The Top 10 Mistakes Business Analysts Make in Capturing Business Rules

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Executive Director, BBC 2012

Reference:
Business Rule Concepts (3rd Edition),
Ronald G. Ross, 2009, BRSolutions.com
Ms. Lam is a world-renowned expert on business project management, having managed numerous projects that focus on the large-scale capture, analysis and management of business rules. She advises senior management of large companies on organizational issues and on business solutions to business problems. She has extensive experience in related areas, including BPM, structured business strategy, and managing and implementing information systems.

Ms. Lam is most recognized for her ability to identify the source of business issues, and for her effectiveness in developing pragmatic approaches to resolve them. She has gained a world-class reputation for fostering positive professional relationships with principals and support staff in projects. Ms. Lam graduated from the University of British Columbia with a B.S. in Computer Science.
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assume everyone knows what a business rule is

mistake #1
Is this a business rule?

Provide a feature to handle electronic funds transfer.

mistake #1: assume everyone knows what a business rule is
Is this a business rule?

Provide a feature to handle electronic funds transfer.

... requirement
Is this a business rule?

Customer provides account id. System displays account.
Is this a business rule?

Customer provides account id. System displays account.

... use case statement
Is this a business rule?

If the overdrawn flag is set to ‘yes’, reject transaction.
Is this a business rule?

If the overdrawn flag is set to ‘yes’, reject transaction.

... system if/then statement
An attendee with a cell phone that rings during my session must buy me a new outfit.

- Any attendee?
- Buzz loudly?
- Blouse?
- Skirt?
- Dress?
- Shoes?
- Accessories?
- Belt?
- Scarf?
- Jewelry?

Mistake #1: Assume everyone knows what a business rule is
An attendee with a cell phone that rings during a business rules session must buy the instructor a new outfit.

An new outfit must include all the following:

- A dress
- A pair of matching shoes
- Matching accessories

A pair of shoes must be considered matching if all the following are true:

...
Customer places order.

A customer must not place more than three rush orders charged to its credit account.

A customer with preferred status should have its orders filled immediately.

A customer’s annual order volume must be computed as total sales closed during the company’s fiscal year.

A customer must be considered “preferred” if the customer places more than five orders over $1,000.

A customer that does not place any order for 36 consecutive months must be automatically archived.

what business rules is about
business rules enable the business to make better, more consistent decisions in day-to-day business activity
decision:

What should we charge for shipping an order?

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weight

provide criteria for making operational business decisions ... consistently

mistake #1: assume everyone knows what a business rule is
business rule: criterion used in business operations to

• guide behavior
• shape judgments
• make decisions
Provide a feature to handle electronic funds transfer.

Every employee expense reimbursement must be processed through electronic funds transfer.

mistake #1: assume everyone knows what a business rule is
mistake #1: assume everyone knows what a business rule is

use case statement
Customer provides account id.
System displays account.

business rule
A customer must have a valid account.
business rules

1. An account must not be overdrawn.

2. An account may be considered overdrawn only if cash withdrawal is greater than the current balance of the account.
treat business rules as simply an IT project

Oracle Policy Automation: The New Paradigm

mistake #2
mistake #2: treat business rules as simply an IT project

business rules are about putting the business in charge
“... at Delta Dental, we put the business rules entirely in the hands of business people, which meant that they author the rules, they test the rules, they regression-test the rules, they analyze the rules, they deploy the rules ...”.

Mukundan Agaram, Enterprise Architect, Delta Dental of Michigan
Excerpted from ... Business Rules Forum 2009 Practitioners’ Panel
the business needs to ...
- make corrections in business strategies and tactics.
- roll out new or modified products and services.
- implement new customer and supplier agreements.
- comply with ever-changing regulatory statutes.

the business rules are ...
- embedded in application code.
- inaccessible to the business workers.
- requires IT involvement at every turn.

