

Management Support System

Types Of Management Information Systems

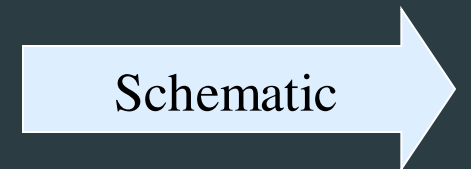
Course Code: CIS 414

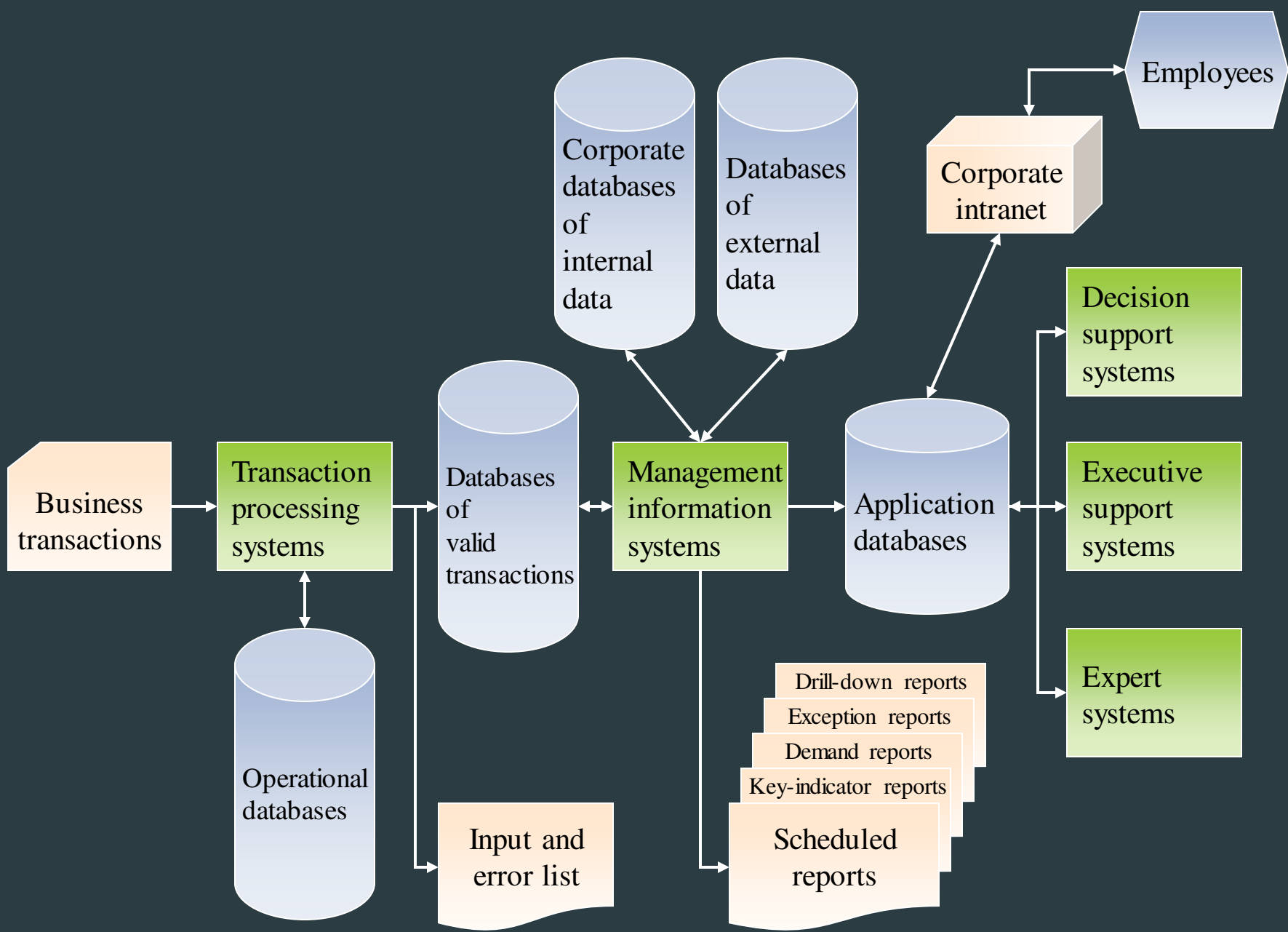
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Management Information Systems (MIS)

