BUSINESS SYSTEM PLANNING

BUSINESS SYSTEM PLANNING

- 1970s IBM initial works on BSP, it was previously for internal use only.
- 1981, IBM issued and made available to customers.
- This method became an important tool for many organizations.

BUSINESS SYSTEM PLANNING

Business System Planning is a method for

- analyzing,
- defining and
- designing

an information architecture of an organization.

BUSINESS SYSTEM PLANNING

- It is a very complex method dealing with data, processes, strategies, aims and organizational departments which are interconnected.

BUSINESS SYSTEM PLANNING

BSP brings new approach to design an information architecture and its goals are to:

- understand the issues and opportunities with the current applications and technical architecture
- develop a future state and migration path for the technology that supports the enterprise
- provide business executives with a direction and decision making framework for IT capital expenditures
- provide information system (IS) with a blueprint for development

BUSINESS SYSTEM PLANNING

- The result of a BSP project is an actionable roadmap that aligns technology investments to business strategy.

BSP STEPS

BSP procedure contains 15 steps which are classified into 3 main sections according to their functions.

1. Preparation
2. Analytical
3. Final

BSP STEPS

1 Preparation

1. Obtain authorization for the study
2. Study preparation
3. Study beginning

BSP STEPS

2 Analytical

1. Define the business strategy
2. Define the business processes
3. Define the data classes
4. Annalise current information support
5. Discuss the analysis results with management
6. Issue the analysis results

BSP STEPS

3 Final

1. Define the information architecture
2. Establish priorities for IS development
3. Verify the impact of study to IS managing
4. Next procedure proposal
5. Results presentation
6. Next procedure

1.PREPARATION

1. Obtain authorization for the study

The very first step of BSP is to obtain authorization for the study from management or a department interested in this study.

A number of staff roles need to be agreed upon with management

1.PREPARATION

1. Obtain authorization for the study

- The roles are following:
  - **Management member (Director)**
    - operates as a sponsor or a team leader
    - Verifies, approves final results of the study
  - **Sponsor**
    - provides with the financial support for the study
  - **Team leader**
    - chooses and leads the team members (4-7 people)
    - coordinates activities
    - guarantees early documentation
    - has 8 weeks to carry out the study (usually more)
    - presents final results to the management

1.PREPARATION

1. Obtain authorization for the study

The roles are following:

- Team member
  - is usually a leader of certain organization department
  - analyses and determines information needs of organization
  - recommends future content of IS
  - presents final results to the management
- Secretary
  - guarantees documentation of the study
  - is also an assistant of the team leader

1.PREPARATION

2. Study Preparation

The team leader is responsible for this part and its goal is to:

- ☐ set time plan
- ☐ get all the necessary documents
- ☐ choose managers for interview
- ☐ ensure meeting and interview space
- ☐ inform team members about:
  - fundamental functions of the organization
  - data processing level of the organization

2. Study Preparation

Final product of this step:

A Leading study book

The book contains:

- all the necessary information mentioned above,
- concrete study schedule, documents relating to IT, diagrams, etc.

1.PREPARATION

3. Study Beginning

It's Initiated with a Kick-off meeting where:

- sponsor presents
  - the main purpose of the study
  - expected results of the study
- team leader presents
  - results of previous part
  - plan of the study
- IT manager presents
  - the present state of IS
  - role of IS within the organization
  - After this meeting the preparation part of the project is finished and we can proceed to the analytical part of the study.

2.ANLYTICAL

1. Define the business strategy

- ☐Adaptation to the customer's desires
- ☐Centrally planned reservations, stock, customer's payments
- ☐Check-in improvement
- ☐Material movement improvement
- ☐Noise reduction
- ☐Paperless processes
- ☐Product portfolio expansion
- ☐Presentation improvement
- ☐Advertising improvement
- ☐Reduction of commitment losses
- ☐Reduction of material costs
- ☐Relations with business partners improvement
- ☐Stock management improvement
- ☐Simplification customer's order cycle
- ☐Transport coordination

2.ANLYTICAL

1. Define the business strategy

Team is responsible for creating the main processes from these strategic targets.

The final output = **Strategy /OU matrix**.

- **Strategy** = particular strategic targets mentioned above.
- **Organizational Units (OU)** = particular departments of the organization (i.e. production, business, marketing, etc.). Every single department is considered to have a responsibility for each strategic target.
- a cross [x]= primary responsibility.
- a slash [/] = partial responsibility.

2.ANLYTICAL

1. Define the business strategy

Strategy /OU	Technical	Administration	Operational	Transport	Marketing	IT dept
Paperless processes	X	X	X	X	X	X
Transport coordination	X	X	X	X		
Noise Reduction	X	/	X			
Check-in improvement			X	X		
New Customers				X	X	
Presentation improvement						X

2.ANLYTICAL

2. Define the Business Processes

There are several business processes (activities) within every organization.

Choose the most relevant ones which are profitable for the organization, and select the department which is responsible for the particular process.

