
Activity Based Costing At UPS



UPS Developed ABC Systems to:

- Link operating behavior to Product and Customer segment cost
- Support existing and new product pricing decisions
- Report consistent and reliable profitability results by product



Activity Based Cost Overview

Activity Based Costing at UPS is a crossfunctional discipline requiring an understanding of our work activities.

- Identify the key activities within a function or process.
- Measure the cost associated with the activities.
- Assign costs to products, customers and processes based on the **use** of the activities.

Collaboratively, Finance and Accounting, Engineering, IT and Operations produced a series of ABC models at UPS.

Evolution of Activity Based Costing at UPS

Markets and technology were changing.

Transportation needs were moving toward time definite, feature based services:

- JIT was used to reduce inventory
- Economy was moving from manufacturing to more service based
- An information driven business environment was developing

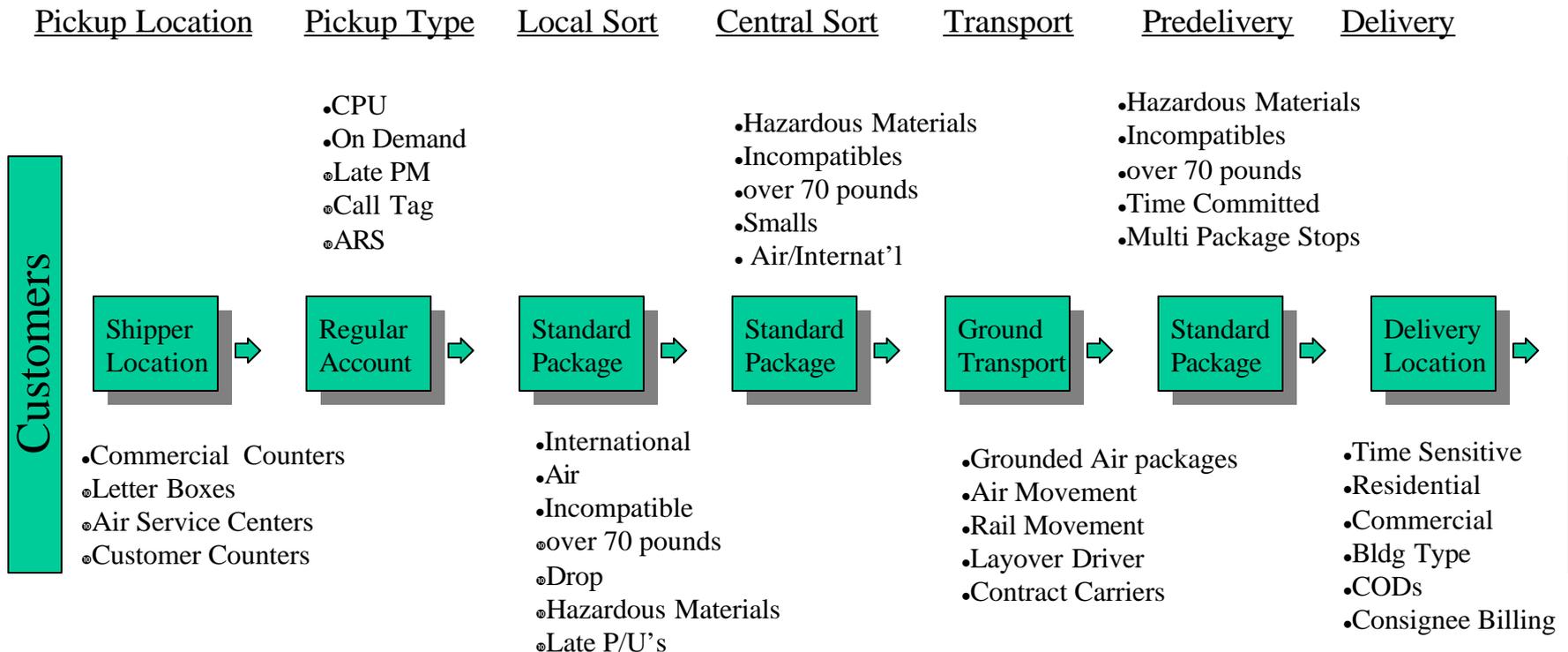
Evolution of Activity Based Costing at UPS

