

Business Process — CIS 211 — Duke Hutchings

What is BPA, BPI, BPR, & BPM?

What does BP* have to do with MIS?

Office: 314 Duke Bldg

Office Hours

3:30 — 5:00 Mondays and Wednesdays

8:00 — 9:30 Tuesdays

1:30 — 3:00 Thursdays

appointments always welcome

Acknowledgement

The content of the following slides is based on
Business Plug-in B2 of

Business Driven Technology (3rd edition)

by P. Baltzan, A. Phillips, & S. Haag

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Web site: <http://www.mhhe.com/bdt3e/>

But first...

Common flowchart drawing mistakes

The diagram is as important as the method used to create it

Why create flowcharts? (properties of the **creation method)**

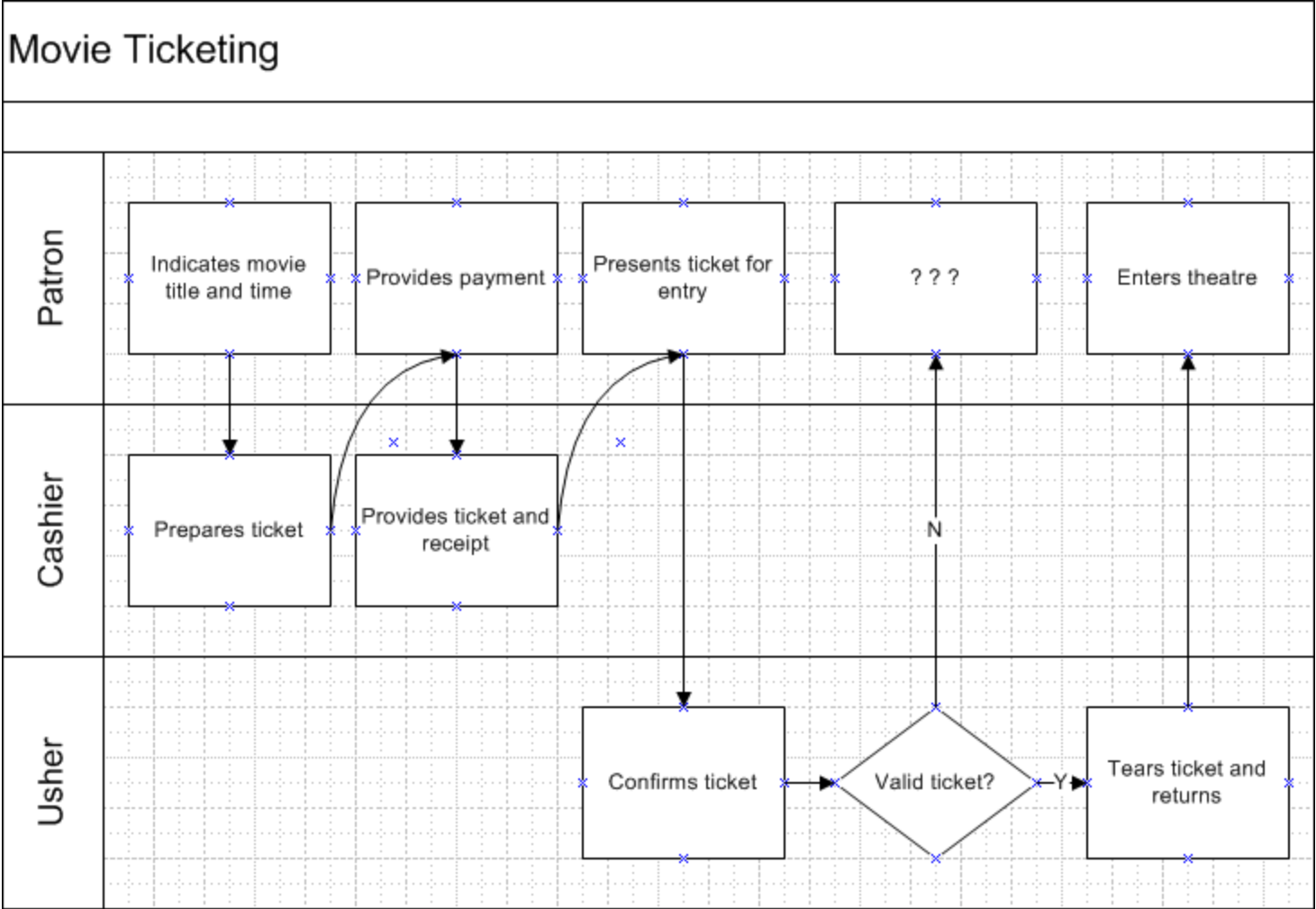
Expose detail in a gradual manner; sub-charts are OK

Allow for both concision and accuracy

Promote a common, consistent vocabulary

Allow for a better understanding of “interfaces”

Interfaces & Another Flowcharting Method



Best Practice

Business Process Model and Flowchart are synonyms

(G5) Why is it important to build a cross-functional team to create an *as-is* business process model?

