

Business Process Management & IT

WHAT IS A PROCESS?

A process is defined as a sequence of events that uses inputs to produce outputs.

From a business perspective: It is a coordinated & standardized flow of activities performed by people or machines, which can movement functional or departmental boundaries to achieve a business objective & creates value for internal or external customers.

WHAT IS BUSINESS PROCESS?

Definition

Business process consists of a set of activities that are performed in coordination in an organizational & technical environment.

To manage business process:

1st task: Defining the steps & mapping the tasks involved in process.

2nd task: Performance measures should be established which creates a basis to improve the process.

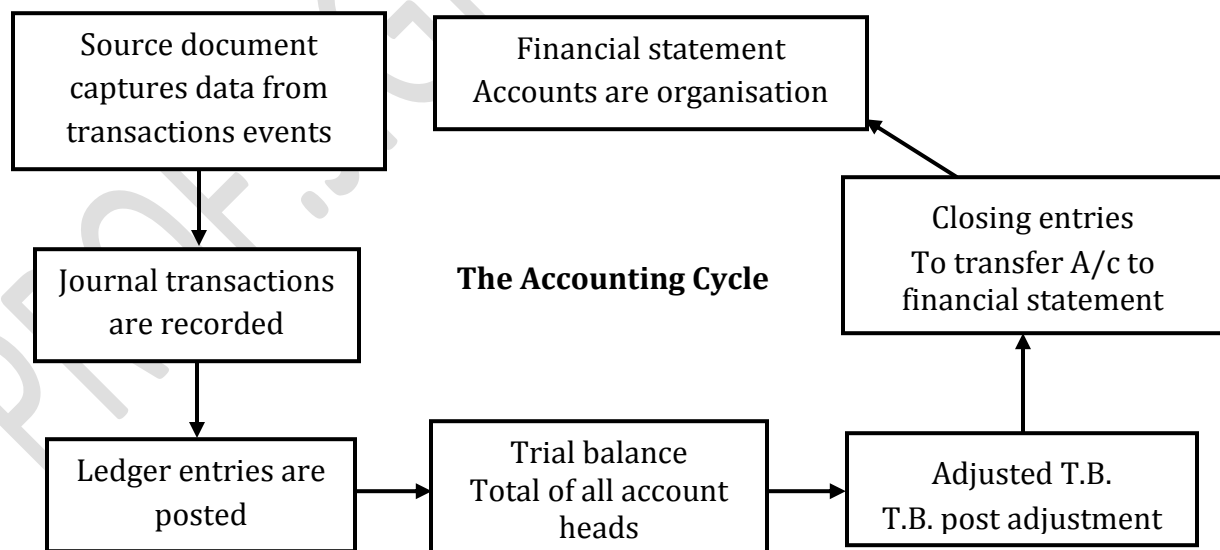
3rd task: Describe the organizational set up that enables the standardization to the process throughout the organisation.

