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Release 1.4

# **The Business Motivation Model**

*Business Governance in a Volatile World*

Prepared by

**The Business Rules Group**

**[www.BusinessRulesGroup.org](http://www.BusinessRulesGroup.org)**

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- Business Semantics Ltd.
- Business Rule Solutions LLC.
- Mega International

The following OMG member organizations supported the OMG specification:

- Business Rules Group
- EDS
- Fair Isaac Corporation
- Hendryx and Associates
- KnowGravity Inc.
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The BRG participants in Release 1.2 worked with other OMG members to present the Business Motivation Model (BMM) as an OMG Standard, and then the BRG produced this Release, based on that Specification. The OMG member organizations involved in developing the BMM Specification include:

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## Preface to Release 1.4

In 2010, the OMG's (Object Management Group's) Revision Task Force (RTF) completed its work on Version 1.1 of the Business Motivation Model and published its updated specification.<sup>1</sup> This Release 1.4 of the Business Rules Group's (BRG's) publication applies the relevant changes from OMG BMM Version 1.1, including updates for consistency with sibling standards (SBVR, BPDM, and OSM). The "differences" notes below, for BRG's Release 1.3, still apply.

## Preface to Release 1.3

In 2005, the Business Motivation Model became an adopted standard of the OMG (Object Management Group). The OMG's Finalization Task Force (FTF) completed its work in Sept. 2007.<sup>2</sup> Release 1.3 reflects the few changes to the business-facing view of the Model from that standardization work. These include: the addition of a 'uses' fact type between Assessments, the addition of 'Influencing Organization' and its relationship to 'Influencer', the addition of a family of concepts for Asset and Liability, and a changed wording used for decomposition fact types (from 'component of/part of' to 'includes/included in').

Release 1.3 also has some differences of omission from the OMG work. These include:

- The Concepts Catalog of the OMG work is represented as an SBVR business vocabulary expressed in SBVR Structured English. That language was the basis for producing a UML/MOF model of BMM. This normative model is one on which tools can be based — indeed, as of this writing at least five BMM support tools with interchange capabilities are being built on that basis.
- In Release 1.3 the categories shown for Influencer and Assessment continue to be presented as "recommended"; the OMG specification makes this distinction by defining these categories as a "recommended default" — i.e., not part of the normative model. Furthermore, to support the implementation of these (and alternative) schemes, the OMG BMM specifies general categorization concepts so that BMM users can implement their own categories of Influencer, Assessment, and Influencing Organization.

A reader interested in the detail of these points should refer to the OMG BMM specification.

## Preface to Release 1.2

In September 2005, the Object Management Group (OMG) voted to accept the Business Motivation Model as the subject of a *Request for Comment* (RFC). This means that the OMG is willing to consider the Business Motivation Model as a specification to be adopted by the OMG, subject to comment from any interested parties.

Adoption as an OMG specification carries the intention that the Business Motivation Model would, in time, be submitted to the International Standards Organization (ISO) as a standard.

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<sup>1</sup> Object Management Group, *Business Motivation Model (BMM) Specification, Version 1.1*, OMG (2010). Available as OMG Document Number: formal/2010-05-01. Available URL: <http://www.omg.org/spec/BMM/1.1/>

<sup>2</sup> Object Management Group, *Business Motivation Model (BMM) Specification*, OMG (2007). Available as "drc/07-08-03" at [www.omg.org](http://www.omg.org)

One of the OMG's conditions for RFC acceptance was an explicit statement about attributes that would be required to be included in compliant implementations of the Business Motivation Model. This has been included in Section 1.4.

## Preface to Release 1.1

The time lapse between Release 1.0 and Release 1.1 of the Business Motivation Model is just over four years. The Model has shown remarkable stability during that period. This brief Preface to Release 1.1 identifies the relatively small number of updates and improvements to the Model that the Business Rules Group (BRG) has made. These changes were based on:

- application of the Model in actual practice.
- suggestions from various conferences and presentations in Europe and North America.
- world-wide feedback via the BRG's website.
- intense work starting in 2003 on "Semantics of Business Vocabulary and Business Rules" (SBVR), a response to an RFP produced by the Object Management Group (OMG) entitled "Business Semantics of Business Rules."<sup>3</sup>

Perhaps the most notable changes in Release 1.1 are (a) the new name for the Model itself, "The Business Motivation Model," and (b) the new title of this document, "The Business Motivation Model ~ Business Governance in a Volatile World." The BRG received compelling arguments that the original name of the document, "Organizing Business Plans ~ The Standard Model for Business Rule Motivation," did not accurately reflect the purpose and content of the Model.

These arguments were centered on two main points:

- 'Business Plan' means many things to many people, and generally has broader connotations than the BRG intended. For example, "schedule of planned business activities" comes to mind for some people, whereas "proposed plan created to attract venture capital" comes to mind for others. Rather, the focus of the Model is on the elements of business *governance* (e.g., strategies, tactics, policies, goals, objectives, etc.); how these elements are inter-related; and what purposes they serve — i.e., their business *motivation*.
- Although the Model does address the business motivation for business rules — after all, business rules are certainly an element of business governance — including 'business rule' in the title of the document gave it a prominence that outweighed its actual role. In fact, as noted below, the Model does not even define Business Rule, but rather will adopt the definition from "Semantics of Business Vocabulary and Business Rules" (SBVR).

As mentioned above, the structure of the Model in Release 1.1 has changed very little from Release 1.0. The most significant adjustments involve sharpened definitions. For example, a dictionary basis has been added for each term in the Model.<sup>4</sup> Beyond that, several concepts have been renamed, and several fact types have been added or revised. In addition, numerous examples have been added throughout the document.

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<sup>3</sup> Submitted September 2005.

<sup>4</sup> Two primary sources are used for this purpose:

- New Oxford Dictionary of English [NODE].
- Merriam-Webster Unabridged Dictionary [MWUD].

The only new concept added to the Model is a placeholder for Business Process. The BRG has recognized the need to indicate how Business Process is related to the elements of the Model, and this placeholder permits it to do so. By *placeholder*, the BRG emphasizes that it is not suggesting any standard view of Business Process; instead, that it intends to defer to other standards activities for relevant definition(s). For example, work is currently being undertaken in the OMG to develop a standard Business Process Definition Metamodel (BPDM).

The final noteworthy adjustment in Release 1.1 is that an outside definition has been adopted for ‘Business Rule’. As noted earlier, the focus of this document is on the elements of business governance and, in the Model, Business Rules are viewed as simply one such element. As in the case of the placeholder for Business Process, the adopted definition for Business Rule permits the BRG to indicate how Business Rules relate to other elements of the Model, but to defer to other standards activities for comprehensive definition and treatment.<sup>5</sup>

## Preface to Release 1.0<sup>6</sup>

### Background

In 1995, the Business Rules Group<sup>7</sup> (BRG), then under the auspices of GUIDE International published a seminal work, “Defining Business Rules ~ What Are They Really?” That document focused on understanding Business Rules from an information system perspective. That work provides key insights on the basic structure of Business Rules — that is, what Business Rules really are.

Since 1997, the BRG has focused its energies on understanding Business Rules from a business perspective. This in turn required a full, business-oriented understanding of how the elements of business plans should be organized. The BRG found that although many professionals have used planning methodologies over the years, no standard existed in that area, and many of the basic concepts were hazy and ad hoc. In particular, there was no inclusion of Business Rule in such approaches — a crucial omission.

This document presents the work of the BRG to correct these problems. It reflects the consensus of the BRG — and collectively the members’ many years of practical experience — about business planning. The BRG believes that business plans, especially as they relate to engineering business processes that include automated components, can and should be organized according to the elements of the Model presented in this document.

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<sup>5</sup> For succinct discussion of the fundamental principles of the Business Rule approach, refer to the BRG’s *Business Rules Manifesto* (2003) available from <http://www.businessrulesgroup.org>. The *Manifesto* is available in a variety of languages, including (as of this Release): Chinese (Classic), Chinese (Simplified), Dutch, English, French, German, Lithuanian, Portuguese, Spanish, Swedish, and Turkish, with additional translations underway.

<sup>6</sup> Originally published in 2000.

<sup>7</sup> For more on the background and history of the BRG, refer to “A Brief History of the Business Rule Approach” 2nd ed., *Business Rules Journal*, Vol. 7, No. 11 (Nov. 2006); available from <http://www.BRCommunity.com/a2006/b317.html>

## Organization of this Document

This document centers on an explanation of the Model. It begins by describing two major topical areas and the role they play.

Section 2 describes the major concepts of the Model in broad terms — Ends and Means, Influences, and Assessments of those Influences on the Ends and Means.

Sections 3 and 4 are the heart of the document, presenting Model concepts in detail. As well as providing the concept descriptions that define the Model, these sections contain numerous examples.

Many of these examples are based on a (fictitious) car rentals company, EU-Rent, that continues the case study the BRG used in its earlier report. Although there are individual examples drawn from other sources, EU-Rent<sup>8</sup> provides at least one example of every concept, within the context of a single organization. This provides some coherence across the examples and illustrates the relationships between many of the concepts.

The other examples were taken selectively from a wide set of enterprises. While the BRG used real-world samples as the basis for these examples, it discovered that real-world samples often do not conform exactly to the prescriptions for the various concepts presented in this document. The BRG found that the wording of these real-world statements is typically an amalgamation — using language designed for the consumption of vested audiences. Therefore, the samples have been reworded as appropriate for use with the Model. The BRG believes this is an important part of the value of its work.

Section 5 briefly discusses metrics in the context of the Model.

## The Appendices

**Appendix A.** The Model is included in graphic form in Appendix A, which makes for handy reference.

**Appendix B.** The real meaning of the concepts in the Model is in the concept definitions. These definitions are an integral part of the Model — indeed, the Model diagram is meaningless without them. Appendix B contains all the definitions in the form of a Glossary of Definitions, which the BRG prefers to call the Concepts Catalog<sup>9</sup>.

**Appendix C.** The Model is diagrammatically presented in this document using neutral, non-normative conventions. These conventions, explained in Appendix C, are intended only for visual illustration of the Model's concepts and fact types.

**Appendix D.** The document uses many examples from the EU-Rent case study, an overview of which is presented in Appendix D.

**Appendix E.** The positioning of the Model with respect to the Zachman Architecture Framework is discussed in Appendix E, which also comments on other artifacts of business models, including Organization Unit, Business Process, and Asset/Liability.

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<sup>8</sup> The EU-Rent case study was developed by John Hall of Model Systems.

<sup>9</sup> The “Semantics of Business Vocabulary and Business Rules” (SBVR) focuses on concepts, rather than merely on terms. Therefore the Group prefers the name ‘Concepts Catalog’, rather than ‘Glossary of Definitions’.

**Appendix F.** A bibliography of relevant reference material is presented in Appendix F.

### **Audiences for the Model**

Who are the audiences for the Model? Primary audiences include the following:

- **Developers of business plans.**  
For that audience, the Model is a conceptual tool for engineering the business itself.
- **Analysts supporting the developers of business plans.**  
For that audience, the Model is a tool for organizing and clarifying business plans.
- **Implementers and users of software tools and repositories.**  
For that audience, the Model is a formal scheme for structuring information about such business plans.

A final point is this. The BRG uses the word ‘enterprise’ in this document for convenience. The enterprise can be either for-profit or not-for-profit — similar concepts apply. Also, the ‘enterprise’ can be some subset of a larger enterprise; again, similar concepts should apply.

## 1. Introduction

The Business Motivation Model provides a scheme or structure for developing, communicating, and managing business plans in an organized manner. Specifically, the Business Motivation Model does all of the following:

- It identifies factors that motivate the establishing of business plans.
- It identifies and defines the elements of business plans.
- It indicates how all these factors and elements inter-relate.

Among these elements are ones that provide governance for and guidance to the business — Business Policies and Business Rules.

### 1.1 What is the Business Motivation Model?

There are two major areas of the Business Motivation Model.

