PART I

The Business Problem: Why Business Rules?

Readings for Business Professionals

Overview

I will keep this Overview of Part I brief. If you have just finished reading the Preface, you already know where we are headed. If not, the content presented here will speak largely for itself.

The material in this part appears as a set of informal readings, each packaging a key insight about the business rule approach. These readings are organized into the following chapters.

1. Chapter 1 presents just enough information about the basic ideas of business rules so that we can move quickly into discussion of their business application in the chapters that follow.
2. Chapter 2 discusses how business rules are key to many of the most exciting trends in business today. Indeed, I believe business rules make certain changes in the business landscape inevitable. This chapter identifies what these opportunities are and how you can stay on top of them.
3. Chapter 3 revisits the idea presented in the Preface that automated knowledge (business logic) services will rapidly become part of mainstream information technology (IT) practices. This chapter provides a quick look at the role business rules will play in that change.

1. In some places in these chapters I describe practices and experiences shared by my colleagues and myself. In such instances, we refer to the Principals of Business Rule Solutions, LLC.
Chapter 4 discusses the business-driven approach (mentioned in the Preface) for building better business solutions. Business rules are just one element of that approach. If you are interested in pragmatic yet innovative ways in which IT projects can be aligned more directly with business goals, be sure to have a look at Chapter 4.
What’s This about Business Rules?

The Problem and the Fix in a Nutshell

A Telltale E-Mail Trail

The Case for Business Rules

The brief series of e-mails reproduced here illustrates some of the snarls in day-to-day tactical decision making that plague most organizations today. The overall problem is so pervasive—so big—that it can be difficult even to see at first. It is so much part of our everyday way of doing business that we tend to accept it as a given and simply work around it. (The exchange presented here is a real one, altered only to disguise the identities of those involved.)

As illustrated in the exchange, we often discover holes in operational policy only after it is too late to do much about them, at least without significant expense or loss of face. Is there a solution? Yes, there is—the business rule approach.

What are business rules? You probably have a pretty good intuitive sense of them already, at least from a business perspective. For now, let’s simply characterize a business rule as follows.

Business Rule
A directive intended to influence or guide business behavior.
Re: The GenTech Sale

The parties involved in the following e-mail exchange:

Tracy, accounting staff member
Ken, the product manager
Glenda, the sales manager

At 08:52 AM July 8 Ken wrote:

Tracy,

Yesterday we received the 2nd Qtr Sales Report and Income Statement. You listed the revenue from our 6/5 sale to GenTech as $14,358.00. How was this amount determined?

I know GenTech attended our annual conference, and since they initially saw the product there, they got the special 20% conference discount. Since they purchased two copies, shouldn’t the total be $15,587.00 ($9,592 for the first copy under the special 20% discount, and $5,995 for the second copy)?

Ken

At 10:32 AM July 8 Tracy wrote:

Ken,

Since GenTech attended the conference, we extended them the special 20% conference discount on both copies. So the total was $14,358.00 ($9,592 for the first copy under the special 20% discount, and $4,796 for the second copy under the special 20% discount). Hope you don’t have a problem with this(?).

Tracy

At 03:25 PM July 8 Ken wrote:

Tracy,

My understanding was that only the first copy of any sale was to be offered at the special conference discount. Subsequent copies are already being deeply discounted a full 50%!!

Unfortunately, this is now water under the bridge as far as these first two copies for GenTech goes. However, they have already committed to buying another 8 or 9 copies. THERE IS TO BE NO FURTHER DISCOUNT ON THESE COPIES. Have you received their new purchase order yet? Unfortunately, they are probably under the impression that they will get the conference discount on these additional copies too. I’ll have to touch base with Glenda so she can straighten all this out with them.
What's This about Business Rules?

We need to get our act together before closing more new sales. What is the specific intent of offering a discount to conference attendees? It gets a little nebulous when we say ‘conference attendees receive a discount.’ Does the discount extend to any organization/person the attendee is associated with? Does the purchase need to be made on the spot to qualify? Does the discount have an expiration date? Are the discounted purchases limited to one per person?

These are just some of the questions that come to mind. If some rules aren’t established here this is going to bite us again. GenTech placed the order more than 3 months after the conference. Since they are buying a relatively expensive product, it isn’t reasonable to expect them to purchase it on the spot. Having said that, there should be an EXPIRATION DATE for the conference discount. I would suggest 30 to 60 days after the conference. And in the future we should make it clear the discount applies only to the first copy, not to subsequent copies.

Let’s establish some good guidelines so we are all on the same page. We want to avoid any future misunderstandings and maintain the good will of our customers.

Ken

At 05:15 PM July 8 Glenda wrote:

Ken,

I’ve been going back and forth with GenTech over this for a good while, but after making a few other concessions, I think the fires are out on this one for now.

I agree fully with your concerns. Next time we offer something like this, let’s spend a few minutes thinking it through first. Shouldn’t take all that long— you came up with a great list of questions to consider. I’m sure that would take a lot less time than all this has!