BUSINESS PROCESSES

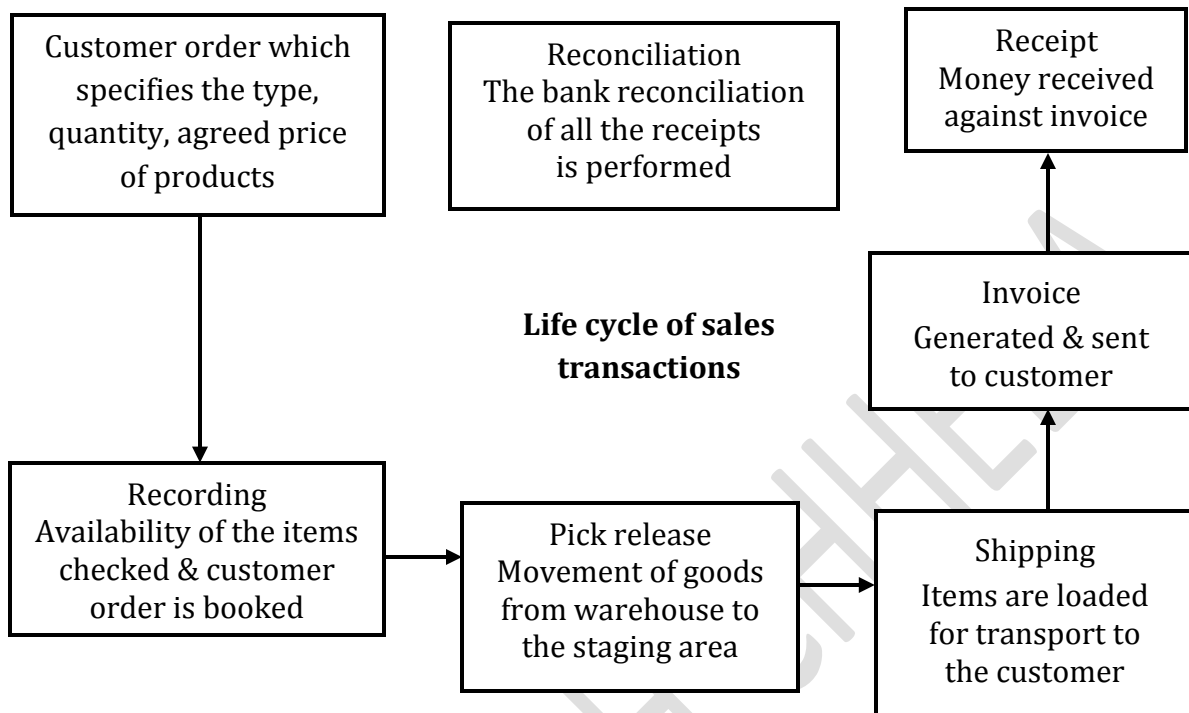
Business process is a prescribed sequence of work steps performed in order to produce a desired result for the organisation.

A business process is initiated by a particular kind of event has a well-defined beginning & end.

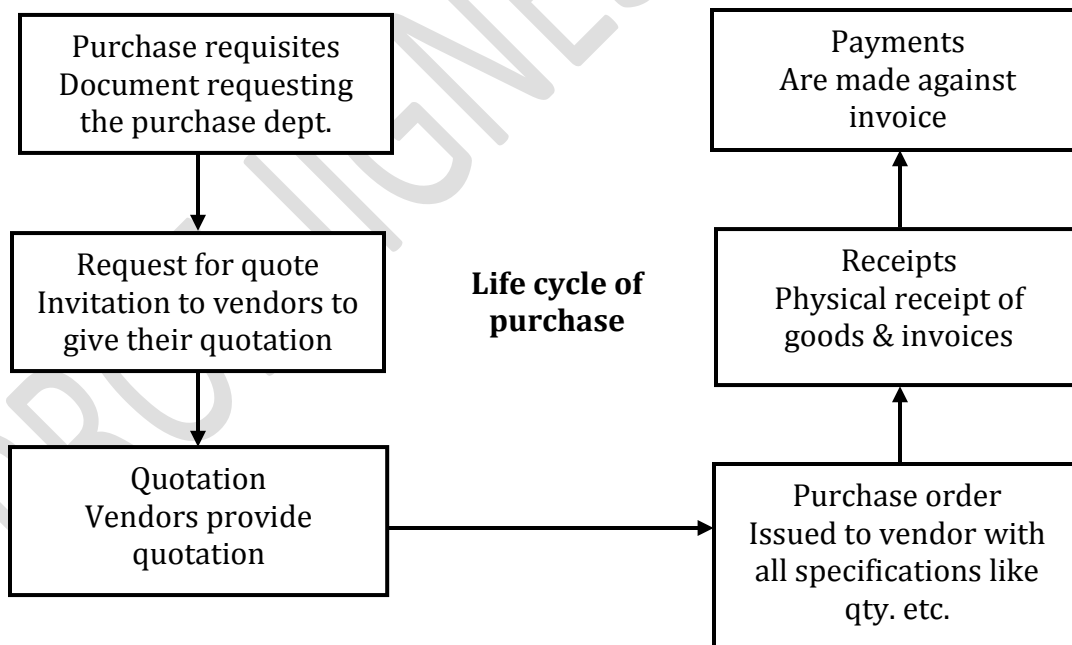
1) Accounting:



2) Sales: Life cycle of sales transactions

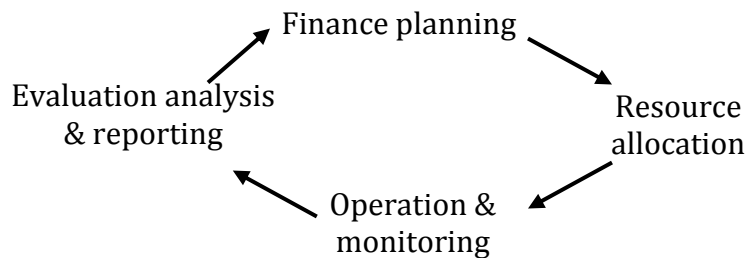


3) Purchases



4) Finances

One of the most important & limited resources.

