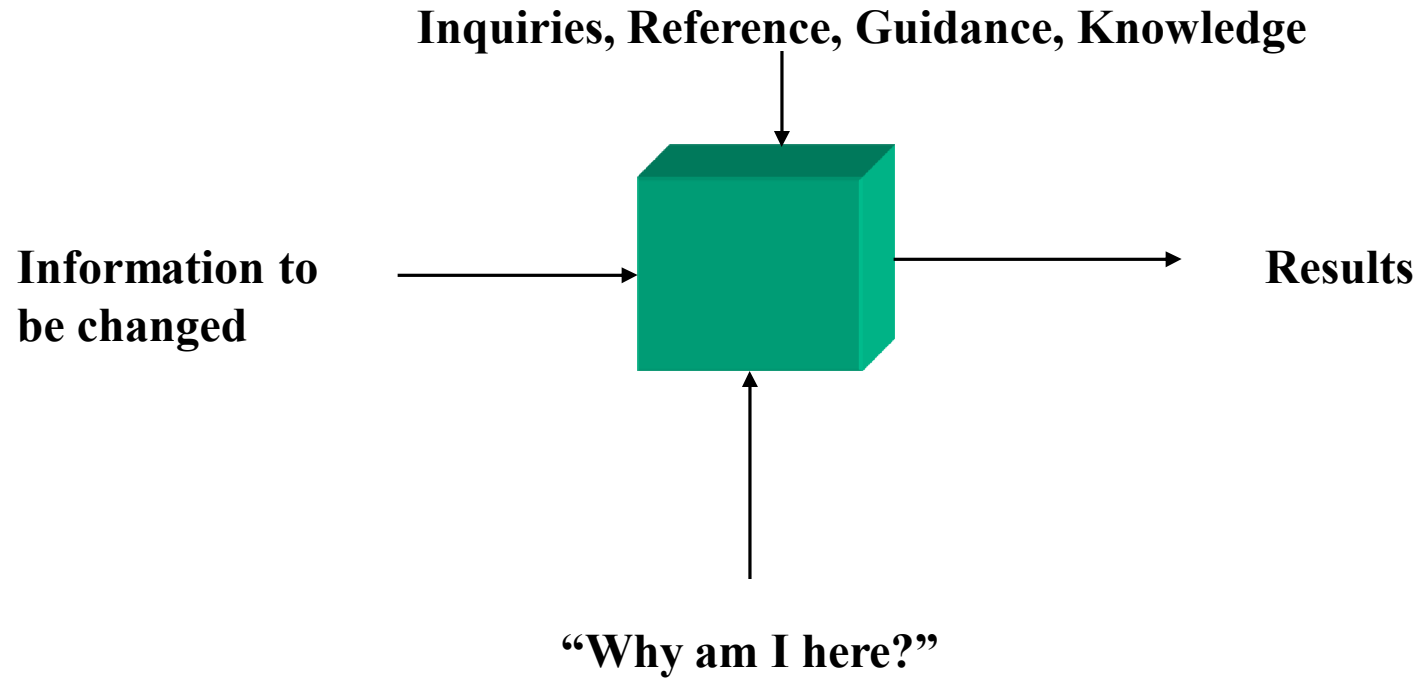
**Home**

**Informational transformation**

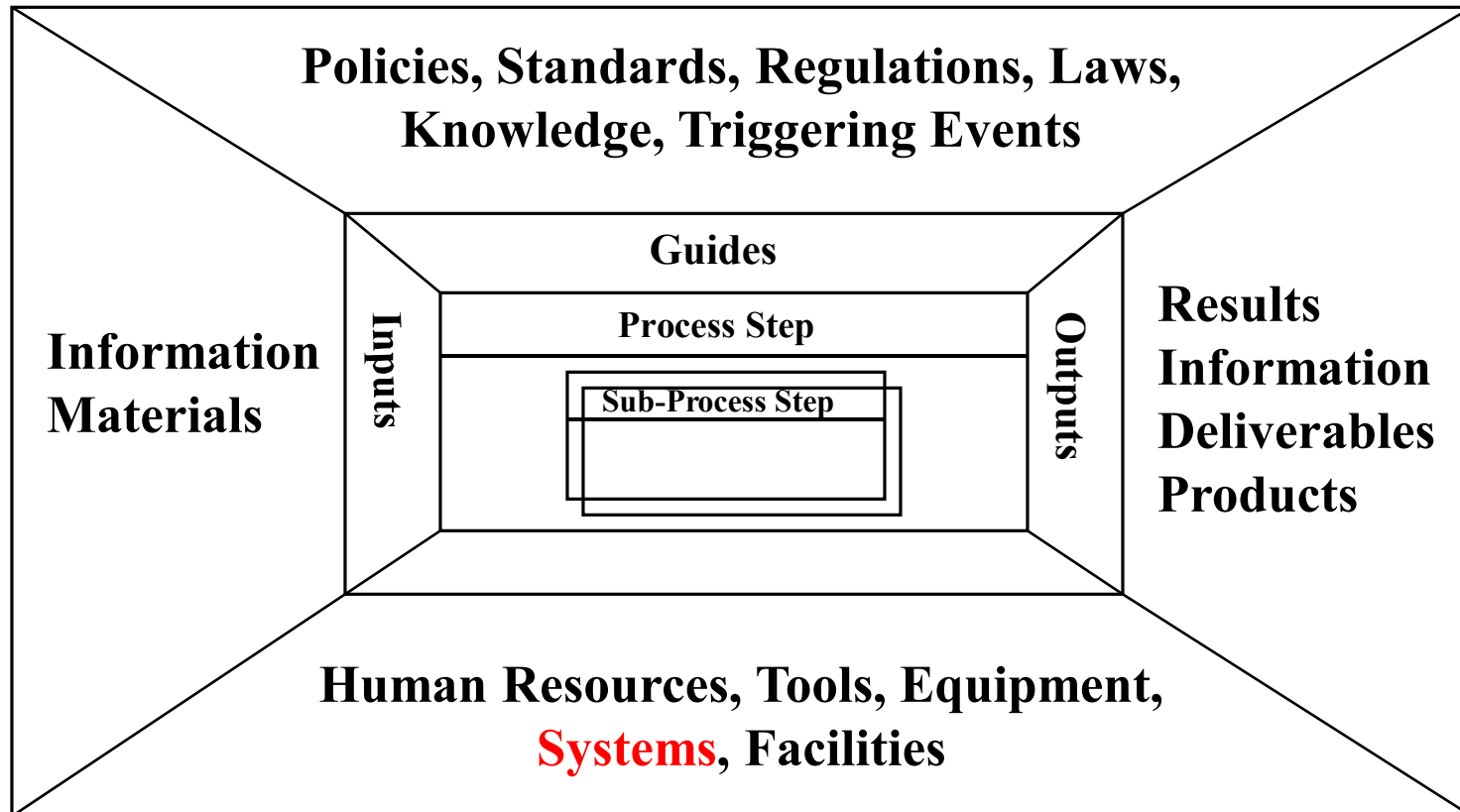
**Verbal Info**

**Order Details**

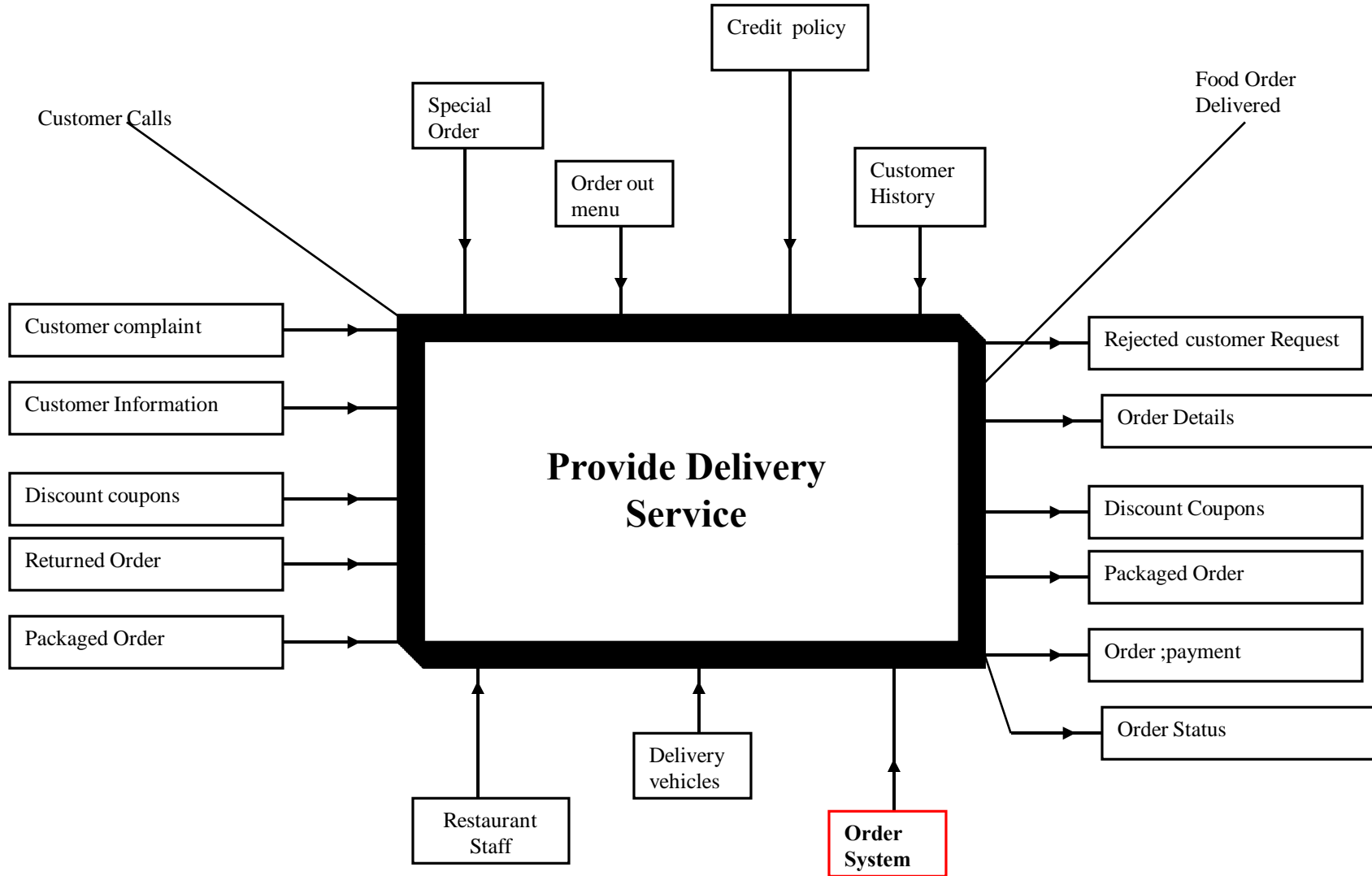
# via Enablers



# ents (IGOE)



# Level IGOEs



# Structure

## Team Responsibilities

Core Team:

Assumes an internally managed project

### Project Champion

- Ensures the delivery and acceptance of the project results: may be the process owner.