mistake #2: treat business rules as simply an IT project
mistake #2: treat business rules as simply an IT project

re-empowered workers

IT as business enabler

business workers
mistake #2: treat business rules as simply an IT project

- Business taking control
  ... system deployment with minimal IT impact

- Business knowing and managing its rules
  ... both automated and non-automated

- Provide better guidance
  ... by constraining or guiding behavior

- Make better decisions

the benefit is on the business side
A new approach to rules
Oracle Policy Automation transforms policy documents

mistake #2: treat business rules as simply an IT project

5.6 Community care

(1) The person is eligible to receive community care only if the person:

(a) is assessed as having complex care needs, and

(b) would be assessed, if the person applied for residential care, as eligible to receive residential care at least at the low level of care, and

(c) lives at home; and

(d) is able to remain living at home with the support of community care.

The person is eligible to receive community care if:

The person is assessed as having complex care needs; and

The person would be assessed, if the person applied for residential care, as eligible to receive residential care at least at the low level of care; and

The person lives at home; and

The person is able to remain living at home with the support of community care.
mistake #2: treat business rules as simply an IT project

The person is eligible to receive community care if:

- The person is assessed as having complex care needs; and
- The person would be assessed, if the person applied for residential care, as eligible to receive residential care at least at the low level of care; and
- The person lives at home; and
- The person is able to remain living at home with the support of community care.
mistake #2: treat business rules as simply an IT project

**Automatic Screen**

- Is the person eligible to receive community care?

**Automatic Screen**

Is the person assessed as having complex care needs?

Would the person be assessed, if the person applied for residential care, as eligible to receive residential care at least at the low level of care?

Does the person live at home?

**Automatic Screen**

- The person is not eligible to receive community care. [Why?]

The person is not eligible to receive community care.

- The person does not live at home.
not having the right business infrastructure
mistake #3: not having the right business infrastructure

- Business side re-think
- Governance structure
- Center of excellence
- Business / Rules analyst

areas to consider
A customer must have an address.
Customer Name: ____________________

Address: ___________________________

City:        ___________________________

Country: ___________________________

Zip:          ___________________________
Do you really need address?
A customer must have

- an email address?
- a twitter account?
- a facebook account?
- a LinkedIn account?
“The key piece, however, was governance and getting the organization to agree to particular terms and particular rules. Setting up that governance was critical. It's basically what I call the 'accelerator' ... or the 'decelerator'. It doesn't matter how good your engine is ... it doesn't matter how good your people are. If you don't have your governance approved, you might do okay for one little rules project ... but once you're up to about five or six that start to run into each other you're in trouble.”

Frank Habraken, Program Manager, CSC
Speaking on experience in Department of Immigration Australia
Excerpted from ... Business Rules Forum 2009 Practitioners’ Panel

mistake #3: not having the right business infrastructure
mistake #3: not having the right business infrastructure

- management of each major areas
- final sign offs

- knows how the business really works
- 'yes.. we agree with that'

executive committee

operational management

business [rule] analysts

subject area experts

high level governance structure
not managing rules from the start
mistake #4: not managing rules from the start

- Trace Source
- Keep track of motivation
- Maintain different versions
- Record how a business rule is implemented
- Delineate relationships with other rules
- Group rules appropriately
- Enforce consistent use of business vocabulary
- Be able to find rules
- Report on rules and rule groups
mistake #4: not managing rules from the start

- RuleXpress
- NewWisdom
- Visual Paragim
- Excel
- Word
- RequisitePro
- System Architect
- Rules Engines
mistake #4: not managing rules from the start

Business Rule Capture
Visualization
Rule Verification
Rule Validation

Rule Analysts

Business Vocabulary Support

Business Rule Workflow
Business Rule Management
Rule Engine

business rules tool support
mistake #4: not managing rules from the start

your business rules at your fingertips
organize your business rules
add and view relationships between business rules
not focusing on a vocabulary model
“One of the things we're really trying to leverage – regardless of the technology (that's the easy part!) – is getting to a common business language.

And I mean this across all of the specialized skills ... your BMP, SOA, BRMS portal. In my mind there's a real tradeoff between having the agility and flexibility that all this specialization brings and the practicality – cost performance and the like.

I think you just need to be very practical. What's foundational is to get to a common business language.”