**BUSINESS PROCESS REENGINEERING**

“BPR is the fundamental rethinking & redesign of processes to achieve dramatic improvement in critical, contemporary measures of performance such as cost, quality, service & speed”.

Dramatic Achievement

Means to achieve 80% or 90% reduction in cost, delivery time etc.

Radical Redesign

Reinventing & note enhancing or improving. It is a “clean slate approach”. New system is to be redesigned a fresh.

Fundamental Rethinking

Asking a question “why do you do what you do”. Activity should be done which adds values for customers.

BUSINESS PROCESS MANAGEMENT**Definition**

“The achievement of an organisation’s objectives through the improvement, management & control of essential business processes”.

Achievement : Realizing the strategic objectives as outlined.

Organisation: Enterprise or parts of an enterprise.

Objectives: Range from the strategic goals of the organisation through to the individual process goals.

Improvement: More efficient & effective.

Management: Organising components & subcomponents like people, skills etc.

Control: Plan-do-check-act.

Essential: To improve those processes which improves value.

Business: Impact on the business by delivery benefits.

Processes: Provide some who cares with what they expect to receive.

BPM PRINCIPLES & PRACTICES

- 1) Processes are assets that create value for customers.
- 2) Process produces consistent value to customers.
- 3) Continuous improvement of processes.

KEY FACTORS TO CONSIDER IN IMPLEMENTING BPM

Factors	Key considerations
Scope	A single process, a department, the entire co.
Goals	Process understanding, improvement, etc.
Methods to be used	Six, sigma, BPM life cycle, etc.
Skills required	Consultants, employees, etc.
Tools to be used	White boards, sticky notes, softwares for mapping, etc.
Investments to make	Training, tools, time
Sponsorship/Buying needed	Executive level, employee level, etc.

NEED FOR A BPM IMPLEMENTATION

- 1) For long term future positioning of the business.
- 2) For short term cost effectiveness.
- 3) Initiate improved process.
- 4) Introduce knowledge of product & customer profitability.
- 5) Re-engineer the business radically for future competitive differentiation.
- 6) Address the cultural barriers.
- 7) Introduce leadership & a role for managers.

BPM PRIMARY BENEFIT OF USING TECHNOLOGY FOR BPM ARE:

- i) Effectiveness gains for enterprises.
- ii) Amalgamation of applications.
- iii) Creation of basic operational value proposition with less effort & higher quality.

BPM'S PRACTICES (STEPS)**1) Process-oriented organizational structure:**

Process produce the values that justify on organisation existence.

(a) Process organisation:

Each process unit would contain various functions that support the process.

(b) Case management organisation:

Employees would still report to functional head. In addition they would report to case managers.

(c) Horizontal process management organisation:

Process owners are responsible for core processes.

2) Appoint process owners:

The process owner designs, deploys & improves the process & is responsible for best to perform functions associated with the process.

3) Top down commitment, Bottom up execution:

Top down → commitment e.g. Top management

Bottom up → execution e.g. Employees

4) Use information technology to manage processes:

Once implemented, allows organisation to manage, monitor, control & analyze process real time.

5) Collaborate with business partners:

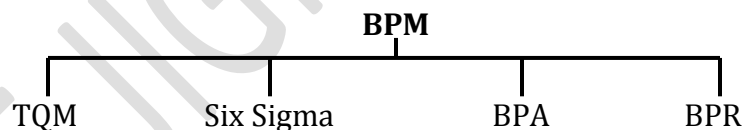
To extend process management outside the enterprise that involves sharing information with business partners (where we outsource our work that place should also use same BPM as ours to maintain quality).