- ▶ Management information system (MIS)
 - ▶ An MIS provides managers with information and support for effective decision making, and provides feedback on daily operations
 - ▶ Output, or reports, are usually generated through accumulation of transaction processing data
 - ▶ Each MIS is an integrated collection of subsystems, which are typically organized along functional lines within an organization

Sources of Management Information





Outputs of a Management Information System

▶ Scheduled reports

- ▶ Produced periodically, or on a schedule (daily, weekly, monthly)

▶ Key-indicator report

- ▶ Summarizes the previous day's critical activities
- ▶ Typically available at the beginning of each day

▶ Demand report

- ▶ Gives certain information at a manager's request

▶ Exception report

- ▶ Automatically produced when a situation is unusual or requires management action

Scheduled Report Example

Daily Sales Detail Report						
						Prepared: 08/10/xx
Order #	Customer ID	Sales Rep ID	Ship Date	Quantity	Item #	Amount
P12453	C89321	CAR	08/12/96	144	P1234	\$3,214
P12453	C89321	CAR	08/12/96	288	P3214	\$5,660
P12453	C03214	GWA	08/13/96	12	P4902	\$1,224
P12455	C52313	SAK	08/12/96	24	P4012	\$2,448
P12456	C34123	JMW	08J/13/96	144	P3214	\$720

Key Indicator Report Example

Daily Sales Key Indicator Report			
	This Month	Last Month	Last Year
Total Orders Month to Date	\$1,808	\$1,694	\$1,014
Forecasted Sales for the Month	\$2,406	\$2,224	\$2,608

Demand Report Example

Daily Sales by Sales Rep Summary Report	
Prepared: 08/10/xx	
Sales Rep ID	Amount
CAR	\$42,345
GWA	\$38,950
SAK	\$22,100
JWN	\$12,350

Exception Report Example

Daily Sales Exception Report – ORDERS OVER \$10,000

Prepared: 08/10/xx

Order #	Customer ID	Sales Rep ID	Ship Date	Quantity	Item #	Amount
P12453	C89321	CAR	08/12/96	144	P1234	\$13,214
P12453	C89321	CAR	08/12/96	288	P3214	\$15,660
P12453	C03214	GWA	08/13/96	12	P4902	\$11,224
...
...

Outputs of a Management Information System

Drill Down Reports

Provide detailed data about a situation.

Earnings by Quarter (Millions)			
	Actual	Forecast	Variance
2 ND Qtr 1999	\$12.6	\$11.8	6.8%
1 st Qtr 1999	\$10.8	\$10.7	0.9%
4 th Qtr 1998	\$14.3	\$14.5	-1.4%
3 rd Qtr 1998	\$12.8	\$13.3	-3.0%

Etc. See Figure 9.2

Characteristics of a Management Information System

- ▶ Provides reports with fixed and standard formats
 - ▶ Hard-copy and soft-copy reports
- ▶ Uses internal data stored in the computer system
- ▶ End users can develop custom reports
- ▶ Requires formal requests from users

Management Information Systems for Competitive Advantage

- ▶ Provides support to managers as they work to achieve corporate goals
- ▶ Enables managers to compare results to established company goals and identify problem areas and opportunities for improvement

MIS and Web Technology

- ▶ Data may be made available from management information systems on a company's intranet
- ▶ Employees can use browsers and their PC to gain access to the data

Functional Aspects

- ▶ MIS is an integrated collection of functional information systems, each supporting particular functional areas.