Sam Paper, SVP, Bank of America
Excerpted from ... Business Rules Forum 2009 Practitioners’ Panel
mistake #5: not focusing on a vocabulary model

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<table>
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<th>Expiration Date</th>
<th>Certificate PIN</th>
<th>Original Ticket Number</th>
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</table>

Note: Valid toward the purchase of one electronic ticket, where eligible, on Continental up to $500.00
mistake #5: not focusing on a vocabulary model
mistake #5: not focusing on a vocabulary model
mistake #5: not focusing on a vocabulary model
A gift certificate must not exceed $3,000.
A travel certificate must not exceed $4,000.
A customer care certificate must not exceed $5,000.
A driver must be at least 19 years old.

Driver? Candidate? Person listed? Family Member?

how a vocabulary model can help
A rule statement must include one of the following keywords ...

- must ... or must not
- only ... (especially only if)

A rule statement adds a keyword to make a sentence using terms and fact types.

**Fact:** A driver can be older than 19 years of age.
**Rule:** A driver must be older than 19 years of age.

**Fact:** A customer can place an order over $1,000.
**Rule:** A customer may place an order over $1,000 only if the customer has approved credit.

how a vocabulary model can help
mistake #6

not having a well-defined scope
“Don't try to bite off more than you can chew in the first project. That's hard to do; it's hard to keep things small on that first project. But it's important to not try to do too much in that first project.”

Kevin Chase, Project Director
Customer Information Technology Service Group, ING
Excerpted from ... Business Rules Forum 2009 Practitioners’ Panel
Set Goals

- Focus on business rules specification?
- Focus on implementation?
- Focus on tool?
- Focus on governance process?
define scope by process tasks ...

mistake #6: not having a well-defined scope
mistake #6: not having a well-defined scope

- Is customer eligible for membership?
- Is student eligible for financial aid?
- Is employee qualified for child care benefits?

define scope by decision...
mistake #6: not having a well-defined scope

- Customer
- Employee
- Claim
- Antique

- Gold Customer
- Retired Employee
- Bodily Injury Claim
- Oil Painting

define scope by business concepts...
Caution!
Be aware of out-of-scope references

define scope by source document ...
Business rules required to determine if a customer is a Gold Customer

Business rules that guide shipping antique arts to Gold Customers

Business rules documented in ‘Chapter 4 – Gold Customer’ of the Customer Service Guide

define scope by combination of all ...
Start small

Ensure business and IT buy-in

Start in area you have some control over

Select something that is highly visible

For large projects – use a phased approach

Remind everyone of the scope constantly

Show off your deliverables early

Prove success early

some friendly advice ...
mistake #7

not having strong sponsorship
“Get executive buy-in early on. Educate them about what business rules can do for them; explain the value-add. You've got to do a lot of evangelism to get their buy-in because business rules, once you've put it in place, is a two-headed monster – business and technology.

As such, in the organization, you need the clout to bring both sides together and to lead it as one effort for the whole enterprise.”

Mukundan Agaram
Enterprise Architect, Delta Dental of Michigan

“You need strong executive sponsorship, and evangelism is a good word for this.
You really need strong evangelism, both at the grass roots level, which I provided early-on, but also at the executive level, which my boss provided.”

Kevin Chase
Project Director, Customer Information Technology Service Group, ING

the benefit is with the business ...
Agility... Faster to market
Risk Management
Compliance
Agreement / contract management
Business managing its own rules
Less IT involvement for rule changes

what are the business drivers for your sponsors ...
externalizing business rules ...