6) Continuous learning & process improvement.**7) Align employee reward to process performance.****8) Utilize BPR, TQM & other process improvement tools.****BUSINESS PROCESS MANAGEMENT LIFE CYCLE**

An Enterprise Resource Planning (ERP) application divides BPM into following phases:

1) Analyse phase: Of the current environment & current process & problem.**2) Design phase:** To meet the identified needs etc.**3) Implementation phase:** Involves project preparations, realization, blue print, etc.**4) Run & monitor phase:** Deployment & BP monitoring.**5) Optimize:** Cont. improvement.**BUSINESS PROCESS MANAGEMENT****Objective:**

To evaluate the efficiency & usefulness of business processes for reducing costs & ensure value creation.

**1) Six Sigma:**

Improve the quality of process outputs by identifying & removing the causes of defects & minimizing variability in manufacturing & business processes.

It follows a life cycle having phases:

i) Define: Requirement are gathered. Measurement (CTQ) critical to quality are identified.



ii) Measure: Determined & variables that affect these output measures are identified.



iii) Analyze: To determine root cause of variation.



iv) Improve: CBA should be performed.



v) Control: To validate expected results.

2) Total Quantity Management (TQM)

Continuously improve its ability to deliver high quality products & services to customers.

TQM process are divided into 4 sequential categories: Plan Do Check Act

i) Plan: Define the problem & ascertain root of problem.



ii) Do: Develop & implement solution.



iii) Check: Confirm the results through before & after data comparison.



iv) Act: Document their result, make recommendations for the problem to be addressed in the next PDCA cycle.

CHALLENGES IN IMPLEMENTING BPA

- 1) The no. of interfaces with the customers is growing (e.g. phone, fax, etc.)
- 2) The product, service & price options have increased the complexity of the business.
- 3) Difficulty in co-ordination between 'build & buy' i.e. customized software & readymade softwares.
- 4) Budgets are being cut i.e. High budget.

VALUE CHAIN AUTOMATION

Value chain means a set of activities when we complete it will add value.

Six business functions of the value chain are as follows:

- 1) Research & development
- 2) Design of products, services or processes
- 3) Production
- 4) Marketing & sales
- 5) Distribution
- 6) Customer service

BPA RISKS

- 1) Risk to jobs: Employees are replaced by technology.
- 2) False sense of security: Automating poor processes will not gain better business practices.

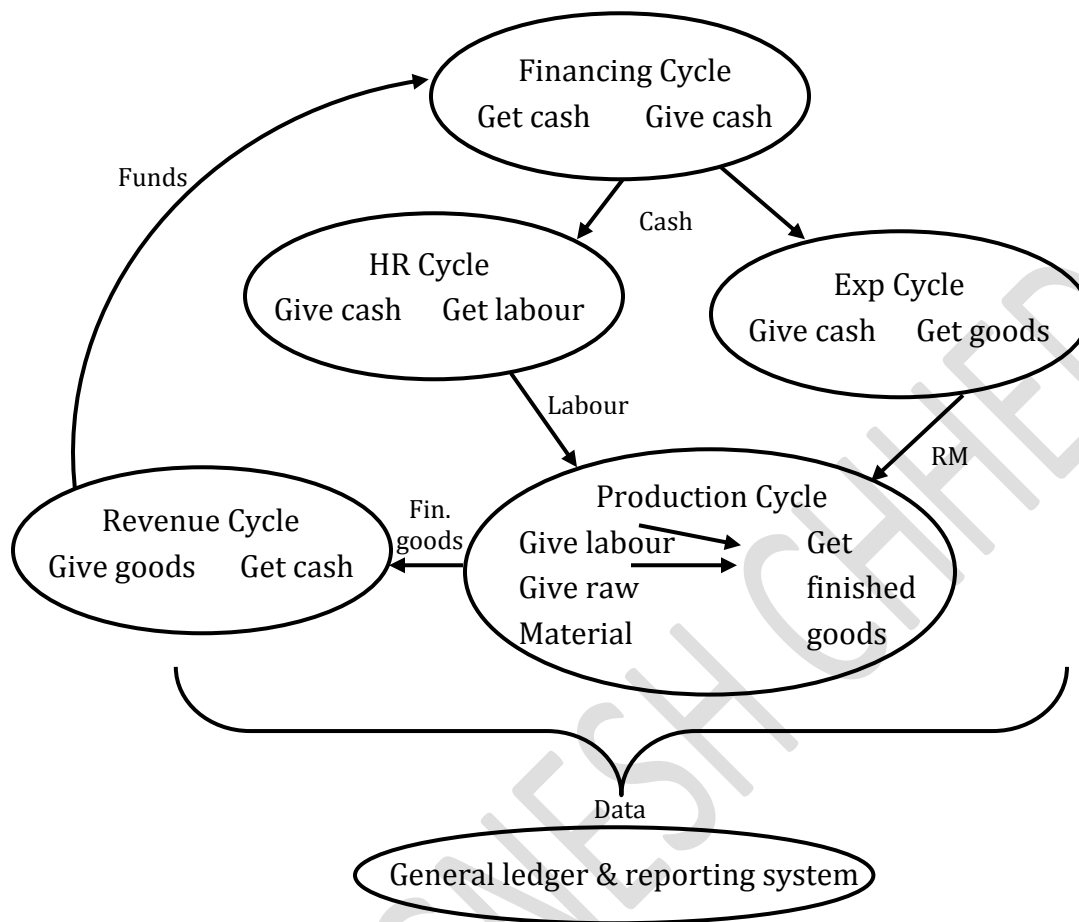
ACCOUNTING SYSTEMS AUTOMATION (AIS)