Schematic

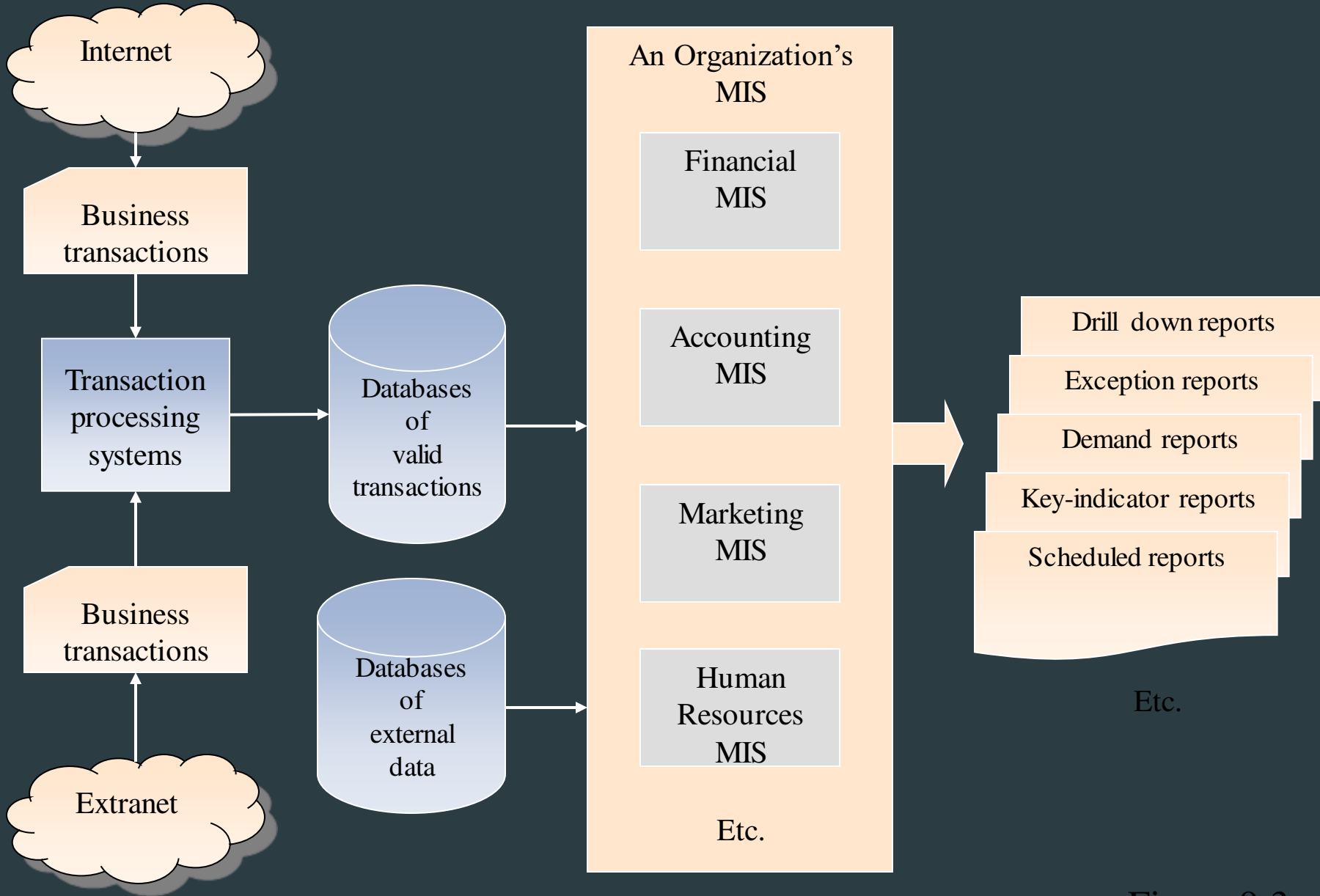


Figure 9.3

Financial MIS

- ▶ Provides financial information to all financial managers within an organization.



