

Transaction Processing System



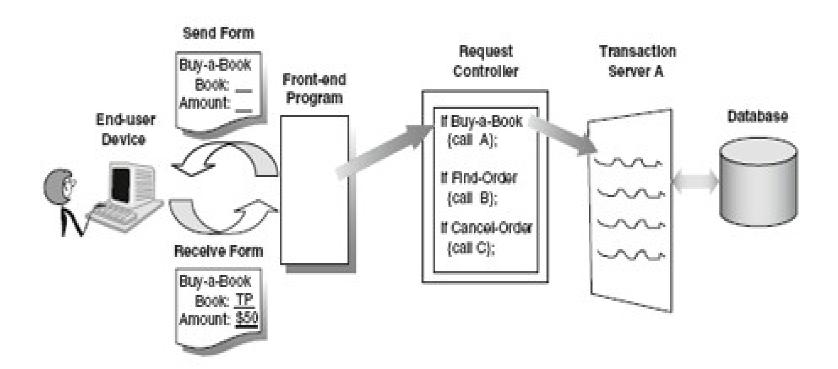
- A transaction: An activity such as making a purchase or a sale and so on.
- A system through which performance of transaction is ensured, is known as TPS.
- Processes day to day transactions.
- Can be handled manually or through computer based system



Transaction Processing System









Features of TPS



- Similarity in TPS of various organizations
- TPS is a major producer of info reports.
- They generate up to date assessment of organizational performance
- Components are Input, Processing, Storage, Output.



Components



• I/P : In the form of source documents

Processing: Converting input to output

• Storage : Stores various records

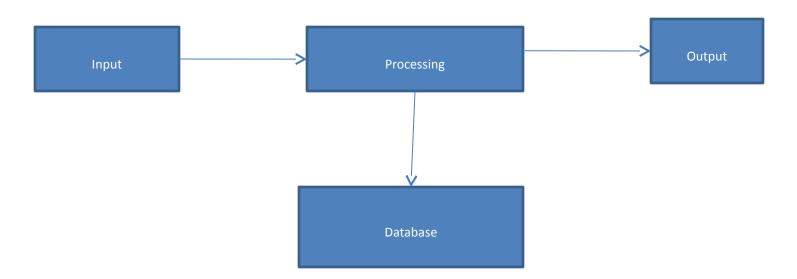
Output : In form of documents



Transaction processing cycle









Transaction processing methods



1) Online entry with immediate processing

2) Online entry with subsequent processing

3) Batch processing



Group DSS





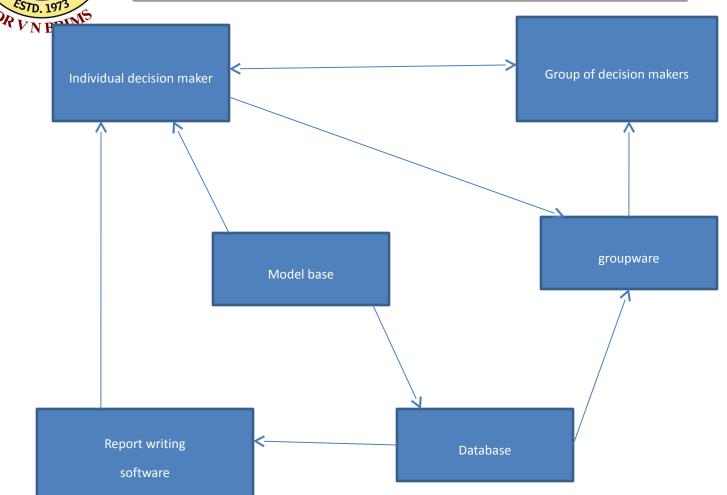
Important decisions are made by groups called as groupware.



Components of GDSS









Advantages of GDSS



- Pooling of knowledge and information
- Satisfaction and commitment:

Development of good spirit

- Personnel development through learning
- More risk taking ability



Executive info system





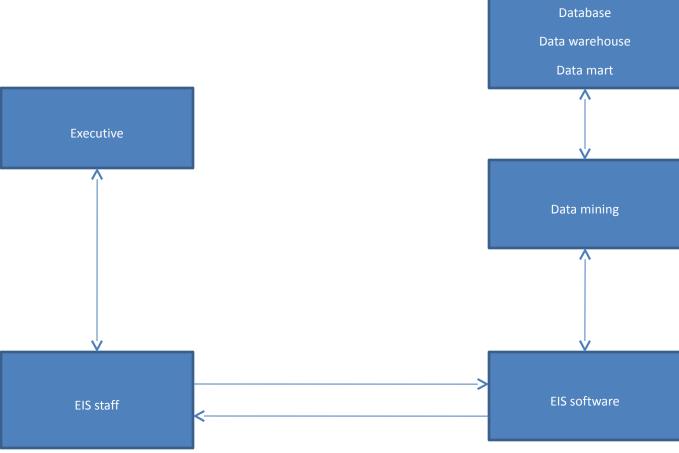
Provides relevant info to top management for strategic planning and control