- The first is the Ends and Means of business plans. Among the Ends are things the enterprise wishes to achieve — for example, Goals and Objectives. Among the Means are things the enterprise will employ to achieve those Ends — for example, Strategies, Tactics, Business Policies, and Business Rules.
- The second is the Influencers that shape the elements of the business plans, and the Assessments made about the impacts of such Influencers on Ends and Means (i.e., Strengths, Weaknesses, Opportunities, and Threats).

The Ends, Means, and Influencers are related to each other in order to answer the following two fundamental questions:

#### 1. What is needed to achieve what the enterprise wishes to achieve?

This question is answered by laying out the particular elements of the business plans — in other words, the Means necessary to achieve the desired Ends.

#### 2. Why does each element of the business plan exist?

This question is answered by identifying the particular Ends that each of the Means serves, and the Influencers that underlie the choices made in this regard. This is what is meant by *motivation*.

All elements of the Business Motivation Model are developed from a business perspective. The basic idea is to develop a *business model* for the elements of the business plans **before** system design or technical development is begun. In this manner, the business plans can become the foundation for such activity, connecting system solutions firmly to their business intent.

The Business Motivation Model contains:

- A set of built-in concepts that define the elements of business plans. They are associated in a structure that is methodology-neutral; it will support a range of approaches for creating and maintaining a Business Motivation Model for an enterprise, and is particularly strong in support of processes that are driven by business change.
- Roles in the structure for three essential concepts: Business Process, Business Rule, and Organization Unit. They participate in associations within the Business Motivation Model, but also (it is assumed) in other associations outside its scope — as is the case in

SBVR<sup>10</sup>, and the submissions for BPMN<sup>11</sup> and OSM<sup>12</sup>. They are regarded as references to elements that will be defined and maintained outside an enterprise's Business Motivation Model.

The Business Motivation Model is simple. Its concepts have only basic attributes — identifier and text description. Most of its associations are unconstrained: optional and many-to-many.

Software tools that support the Business Motivation Model usually provide simple recording and reporting functionality, with some analysis capabilities (e.g., reporting of goals that are not quantified by objectives, business rules that are not derived from any business policy).

The Business Motivation Model is not:

- A specification for a business development management process or tool.
- A specification for a project definition or management process or tool.
- A specification for a full business model.

It could be included in such specifications, but that is beyond the scope of this one.

## 1.2 Other Elements of a Full Business Model

The Business Motivation Model is not a full business model. For example, the elements of business plans do not prescribe in detail any of the following, each of which is an essential part of a full business model.

- **Business Processes.** Business plans include Courses of Action — what the enterprise has to do to achieve its Ends — transformed into Business Processes that encompass activities, sequencing, dependencies, interactions, triggering by business events, etc. Business Process specification is outside the scope of business plans. However the Business Motivation Model does include a placeholder for Business Process, to provide for integration with emerging Business Process standards.
- **Workflows.** The basis of workflow is assignment of responsibilities for Business Processes to roles in the organization. Design of workflow is outside the scope of business plans. However, the business plans may include Strategies or Tactics that configure organization structure to achieve effective workflow.
- **Business Vocabulary.** Also needed is full specification of the terms and facts needed to support the business.<sup>13</sup> However, the business plans do provide a business basis for such development — namely, the concepts and vocabulary used in the elements of the business plans, particularly in its Business Rules.

Refer to Appendix E (Section E.2) for comments about additional elements of a full business model.

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<sup>10</sup> OMG Adopted Specification “Semantics of Business Vocabulary and Business Rules”

<sup>11</sup> OMG Adopted Specification “Business Process Modeling and Notation”

<sup>12</sup> OMG RFP “Organization Structure Metamodel”

<sup>13</sup> Organizing Business Vocabulary is the focus of “Semantics of Business Vocabulary and Business Rules” (SBVR).

### 1.3 Business Rules in the Business Motivation Model

Business Rules play an important role in development of business plans. For example, they can serve the following purposes:

- Make business tactics sufficiently well developed to guide the actual performance of work.
- Provide fallback positions when some element of the business plans fails.
- Resolve conflicts when the Ends the business seeks are in conflict with one another.

Because of this key role — which is often make-or-break for the very success of business plans — developing the motivation for Business Rules from the business perspective is fundamentally important.

### 1.4 Methodologies and the Business Motivation Model

It is important to note that the Business Motivation Model is not in any sense a methodology. Indeed, it is entirely neutral with respect to methodology or particular approach, with only several general exceptions as follows:

- The requirements development process should be business-driven.
- Organized business plans should be a fundamental deliverable in any such process.
- Business Rules and Business Processes are key elements of such business plans.

One way to think of the Business Motivation Model is as a blueprint purposely designed to support a range of methodological approaches. Implementation of the Model would result in the elements of business plans being stored and related to other information about the enterprise, no matter what methodology was used for discovering and defining them.

In the design for any such implementation, each concept of the Business Motivation Model (i.e., each concept listed in the Concepts Catalog) should be assigned two attributes — ‘name’ and ‘description’ — to be included in the implementation. User enterprises and repository vendors could, of course, choose to include additional attributes.

### 1.5 Beneficiaries of the Business Motivation Model

Three types of people are expected to benefit from the Business Motivation Model: Developers of business plans, Business modelers, and Implementers of software tools and repositories.

#### 1.5.1 Developers of Business Plans

The Business Motivation Model is a conceptual tool for engineering the business itself. It provides developers of business plans with:

- A set of concepts that acts as a check-list of factors to be considered
- A standard vocabulary
- A flexible model to support their development processes

They also use tools that implement the Business Motivation Model for storage and management of their business plans.

### **1.5.2 Business Modelers**

Modelers who develop detailed business models will, in the future, use standards and models based on the OMG's specifications for BPMN, SBVR, and OSM.

The Business Motivation Model will support them in two ways:

3. The content of their enterprise's Business Motivation Model will help to guide and shape their more detailed models.
4. Eventually specifications such as BPMN, SBVR, and OSM together with the Business Motivation Model (or something with similar scope) should be merged into a single business-oriented modeling architecture, and implemented in integrated tool suites. Until then, tools based on the Business Motivation Model could provide a straightforward way of relating business processes, business rules, and organization units to each other, and to the desired results, courses of action and business policies that affect them.

### **1.5.3 Implementers of Software Tools and Repositories**

The Business Motivation Model provides the basis of a logical data design that has been implemented in the databases of tools that support the model.

Tool developers might also choose:

- To elaborate on the Business Motivation Model, with additional attributes, more-normalized entities, and more-refined associations.
- To use the Business Motivation Model in specifications of tools that support models with broader scope than the Business Motivation Model.

Both of these are beyond the scope of this specification.

## **1.6 Placeholders**

Four concepts (Asset, Organization Unit, Business Process, and Business Rule) have roles in the structure of the Business Motivation Model but actually belong in other OMG standards, where they are defined and associated with related concepts needed for detailed business modeling.

The defaults for the required external standards are the OMG's specifications for the Organization Structure Metamodel (OSM), Business Process Modeling and Notation (BPMN), and Semantics of Business Vocabulary and Business Rules (SBVR). In practice, enterprises could use alternative external standards.

Business Rule is a core concept of the BMM (albeit that its definition is adopted from SBVR). Organization Unit and Business Process (discussed in Appendix E) are placeholders for association with concepts in OSM and BPMN respectively. Assets (also discussed in Appendix E) are not yet referenced to any particular OMG specifications.

## 2. Overview of the Business Motivation Model

Fundamental to the Business Motivation Model is the notion of *motivation*. If an enterprise prescribes a certain approach for its business activity, it ought to be able to say *why*; that is, what result(s) the approach is meant to achieve.

Sometimes it is difficult to uncover such motivation, especially in operations that have been going on for some time. All too often it turns out to be “...because we had to find a workaround for a system that didn't do quite what was needed.” This may describe business work practice, information systems, or both.

A cornerstone of any work addressing motivation had to be the enterprise's aspirations (its Vision) and its action plans for how to realize them (its Mission). Refinements were introduced — Vision into Goals and Objectives, and Mission into Strategies for approaching Goals, and Tactics for achieving Objectives. The general term *End* was adopted to refer broadly to any of the ‘aspiration’ concepts (Vision, Goal, Objective) and the term *Means* to refer generally to any of the ‘action plan’ concepts (Mission, Strategy, Tactic). This conjunction of Ends and Means — *being* and *doing* — provides the core concepts of the Model.<sup>14</sup>

An enterprise, however, cannot operate on this Model alone — the business needs to take into account the numerous Influencers that can hinder or assist its operation. These Influencers provide Opportunities that would help the enterprise operate, as well as Threats that would thwart it. Influencers also represent Strengths from within that the enterprise could exploit, or Weaknesses that it should compensate for.

But is an Influencer inherently a Strength or Weakness — is it always a Threat or Opportunity? That determination comes from an Assessment of the impact of an Influencer on the stated Ends and Means — an Assessment such as is developed in SWOT analysis.<sup>15</sup> In this commonly-used technique, Internal Influencers (assessed to be Strengths and Weaknesses) and External Influencers (assessed to be Opportunities and Threats) are analyzed as a part of business plan development.<sup>16</sup>

Once an Assessment has identified relevant Influencers in terms of their impact on Ends and Means, Directives (Business Policies and Business Rules) can be put in place to govern and guide the enterprise Courses of Action. Directives keep the enterprise on course and moving toward its Desired Results. Because of their integral role in guiding Courses of Action, Directives are included in the set of *Means* concepts.

Business Rules are noteworthy in that regard. Business Rules sharpen the Business Tactics because they make Courses of Action concrete at the operational level. Business Rules can also provide specific remedies when a Course of Action fails, and specific resolutions to conflicts that

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<sup>14</sup> In fact, this is the essential distinction between Ends (the *being* — “what you aspire to be”) and Means (the *doing* — “the actions you intend to take to get there”). We express this distinction in our terms ‘Desired Result’ and ‘Course of Action’.

<sup>15</sup> Note that SWOT is an example of a well-established technique: other techniques (and specializations of Assessment) may be substituted — but they should be adequate replacements for SWOT.

<sup>16</sup> Neal Fishman, “SWOT Assessment,” *DataToKnowledge Newsletter*, Volume 27, No. 6 (November/December 1999), pp. 3-4.

inevitably arise among the Ends. In short, Business Rules provide the leverage needed for building effective, adaptable business solutions and systems.

Understanding the motivation for Business Rules is crucial in that regard.

- When a Business Rule is encountered, you can ask where it would fit — which Influencer, on which End or Means, does it address?
- When a Business Rule does not seem to fit, it can be challenged. Does it perhaps support some older Means or End that is no longer relevant to the enterprise? Was it a workaround for some historical information system deficiency or organizational issue that is no longer relevant?

The next section examines each of the concepts of the Business Motivation Model in detail to reveal how they work together to provide this kind of support.

### 3. The Core Elements of the Business Motivation Model

The main elements of the business plans are its Ends and Means. These fundamental terms represent two hierarchies, as shown in Figures 3-1 and 3-5.

#### 3.1 The End Concepts

An End is something the business seeks to accomplish. The important thing to remember about an End is that it does not include any indication of **how** it will be achieved.

In describing Ends, it is useful to document who *defined* the End and at what point in time, so that an audit trail exists for future reference. This, of course, cannot always be mandated.

##### Categories of End

End concepts can be arranged in a hierarchy, as shown in Figure 3-1.



Figure 3-1. The Hierarchy of 'End' Concepts

An End may be either a Vision or some Desired Result (a Goal or an Objective). The essence is that these are kinds of things, in varying detail, that the enterprise is trying to accomplish.

Vision is an overall image of what the organization wants to be or become. It usually encompasses the entire organization and is long-term in its perspective. Desired Results, on the other hand, are the more specific Goals and Objectives that the enterprise, or some part of it, intends to achieve.