- Clears the path and warns of road blocks
- Resolves political and cross organizational escalate
- Takes responsibility for the ongoing operation of the

### Project Acceptor

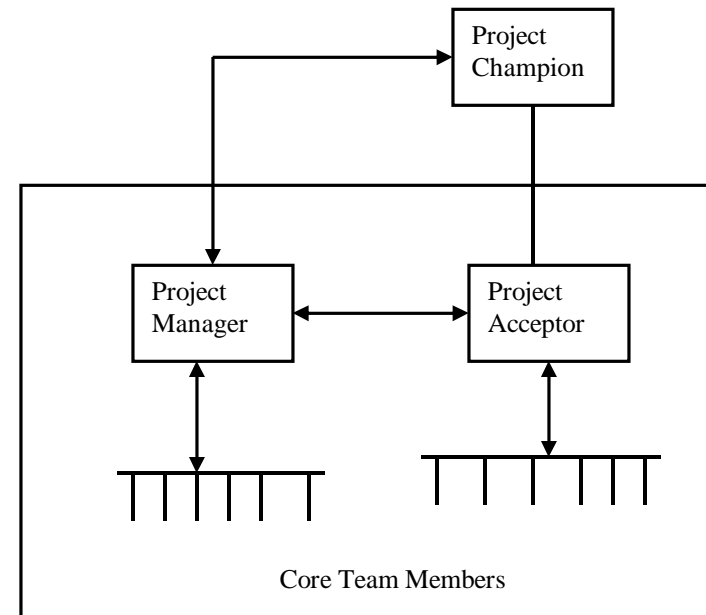
- Coordinates the multiple vested interests of the
- Acts as project conscience
- Accepts the project results on behalf of the process champion
- Can also be the Project Champion

### Project Manager

- Plans and manages the project day to day
- Motivates and manages the team
- Focal point for project issues
- Delivers the business solution to the Acceptor

### Project Team Member

- Dedicated to conduct the day to day activities of the BPR process
- Understands the business requirements and delivers to the Acceptor
- Brings either BPM technique or SME knowledge or skills
- Coordinates an extended team relationship



