Quizlet

MIS Final

Terms in this set (71)

the digital firm	nearly all of the organizations significant business relationships with customers, suppliers, and employees are digitally enabled and mediated
business processes	collection of activities required to produce a product or service. (ex: develop new product, generating or fulfilling orders, hiring employees, etc)
business assets	intellectual property, core competencies, financial and human capital
Firms invest heavily in information systems to achieve SIX STRATEGIC BUSINESS OBJECTIVES	operational excellence new products, services and business model customer and supplier intimacy improved decision making competitive advantage survival
information	data shaped into meaningful form
data	stream of raw facts
metadata	data about data, set of data that describes and gives information about other data

concept of a system	set of components that work together (input > processing > output > feedback)
Businesses can be viewed as	a collection of processes, both functional and cross-functional. Process may be assets or liabilities.
Types of Information Systems	Transaction Processing Systems (TPS) Management Information Systems (MIS) Decision Support Systems (DSS) Executive Support Systems (ESS) (Data may be exchanged between systems)
transaction processing systems TPS	perform and record daily routine transactions necessary to conduct business (ex: sales order entry, shipping and receiving, payroll, call center system) Major source of data for other sysyems
management information systems MIS	provides pre-specified reports, answers to routine questions with predefined procedure for answering them, data from TPS, few analytical capabilities
DSS	serves middle management, supports non-routine decision making, often make use of external information as well as data from TPS/MIS, What If analysis
ESS	support senior management, address non-routine decision making, incorporate data about EXTERNAL events as well as summarized information from MIS/DSS/TPS Recipient of data from lower-level systems

entity	a person, place, thing, or event on which we store and maintain information
attribute	characteristics, or quality, describing entity
File organization	database > file > record > Field > Byte > Bit
problems with the traditional file environment	files maintained separately by different departments data redundancy data inconsistency program-data dependence lack of flexibility poor security lack of data sharing and availability
database	collection of data organized to serve many applications by centralizing data and controlling redundant data
DBMS	software allowing organizations to centralize data, manage them efficiently, and provide access interfaces b/w applications and physical data files separates logical and physical views of data solves problems of traditional file environment separates logical and physical views of data
logical view	presents data as they would be perceived by end users or business specialists
physical view	shows data are actually organized and structured on physical storage media

Relational DBMS	most prolific database model represent data as two dimensional tables called relations or FILES each table contains data on entity and attributes
primary key	field in table used for key fields
foreign key	primary key used in second table as look up field to identify records from original table
designing databases (conceptual and physical design)	must understand the relationships among the data, the type of data being maintained, how the data will be used, impacts to organization in order to manage data company-wide
conceptual (LOGICAL) design	describes how the data elements in the database are to be grouped. abstract model from business perspective (ex: what data should be contained with the SUPPLIER table?)
physical design	how database is arranged on direct-access storage devices
design process identifies	relationships among data elements, redundant database elements, redudant database elements most efficient way to group data elements to meet business requirements, needs of application programs

normalization	streamlining complex groupings of data to minimize redundant data elements and awkward many-to-many relationships the process of creating small, stable, yet flexible and adaptive data structures from complex groups of data
unnormalized relation	contains repeating groups.
datawarehouse	stores current and historical data from many core operational transaction systems consolidates and standardizes information to use across enterprise, but DATA CAN NOT BE ALTERED system will provide query, analysis, and reporting tools
data marts	subset of data warehouse summarized or highly focused portion of firm's data for use by specific population of users typically focuses on SINGLE SUBJECT or LINE OF BUSINESS
data mining	more discovery driven than OLAP finds hidden patterns, relationships in large databases and infers rules to predict future behavior (ex: finding pattern in customer data for one-to-one marketing campaigns or to identify profitable customers

types of info obtainable from data mining	associations: occurrences lined to single events sequence: events linked overtime classification: recognizes patterns of groups to items clustering: finds new groupings within data forecasting: uses existing values to forecast future values
predictive analysis	uses data mining techniques, historical data, and assumptions about future conditions to predict outcomes of events
text mining	extracts key elements from large unstructured data sets valuable for finding patterns and trends in data, enabling organizations to make better decisions
network	two or more connected computer
major components in a simple network	client computer server computer network interfaces connection medium network operating system hubs, switches, routers
routers	device used to route packets of data through different networks, ensuring that data sent gets to the correct address

client-server computing	distributed computing model clients linked through network controlled by network server computer server sets rules of communication for network and provides every client with an address so others can find it on the network has largely replaced centralized mainframe computing the internet: largest implementation of client/serer computing
packet switching	method of slicing digital messages into parcels, sending packets along different communication paths as they become available, and then reassembling packets at destination
TCP/IP	connectivity between computers enabled by protocols. common world wide standard that is basis for internet standard/common language for the world wide web
protocols	rules and procedures that govern transmission of info between two points
enterprise applications	ERP, SCM, CRM

enterprise systems	also called "enterprise resource planning ERP systems" suite of integrated software modules and a common central database collects data from many divisions of firm for use in nearly all of firm's internal business activities information entered in one process is immediately available for other processes
enterprise software	built around thousands of predefined business processes that reflect best practices
business value of enterprise systems	increase operational efficiency provide firm wide information to support decision making enable rapid responses to customer requests for information on products include analytical tools to evaluate overall organizational performance
supply chain	a network of organizations and business processes for procuring raw materials, transforming these materials into intermediate and finished products, and distributing the finished products to customers
LAN (local area network)	connects computers in one building or several buildings that are close in proximity
WAN (wide area network)	transcontinental or global
web 2.0	second generation services enables collaboration, sharing info, and creating new services online.

planning systems	enable the firm to model its existing supply chain, generate demand forecasts for products, and develop optimal sourcing and manufacturing plans
execution systems	manage the flow of products through distribution centers and warehouses to ensure that products are deliver to the right locations in the most efficient manner
customer relationship management systems (CRM)	focus on knowing the customer capture and integrate customer data from throughout the organization for the purposes of consolidation and analysis distribute customer info to various systems and customer TOUCH POINTS
components of customer relationship	service, sales, marketing
operational CRM	customer-facing applications (call center, customer service, and sales force automation)
analytical CRM	analyze customer data output from operational CRM applications based on data warehouses populated by operational CRM systems and customer touch points
customer lifetime value CLTV	based on the relationship between the revenue produced by specific customer, the expenses incurred in acquiring and servicing that customer and the expected relationship term.

churn rate	number of customers who stop using or purchasing products or servicesfrom a company. indicator of growth or decline of firms' customer base
enterprise applications: challenges	highly expensive technological changes business process changes organizational changes switching costs, dependence on software vendors data standardization, management, cleansing
enterprise applications: trends	move is to make applications more flexible, web enables, integrated with other systems enterprise suites open source and on demand solutions mobile compatible, web 2.0 capabilities complementary analytical products
e commerce unique features	ubiquity global reach universal standard richness interactivity information density personalization /customization social technology
ubiquity	the web is available anywhere/anytime
global reach	commerce across cultural and national boundaries
universal standards	technology standards enabled connectivity
richness	audio, video and text enhance marketing messages

interactivity	two way interaction, engaging consumers in dialogue
information density	increased amount and quality of info, greater price/cost transparency, enables price discrimination
personalization/customization	modification of messages and goods
social technology	promotes user content creation and distribution