**Vision**

A Vision describes the future state of the enterprise, without regard to how it is to be achieved.

A Vision is the ultimate, possibly unattainable, state the enterprise would like to achieve. A Vision is often compound, rather than focused toward one particular aspect of the business problem. A Goal, in contrast, should generally be attainable and should be more specifically oriented to a single aspect of the business problem.

A Vision is supported or *made operative by* Missions. It is *amplified by* Goals.

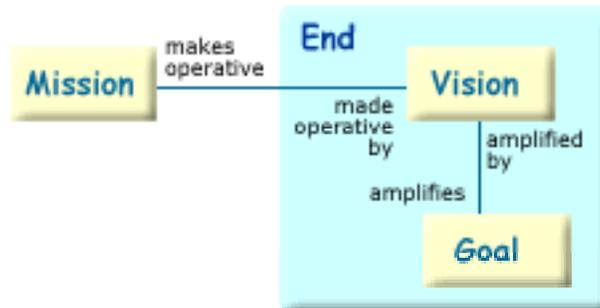


Figure 3-2. Vision

Examples of Vision include the following:

	Vision
<i>EU-Rent</i>	Be the car rental brand of choice for business users in the countries in which we operate
<i>Pizza Company</i>	Be the city’s favorite pizza place.
<i>Consulting Company</i>	Be the premier consulting company in the industry.
<i>Retail Pharmacy</i>	Be the low-cost health care provider with the best customer service.
<i>Municipal Police Department</i>	Be a professional, trusted provider of police services — a leader in cooperative efforts with the neighborhood and other agencies to make our city safer.

**Desired Result**

A Desired Result is an End that is a state or target that the enterprise intends to maintain or sustain. A Desired Result *is supported by* Courses of Action.

**Categories of Desired Result**

Desired Result includes the following concepts:

- Goal
- Objective



Figure 3-3. Desired Results — Goals and Objectives

Compared to an Objective, a Goal tends to be longer term, qualitative (rather than quantitative), general (rather than specific), and ongoing. Compared to a Goal, an Objective tends to be short term, quantitative (rather than qualitative), specific (rather than general), and not continuing beyond its timeframe (which may be cyclical).

Objectives differ from Goals in that Objectives should always be time-targeted and measurable. Goals, in contrast, are not specific in these ways.

Desired Results are supported by Courses of Action, which can be either Strategies or Tactics. Generally, Goals are supported by Strategies, and Objectives are achieved by Tactics.<sup>17</sup>

In many enterprises there is a continuum from major Strategies that impact the whole of the business to minor Tactics with limited, local effects. The dividing line between ‘minor Strategy’ and ‘major Tactic’ is blurred. Also, over time, some Courses of Action may evolve from Tactic to Strategy, and some Strategies may devolve into Tactics. Some enterprises do make a hard distinction between Strategies and Tactics; these enterprises may choose to pair Strategies only with Goals, and Tactics only with Objectives.

Other enterprises use other bases for distinguishing Strategies and Tactics. For example, some enterprises distinguish between Strategy and Tactic based on planning horizon. In this case, Strategies are put into place to support the long-term Goals — i.e., a planning horizon that is typically several years or more — while Tactics are the Courses of Action implemented to deal with the shorter planning horizon of a year or less (the current operational plans). Still other enterprises distinguish Strategy (a Course of Action that is for “the gaining of a specific advantage”) from Tactic, which is a Course of Action that is for “the deployment of specific resources to gain that advantage.”

<sup>17</sup> An enterprise that prefers to strictly maintain this pairing can do so by specifying an appropriate constraint. It may also want to specialize the Model for its own use by replacing the fact type ‘Desired Result is *supported by* Course of Action’ with two more specific fact types:

- Goal is *supported by* Strategies
- Objective is *achieved by* Tactics

## Goal

A Goal is a statement about a state or condition of the enterprise to be brought about or sustained through appropriate Means. A Goal *amplifies* a Vision — that is, it indicates what must be satisfied on a continuing basis to effectively attain the Vision.

A Goal should be narrow — focused enough that it can be *quantified by* Objectives. A Vision, in contrast, is too broad or grand for it to be specifically measured directly by Objectives.

However, determining whether a statement is a Vision or a Goal is often impossible without in-depth knowledge of the context and intent of the business planners.

Examples of Goal include the following:

	Goal
<i>EU-Rent</i>	To be a ‘premium brand’ car rental company, positioned alongside companies such as Hertz and Avis
	To provide industry-leading customer service.
	To provide well-maintained cars.
	To have vehicles available for rental when and where customers expect them.
<i>Pizza Company</i>	To deliver pizzas in an expedient amount of time.
<i>Consulting Company</i>	To improve customer satisfaction (over the next five years).
<i>Publishing Company</i>	To improve customer satisfaction (over the next five years).
<i>E-Business Company</i>	To have more customers than any other e-business.

## Objective

An Objective is a statement of an attainable, time-targeted, and measurable target that the enterprise seeks to meet in order to achieve its Goals.

- **Attainable.** It is self-evident that Objectives should be attainable. If they are not, the business plans are unrealistic and will likely fail.
- **Time-targeted.** All Objectives should be time-targeted. This means that either an absolute timeframe (e.g., “by January 1, 2007”) or relative timeframe (e.g., “within two years”) should be included in each Objective. This timeframe indicates when the Objective is to be met.
- **Measurable.** Objectives should be measurable. This means they must include some explicit criteria for determining whether the Objective is being met in practice. This criteria may be fairly exacting (for example, “on-time 95% of the time”). At the very minimum, the criteria must provide a basis for making a “yes or no” determination (e.g., “up and running”). Such criteria may be the basis for certain Business Rules, created specifically to compute or derive the relevant evaluation.

This understanding of ‘Objective’ is consistent with the industry’s popular “SMART” criteria that an Objective be: **S**pecific, **M**easurable, **A**ttainable, **R**elevant, and **T**ime-Based.

Statements of Objective should always begin with the time-targeted phrase, followed by a quantified noun.

Example time-targeted phrases:

- *By 09/01/2001, ...*
- *Effective immediately, ...*
- *After 2 years, ...*
- *Within 5 weeks, ...*
- *On or before June 1, 2002, ...*
- *On April 15, 2001, ...*

An Objective *quantifies* a Goal — that is, it provides the basis for measures to determine whether the Goal is being achieved. Conversely, the Goal is *quantified by* these measurable Objectives. For example, the Goal “To provide industry-leading customer service” is quantified by the Objective “Effective immediately, a ranking of 8 or better on a monthly customer satisfaction scale of 1-10” and by the Objective “By Jan. 1, 2001, a B+ grade level on the annual Better Business Bureau ratings.”

Examples of Objective include the following:

	<b>Objective</b>
<i>EU-Rent</i>	By end of current year, be rated by A C Nielsen: in the top 6 car rental companies in each operating country within the European Community in the top 9 car rental companies in all other operating countries
	By end of current year, to score 85% on EU-Rent’s quarterly customer satisfaction survey.
	During 4 <sup>th</sup> quarter of current year, no more than 1% of rentals need the car to be replaced because of mechanical breakdown (excluding accidents).
	During 4 <sup>th</sup> quarter of current year, 98% of customers who ask to rent a car get one
<i>Pizza Company</i>	By January 1, 2005, 95% on-time pizza delivery.
<i>Consulting Company</i>	By June 30, 2005, an operational customer call center.
<i>E-Business Company</i>	Within six months, 10% increase in product sales.

### Facts that Organize Ends

Besides those mentioned above, other logical connections (i.e., fact types) are required to fully organize the Ends. These logical connections provide additional structure among elements of the Ends themselves.

#### Interrelating Desired Results

One Desired Result can *include* other Desired Results; a Desired Result can be *included in* some other Desired Result. In other words, there can be a ‘parts explosion’ of Desired Results. This connection should only be used to associate like instances — that is, Goals only to other Goals and Objectives only to other Objectives.



Figure 3-4. Interrelating Desired Results

A ‘parts explosion’ of Desired Results happens when there is a decomposition of some higher-level Goal (or Objective) into lower-level Goals (or Objectives). Such decomposition occurs, for example, when elements of the business plans created by one level of management are handed down to a lower organizational level for more detailed planning or implementation. This creates a ‘recursion’ among the elements, from higher level to lower level. For example, the Goal “To keep customers satisfied” is composed of the sub-Goal “To deliver pizzas in an expedient amount of time” and the sub-Goal “To produce tasty pizzas.”

### 3.2 The Means Concepts

A Means represents any device, capability, regime, technique, restriction, agency, instrument, or method that may be called upon, activated, or enforced to achieve Ends. Remember that a Means does not indicate either the steps (business processes and workflow) necessary to exploit it, nor responsibility for such tasks, but rather only the capabilities that can be exploited to achieve the desired Ends.

In describing Means, it is useful to document who *established* the Means and at what point in time, so that an audit trail exists for future reference. This practice, of course, cannot always be mandated.

### Categories of Means

Means concepts can be arranged in a hierarchy, as shown in Figure 3-5.



Figure 3-5. The Hierarchy of 'Means' Concepts

A Means may be either a Mission, a Course of Action (a Strategy or Tactic), or a Directive (Business Policy or Business Rule).

Mission, like its counterpart Vision, indicates a correspondingly long-term approach — one that is focused on achieving the Vision. Like Vision, Mission is not very specific; it is something broadly stated, in terms of the overall functioning of the enterprise.

Apart from the basic Mission of the enterprise, the Means of the Business Motivation Model have been carefully organized into Courses of Action and Directives.

In some respects, Courses of Action are the more basic of the two. In and of themselves, however, Courses of Action tend to be rather blunt instruments. They require Directives to have any real chance of success.

In contrast to Courses of Action, Directives cannot really stand on their own. They exist to give the Courses of Action a fine edge — in other words, to ensure that the Courses of Action will be applied intelligently and within the boundaries of what is acceptable or optimal for the enterprise. In short, Directives represent encoded (i.e., written down) knowledge that ensures the highest possible chances of success for the Courses of Action.

A Directive always has to do with governance or guidance. A Course of Action, in contrast, identifies an active approach in moving toward the Ends. A Course of Action is always action-dominated (action-oriented).

**Mission**

A Mission indicates the ongoing operational activity of the enterprise. The Mission describes what the business is or will be doing on a day-to-day basis.

A Mission *makes* a Vision *operative* — that is, it indicates the ongoing activity that makes the Vision a reality. A Mission is *planned by means of* Strategies.

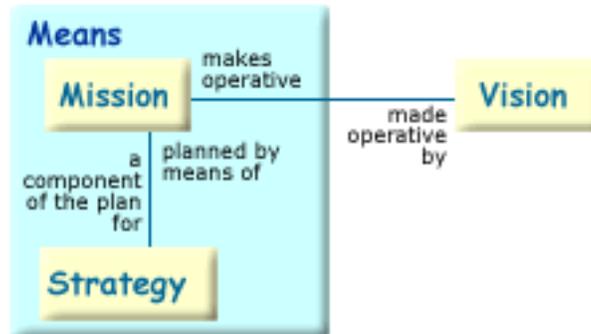


Figure 3-6. Mission

A Mission statement should consist of the following three items only and should be formed using brief statements of them.

- 1. An action part. *For example, “provide”*
- 2. A product or service part. *For example, “pizzas”*
- 3. A market or customer part. *For example, “customers city-wide”*

The Mission statement should be focused on day-to-day operations, generic enough to cover all Strategies, and broad enough to cover the complete area of operations.

Examples of Mission include the following:

	<b>Mission</b>
<i>EU-Rent</i>	Provide car rental service across Europe and North America for both business and personal customers.
<i>Pizza Company</i>	Provide pizza to customers city-wide.
<i>Consulting Company</i>	Provide consulting, outsourcing, and staff augmentation services to companies in North America.
<i>Retail Pharmacy</i>	Provide generic and ethical drugs to the retail market.