# Understanding Processes

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- Gather Process Information**
- Decompose Scoped Process into 3 - 7 Sub-Processes (Activities)**
- Develop Modeling Standards**
- Model the Process**
- Determine Process Roles and Responsibilities**



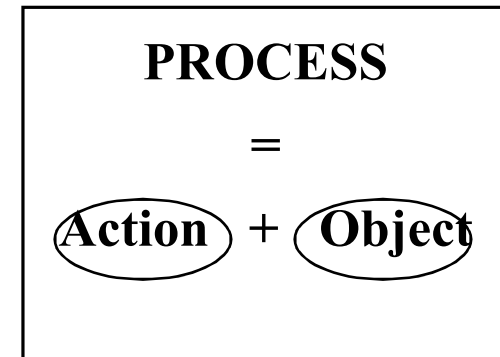
## How do we describe our process/activities?

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A process is represented by a labeled box

The label must be an action/object phrase that describes the activity in a concise, specific manner

- ✓ Take Order
- ✓ Fill Out Forms
- ✓ Call Customer
- ✓ Determine Delivery Route
- ✓ Install Equipment
- X Process Documents
- X Maintenance
- X Manage Warranty



## What is “Process Modeling”?

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**A diagram or map of a business process and the supporting documentation of related characteristics, which identifies the activities performed and the information and product flows between them.**

**What it is !**

**What it is not !**

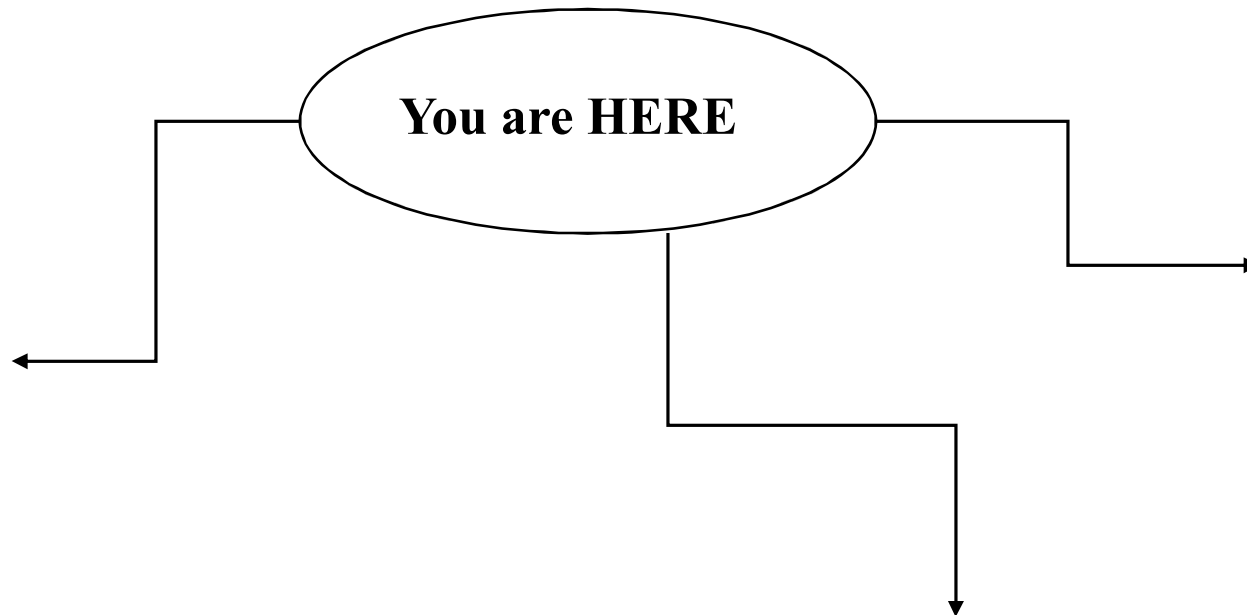
**Science**



## Business Modeling

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### Establishing the “DOT”