UPS responded by developing new business strategies which focused on meeting customer needs

- Detailed knowledge of our cost to serve by Product and Customer became a priority
- The market drove the need to better understand specific segments of our business
- A focus on “average” cost was no longer appropriate

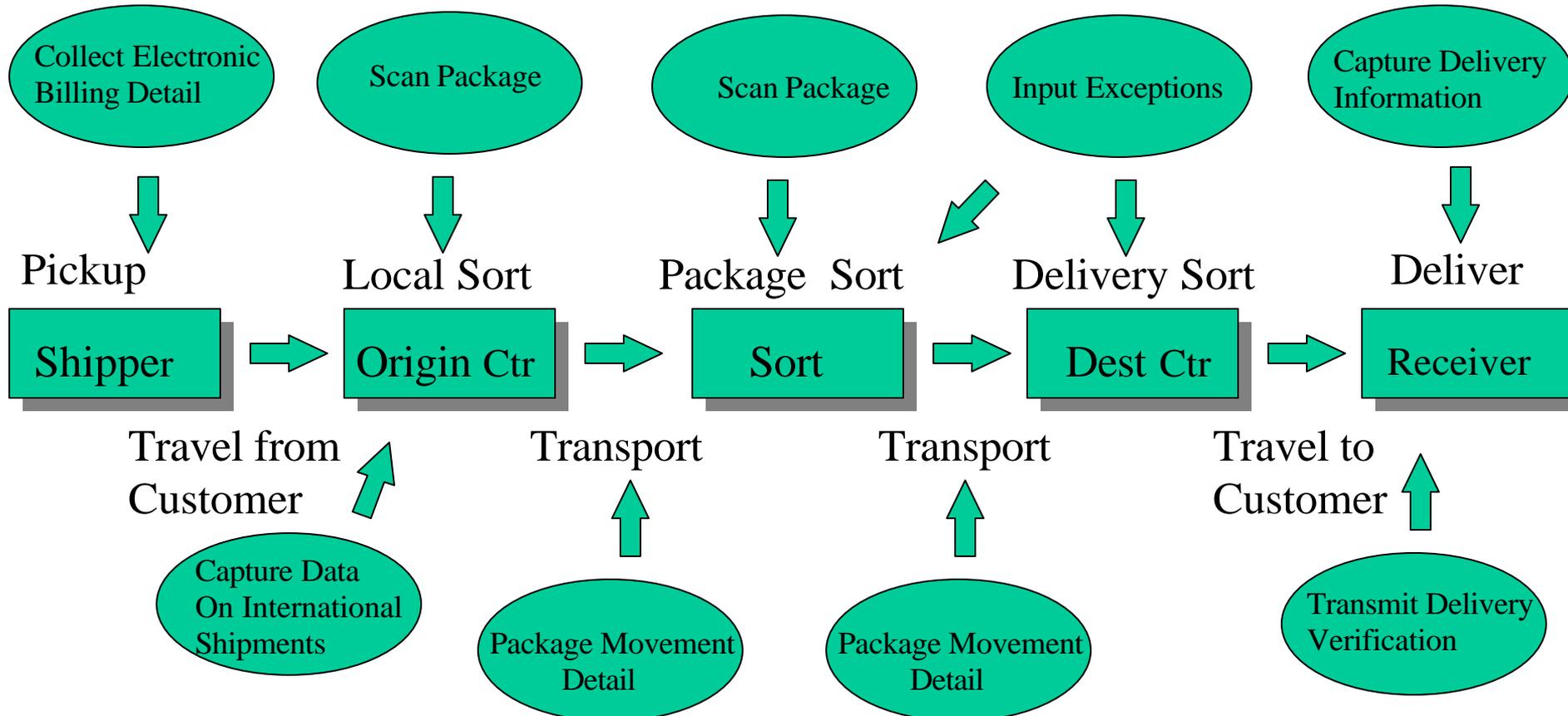
Activity Based Costing Overview

Our operations are extremely complex with a wide variety of service options, operating conditions and support activities.