## Course of Action

A Course of Action is an approach or plan for configuring some aspect of the enterprise involving things, processes, locations, people, timing, or motivation, undertaken to achieve Desired Results. In other words, a Course of Action *channels efforts towards* Desired Results. To help ensure success in this regard, Courses of Action are *governed by* Directives.

Courses of Action, which include Strategies and Tactics, represent the basic elements of a general plan or overall solution — in other words, an overall approach — that the enterprise will take to achieve its Desired Results. It is important to remember that Courses of Action are not Business Processes; rather, Courses of Action can be *realized by* Business Processes — that is, made operative by Business Processes.

### Categories of Course of Action

Course of Action includes the following concepts:

- Strategy
- Tactic



Figure 3-7. Course of Action

Compared to Tactics, Strategies tend to be longer term and broader in scope. A Strategy is *implemented by* Tactics. Strategies usually *channel efforts towards* Goals, rather than Objectives.

Compared to a Strategy, a Tactic tends to be shorter term and narrower in scope. Tactics *implement* Strategies; they are courses of action that will support those Strategies. Tactics generally *channel efforts towards* Objectives, rather than Goals.

Determining whether a Course of Action is a Strategy or a Tactic may be impossible without in-depth knowledge of the context and intent of the business planners. In fact, in the course of developing and analyzing business plans, some elements may change category as the target problem is understood better. For example, an element originally defined as a Tactic may subsequently be elevated to a Strategy. The reverse is also likely to occur. In other words, the business plans will gradually evolve toward greater accuracy in specification, as well as greater coherence and completeness.

## Strategy

A Strategy is one *component of the* plan for the Mission. A Strategy represents the essential Course of Action to achieve Ends — Goals in particular. A Strategy usually *channel efforts towards* those Goals.

A Strategy is more than simply a resource, skill, or competency that the enterprise can call upon; rather, a Strategy is accepted by the enterprise as the **right** approach to achieve its Goals, given the environmental constraints and risks.

Examples of Strategy include the following:

	Strategy
<i>EU-Rent</i>	Operate nation-wide in each country of operation, focusing on major airports, competing head-to-head, on-airport, with other premium car rental companies.
	Manage car purchase and disposal at local area level, with national (operating country) guidance covering: What models may be bought from which manufacturers; Overall numbers and mix of models; When to dispose of cars, by mileage and age; Phasing of purchasing and delivery.
	Join an established rewards scheme run by a third party (i.e., outsource rather than building own scheme).
<i>Pizza Company</i>	Deliver pizzas to the location of the customer's choice.
<i>Consulting Company</i>	Implement a Customer Relationship Management System.
	Increase repeat business.
<i>E-Business Company</i>	Buy other e-business mailing lists.

**Tactic**

A Tactic is a Course of Action that represents part of the detailing of Strategies. A Tactic *implements* Strategies. For example, the Tactic “Call first-time customers personally” implements the Strategy “Increase repeat business.”

Tactics generally *channel efforts towards* Objectives. For example, the Tactic “Ship products for free” *channels efforts towards* the Objective “Within six months, 10% increase in product sales.”

Examples of Tactic include the following:

	<b>Tactic</b>
<i>EU-Rent</i>	Encourage rental extensions.
	Outsource maintenance for small branches.
	Create standard specifications of car models, selecting from options offered by the manufacturers <i>Note: these will be trade-offs between ‘rentable’ and ‘high residual value for sales’.</i>
	Equalize use of cars across rentals so that mileage is similar for cars of the same car group and age
	Comply with car manufacturer’s maintenance schedules
<i>Pizza Company</i>	Hire drivers with their own vehicles to deliver pizzas.
<i>Consulting Company</i>	Provide each member of the sales force with a palmtop.
	Call first-time customers personally.
<i>E-Business Company</i>	Ship products for free.

## Directive

As the name suggests, Directives indicate how the Courses of Action should, or should not, be carried out — in other words, they *govern* Courses of Action. Specifically, a Directive defines or constrains or liberates some aspect of an enterprise. It is intended to assert business structure or to control or influence the behavior of the business, and is stated in declarative form.



Figure 3-8. Interrelating Directives with Courses of Action and Ends

Directives *govern* Courses of Action. For example, the Business Rule “Pizzas may not be delivered beyond a radius of 30 miles” governs the Strategy “Deliver pizzas to the location of the customer’s choice.” This governance applies to Tactics as well. For example, the Tactic “Encourage rental extensions” is governed by the Business Policy “Allow extension of rentals by phone.”

It is expected that all Courses of Action should be *governed by* some Directive, especially as the business plans evolve and become more coherent and complete. Any Course of Action not *governed by* a Directive should be examined carefully to discover potential omissions.

On the other hand, having too many Directives may become unduly constraining. The correct balance in this regard can only be identified by having in-depth knowledge of the context and intent of the business people participating in the planning.

In striking this balance it should be remembered that, unless a Directive is made explicit, it is assumed that no constraint on other elements of the business plans will be exercised. ‘Unstated’ Directives simply cannot be addressed in the Model — quite literally, they can be recognized only by stating them.<sup>18</sup> To be taken into account within the Model, every Directive must be explicit and recorded in an official manner.<sup>19</sup>

<sup>18</sup> For Business Policies in particular, this represents a de facto boundary between Model and methodology. The BRG recognizes that to be workable, a practical methodology must address the reality of *implicit* Business Policies within the business.

<sup>19</sup> Making Business Rules explicit is a fundamental principle of the Business Rule approach. Refer to the *Business Rule Manifesto*.

It is also possible for the Courses of Action to be *formulated based on* Directives. For example, the Tactics ‘Comply with manufacturer’s maintenance schedules’ and ‘Equalize use of cars across rentals so that mileage is similar for cars of the same car group and age’ are both formulated based on the Business Policy ‘Depreciation of cars must be minimized’. The Directive thereby serves as the *source of* the Course of Action.

Occasionally a Directive is defined to *support the achievement of* a Desired Result directly. For example:

- The Business Policy “The cell phone numbers of customer representatives should be available to customers” supports achieving the Goal “To provide high-quality customer support.”
- The Objective “Within six months, 10% increase in product sales” is supported by this Business Rule that defines product sales: “Product sales must be computed as total sales, minus all of the following: sales tax, shipping charges, and maintenance contract fees.”

### Business Rule Enforcement Level

A Business Rule that guides behavior<sup>20</sup> has an enforcement level. Enforcement levels represent alternatives in a graded or ordered scale, each of which indicates the severity of action imposed to put or keep a rule in force. An example of a range of enforcement levels<sup>21</sup> — from ‘strictly enforced’ to ‘guideline’ — is:

<i>Value</i>	<i>Meaning</i>
<b>strictly enforced</b>	If the rule is violated, the penalty is always applied.
<b>deferred enforcement</b>	Strictly enforced, but enforcement may be delayed — e.g., waiting for resource with required skills.
<b>pre-authorized override</b>	Enforced, but exceptions allowed, with prior approval for actors with before-the-fact override authorization.
<b>post-justified override</b>	If not approved after the fact, you may be subject to sanction or other consequences.
<b>override with explanation</b>	Comment must be provided when the violation occurs.
<b>guideline</b>	Suggested, but not enforced.

<sup>20</sup> Only Business Rules that guide behavior (SBVR ‘operative business rule’) require enforcement. Definitional Business Rules (SBVR ‘structural business rule’) are “true by definition”.

<sup>21</sup> From the OMG specification for “Semantics of Business Vocabulary and Business Rules” (SBVR).

Examples of enforcement level include the following:

	Directive	Enforcement Level
<i>EU-Rent</i>	A EU-Rent agent who is found, after a managerial review, to have rented a vehicle to a customer without a valid driver's license, is to be fired.	strictly enforced
<i>Pizza Company</i>	A driver who is convicted of one moving traffic violation while driving for the company will be counseled by a manager concerning safe driving.	pre-authorized override
<i>E-Business Company</i>	A customer rated negative by more than ten other customers will be blocked forever from doing business.	override with explanation

Deciding what enforcement level is to be applied to a Business Rule is often a Tactic within business plans. In the Model, Tactic *effects enforcement level of* Business Rule.

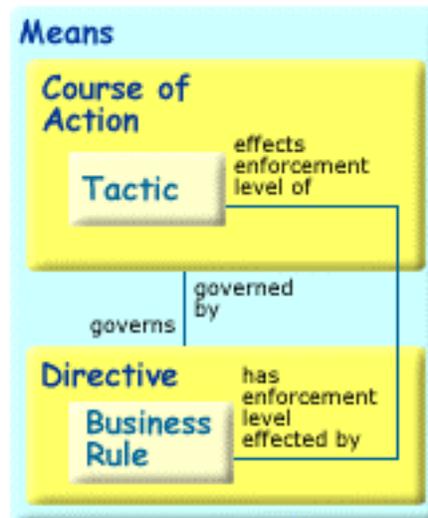


Figure 3-9. Setting Enforcement Level

### Directive as Regulation

A Directive may *act as* some other Organization Unit's Regulation. The Business Rules and Business Policies determined at one level in an organization may be effectively the *law* (Regulation) for lower-level organizations.



Figure 3-10. Directive as Regulation

For example, production and sales divisions both have to comply with company policy on safety at work. These units in turn have to determine their own local policies and rules for their particular compliance with the 'law' (company policy) imposed from above. Furthermore, the rules and policies they come up with will most likely be unique; rules for safety within the production division are different from those in sales.

### Categories of Directive

Directive includes the following concepts:

- Business Policy
- Business Rule

Compared to a Business Rule, a Business Policy tends to be less structured,<sup>22</sup> less discrete, and usually not atomic — that is, not focused on a single aspect of governance or guidance. Also compared to a Business Rule, a Business Policy tends to be less compliant with standard business vocabulary, and less formally<sup>23</sup> articulated.

In contrast to a Business Policy, a Business Rule is highly structured<sup>17</sup> and is carefully expressed in terms of standard vocabulary. A Business Rule should be discrete and atomic — that is, represent only a single aspect of governance or guidance.

Business Policies provide broader governance or guidance that is not directly enforceable. Business Rules provide specific, *practicable* governance or guidance to implement Business Policies. 'Practicable' means that a person who understands a Business Rule could observe a relevant situation (including his or her own behavior) and decide directly whether or not the business was complying with the rule.

Some Business Rules could be automated in software; some can be applied only by people. Business Policies are not directly automatable.

<sup>22</sup> This means 'structured' in a natural language sense, not 'structured' in any technical sense.

<sup>23</sup> 'Less formally' should not be interpreted as 'less carefully'.

**Business Policy**

A Business Policy is a Directive that is not directly enforceable<sup>24</sup> whose purpose is to govern or guide the enterprise. Business Policies provide the *basis for* Business Rules. Business Policies also *govern* Business Processes.

The formulation of a Business Policy, which is always under the enterprise's control, is by some party who is authorized to manage, control, or regulate the enterprise by selecting from a variety of alternatives in response to one or more Assessments.

Business Policies that exist merely to enable a Strategy in a direct and trivial manner should be avoided. For example, suppose the enterprise has the Strategy "Encourage repeat business." A Business Policy that says "Repeat business should be encouraged" is trivial and does not need to be expressed.

In general, Business Policies exist to govern — that is, control, guide, and shape — the Strategies and Tactics. For example, the Business Policy "We will not make on-site visits" governs the Strategy "Encourage repeat business," as well as the specific Tactics that might be selected to implement the Strategy. Specifically, no Tactic requiring on-site visits will be permitted to support the Strategy — even though on-site visits would probably be effective in that regard. On the other hand, a Tactic involving sending coupons by mail would be acceptable under the Business Policy since it involves no on-site visits.

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<sup>24</sup> "Not directly enforceable" means that some interpretation of the Directive (e.g., in Business Rules) is needed in order to detect violations.