# When Do I Stop Modeling Current Process?

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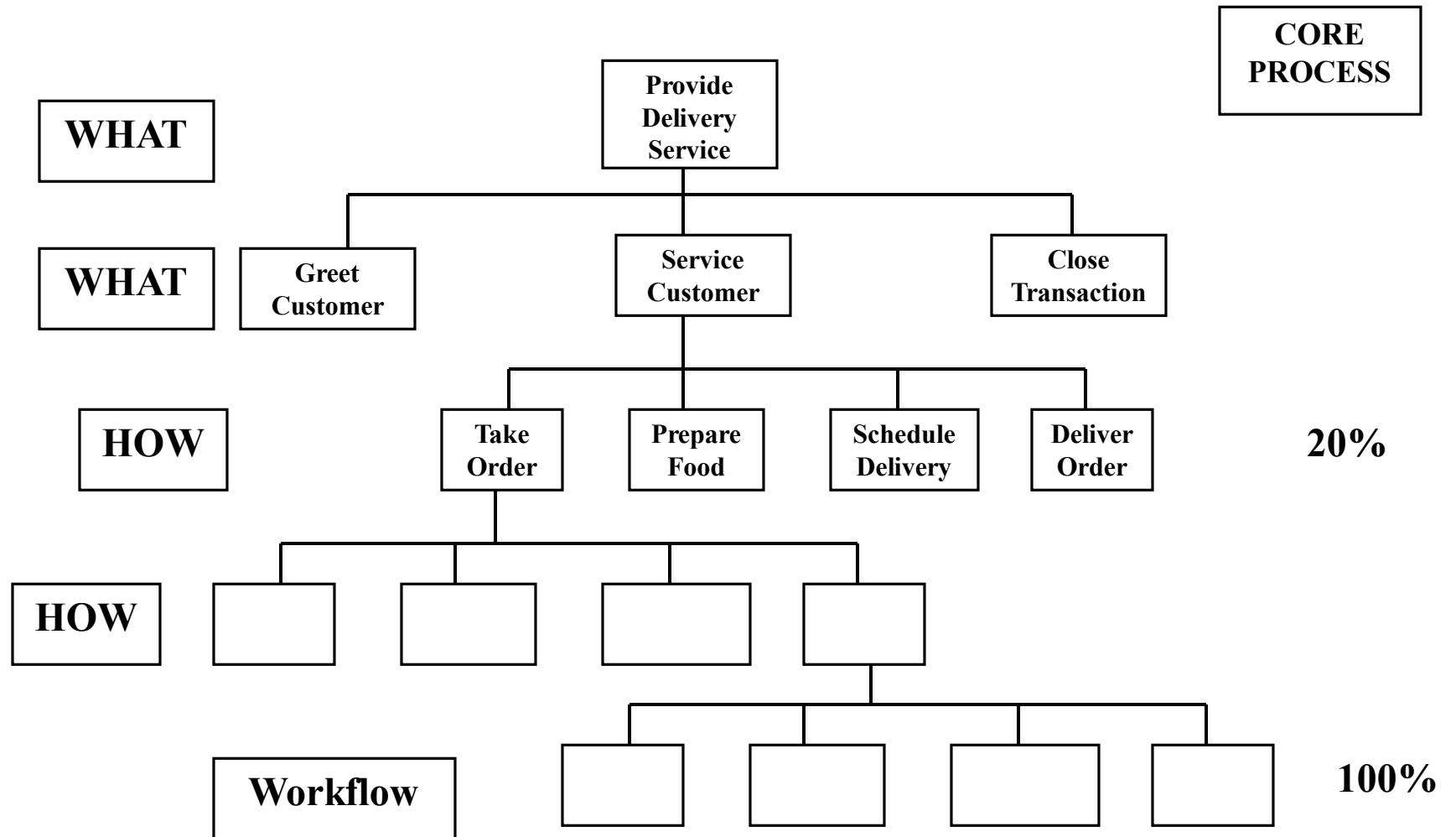
**What I know?**

**What I Model?**



**Recognize there is a  
difference between  
what I understand  
(know) about the process  
and what I model**

# Modeling Current Process at Various Levels





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# Understand Business Processes

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## What I Model

- Measure the business performance
- Evaluate alternative organizational structure
- Explore Technology opportunities