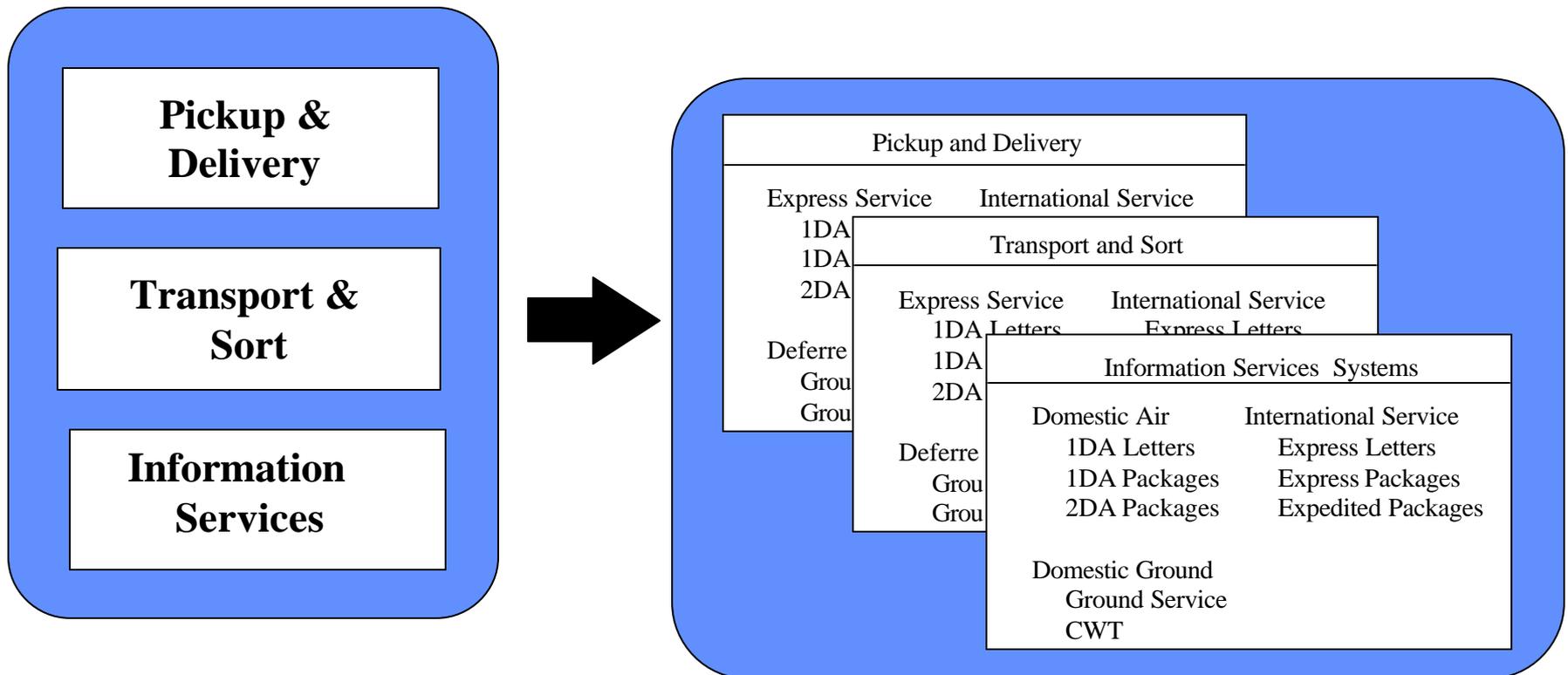
UPS's Activity Based Costing Approach

At the same time, providing information about the package has become a major priority and has increased downstream activities.