Schematic

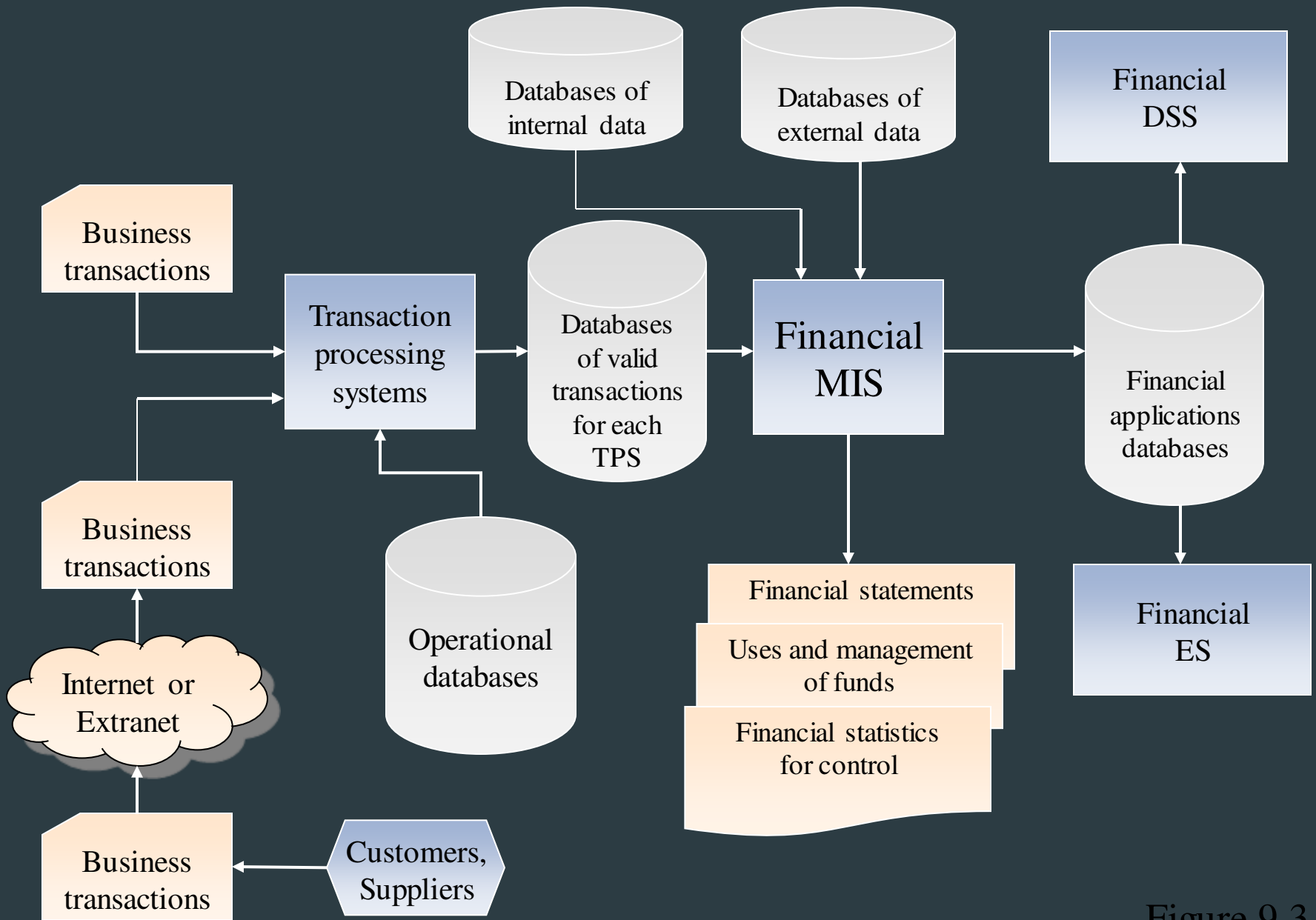


Figure 9.3

Inputs to the Financial Information System

- ▶ Strategic plan or corporate policies
 - ▶ Contains major financial objectives and often projects financial needs.
- ▶ Transaction processing system (TPS)
 - ▶ Important financial information collected from almost every TPS - payroll, inventory control, order processing, accounts payable, accounts receivable, general ledger.
 - ▶ External sources
 - ▶ Annual reports and financial statements of competitors and general news items.

Financial MIS Subsystems and Outputs

- ▶ Financial subsystems
 - ▶ Profit/loss and cost systems
 - ▶ Auditing
 - ▶ Internal auditing
 - ▶ External auditing
 - ▶ Uses and management of funds