## What I Model

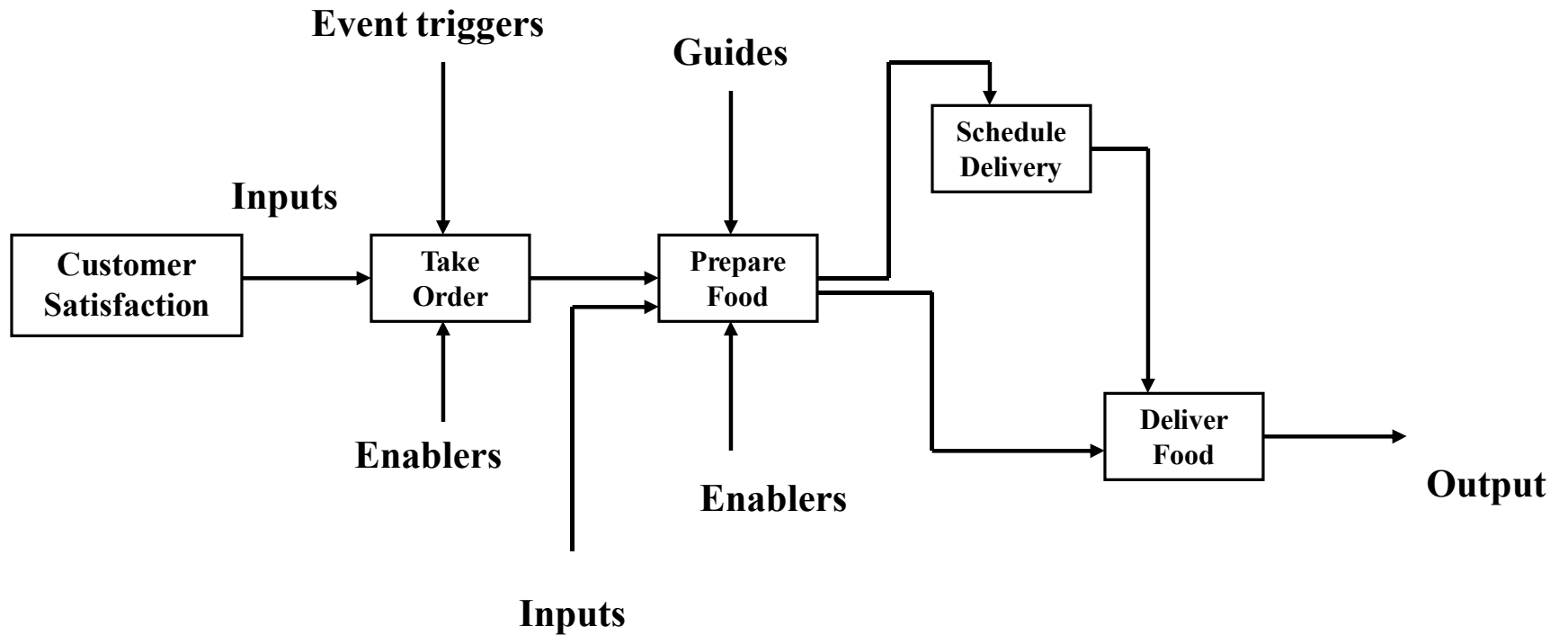
- Remove gaps
- Manage cross-functional interfaces
- Allocate resources appropriately

## What I Model

- Determine root cause
- Recommend change
- Validate understanding
- Confirm the boundaries
- Identify gaps

# Communicate Understanding

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## Measuring Processes

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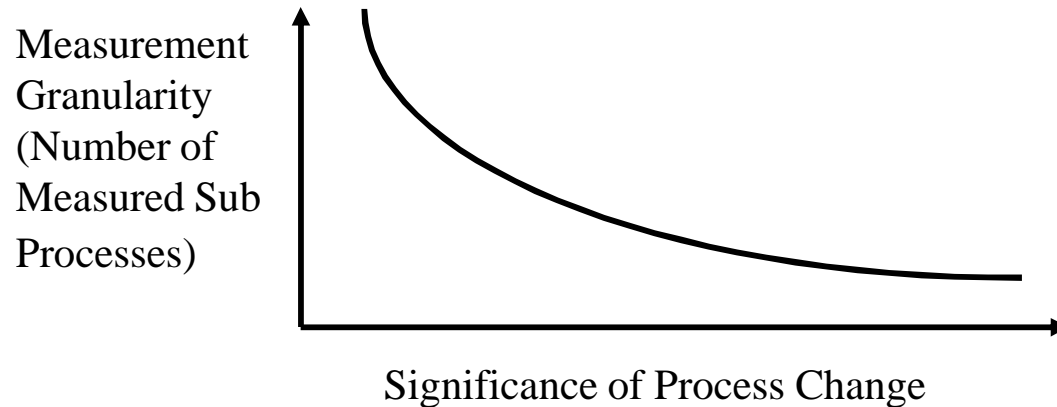
- ➔ **Review Process and Project measures**
- ➔ **Develop/Clarify measurement criteria**
- ➔ **Identify appropriate measures**
- ➔ **Gather measurement information**
- ➔ **Annotate the models and characteristics**