Glenda

We need not dwell on more precise definitions for now—there is plenty of opportunity for that in the rest of the book. More important is why your business should focus on business rules. I will answer that question in this part of the book.

When Is a Door Not a Door?

The Business Rule Difference

One of the interesting things about consulting with different organizations on business rules and publishing a journal\(^2\) on that subject is that a lot of really silly rules cross my desk. I think you might enjoy some of these, so I have included several small selections in Part III.

One reader recently forwarded a rule that raises some interesting questions. He observed that in his apartment building the doors to the stairwells all have signs on them that say, “Doors must be kept closed at all times.” His question was, “Is a door you must never open really a door?” If the rule is followed religiously, he noted, the door might as well be considered part of the wall.

Before addressing that tongue-in-cheek question, let’s do some analysis on this rule. I think we can safely assume that the rule as stated is actually a shorthand form. A more complete and accurate version might be, “You may use this door for entry and exit, but it must be closed behind you.” If we wanted to be very complete, we might explain the basic motivation for the rule by adding, “This is a fire door.”

Further analysis of this simple rule reveals some fundamental ideas of the business rule approach.

- The rule was posted, that is, written down. Why? The answer lies in the motivation for the rule. Its purpose is to protect the inhabitants of the building against the dangers of fire. When a rule becomes important enough, it is always written down.
- The rule was written in plain English. If the rule were difficult to understand or encoded in such a way that many of the inhabitants could not readily interpret it, the rule would not serve its purpose very well. A rule important enough to write down is worth writing plainly.
- A procedure for this situation is not really needed. We could write one, of course, but in this case it would probably be trivial. (“Approach door; grasp doorknob with hand; twist doorknob in clockwise direction; pull/push carefully. . . .”) Nonetheless, the rule is still crucial. Rules can exist independent of procedures.
- This rule—like all rules—serves to shape behavior. The posting of the rule reminds inhabitants, staff, and others to close the door, and presumably they are therefore less likely to forget or perhaps even block the door open. The purpose of a rule is always to guide or influence behavior in desired ways.
- The rule serves a purpose. It is neither frivolous nor arbitrary. Fire is a deadly risk, and all reasonable measures must be taken to protect against it. Business rules never arise in a vacuum; there are always identifiable and important business factors motivating them.
- The rule was posted right where the action is—that is, where actual use of the door occurs. This proximity to the action helps ensure that people follow the rule as events actually unfold. The best way to ensure rules are followed is to get them right in front of people at the exact point where the guidance is relevant.
- The rule is undoubtedly part of a larger body of regulatory fire code rules for buildings. Even though the rule might be posted thousands of times
What’s This about Business Rules?

for enforcement purposes, these postings arise from a single source. This ensures consistency. If rules are important enough to be enforced, they are important enough to be single-sourced.

- The body of fire codes was undoubtedly produced by experts experienced in the field and is backed by the political authority of the city or state. The regulations were not produced or mandated by an IT department! Business logic should always be specified directly by those people who have relevant knowledge.

- Because of the importance of the regulations to the well-being of the community, any and all changes to them must be reviewed, approved, incorporated, and disseminated carefully. Because new dangers and liabilities can be discovered at any time, this process should be as streamlined and efficient as possible. On the other hand, over time some rules may become obsolete and even dangerous. The bottom line: Rules must be managed.

The Basic Principles of the Business Rule Approach

- Rules should be written and made explicit.
- Rules should be expressed in plain language.
- Rules should exist independent of procedures and workflows.
- Rules should build on facts, and facts should build on concepts as represented by terms.
- Rules should guide or influence behavior in desired ways.
- Rules should be motivated by identifiable and important business factors.
- Rules should be accessible to authorized parties.
- Rules should be single-sourced.
- Rules should be specified directly by those people who have relevant knowledge.
- Rules should be managed.

These commonsense observations represent basic principles of the business rule approach. Your business undoubtedly has literally hundreds or thousands of such rules guiding its various business processes. Yet in practice, these basic principles are seldom followed. In many organizations, the problem is so severe that the overall guidance process has just about broken down.
Can you do something about it? Yes! This book will guide you toward solutions.

Now back to that question, “Is a door you must never open really a door?” The answer is obvious—yes, of course it is. A wall without a door will always just be a wall. If you need a door sometime in the future, you must re-model, and that means time and money (not to mention disruption for the inhabitants). If you have ever remodeled your home, you know exactly what I mean.

The wall with a door acts like just a wall until such time that the “must remain closed” rule is discontinued. Then, with relatively little delay, expense, or disruption, the wall can become a wall with a functional door.

Think of the business rule approach as a relatively inexpensive way to build potential doors for your business for all those many cases when they might one day be needed. That way you can avoid walling yourself off from best-fit solutions and quick-response opportunities. In a world of constant and accelerating change, adaptability is the name of the game. This is why your company should focus on business rules today!