Manufacturing MIS



Schematic

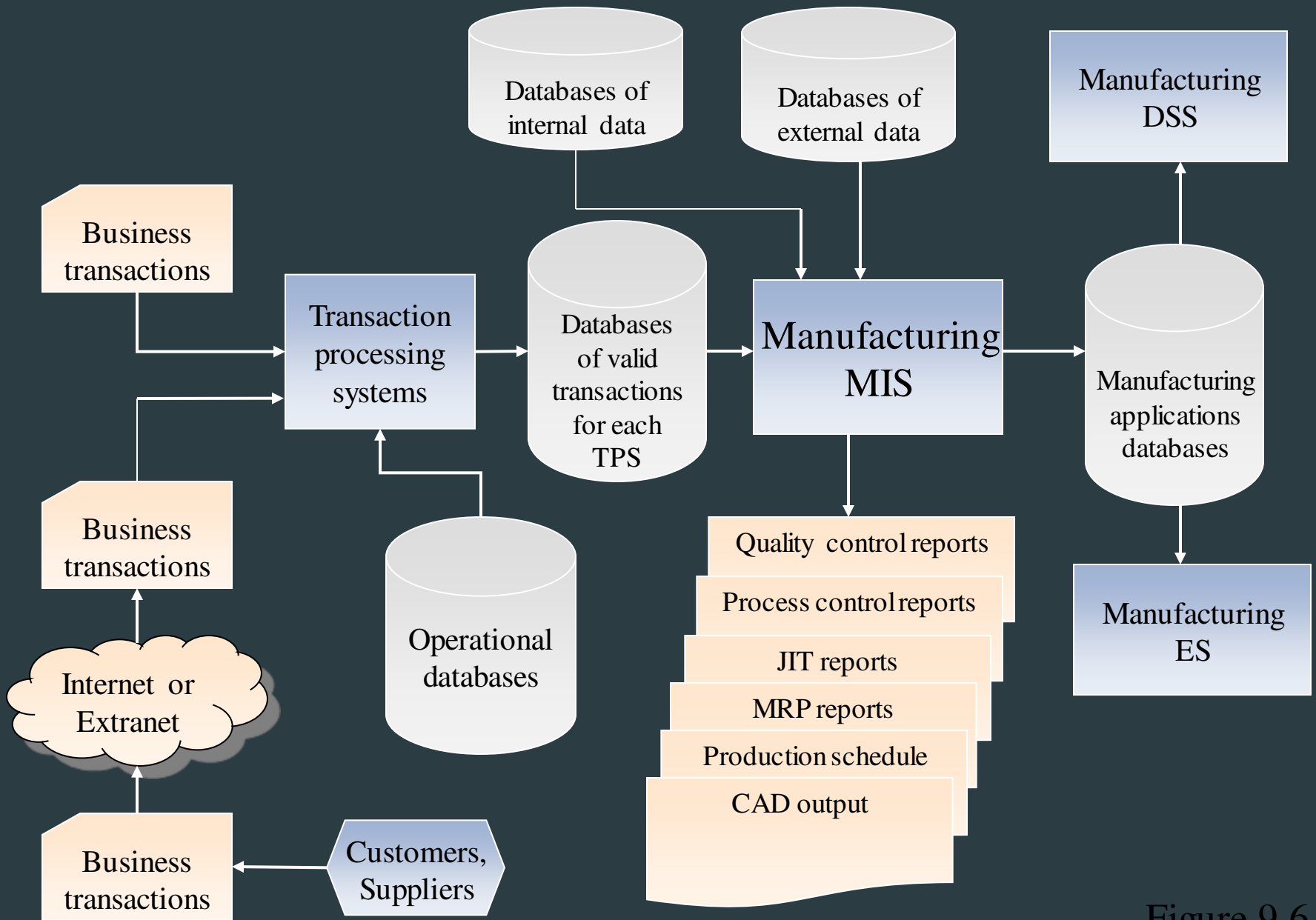


Figure 9.6

Inputs to the Manufacturing MIS

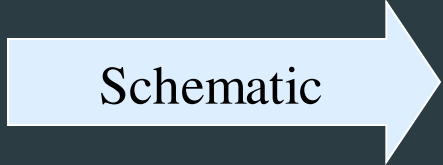
- ▶ Strategic plan or corporate policies.
- ▶ The TPS:
 - ▶ Order processing
 - ▶ Inventory data
 - ▶ Receiving and inspecting data
 - ▶ Personnel data
 - ▶ Production process
- ▶ External sources

Manufacturing MIS Subsystems and Outputs

- ▶ Design and engineering
- ▶ Master production scheduling
- ▶ Inventory control
- ▶ Manufacturing resource planning
- ▶ Just-in-time inventory and manufacturing
- ▶ Process control
- ▶ Computer-integrated manufacturing (CIM)
- ▶ Quality control and testing

Marketing MIS

- ▶ Supports managerial activities in product development, distribution, pricing decisions, and promotional effectiveness