- 70% reduction in future development effort
- 3,500 pages of tax law in 12 months
- extensive reuse of the rulebase
- share business rules with other agencies to more easily facilitate cross-agency services to customer
- conduct real-time risk analysis by using business rules to identify non-compliant behavior
- ensure business rules are applied consistently and as intended
- now exploring ‘rules as a service’ for cross-government collaboration
not communicating
communicate with
• executives
• business stakeholders impacted
• active business stakeholders
• project team members
• IT

on
• business decisions and rule sets
• vocabulary and definitions
• approach
• findings (conflicts, gaps, errors)
• successes

mistake #8: not communicating
If you want to achieve the right results from your communication you must relate the right content to the right audience in the right way.
mistake #8: not communicating

executive

- identified 1,000 fraudulent activities
- saved $1,000,000
- business rules:
  - used over 10 times in last hour
  - zip code of 12345
  - average usage is 3 times per month

IT

- identified 1,000 fraudulent activities
- saved $1,000,000
- business rules:
  - used over 10 times in last hour
  - zip code of 12345
  - average usage is 3 times per month

relate the right content to the right audience in the right way
mistake #8: not communicating

executives
- highlight successes
- communicate business benefits
- describe key findings

impacted business stakeholders
- describe key decisions & high level business rules
- simplify business rule sets
- use graphical representation

active business stakeholders
- communicate regularly
- review and validate decisions and business rule sets
- detailed walkthrough by business analysts

project team
- communicate regularly
- walkthrough major changes to evaluate impact
- detail... detail... detail...

IT
- communicate when business logic has been reviewed and approved
- detail... detail... detail...
not having the right skill set
Not everybody can be a good rules analyst – not even good business analysts... they don’t necessarily equate to a good analyst.

You really need to make sure that you’re finding people with the right skill set; it’s a different mindset, to sit down and think through how your business is using its knowledge.”

Kelly Karlen
Manager, Business Rules Center of Excellence,
Blue Cross Blue Shield of Minnesota
Excerpted from ... Business Rules Forum 2009 Practitioners’ Panel
mistake #9: not having the right skill set

The role of a business [rule] analyst

- Subject area expert
- Operational management
- Executive committee
- Developer

The role of a business [rule] analyst
business [rule] analyst required skills

mistake #9: not having the right skill set

- subject area expert
- executive committee
- developer
- operational management
- rule harvesting
- rule specification
- rule analysis
- rule management
- vocabulary management

business [rule] analyst
“Being a Rule Analyst requires more than a set of learned skills; there is a certain personality that comes with the territory. Although the traits of this personality can be developed or refined, they cannot be taught.”

Kristen Seer, Senior Consultant, Business Rule Solutions, LLC
Excerpted from “The Role of Rule Analyst,” Business Rules Journal
business [rule] analyst required skills

- strong analytical ability
- ability to see the ‘big picture’
- ability to work in a detailed level
- adaptability
- quick learner
- problem-solving ability

mistake #9: not having the right skill set
Ability to see business rules outside the context of process, people or event

For Example: “Thou shalt not kill.”
10 not having a business rule methodology
“Do invest your time in your rule harvesting and elaboration work. On average we now find that close to 75-80% of the time it takes to complete a rule is spent in the elaboration (specification). Coding the rule and testing it takes next to nothing once the elaboration is done.”

Paul Avilez
Principle Software Developer, Liberty Mutual
mistake #10: not having a business rule methodology

Business Rule Management
- Repository
- Meta Model
- Traceability

Rule Engine

Business Rule Workflow
- Intuitive Interface
- Layering for Re-Use

Rule Analysts

Visualization
- Fact Model
- Rules & Rule Sets

Rule Verification
- Completeness
- Conflicts
- Subsumptions

Rule Validation
- Semantic Scenarios
- Test Case Scenarios
- Regression Testing

Business Vocabulary Support

Business Rule Capture
- RuleSpeak
- Concept Model
- Decisioning

methodology & techniques
2. Concentrate on the business benefit.
3. Build a business structure.
5. Focus on business vocabulary.
6. Define scope early.
7. Secure strong sponsorship.
8. Communicate constantly.
9. Foster the right skill-set.
10. Adopt a business rule methodology.

check list
Building Business Solutions

*Business Analysis with Business Rules*
By Ronald G. Ross and Gladys S. W. Lam

Business Rule Concepts

*Getting to the Point of Knowledge*
By Ronald G. Ross

Use code BBCBRF12 for 25% discount on either or both books when ordering on BRSolutions.com... offers expires Mar 31, 2012

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