Attributes of note in flowchart creation

often best accomplished in cross-functional teams

often best to create “as-is” and “to-be” diagrams

Core Idea of Business Process Analysis

Visualize — gain insight into business practice

Document — allow for truthful, helpful visualization

Investigate — allow for detailed, accurate documentation

Identify or speculate — allow for worthwhile investigation

Business Process Analysis — understanding what you do

BPI — Business Process Improvement — becoming better at it

BPR — Business Process Reengineering — changing it altogether

Processes Defined

- (1) standardized set of activities to accomplish a task
- (2) activities that transform a set of inputs into a set of outputs

Idea: a business is nothing more than a set of processes
(which can be tailored to be effective or efficient)

What properties of a diagram indicate effectiveness?

What properties of a diagram indicate efficiency?

Processes are IT-Agnostic

Examples of processes that do not involve IT or ISs?

Given that processes do not have to involve IT or ISs, then what is the relationship between MIS and BPA?

Process Considerations

Can be cross-departmental (“cross-functional”)

Can be cross-organizational (customer-facing vs. business-facing)

(G3) Identify three customer-facing processes in which college or university engages (i.e., student-facing processes) that involve information systems in some way

BPA: document and model processes to promote full understanding

Discussion

(G1) Consider the video rental process at Blockbuster, Hollywood Video, or Family Video (that we described and depicted on Thursday). What data is likely collected during this process? What other data could be collected to examine whether the process should be improved?

(G2) Examine the list of processes in Figure B2.1. Identify three processes that are poorly labeled (remember, processes are actions, not objects) and provide a better label for the process

BPA — Business Process Analysis

Why identify, measure, document, and visualize processes?

Determine bottlenecks

Identify duplicated process pieces

Identify smooth-running processes

Identify time-wasting activities

Determine percentage of manual vs. automatic behaviors

BPI vs. BPR

(G4) In your own words, characterize the difference between **business process improvement** and **business process re-engineering**

BPI vs. BPR

BPI: improving current operations

BPR: altering operations to gain improvement (usu. through **projects**)

Both involve BPA (though BPR uses it much less than BPI)

BPI — Continual Process Improvement Model

- (1) Determine existing process
- (2) Determine metrics
- (3) Execute process (while measuring)
- (4) Analyze data
- (5) Update process, repeat

Beware the **Hawthorne Effect**

BPI vs. BPA

Why identify, measure, document, and visualize processes? (BPA)

- Determine bottlenecks
- Identify duplication
- Identify time-wasting
- Determine manual activity

What can you do with information gained from BPA? A: BPI

- Remove bottlenecks
- Eliminate duplication
- Alter/Eliminate time-wasting
- Automate manual activity

Don't change a small-impact activity when a bigger problem exists
BPI actions are typically **small** or **incremental** changes

Additional BPI examples

Change sub-processes of approval, inspection, or review (WMS)

Transform sequential processes into parallel processes (WMS)

Shift from push-based to pull-based information drivers (SCM)

Identify likely candidates for outsourcing

BPI vs. BPR

BPI: improving current operations

BPR: altering operations to gain improvement (usu. through **projects**)

Both involve BPA (though BPR uses it much less than BPI)

BPR Model (modified DoD “best practices” model)

- (1) Determine functional objectives
- (2) Suggest and analyze alternative approaches
- (3) Develop detailed action plan
scope, time, & cost
- (4) Execute plan and control changes

Acquire sponsor sign-off during steps 1, 2, 3, 4

Note: this is a very generic portfolio & project management model

When to use BPR?

When process are “broken beyond repair”

When processes can feasibly be changed (consider **buy-in**)

When impact of process change will be significant

When savings will be visible (short-term ROI or near-term breakeven)

BPI vs. BPR

BPI

Gradual improvement

Lower “internal” risk

Higher “external” risk

Harder to use new IT ideas

BPR

Radical change

Higher “internal” risk

Lower “external” risk

Easier to incorporate new IT ideas

BPM — “wave of the future?”

Use IT and IS to facilitate process analysis and modification

Shares traits with ERP, WMS, and SCM

Unique attribute: exposure & modifiability of rules

Shifts power from IT to rest of organization

Moves IT out of “support” role into “active” role

Requires specific management structure and organizational culture

Discussion

What is the homework assignment?

BPA?

BPI?

BPR?

BPM?

Assignments — CIS 211 — Duke Hutchings

Homework Exercise #6/#7

Guided Reading Exercise #9

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