UPS's Activity Based Costing System

UPS system is based on traditional ABC in that it takes detailed Functional Cost and Maps it to Products based on the Activities that the Products drive



UPS's Activity Based Costing System

UPS's ABC System is unique in that it leverages our database of work measurement and package movement detail to improve our understanding of activity cost drivers

- UPS has a substantial investment in Industrial Engineering
 - Work measurement studies have been performed on work activity at UPS as far back as 1921.
 - These studies provide important insights into the content of activities and the rate at which products drive these activities.
- UPS maintains detailed package flow control systems
 - How products move through our system provides important cost insights.
 - Ready access to this data allows for frequent re-calibration of our models

Activity Based Costing Overview

The Challenge

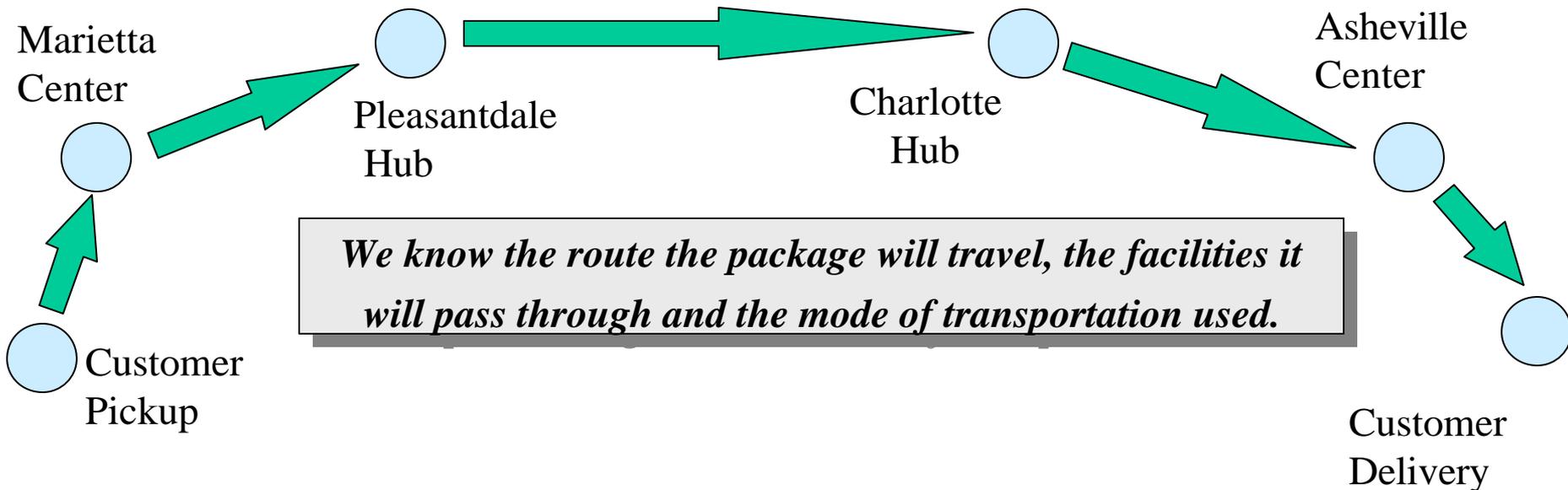
- UPS has a highly efficient network of shared assets that constantly adjusts to meet demand.
- Resources are shared across product lines making it difficult to identify unique cost differences.
- Analysis of UPS package flow models provides a framework to begin to answer such questions as:
 - What activities were needed to get the package to the final destination?
 - What information system resources were required?
 - What share of the activities and resources did the package consume?
 - What did these activities and resources cost?

UPS's Activity Based Costing Approach

Our ability to move packages between locations is another core competence. Our capacity to track a package's movement enhances our ability to accurately measure product cost.