Schematic

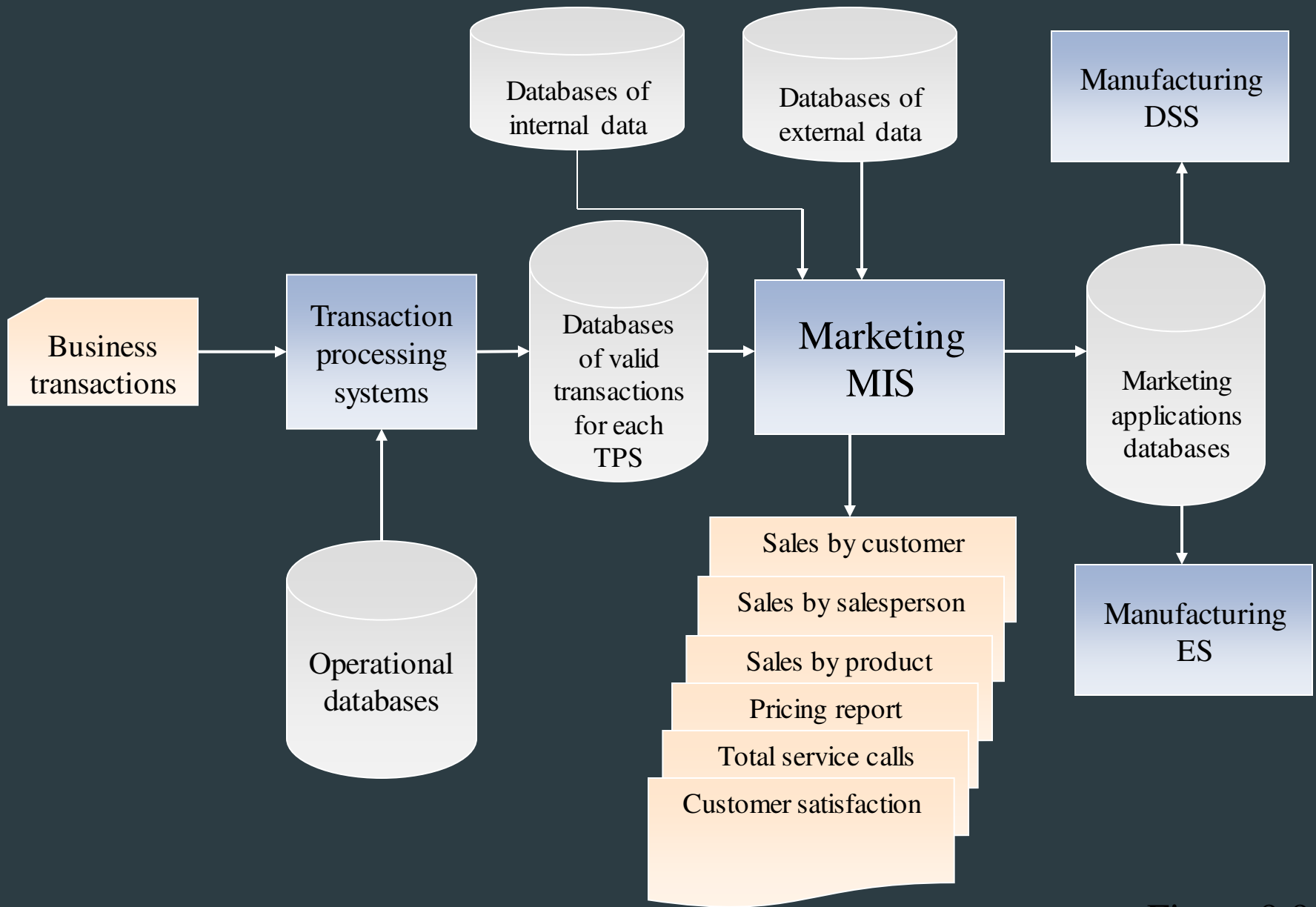


Figure 9.9

Inputs to Marketing MIS

- ▶ Strategic plan and corporate policies
- ▶ The TPS
- ▶ External sources:
 - ▶ The competition
 - ▶ The market

Marketing MIS Subsystems and Outputs

- ▶ Marketing research
- ▶ Product development
- ▶ Promotion and advertising
- ▶ Product pricing

Human Resource MIS

- ▶ Concerned with all of the activities related to employees and potential employees of the organization