Examples of Business Policy include the following:

	<b>Business Policy</b>
<i>EU-Rent</i>	<p>Depreciation of rental cars must be minimized</p> <p><i>Compare the (non-practicable) Business Policy with related (practicable) Business Rules:</i></p> <p><i>The Car assigned to a Rental must be: at the time of assignment, of the available Cars in the requested Car Group, the one with the lowest mileage.</i></p> <p><i>A Rental cannot be extended by phone if the Car’s odometer reading is greater than (next service mileage — 500).</i></p>
	<p>Rental payments must be guaranteed in advance</p> <p><i>Compare with Business Rule based on this policy:</i></p> <p><i>A provisional charge for the estimated cost of the Rental must be made against a valid credit card held by the Renter before the Car is handed over.</i></p>
	<p>Rental cars must not be exported</p> <p><i>Compare with Business Rule based on this policy:</i></p> <p><i>An ‘out of country’ car can be rented only on a one-way rental with drop-off at a branch in its country of registration.</i></p>
	<p>Rental contracts are made under the law of the country in which the pick-up branch is located</p>
	<p>Rentals must comply with relevant laws and regulations of all countries to be visited</p>
<i>Pizza Company</i>	Safety in the kitchen, and in the streets, comes first.
<i>E-Business Company</i>	A business representative will personally contact each customer who makes a complaint.

## Business Rule

A Business Rule is a Directive, intended to govern, guide or influence business behavior, in support of Business Policy that has been formulated in response to an Opportunity, Threat, Strength, or Weakness. It is a single Directive that does not require additional interpretation to undertake Strategies or Tactics. Often, a Business Rule is *derived from* Business Policy. Business Rules *guide* Business Processes.

Formally, a Business Rule is a rule that is under business jurisdiction<sup>25</sup>. A rule is a proposition that is a claim of obligation or of necessity. The common sense understanding of ‘rule’ is that a rule always tends to remove some degree of freedom.

Examples of Business Rule include the following:

	<b>Business Rule</b>
<i>EU-Rent</i>	Each Car purchased must match the standard specification of its Car Model.
	The Car assigned to a Rental must be: at the time of assignment, of the available Cars in the requested Car Group, the one with the lowest mileage.
	A customer must present a valid driver’s license in order to rent a EU-Rent vehicle.
	A Car whose odometer reading is greater than (next service mileage — 200) must be scheduled for service.
	A Rental cannot be extended by phone if the Car’s odometer reading is greater than (next service mileage — 500).
	The rental of a car whose odometer reading is greater than (next service mileage — 500) may be extended only if the car is exchanged at a EU-Rent branch.
	Every driver on a rental must be over 21 years old.
<i>Pizza Company</i>	Pizzas must be delivered within one hour.
	Pizzas may not be delivered beyond a radius of 30 miles.
<i>E-Business Company</i>	The order tax amount must be calculated at the time the order is placed.
	An order must not contain more than 25 order items.

<sup>25</sup> This definition is adopted from “Semantics of Business Vocabulary and Business Rules” (SBVR).

### Facts that Organize Means

Besides those mentioned above, other logical connections (i.e., fact types) are required to fully organize the Means. These logical connections provide additional structure among elements of the Means themselves.



Figure 3-11. Facts Involving Means

#### Interrelating Courses of Action — Composition

One Course of Action can *include* other Courses of Action; a Course of Action can be *included in* other Courses of Action. In other words, there can be a ‘parts explosion’ of Courses of Action. This connection should only be used to associate like instances — that is, Strategies only to other Strategies and Tactics only to other Tactics.

Such ‘parts explosion’ happens when there is a decomposition of some higher-level Course of Action into lower-level Courses of Action. This decomposition occurs, for example, when elements of the business plans created by one level of management are handed down to a lower organizational level for more detailed planning or implementation. This creates a ‘recursion’ among the elements, from higher level to lower level. For example, the Strategy “Ensure that the stock of available vehicles never falls below an acceptable level” is composed of sub-Strategies appropriate to each geographic region.

#### Interrelating Courses of Action — Enabling

One Course of Action can be *enabled by* another Course of Action. In other words, the latter Course of Action provides basic support that makes the former Course of Action viable. This connection should generally be used to associate like instances — that is, Strategies only to other Strategies and Tactics only to other Tactics.

For example, the Strategy “Ensure that the stock of available vehicles never falls below an acceptable level” is enabled by the Strategy “Maintain vehicles in good working condition.” For another example, the Tactic “Provide each member of the sales force with a palmtop” enables the Tactic “Input sales orders at the source.”

### Interrelating Business Policies

One Business Policy can *include* other Business Policies; a Business Policy can be *included in* other Business Policies. In other words, there can be a ‘parts explosion’ of Business Policies. For example, the Business Policy “Safety first” can be decomposed into more specific policies that deal with vehicle safety and workplace safety.

### 3.3 Expressing Core Elements of the Business Motivation Model

It is expected that statements an enterprise gives representing its Ends and its Directives will be laden with words that are judgmental, qualitative, and/or comparative. Indeed, the inclusion of such words is one fundamental characteristic of these elements.

Examples of such words include the following.

- Best
- Closest
- Durable
- Expedient
- Low(est)-cost
- Reliable
- Biggest
- Convenient
- Effective
- Fast(est)
- Premier
- Responsive
- Clear
- Courteous
- Efficient
- Leading-Edge
- Professional
- Quickest

These ‘qualitative’ (judgmental or comparative) words should be avoided in expressing Missions, Strategies, and Tactics when the words actually refer to a desired end-state. Statements containing such words should be carefully analyzed and then re-stated as appropriate Desired Results or Directives. Indeed, the absence of adjectives suggesting desired end-states is one fundamental way in which Courses of Action are distinguished from Desired Results and Directives.

However, qualitative words may be used in Courses of Action if the words do not refer to the end-state desired. For example, the Tactic “ship products for free” includes the adjective ‘free.’ This is valid word usage in a Course of Action since it does not describe the Desired Result.

## 4. Influencers and Assessments

To fully understand the elements of business plans, it is necessary to identify the Influencers that shape them. This helps communicate the full intent of the Means and Ends by explaining the context in which they were formulated.

Influencers, however, are neutral — they are more or less simply just ‘there’ until someone makes an Assessment about how they are likely to impact some End or Means. Influencers should always be stated in a neutral, factual manner. Therefore, Influencers should be devoid of qualitative words. The presence of qualitative words indicates a statement *about* an Influencer — in other words, an Assessment.

This section describes the concepts that define these aspects of the Business Motivation Model. Understanding these elements supports intelligent revision of the business plans, possibly well after the business plans and related application system(s) have been implemented.

### 4.1 Influencers on the Ends and Means

#### ***Influencer***

An Influencer can be anything that has the capability to ‘produce an effect without apparent exertion of tangible force or direct exercise of command, and often without deliberate effort or intent.’ The Influencers specifically of concern to business plans are those that can impact the enterprise in its employment of Means or achievement of its Ends. This impact *has influence that is judged in Assessments*.

Influencers should not simply be named but described as well. Such amplification communicates sufficient background and/or contextual information for other planning participants to make appropriate, relevant Assessments.

In describing Influencers, remember they are always neutral, and must be *assessed* to determine implications for business plans. Suppose a statement is made that ostensibly describes some Influencer. If it appears that a Business Rule can be derived *directly* from the statement, then the statement is almost certainly not an Influencer. For example, consider the statement “The company color is blue.” This leads directly to the Business Rule “Each web site screen must contain the company color blue.” Because no Assessment needs to be made, the statement is of another kind — in this case mostly likely a Business Policy.

In describing Influencers, it is also useful to document who *recognizes* the Influencer and at what point in time, so that an audit trail exists for future reference. This practice, of course, cannot always be mandated.

### Categories of Influencer

Influencers impact an enterprise's employment of Means or achievement of Ends. There are two built-in categories of Influencer:

- External: an Influencer that is outside the enterprise's organizational boundaries
- Internal: an Influencer from within the enterprise.

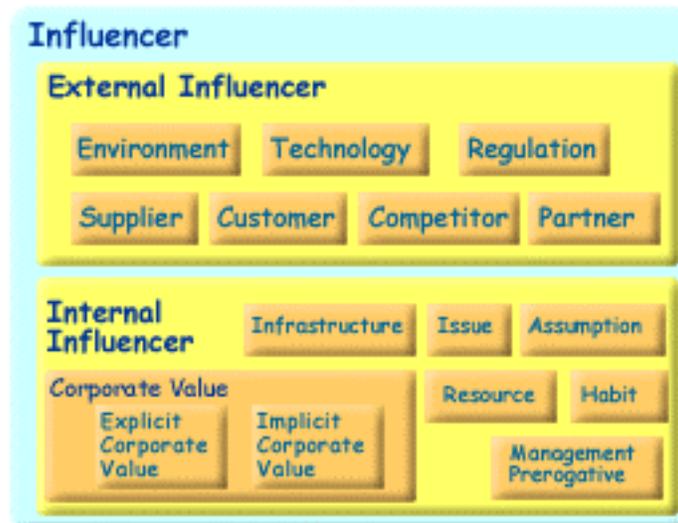


Figure 4-1. Concepts Reflecting Possible Influencers

Beyond these, an enterprise can define whatever Influencer Categories it requires. Enterprises that do not have a preferred set of categories may choose to use this default set, modifying and extending it as required. This default set provides general categories that are used for examples and discussion in this specification. It is suggested that each Influencer is categorized as (at least) one of the general categories and as either internal or external, as described in the following tables.

Influencer Categories may themselves be categorized in broader categories; a narrower category may be included in more than one broader category. Management of consistency when Influencers are categorized in multiple categories is a matter for methodology, practice, and tools, and is beyond the scope of this specification.

**Example: External Influencers**

External Influencers are those outside an enterprise's organizational boundaries that can impact its employment of Means or achievement of Ends. Influencer Categories usually also categorized as External Influencer include the following.

<b>Competitor</b>	A rival enterprise in a struggle for advantage over the subject enterprise.
<b>Customer</b>	A role played by an individual or enterprise that has investigated, ordered, received, or paid for products or services from the subject enterprise.
<b>Environment</b>	The aggregate of surrounding conditions or Influencers affecting the existence or development of an enterprise.
<b>Partner</b>	An enterprise that shares risks and profit with the subject enterprise (or is associated with the subject enterprise to share risks and profit) because this is mutually beneficial.
<b>Regulation</b>	An order prescribed by an authority such as a government body or the management of an enterprise.
<b>Supplier</b>	A role played by an individual or enterprise that can furnish or provide products or services to the subject enterprise.
<b>Technology</b>	The role of technology, including its developments and limitations — there may be prerequisites for use of technology; there may be enterprise activity that technology enables or restricts.

One Influencer Category, Regulation, is explicitly defined in the Model. This supports the requirement (discussed above in "Directive as Regulation") for Directive to be able to act as a Regulation within an enterprise.

This list of External Influencers is not necessarily exhaustive. The enterprise may choose to add additional categories or even introduce its own categorization scheme (i.e., the list above is replaceable as a whole).

Also, the categories are not necessarily mutually exclusive. A particular instance of External Influencer actually may have more than one of these categories.