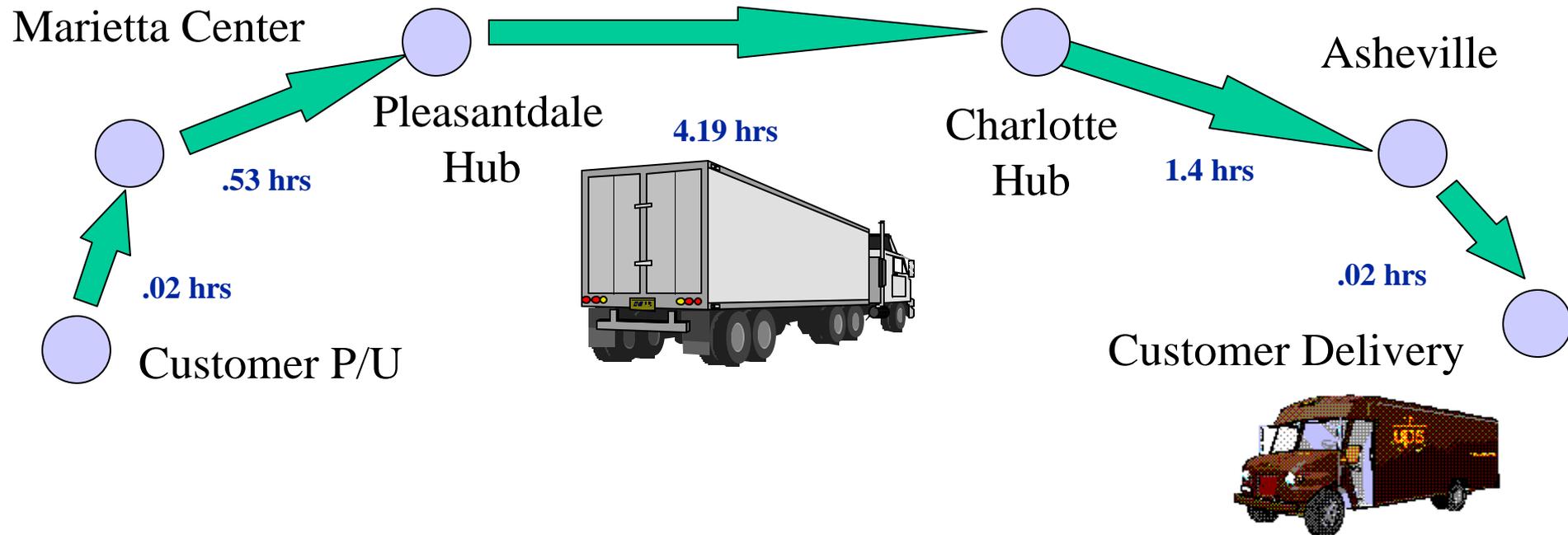
For Example:

Customer in Marietta, Ga. sends a package to a customer in Asheville NC.