## Identify Appropriate Measures

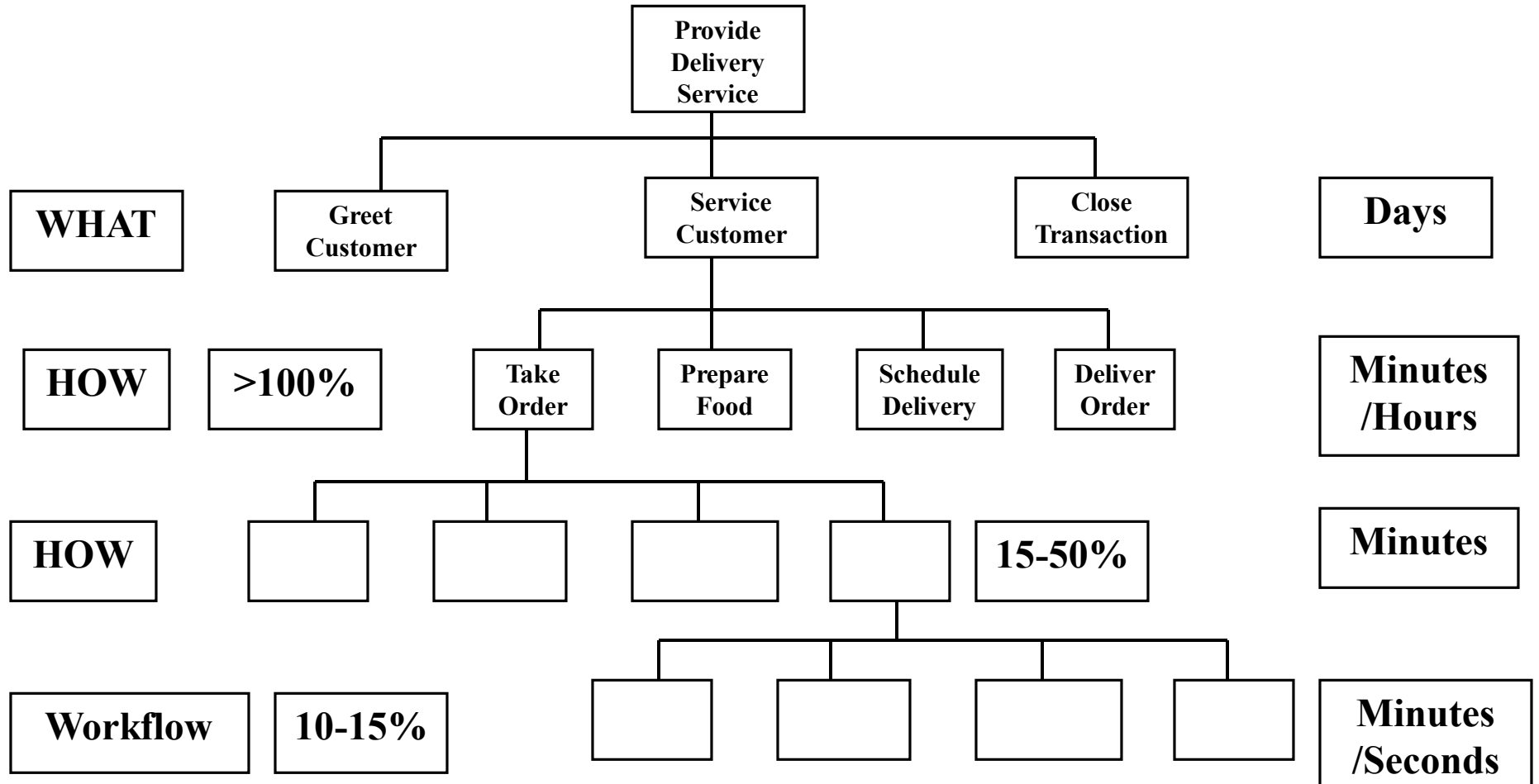
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- ➔ **Process and Project goals and objectives will determine required level of Measurement**
- ➔ **Can be a mix of process model levels**



- ➔ **Should at least measure overall process performance**
- ➔ **Details are required for incremental change, 80/20 tells where to drill**

# Identify Appropriate Measurement Levels



## REVIEW KPIs and Project Objectives

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### Key Performance Indicator

→ Customer Satisfaction

### Project Objectives

- ✓ Eliminate non-value-added activities
- ✓ Reduce number of coupons given by 50%
- ✓ Simplify the process
- ✓ Improve cross-functional communication
- ✓ Reduce # of exceptions
- ✓ Improve the reliability of delivery-
- ✓ Improve on-time from 50% to 90%
- ✓ Increase customer satisfaction-reduce the number of complaints by 50%