2.ANLYTICAL

2. Define the Business Processes

- ☐Contacts creation
- ☐Invoicing
- ☐Monitoring
- ☐Plane coordination
- ☐Plane service
- ☐Registration of a new customer
- ☐Service reservation
- ☐Employee training
- ☐Transfer
- ☐Car rental

2.ANLYTICAL

2. Define the Business Processes

The final output of this step are two matrices:

1. Processes / OU
2. Processes / Strategy.

2.ANLYTICAL

2. Define the Business Processes

Process / OU	Operational	Technical	Administration	Transport	IT Dept.	Marketing
Training	X	X	X	X	X	X
Monitoring	X	X	X	X		
Plane Coordination	X	X				
Plane Service	/	X			X	
Reservation	X			X	X	

2.ANLYTICAL

2. Define the Business Processes

PROCES/ STRATEGY	Paperless Process	Transport Coordination	Check-in Improvement	Noise Reduction	New Customers
Training	X	X	X		X
Plane Coordination	X	X	X	X	
Plane Service	X	X		X	
Reservation	X	X			
Monitoring	X	/	X		

2.ANLYTICAL

3. Define Data Classes

It is necessary to create data classes (DC, Entities) which represent data classes of the particular organizational units. There are usually about 30-60 data classes depending on the size of the organization.

Future IS is about to use databases based on these data classes.

2.ANLYTICAL

3. Define Data Classes

There are several examples of data classes:

- Branch
- Customer
- Employee
- Invoice
- Load
- Plane
- Purchase order
- Service Catalog
- Supplier
- Vehicle

2.ANLYTICAL

3. Define Data Classes

The final output of this step are three matrices:

1. Data classes / Processes,
2. Data classes / Strategy and
3. Data classes / OU.

2.ANLYTICAL

3. Define Data Classes

DC / PROCESS	Monitoring	Training	Plane Coordination	Plane Service	Reservation
Plane			X	X	
Employee	/	X		/	
Customer					X
Load	X				
Supplier	/	/			X

2.ANLYTICAL

3. Define Data Classes

DC / STRATEGY	Transport Coordination	Paperless Process	Noise Reduction	New Customers	Check-in Improvement
Customer	X	X		X	
Supplier	/	X			
Plane	/		X		
Load		X		/	
Employee		/			/

2.ANLYTICAL

3. Define Data Classes

DC / OU	Operational	IT Dept.	Administration	Transport	Marketing
Plane	X				
Customer				X	X
Load				X	/
Supplier	/				
Employee	/	/	/	/	/

2.ANLYTICAL

4. Analysis of current information support

The Aim:

To check all the applications used by organization which has to consider information support of each application and think of its importance.

The Result = Informational cross which contains some of the matrices mentioned above:

- Processes (Activities) / OU (functions)
- Data classes (Entities) / OU.

2.ANLYTICAL

4. Analysis of current information support

- During this step are also defined information subsystems which plays an important role in the other two matrices called IS / Entities and IS / Activities.
- There are now four matrices which are used to create the informational cross.
- Its main aim is to catch the most important dependencies and responsibilities within the organization and can also lead to appropriate elimination of redundancies.

2.ANLYTICAL

5. Discuss the analysis results with management

Team debates on up to now achieved results with the management.

The main purpose of this step is to:

- consider all the matrices and informational cross
- confirm presumptions relatind to processes and datas
- fill in the missing information
- reveal deficiencies within the organization
- establish future priorities

The final output of this part strongly depends on the quality of prepared question.

2.ANLYTICAL

6. Issue the analysis results

- All created documents are gathered during the preceding analysis.
- These documents serve as a base for the future information architecture.
- The organization classifies and dissects all the came out problems.
- There is prepared a list of causes and their effects for each problem and all the problems are put into the relation with the future IS.

3.FINAL

1. Define the information architecture

The main goal:

- To define the information architecture of the organization.
- It is necessary to connect all the information subsystems to the logical complex.
- There is usually used the matrix Processes / Data classes in order to find appropriate subsystems.

3.FINAL

1. Define the inform. architecture

Organization then generally:

- reorder processes according to the product or service life cycle
- reorder data classes to get the squares "creates" along the main diagonal
- eventually aggregates processes and data classes into logical groups which then create particular information subsystems

3.FINAL

2. Establish priorities for IS develop.

- Which IS to implement first?
- There are criteria (i.e. costs, development time, etc.) which should lead to establish the right order of system implementation.

3.FINAL

2. Establish priorities for IS develop.

- There are always subsystems with the highest priority which are about to be analyzed more deeply.
- The information are presented to the sponsor who can decide which information subsystems will be developed and which not.

3.FINAL

3. Verify the impact of study to IS managing

- There should be carried out a study about IS from the view of their planning and managing.
- Once the organization has finished the work on processes and data classes it should explore the main functions of the system and their goals.
- There can arise unexpected difficulties which are about to be eliminated.

3.FINAL

3. Verify the impact of study to IS managing

The final output of this step are:

* a list of requested changes in particular departments
* a calculation of costs necessary to re/built the IS

3.FINAL

4. Next procedure proposal

There are final recommendations and realization plan for the organization during this step. It considers information architecture, IS managing and the sequence of information subsystems development.

Important parts of the plan procedure are expected costs, profits, a schedule for future activities.

3.FINAL

5. Results presentation

This step contains the final agreement of all interested parties (team, management, sponsor). All the interested parties should agree on the future actions.

3.FINAL

6. Next procedure

This is the final part of BSP. The organization should establish all the particular responsibilities during the project implementation. There is usually a control commission which ensures the consistency across the IS.

3.FINAL

6. Next procedure

BSP, in addition to its value for IS planning, also made two other important intellectual contributions:

* It helped introduce the process view of the firm. The popular Business Process Re-engineering of the 1990s was built on this concept.

* It pointed out the need to de-couple data from the applications that use these data (i.e. data independence). This supported the database approach