Definition

A system of collection, storage & processing of financial & accounting data that is used by decision makers.

Basic functions of an Accounting Info System (AIS):

- 1) Collect & store data: From source documents.
- 2) Record transaction: Into journals. Useful for decision making.
- 3) Safeguarding organizational assets: Documentation of all business activities & an effective segregation of duties.

PROCESSING CYCLES OF AN ACCOUNTS BPM

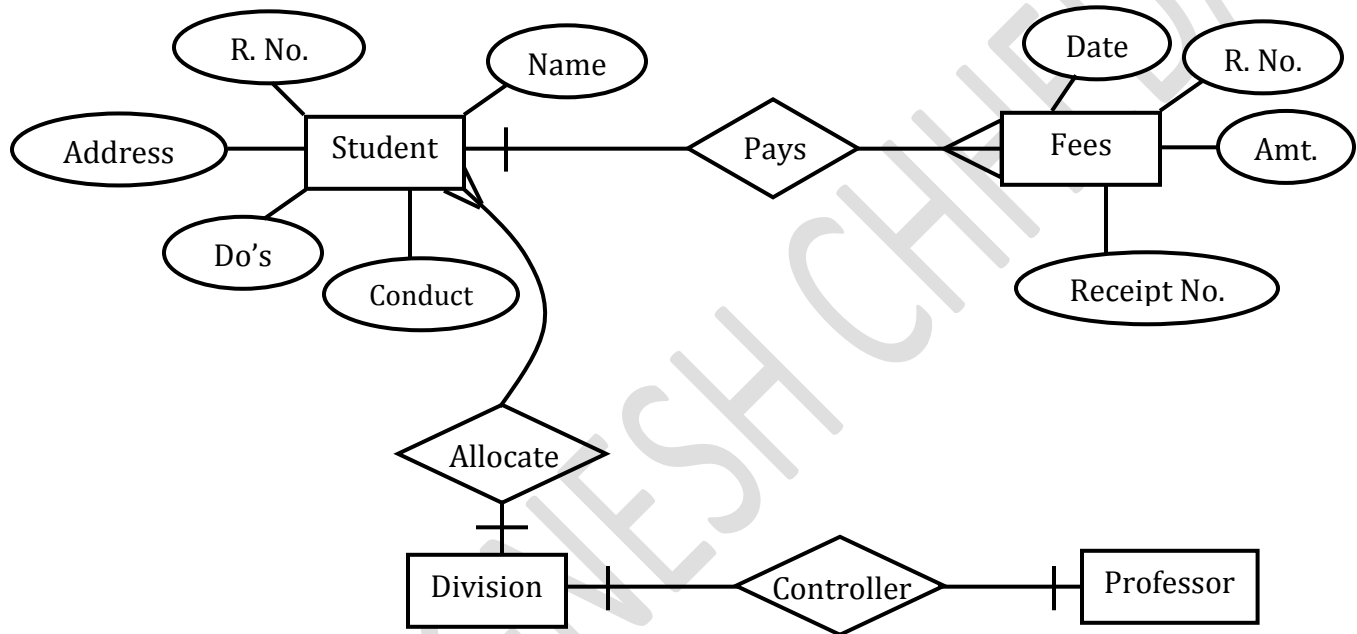
- 1) Financing cycle: Records major economic event.
- 2) Revenue cycle: Includes sales, A/c receivable, etc.
- 3) Expenditure cycle: Purchases, A/c payable, etc.
- 4) Production cycle
- 5) HR cycle