Examples of External Influencer include the following:

	<b>External Influencer</b>	<b>Influencer Category</b>
<i>EU-Rent</i>	Two smaller competitors have merged and the joint enterprise is now bigger than EU-Rent in several European countries.	<i>Competitor</i>
	‘Premium brand’ car rental companies such as Hertz and Avis have a ‘high quality, value for money’ image — and can charge higher rates	
	Budget airlines offering low-cost, short-haul flights, often to secondary airports	
<i>EU-Rent</i>	EU-Rent’s primary target is business customers, but it recognizes the need to appeal also to personal renters.	<i>Customer</i>
	Market research has determined that customers: generally accept that the rates for ‘premium brand’ car rental companies will be higher than the ‘cheap and cheerful’ competition. tend to see ‘on-airport’ companies as premium and ‘off-airport’ as cheap and cheerful	
<i>EU-Rent</i>	Car parking and storage in city centers is limited and expensive	<i>Environment</i>  <i>&amp; Competitors</i>
	The car rental market in Eastern Europe growing year-on-year by at least 5% per year	
	All on-airport car rental companies offer similar types of car, and are physically lined up in a row. If any promotes a special offer, others react almost immediately, so there is very little room for maneuver against competitors on product, service, or price.	
<i>EU-Rent</i>	EC-Lease, which finances cars for EU-Rent at preferential terms within several EC countries, in return for a share of EU-Rent profits in those countries	<i>Partner</i>

<i>(cont.)</i>	<b>External Influencer</b>	<b>Influencer Category</b>
<i>EU-Rent</i>	Laws and regulations in each country of operation for: driver license and insurance; roadworthiness of cars, including emissions; protection of customer personal information.	<i>Regulation</i>
<i>EU-Rent</i>	Car manufacturers — car models and options offered, prices, contract terms and conditions	<i>Supplier</i>
	Insurers — cover offered, options, premiums	
<i>EU-Rent</i>	Vehicle identification and tracking systems.	Technology
	Availability and cost of (environment-friendly) electric and LPG cars	
	Internet support for self service rental reservations	
<i>Pizza Company</i>	“Depreciation starts when you first use the property in your business or for the production of income. It ends when you take the property out of service, deduct all your depreciable cost or other basis, or no longer use the property in your business or for the production of income.” — IRS 1999 1040 Forms and Instructions 1999 Instructions for Schedule C, Profit and Loss from a Business Part II. Expenses, p. C-3	Regulation

**Example: Internal Influencers**

Internal Influencers are those from within an enterprise that can impact its employment of Means or achievement of Ends. Influencer Categories usually also categorized as Internal Influencer include the following.

<b>Assumption</b>	Something that is taken for granted or without proof.
<b>Corporate Value</b>	An ideal, custom, or institution that an enterprise promotes or agrees with (either positive or negative).
- <b>Explicit Value</b>	- A Corporate Value explicitly set forth and declared.
- <b>Implicit Value</b>	- A Corporate Value not explicitly declared but nonetheless understood by some or all of the people in an enterprise.
<b>Habit</b>	A customary practice or use.
<b>Infrastructure</b>	The basic underlying framework or features of a system.
<b>Issue</b>	A point in question or a matter that is in dispute as between contending partners.
<b>Management Prerogative</b>	A right or privilege exercised by virtue of ownership or position in an enterprise.
<b>Resource</b>	The resources available for carrying out the business of an enterprise, especially their quality.

This list of Internal Influencers is not necessarily exhaustive. The enterprise may choose to add additional categories or even introduce its own categorization scheme (i.e., the list above is replaceable as a whole).

Also, these categories are not necessarily mutually exclusive. A particular instance of Internal Influencer actually may have more than one of these categories.

Examples of Internal Influencer include the following:

	<b>Internal Influencer</b>	<b>Influencer Category</b>
<i>EU-Rent</i>	EU-Rent needs to expand its business year on year.	Assumption
	A loyalty rewards program is essential for attracting business customers.	
<i>EU-Rent</i>	Managers are generally promoted from within the company	Habit
	Successful branch managers are usually allowed to remain at their branches for as long as they want to.	
	Branch counter staff receive two days' introductory training. Further training is informal, on the job	

<i>(cont.)</i>	<b>Internal Influencer</b>	<b>Influencer Category</b>
<i>EU-Rent</i>	Rental branches are clustered in and around major cities, with large branches at airports and city centers, medium-sized branches in suburbs and nearby towns, and small agencies in hotels and travel agents' premises.	Infrastructure
	Cars are owned by local areas, not by rental branches. The cars owned by a local area are available to all branches in the area.	
	Rental reservations can be made by telephone, via Internet, or in person. A rental branch can accept an in-person reservation for any other EU-Rent branch	
	The internet rentals software was developed for individual rentals. It has few facilities to support corporate rental agreements	
<i>EU-Rent</i>	How to split promotion and marketing between business customers and personal renters.	Issue
	To what extent car maintenance and servicing should be outsourced.	
<i>EU-Rent</i>	The EU-Rent board has decided to give priority to Eastern Europe for business expansion in the next three years.	Management Prerogative
	Branch managers have authority to offer ad-hoc discounts in reaction to competitors' offers. They use their discretion in doing so, as the reduced price will affect branch financial performance.	
<i>EU-Rent</i>	Cars — popular models from reputable manufacturers, low mileage, environment-friendly, low-cost maintenance	Resource
	Branch staff: Counter clerks — high turnover, variable quality Managers — low turnover, high quality.	

<i>(cont.)</i>	<b>Internal Influencer</b>	<b>Influencer Category</b>
<i>EU-Rent</i>	EU-Rent is environment-friendly. All the car models it offers for rental have good fuel economy and low emissions.	Explicit Corporate Value
	EU-Rent offers quality, service, and value for money, rather than lowest possible price.	
<i>EU-Rent</i>	Rental branch staff are supportive of colleagues and customers. <i>For example, if there is a long queue of customers, they will help colleagues on the counter without needing direction from the manager to do so, and may delay a rest break until the queue is cleared.</i>	Implicit Corporate Value
	Rental branch staff take good care of cars. <i>For example, if they notice problems, (e.g., oil leaks, muffler noise, tire wear) they ensure that maintenance staff are alerted, even if it is not their direct responsibility to do so.</i>	
<i>E-Business Company</i>	Short lunch hours.	Implicit Corporate Value
<i>Accounting Company</i>	Regional managers have considerable latitude.	Management Prerogative

## 4.2 Assessing the Impact of Influencers on Ends and/or Means

Influencers are neutral — they are more or less simply just ‘there’ until someone makes an Assessment of them as they relate to Ends and/or Means. Such an Assessment represents a *judgment about* an Influencer with respect to its *impact on* Ends and/or Means. Specifically, the Assessment indicates that the Influencer affects the employment of Means and/or the achievement of Ends, in certain ways.

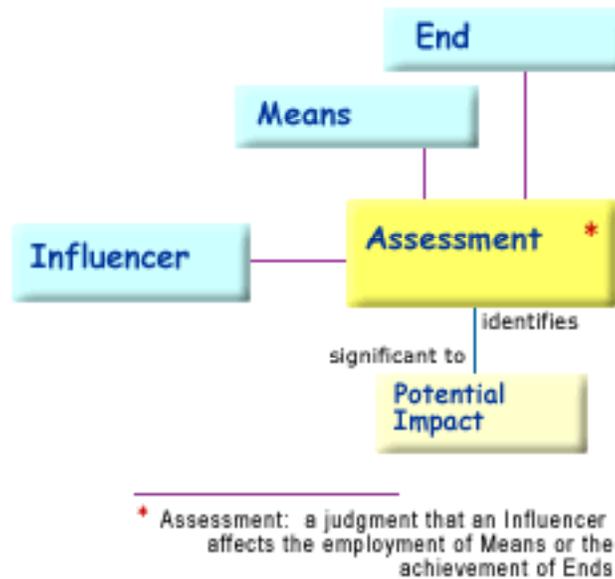


Figure 4-2. Concepts for Assessments of Influencers on Ends and/or Means

If an Assessment is related to both a Means and an End, then this suggests that the particular Means is somehow related to the particular End. Specifically, if there is not a fact relating them — such as ‘Course of Action channels efforts towards Desired Result’ or ‘Directive supports achievement of Desired Result’ — then careful consideration should be given to that omission.

### Assessment

An Assessment is a *judgment about* some Influencer that affects the organization’s ability to employ its Means or achieve its Ends. In other words, an Assessment expresses a logical connection (i.e., fact type) between Influencers and the Ends and/or Means of the business plans. In this way, an Assessment indicates which Influencers are relevant to which Ends and/or Means.

Different people or groups of people<sup>26</sup> might make different Assessments of the very same Influencers on the very same Ends and Means — and perhaps even the same person or group of people at different points in time. It is very important to indicate which person or group of people *makes* which Assessment of an Influencer at which point in time, so that an audit trail exists for future reference. This practice, of course, cannot always be mandated.

<sup>26</sup> Organization Unit. The Model does not elaborate organizational structures — the BRG recognizes their importance, but this area is outside scope.

An Assessment can *provide impetus for* Directives that *govern* Courses of Action and/or *support the achievement of* Ends. In other words, the Directive is *motivated by* the Assessment.

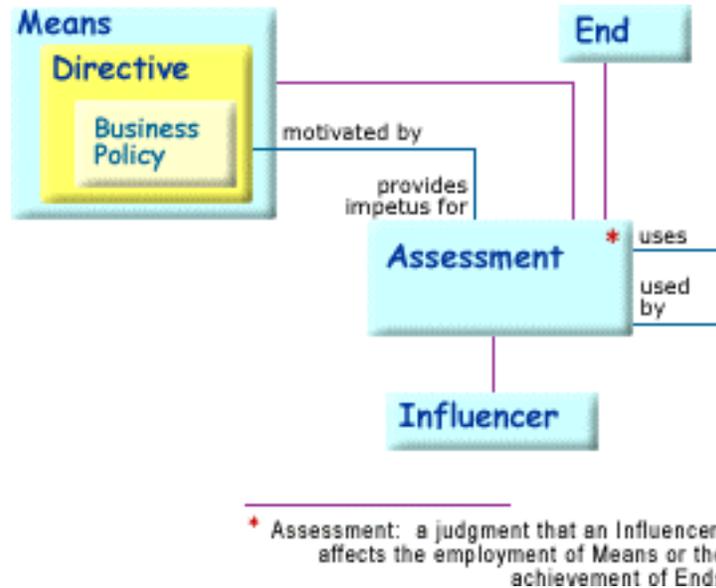


Figure 4-3. Assessment and Directive

#### Use of Assessments by Assessments

Assessments can also *use* other assessments. Typical use of this association is connecting an assessment to other assessments referenced while arriving at the judgment. These associations can then be used for many purposes, including:

- Decision support for making new assessments — identifying the full set of concerns taken into account in earlier assessments
- Compliance audit — justifying decisions made in reacting to change

## Categories of Assessment

The Business Motivation Model supports a general categorization structure for Assessment, as illustrated in Figure 4-4. Categories of Assessment may themselves be categorized in broader categories; a narrower category may be included in more than one broader category.

SWOT — Strength, Weakness, Opportunity, Threat — is a frequently-used set of categories for Assessment. There are other approaches, but if an enterprise does not have another preferred set, SWOT is a sound default. SWOT is used as the illustrative approach for discussion and examples in the rest of this document.

When applying SWOT to making assessments,<sup>27</sup> Assessments are categorized as follows:

- Strength
- Weakness
- Opportunity
- Threat



Figure 4-4. Categories of Assessment

## Strength

This category of Assessment indicates some advantage or area of excellence within the enterprise that can impact its employment of Means or achievement of Ends.

Some examples of Strength Assessments are:

	<b>Strength</b>	<b>Affects</b>
<i>EU-Rent</i>	Infrastructure: geographical distribution of branches	Appeal to business customers.
	Implicit corporate values: environment-friendly, value rather than price — good positioning of EU-Rent, differentiating from competitors.	Promotion to all customers as a 'premium brand'.
	Resource: rental branch managers — ground-level leaders of the customer-facing business.	Building branch networks around major cities and airports.

<sup>27</sup> As stated in Section 2, SWOT is one approach that can be used in making assessments. The Model does not specify SWOT as *the* technique. These categories of Assessment are illustrative.

### Weakness

This category of Assessment indicates some area of inadequacy within the enterprise that can impact its employment of Means or achievement of Ends.

Some examples of Weakness Assessments are:

	<b>Weakness</b>	<b>Affects</b>
<i>EU-Rent</i>	The software for internet rentals has few facilities for self-service of corporate rental agreements — e.g., analyzing car usage by employees, removing people who have left their employment with the corporate customer.	Appeal to businesses for corporate agreements.
	High turnover of branch counter staff frequently causes shortage of experienced staff in branches. This can cause delays in dealing with exceptions and problems.	Provision of high-quality customer service.