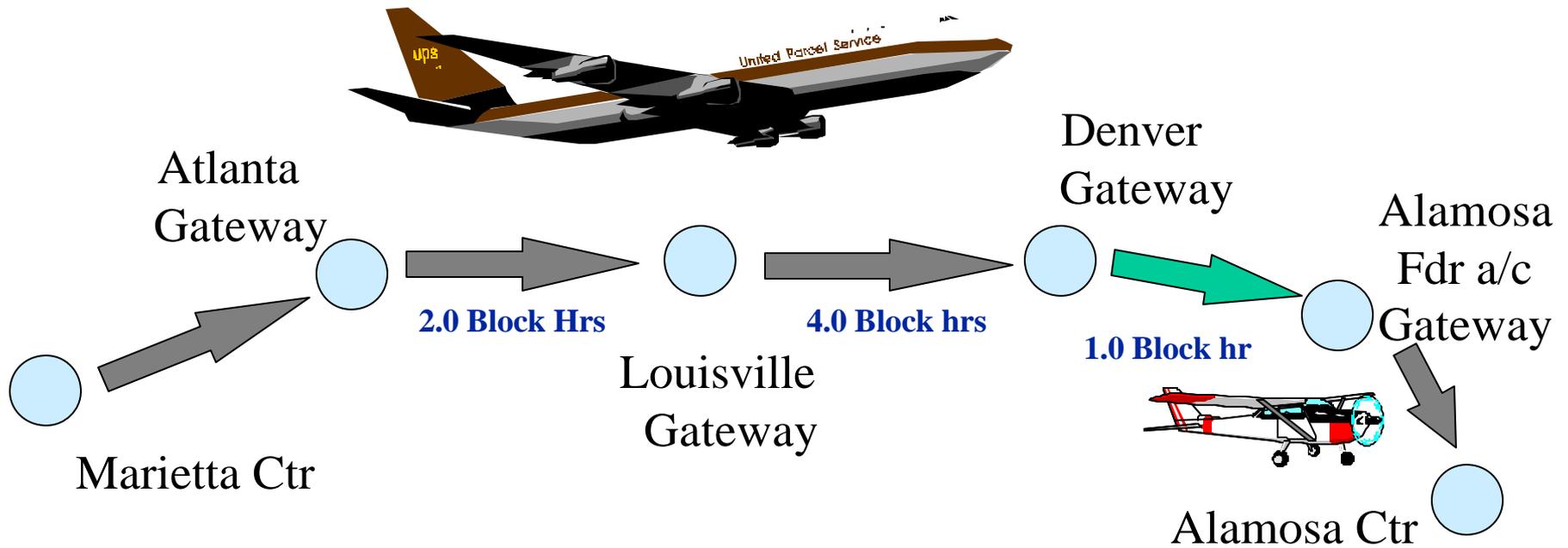
Activity Based Costing Overview

UPS has the ability to leverage extensive work measurement and package movement detail to measure product cost.



Activity Based Costing Overview

Airfeed cost are based on Aircraft type, distance flown and number of flight segments required.



Insights from our ABC System Support many Current Applications

Performance Measurement	View of cost and profitability of a division by product across the network.
Planning & Forecasting	Activity Based Forecasting to integrate financial business plans with profit objectives.
Cost Reduction Efforts	Database of cost information for internal cost comparisons and analysis.
Pricing	Tool to ensure appropriate pricing.
Incentive Administration System	Monitoring system to track performance by customer and account representative.
Customer Performance Measurement	Data mining techniques to segment customers

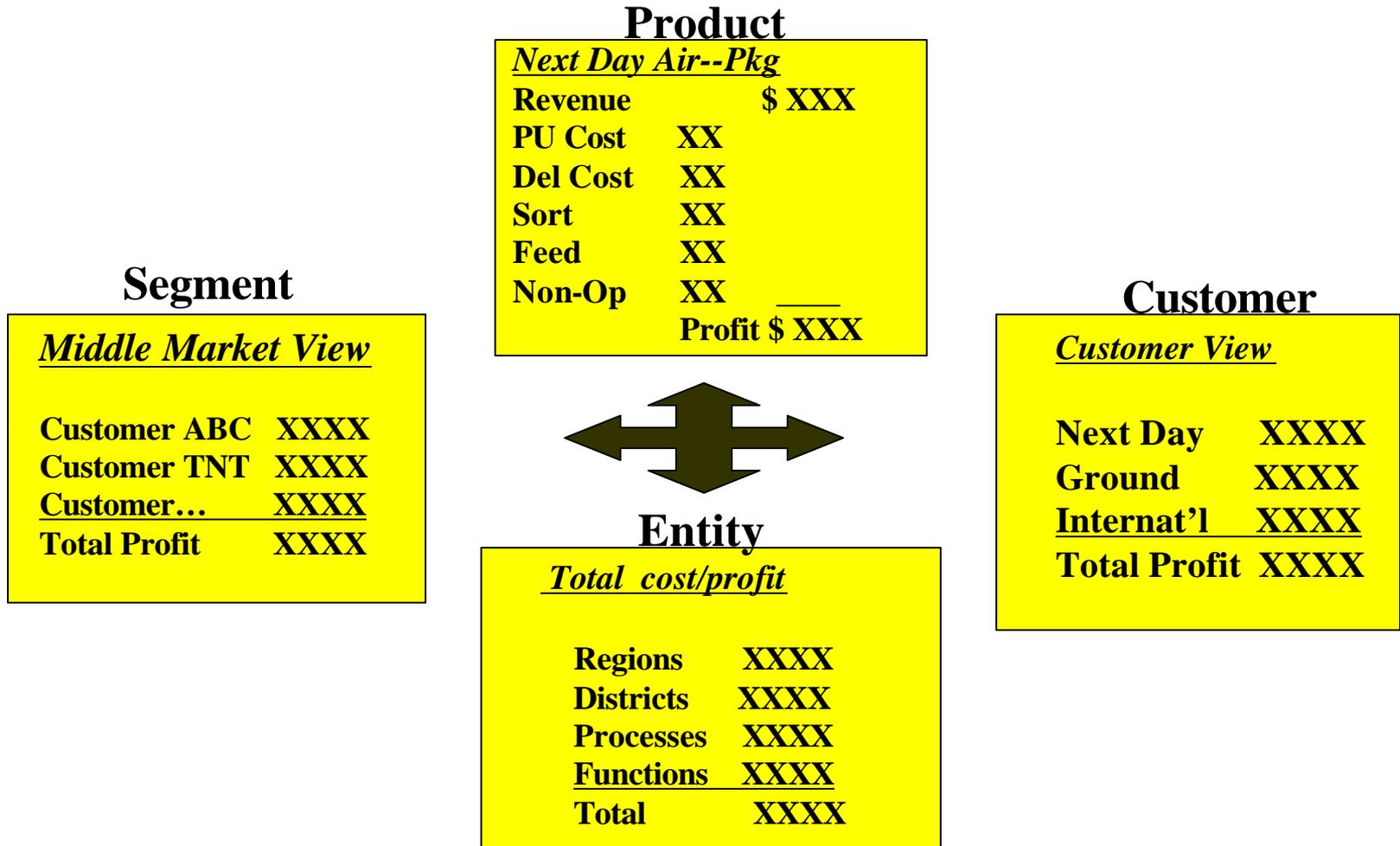
UPS's Activity Based Costing Systems:

ABC systems support Product Performance Reporting at the corporate and operational business unit level.

- Generated monthly
- View by business unit and product
- Electronic report format
- Data allows multi period, product and/or business unit reporting
- Information in the ABC systems is continuously updated

Has become an essential tool for monitoring financial performance at the product and business unit level.

UPS costing methodologies allow for the creation of P&L views across multiple dimensions.



UPS's ABC Systems help reduce cost throughout the value chain:

Activity and Customer analysis help us determine the most efficient way to minimize cost for both UPS and the customer.

- Focus operational improvement efforts on high impact areas.
- Change shipping behavior to minimize cost impact on UPS's network.
- Modify distribution network to reduce total transportation cost.
- Integrate logistic solutions to help optimize benefits across the entire value change.

Customer Strategy:

Customer analysis helps determine the most efficient way to minimize cost for both UPS and the customer

- Change shipping behavior to minimize cost impact on UPS's network
- Modify distribution network to reduce total transportation cost
- Integrate logistic solutions

UPS's goal is to reduce cost throughout the value chain.

Customer Strategy:

Data mining techniques are used to analyze over 50 million records so that profits can be associated to all packages and customers.

- Customer level profitability gives insights into trends affecting our customer portfolio.
- Data mining techniques such as CART, CHAID, Self Organizing Maps, etc. are used to identify meaningful customer groupings.
- Monitoring customer accounts has enhanced our ability to understand effects of various strategic initiatives.

Invested Capital & Economic Profit

We extended our Activity Based Costing techniques to measure invested capital.

- Invested capital is assigned to products based on unique usage of each asset type.
- Results reflect widely varying degrees of capital intensity across ground and air operations.

UPS includes capital requirements into pricing and growth strategies to ensure positive Economic Profit.

In Today's Competitive Marketplace, companies will not survive without a firm understanding of product costs

Cost understanding is a Core Strength at UPS

- Cost is measured at a fine level of detail in our G/L system.
- Detailed work measurement standards improve cost insights and encourage continuous improvement.
- Combining cost detail and work measurement has given us a leading edge Activity Based Cost model.
- This allows UPS to accurately measure financial performance and make effective decisions in pricing, cost control, quality improvement, reengineering, forecasting and customer relationship management.