Components of EIS









Components





Executive: Person who is a decision maker

Database: Comprehensive and specific data

EIS software

EIS output



Expert system





Knowledge based system to solve problems



Components of expert system

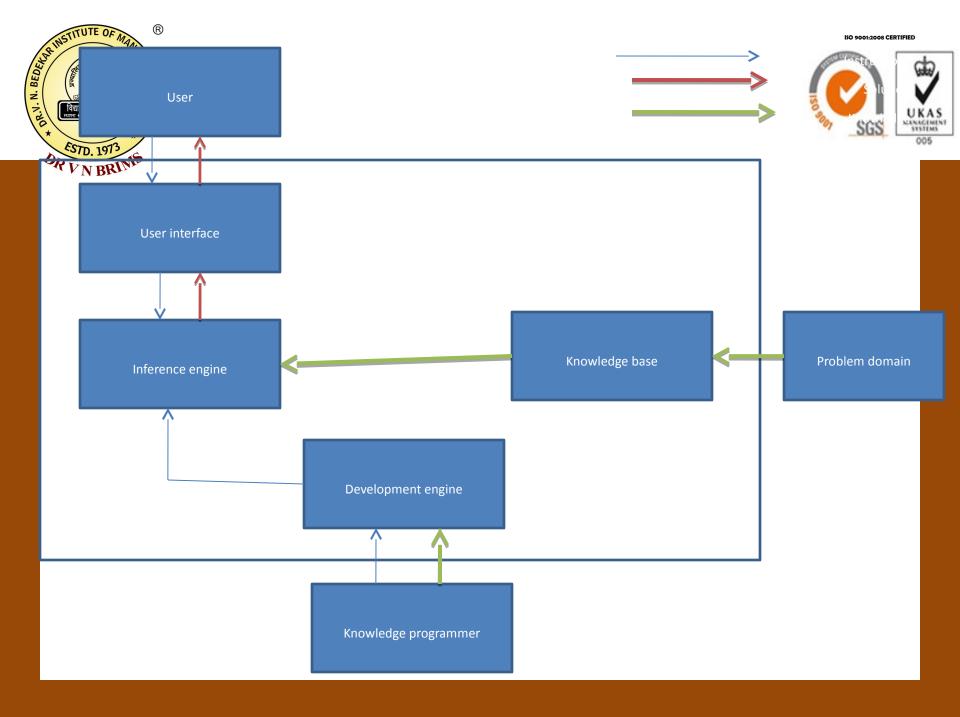


Userinterface

Knowledge base

• Inference engine

Development engine









- User interface
- Expert systemi/p and o/p
- Knowledge base : set of rules to arrive at conclusion. If then form
- Inference engine: Examine the rules of knowledge base and a rule is fired
- Development engine: for developing set of rules



Advantages of ES





- More alternatives
- Greater chances of making rational decisions
- Better decisions without having the expertise
- Decisions are based on rules rather than on personal whims which brings consistency
- Saves time



Limitations of ES



Limited to certain problems

Lack of human knowledge replication

Unsuitable to complex managerial problems

Costly affair



Functions of MIS



To improve Decision Making

To improve efficiency

To provide connectivity



Benefits



- Increase Productivity
- Enhance the quality of DM
- Improves communication and develops teamwork.
- Help in organizational transformation



Limitations



MIS designed in improper manner, does not serve management

• If users doesn't know how to use, MIS doesn't help

Not good when basic data is obsolete and outdated.



Problems in implementing



There will be resistance for major change in working.

Lack of organization culture

• The degree of employee involvement.



Management reports





To see whether activities are happening as per expectations

Gives clue or insight within the organization.



Types of reports





- Scheduled Reports: Daily, Weekly, Monthly
- On demand : generated on demand
- Exception reports : for control
- Predictive reports : for future planning
- Summary reports : Provide summarized info
- Regulatory and statutory reports: For submitting to authorities.



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



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