### Opportunity

This category of Assessment indicates that some Influencer can have a favorable impact on the organization's employment of Means or achievement of Ends. For example, the bankruptcy of Pizza Company's major competitor in Region-Y is assessed to be an Opportunity in its Goal "To increase market share."

Some examples of Opportunity Assessments are:

	<b>Opportunity</b>	<b>Affects</b>
<i>EU-Rent</i>	EU-Rent thinks there is room for competition in the 'premium brand' car rental market.	Appeal to business users. Increase in rental rates.
	Depreciation on cars between their purchase, new, and their sale at the end of their rental life is a critical factor in financial success.	Improved management of depreciation would reduce costs.

**Threat**

This category of Assessment indicates that some Influencer can have an unfavorable impact on the organization's employment of Means or achievement of Ends.

Some examples of Threat Assessments are:

	<b>Threat</b>	<b>Affects</b>
<i>EU-Rent</i>	Budget airlines provide low-cost flights to major cities, but using secondary airports where EU-Rent does not have branches	Appeal to business users. Expansion into Eastern Europe.
	Budget airlines offer a cost effective and faster alternative to car rental for short distances (say, up to 200 miles).	Building 'premium' business from major airports.
	Congestion charges in European city centers: Discourage customers from renting cars in city centers Increase EU-Rent operational costs when moving cars to and from city offices	Positioning city offices — moving them outside congestion zones will reduce convenience for business customers.

## Potential Impact

An Assessment records judgments about the impact (or potential for impact) of some Influencer on Ends and/or Means in terms of Potential Impacts. In other words, an Assessment *identifies* some Potential Impact(s) that is/are *significant to* that Assessment. Each Potential Impact is an evaluation that quantifies or qualifies some aspect of an Assessment in specific terms, types, or dimensions.

A Potential Impact *significant to* an Assessment can *provide impetus for* Directives that govern Courses of Action or *support the achievement of* Ends. An Influencer may lead to the creation of a Business Policy *only* through an Assessment having been made that *identifies* some Potential Impact.



Figure 4-5. Assessment and Potential Impacts

## Categories of Potential Impact

Potential Impacts are categorized as follows:

- Risk
- Potential Reward

Risks are typically regarded to be negative impacts, whereas Rewards are considered positive.

Where there is more than one Assessment associated with a single instance of an End or Means, the total impact should be evaluated to uncover tradeoffs between Risks and Potential Rewards. This is the basis of risk/benefit analysis.

## Risk

A Risk is a category of Impact Value that indicates the impact and probability of loss. Some Risks are expressible as formulae of the kinds:

- Probability of loss. (e.g., 5% probability)
- Potential loss. (e.g., \$500,000 loss)
- Unit-of-measure. (e.g., loss in USD)

Some examples of Risk are:

	<b>Assessment</b>	<b>Risk</b>
<i>EU-Rent</i>	Opportunity: room for competition in the ‘premium brand’ car rental market.	Failure to position EU-Rent as a premium brand risks loss of an estimated 15% of current customers without replacement by new customers.
	Opportunity: targeting business customers & increasing rental rates.	Many unrented cars at weekends, with rates undercut by the ‘cheap and cheerful’ competition.
	Threat: stringent emission control requirements in Scandinavia — have to be met by any EU-Rent car that might be driven in Scandinavia.	Severe financial penalties for failure to comply.

### **Potential Reward**

A Potential Reward is a category of Potential Impact that indicates the probability of gain. Some Potential Rewards are expressible as formulae of the kinds:

- Probability of gain. (e.g., 30% probability)
- Potential gain. (e.g., \$40,000 gain)
- Unit-of-measure. (e.g., gain in USD)

Some examples of Potential Reward are:

	<b>Assessment</b>	<b>Potential Reward</b>
<i>EU-Rent</i>	Opportunity: room for competition in the ‘premium brand’ car rental market.	Market acceptance would support an average increase of 12% on rental rates.  In moving up-market, EU-Rent expects to replace at least 15% of its current customers.
	Opportunity: improved management of depreciation of cars.	Reduction of depreciation costs by 3%.

### 4.3 EU-Rent Example: Reaction to Influencers

EU-Rent needs to decide how it wants to position itself in the car rental market.

- ‘Premium’ car rental companies, such as Hertz and Avis, have a ‘high quality, value for money’ image. *(These EU-Rent Competitors are External Influencers.)*
- Customers generally accept that the rates for premium companies will be higher than the ‘cheap and cheerful’ competition. Customers tend to see ‘on-airport’ companies as premium, and ‘off-airport’ companies as cheap and cheerful. *(These Customers — determined by market research — are External Influencers for EU-Rent.)*
- EU-Rent thinks there is room for competition in the premium market. *(This is an Opportunity Assessment.)*
- EU-Rent decides that it wants to be a premium car rental company. *(This is a Goal.)*
- To achieve this, EU-Rent decides to be nation-wide in each of its countries of operation, focusing on major airports, and to compete head-to-head, on-airport, with other premium car rental companies. *(This is a Strategy.)*
- A problem for on-airport car rental companies is that all the competitors offer similar types of car, and are physically lined up in a row. *(This Environment is an External Influencer for EU-Rent.)* There is very little room for maneuver on product, service, or price. *(This is a Weakness Assessment.)*
- This on-airport constraint on pricing means that depreciation on cars between their purchase as new cars, and their sale at the end of their rental life will be a critical factor in financial success *(This is an Opportunity Assessment.)* In response to this, EU-Rent decides that depreciation of cars must be minimized. *(This is a Business Policy.)*
- EU-Rent has a *Strategy* for car purchase and disposal, covering:
  - » What models to buy from which manufacturers.
  - » What overall numbers and mix and cars to buy.
  - » When to dispose of cars, by mileage and age.
  - » How to phase purchasing and delivery of cars.
  - » etc.

- Within this Strategy, EU-Rent develops *Tactics*<sup>28</sup> for its “minimize depreciation” Business Policy, and *Business Rules* to govern and guide these Tactics. For example:

<i>Tactics</i>	<i>Business Rules</i>
Create standard specifications of car models, selecting from options offered by the manufacturers — this is a trade-off between ‘rentable’ and ‘high residual value for sales’.	Each Car purchased must match the standard specification of its Car Model.
Equalize of use of cars across rentals.	The Car assigned to a Rental must be: at the time of assignment, of the available Cars in the requested Car Group, the one with the lowest mileage.
Comply with manufacturer’s maintenance schedule.	Any Car whose odometer reading is greater than (next service mileage — 200) must be scheduled for service.  A Rental cannot be extended by phone if the Car’s odometer reading is greater than (next service mileage — 500). The Customer must bring it to a EU-Rent branch for a change of car.

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<sup>28</sup> These Tactics will be realized in Business Processes. As before, however, the detailing of these Business Processes is outside the scope of the Model.

## 5 Metrics for the Business Motivation Model

Implicit in many areas of the Business Motivation Model is the subject of metrics. In almost all organizations there are ‘things of interest’ that are heavily measured and tracked.<sup>29</sup> These metrics govern, control, and influence a wide range of important aspects of the organization. The very fact these ‘things’ are so heavily measured makes them important.

Some of the most important metrics of an enterprise are established by its Goals. Each Goal can have one or more *measures of performance*. For example, a metric of the Goal “To be profitable” is the measure of performance ‘annual net revenue.’ Another measure of performance of this Goal might be ‘monthly net revenue.’

Some of the example Goals presented earlier have been extended below to illustrate measures of performance:

	Goal	Measure(s) of Performance
<i>EU-Rent</i>	To provide industry-leading customer service.	market share
<i>EU-Rent</i>	To provide well-maintained cars.	quality of product
<i>EU-Rent</i>	To have vehicles available for rental when and where customers expect them.	usage % order fulfillment
<i>Pizza Company</i>	To deliver pizzas in an expedient amount of time.	elapsed time
<i>Consulting Company</i>	To improve customer satisfaction (over the next five years).	customer satisfaction
<i>Publishing Company</i>	To improve customer satisfaction (over the next five years).	customer satisfaction
<i>E-Business Company</i>	To have more customers than any other e-business.	market share

Objectives should *always* be measurable. Therefore Objectives, by definition, will have metrics. The metrics for an Objective are established by the measures of performance of the Goal that the Objective quantifies. To be able to do this, an appropriate unit-of-measure for the metric must be determined for each Objective. The Objective then expresses the target value that the metric should attain in the timeframe specified. In that way, while a Goal sets the direction, its corresponding Objectives set the milestones to be attained in pursuing the Goal. For example, to quantify the Goal “To be profitable” the enterprise might set one Objective to have a monthly net revenue of at least \$5 million (by a specified date) and another Objective to have an annual net revenue of at least \$100 million (by a specified date).

Metrics are imperative for Potential Impacts. Without thoughtful and careful identification of appropriate metrics, the Risk / Potential Reward evaluation becomes meaningless.

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<sup>29</sup> Rule management is outside of the scope of the Model; however, the enterprise should consider Business Rules to be one of the ‘things of interest’ that it carefully ‘measures and tracks’. Management of rules over time is important not only to performance assessment and improvement, but also addresses related issues, such as response to changes in Influencers.

If a metric is particularly important, it may attain a special status and be called a *Key Performance Indicator* (KPI) or a *Critical Success Factor* (CSF) — or something else. The choice of signifier is unimportant. The enterprise will decide on many different things to be measured.<sup>30</sup> Each of these measurements will have differing degrees of importance relative to the attainment of some Objective or set of Objectives. The fact that the enterprise has decided to measure, evaluate, and act on the results of the metrics is the important thing.

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<sup>30</sup> In fact, if the Zachman Framework is used, it is possible to identify important ‘things’ to be measured in virtually every cell.