## Measurement Criteria

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- **Timeliness - understand your business cycles**
  - ✓ should recognized and represent variations in operations
- **Validity - must be a valid measure of process performance**
  - ✓ orders filled and orders processed vs. pulls per hour
- **Completeness - right level of measures for project objectives**
  - ✓ who needs information and how much do they need
- **Inclusiveness - all appropriate costs not just a few**
  - ✓ should include all related costs, including such things as overhead, space, supplies, etc.
- **Cost Effectiveness - measuring is not FREE**
  - ✓ value of measurement vs. the cost of obtaining
- **Comparability - before and after**
  - ✓ apples - to - apples
- **Balanced - include measurements from all three categories**
- **Perspective - various stakeholders**
  - ✓ internal
  - ✓ external

## Aspects of Measurement

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### Only Measure Performance Improvement Targets

#### Quality and Effectiveness Measures:

- ✓ Appropriateness
- ✓ Customer Satisfaction
- ✓ Quality
- ✓ Defects
- ✓ Cost of Non Conformance
- ✓ Price
- ✓ Responsiveness
- ✓ Consistency
- ✓ Profitability
- ✓ Market Share
- ✓ Real Value-added to
- ✓ process cost

#### Efficiency Measures:

- ✓ Cost
- ✓ Cycle time
- ✓ Wait time
- ✓ Wastage
- ✓ Scrap
- ✓ Spoilage

#### Adaptability Measures:

- ✓ Product and service variability
- ✓ Job satisfaction
- ✓ Ability to handle non standard  
customer requirements
- ✓ Time to profit
- ✓ Time to market
- ✓ More capable work force
- ✓ More flexible staff
- ✓ Equipment Capability
- ✓ Business Disruption
- ✓ Morale

**Common denominators are often Time, Cost, and Customer Satisfaction**  
**Process measures must be directly related to business performance measures**



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## **Validating and Analyzing Processes**

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- Run Workshops**
- Observe the Process Flow**
- Decompose and Prioritize Process Flows**
- Identify Evaluation Criteria for Quick Wins**
- Implement Quick Wins**



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# Process Analysis Techniques

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- **Process mapping interviews and facilitated workshops**
- **Customer Focus Groups**
- **Supplier Feedback**
- **Observing the full process**
- **Value-Added Analysis**
- **Gap Analysis**
- **Root Cause Analysis**
- **Comparisons to Documented Procedures**

## **Capture Information/ Recognize Triggers**

- GUI
- Smart Cards
- PDAs
- Self-Identifying Tags
- Image Capture
- Bar Coding
- OCR
- Speech Recognition
- Phone/Fax
- Biometrics
- Wearable Computers

## **Provide Information for Decision Making and Customer Service**

- **Multimedia Knowledge Access**
- **Natural Language Information Retrieval**
- **Data Warehouse**
- **Geographic IS**
- **Expert Systems**
- **Electronic Books**

## **Pass Control/Hand-off**

- ☞ **EDI/edi**
- ☞ **IVR**
- ☞ **Workflow Applications**
- ☞ **Workgroup Applications**
- ☞ **Documents/Forms/Images**
- ☞ **Internet/Intranet/Extranet**
- ☞ **xDSL (Generic Digital) Subscriber Line**
- ☞ **Cable Modems**
- ☞ **IP Telephony**
- ☞ **Internet Chat**



## Build Evaluation Criteria

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- Refer to project goals and objectives
- Start with process KPIs, vision, and objectives
- Convert into criteria that can be used to evaluate the ideas
- Assign a weight to each criteria

<b>Increase Customer Service</b>	<b>35</b>
<b>Increase Profits</b>	<b>55</b>
<b>Improve Employee Morale</b>	<b>25</b>
<b>Improve On-time Delivery</b>	<b>45</b>

# Technology / Process Matrix









Ranked Process	Technology	Technology	—		
Process 1	Score				
Process 2					
---					
----					
Ranking					

Score: Ease of Deployment and Technology Potential

Prepare 2 matrices: one for ease of deployment and other for technology potential



## Project Milestones

-  **Identify processes**
-  **Identify enablers**
-  **Prepare business-technology matrix**
-  **Identify IT project tasks**
-  **Prepare action plan**
-  **Search/develop solutions**
-  **Implement/deploy**
-  **Improve continuously**

# Overcoming Resistance to Change

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