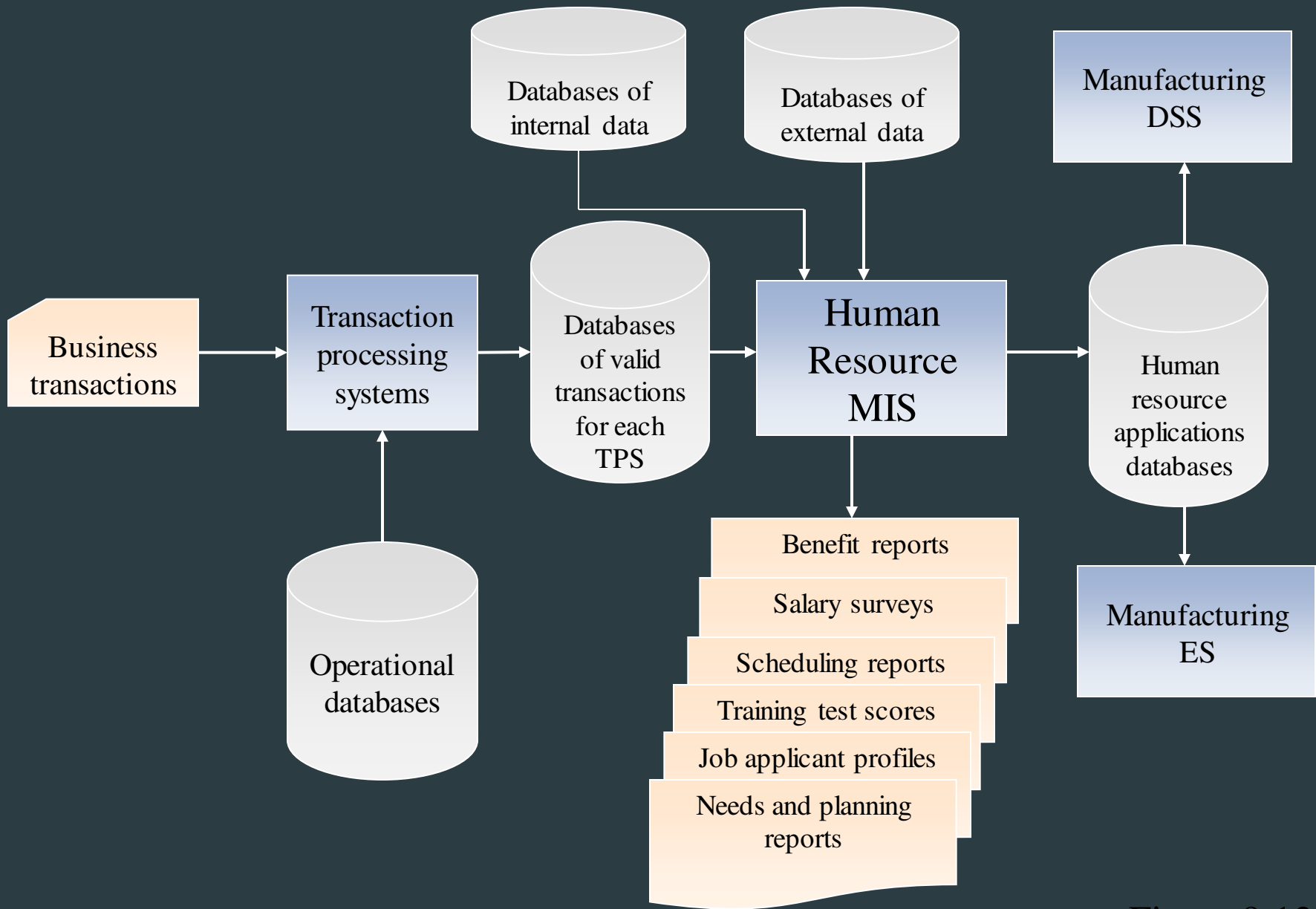


Figure 9.12

Inputs to the Human Resource MIS

- ▶ Strategic plan or corporate policies
- ▶ The TPS:
 - ▶ Payroll data
 - ▶ Order processing data
 - ▶ Personnel data
- ▶ External sources

Human Resource MIS Subsystems and Outputs

- ▶ Human resource planning
- ▶ Personnel selection and recruiting
- ▶ Training and skills inventory
- ▶ Scheduling and job placement
- ▶ Wage and salary administration

Other MISs

- ▶ Accounting MISs
 - ▶ Provides aggregated information on accounts payable, accounts receivable, payroll, and other applications.
- ▶ Geographic information systems (GISs)
 - ▶ Enables managers to pair pre-drawn maps or map outlines with tabular data to describe aspects of a particular geographic region.