BENEFITS OF BPM

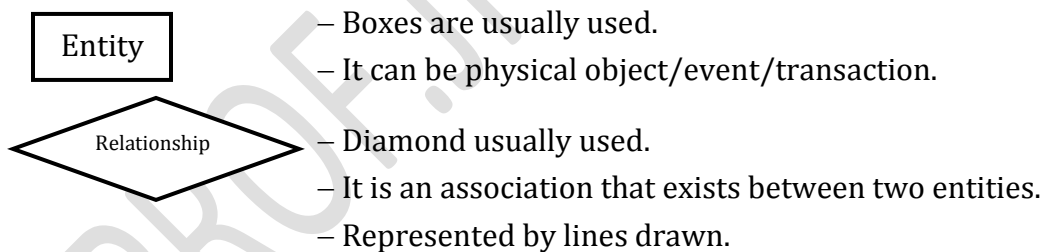
Automating repetitive business processes reduces the manual operational costs and helps employees to concentrate on activities that are important to the success of business.	BPMS works by 'loosely copying' with a company's existing applications less dependency on each other.	Operational savings lead to reduce expenses.	Reduction in the administration involved in compliance & ISO activities. Manages compliance of law as part of their everyday business activities.	Freeing up of employee time. It reduces hard cost (cash) & soft copy cost also.
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BUSINESS RISK OF FAILURE OF IT (BPMS)

- 1) Limited option for customization of the BPM software is required.
- 2) Failure to identify future business needs.
- 3) Technological obsolescence.
- 4) Software failure to meet business needs.
- 5) Resources not available when desirable.
- 6) Deficient project management.
- 7) Breakdown in gap analysis.

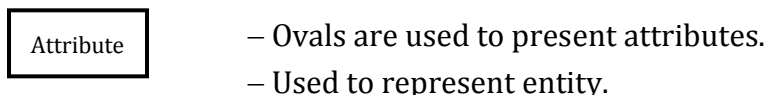
ENTITY RELATIONSHIP DIAGRAMS**Definition**

ER diagram is a graphical representation of entities & relationship between entities.



Various types of relationships.

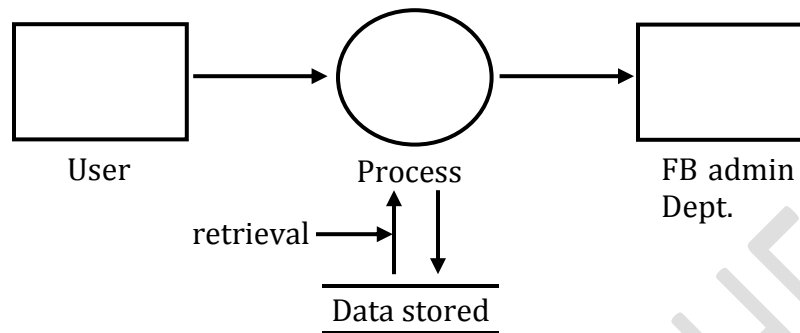
- (i) 1 to 1 (1:1) : Single parent record to single child record.
- (ii) One to many relationships (1:N): Single parent to 2 or more child record.
- (iii) Many to one relationships (M:1): 2 or more parent records to a single child record.
- (iv) Many to many relationships (M:N): Two or more parent records to two or more child records.



DATA FLOW DIAGRAMS

Is a graphical representation of the flow of data through an information system.

A 'DFD' illustrates technical or business processes with the help of the external data stored, the data flowing from a process to another & the results.

**Four major DFD components symbols:****1) Entity:**

- An entity is the source or destination of data.
- It provides data to the system or receive data from it.

2) Process:

- It includes manipulation, transforms data, performing computation, making decisions of data.
- It receives some input & generates some output.

3) Data store:

A data store is where a process stores data between processes for later retrieval by that same process or another one.

4) Data flow:

- Is the movement of data between the entity, the process & the data store.
- Represented by arrow.
- Arrow is annotated with the data name.

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