# Appendix A Business Motivation Model Diagram

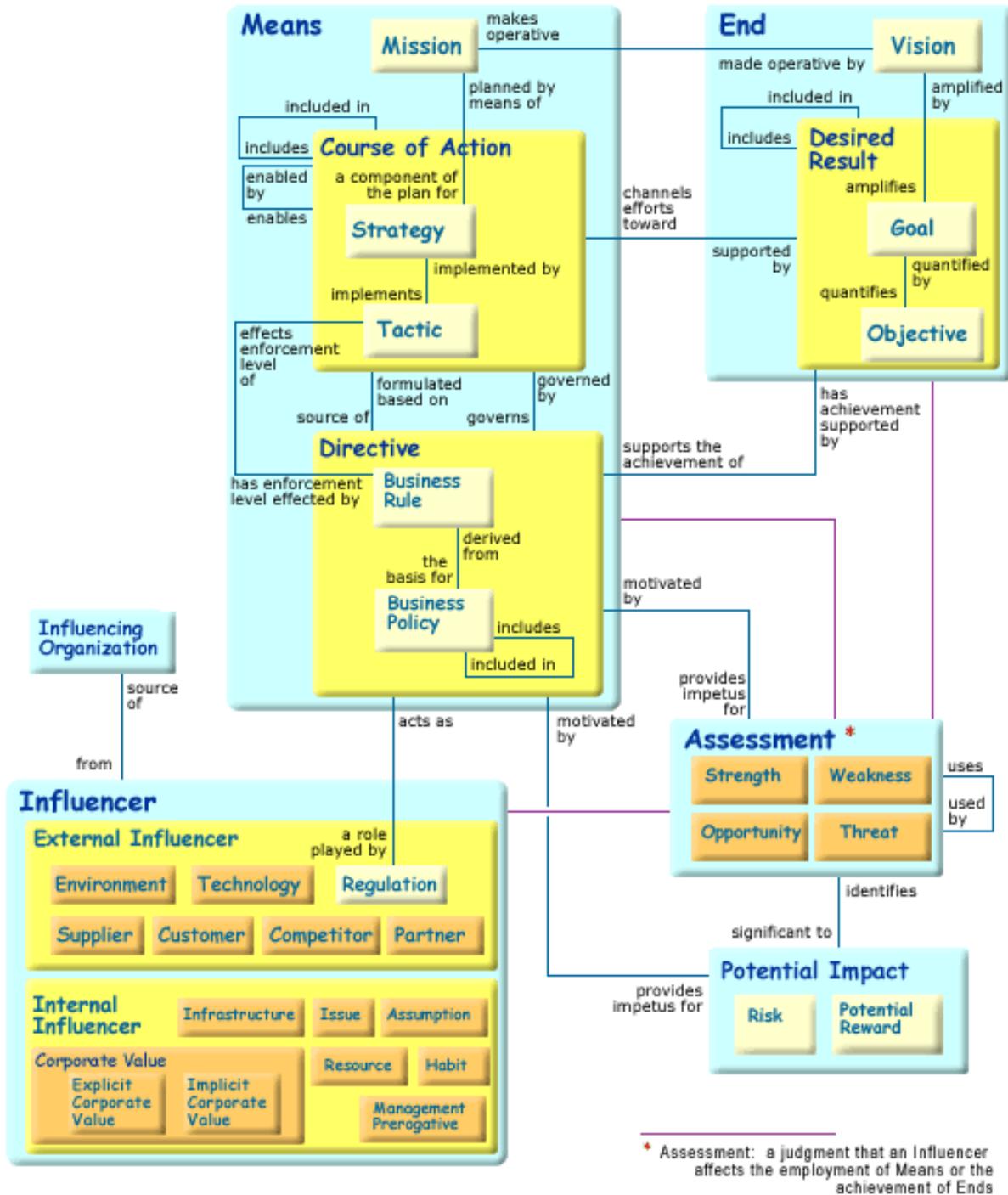


Figure A-1. Core Concepts of the Business Motivation Model

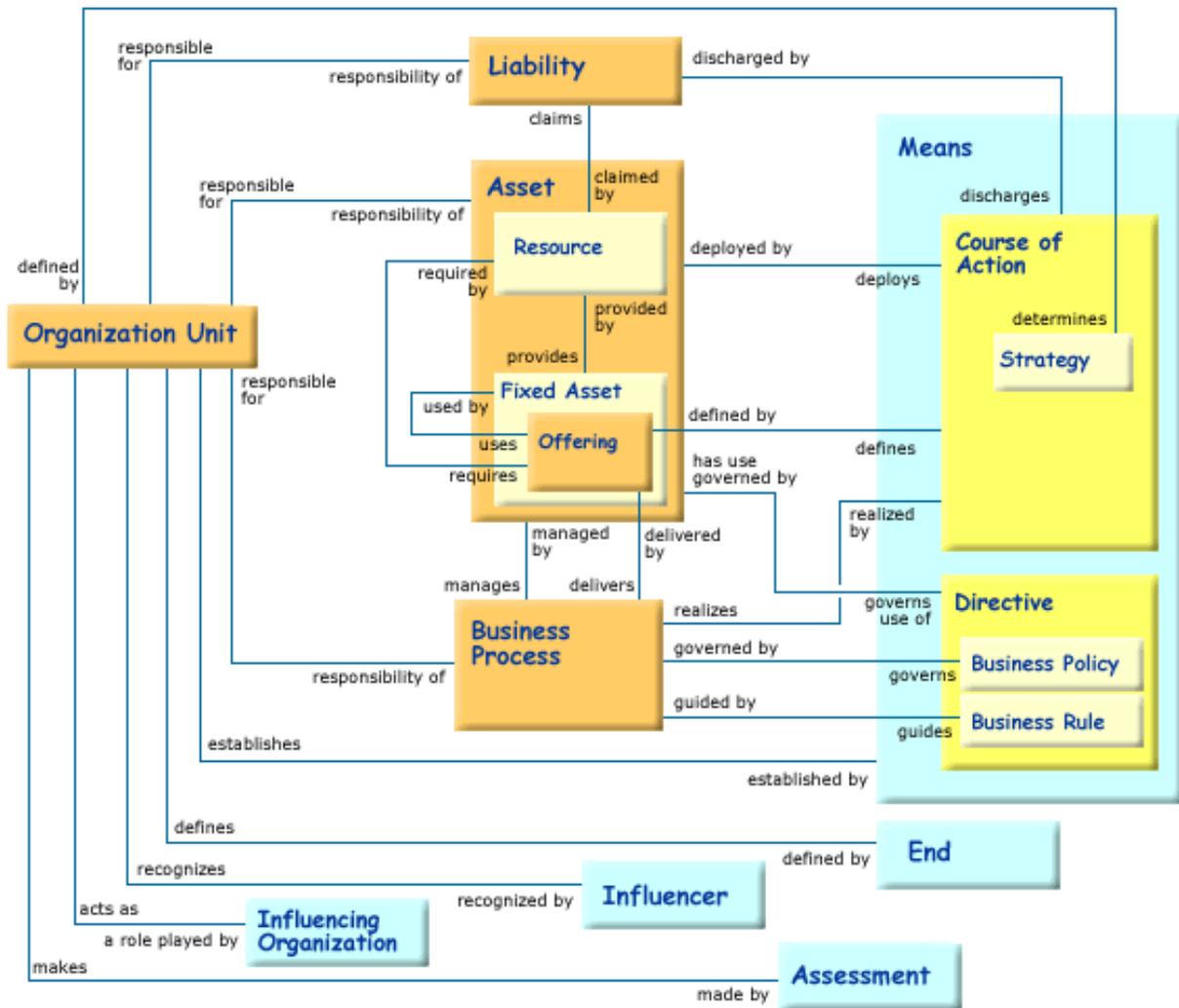


Figure A-2. Placeholders and Placeholder Connections in the Business Motivation Model

## Appendix B

# Concepts Catalog

### Definitions for Terms

**Note:** In the design for an implementation of the Business Motivation Model, each concept in this Concepts Catalog should be assigned two attributes — ‘name’ and ‘description’ — to be included in the implementation. User enterprises and repository vendors could, of course, choose to include additional attributes.<sup>31</sup>

#### Assessment

is a judgment that an Influencer affects the employment of Means and/or the achievement of Ends.

Sample categories of Assessment following SWOT are:

- Strength
- Weakness
- Opportunity
- Threat

Categories of Assessment may themselves be categorized in broader categories; a narrower category may be included in more than one broader category.

An Assessment ...

- expresses a logical connection between Influencers and the Ends and/or Means of the business plans. Specifically, it ...
  - » expresses the impact of Influencers on Ends and/or Means.
  - » is a judgment about Influencers.
- provides impetus for Directives.
- must identify Potential Impact(s).
- must be made by at least one Organization Unit.
- may use other Assessments.
- may be used by other Assessments.

Additional constraints:

- If an Assessment is related to both a Means and an End, then this suggests that the particular Means is somehow related to the particular End. Specifically, if there is not a fact relating them — such as ‘Course of Action channels efforts towards Desired Result’ or ‘Directive supports achievement of Desired Result’ — then careful consideration should be given to that omission.

Dictionary basis:

- to analyze critically and judge definitively the nature, significance, status, or merit of: determine the importance, size, or value of [MWUD ‘assess’ (4)]

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<sup>31</sup> The OMG BMM Specification presents its Concepts Catalog as an SBVR business vocabulary; the reader is referred to that document as the authoritative source for the complete set of implementation concepts.

## Asset

is something of value owned by the enterprise.

An Asset is an actual thing (tangible or intangible) owned by the enterprise, rather than the accounting sense of ‘asset’ — the monetary value of the thing.

Categories of Asset include:

- Fixed Asset
- Resource

An Asset ...

- may be deployed by Courses of Action.
- may have use governed by Directives.
- may be managed by Business Processes.
- may be the responsibility of Organization Units.

Dictionary basis:

- an item of value owned [MWUD 'asset' (3)]

## Assumption

is an Internal Influencer that is taken for granted or without proof.

Dictionary basis:

- a thing that is accepted as true or as certain to happen, without proof [NODE 'assumption' (1)]

## Business Policy

is a Directive that is concerned with directly controlling, influencing, or regulating the actions of an enterprise and the people in it and that is not directly enforceable .

Compared to a Business Rule, a Business Policy tends to be:

- less structured.
- less discrete.
- less atomic.
- less compliant with standard business vocabulary.
- less formally articulated.

The purpose of a Business Policy is to govern or guide the enterprise. The formulation of a Business Policy is under an enterprise’s control by a party authorized to manage, control, or regulate the enterprise, by selection from alternatives in response to a combination of Assessments.

‘Not directly enforceable’ means that some interpretation of the Directive (e.g., in Business Rules) is needed in order to detect violations. In contrast to Business Rules, Business Policies are not directly enforceable in that sense.

A Business Policy ...

- is the basis for Business Rules.
- may govern Business Processes.
- may include other Business Policies.
- may be included in other Business Policies.

Dictionary basis:

- a definite course or method of action selected (as by a government, institution, group, or individual) from among alternatives and in the light of given conditions to guide and usually determine present and future decisions [MWUD 'Policy' {5a}]

## **Business Process**

*The concept 'Business Process' is adopted from the OMG's Business Process Modeling and Notation (BPMN) specification. The placeholder definition is given:*

A Business Process is a set of activities that are performed within an organization or across organizations. [OMG BPMN]

A **Business Process** ...

- is the responsibility of an **Organization Unit**.
- realizes **Courses of Action**.
- is guided by **Business Rules**.
- is governed by **Business Policies**.
- may deliver **Offerings**.
- may manage **Assets**.

A Business Process may contain more than one separate Process. Each Process may have its own Sub-Processes. Individual Processes would be independent in terms of sequence flow, but could have message flows connecting them.

An activity is work that is performed within a business process. An activity can be atomic or non-atomic (compound). The types of activity that are a part of a Business Process are: Process, Sub-Process, and Task.

## **Business Rule**

is a rule that is under business jurisdiction. A rule is a proposition that is a claim of obligation or of necessity.<sup>32</sup> The common sense understanding of 'rule' is that a rule always tends to remove some degree of freedom.

A **Business Rule** is an individual **Directive** that is practicable — that is, does not require additional interpretation to undertake **Strategies** or **Tactics**.

'Practicable' means that a person who understands a **Directive** could observe a relevant situation (including his or her own behavior) and recognize directly whether or not the business was complying with that **Directive**.

For rules that govern activity (SBVR 'operative business rule'), this recognition is about the behavior of people and what form compliant behavior takes. For example, "each rental must be guaranteed by a valid credit card held by the renter of the rental." For definitional rules (SBVR 'structural business rule'), this recognition is about evaluation of the criteria vested in the rule to produce consistent outcomes for decisions or calculations. For example, "a car model requested for a rental must be a car model of the car group specified for the rental."

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<sup>32</sup> This definition is adopted from the OMG standard "Semantics of Business Vocabulary and Business Rules" (SBVR), 2007. The intent is to keep this definition in sync with SBVR, from which this definition is adopted.

A [Business Rule](#) is:

- highly structured.
- discrete.
- atomic.
- carefully expressed in terms of standard vocabulary.

A [Business Rule](#) ...

- is derived from [Business Policy](#).
- guides [Business Processes](#).
- has enforcement level effected by a [Tactic](#).

Only Business Rules that guide behavior (SBVR ‘operative business rule’) may have an enforcement level. Definitional Business Rules (SBVR ‘structural business rule’) are “true by definition.”

Dictionary basis of ‘rule’:

- standard by which something is judged or valued; criterion [MWUD ‘rule’ (2b)]
- principle or standard by which something may be judged or decided [determined] [NODE ‘criterion’]
- standard on which a judgment or decision may be based [MWUD ‘criterion’ (2)]

## Competitor

is an [External Influencer](#) that is a rival enterprise in a struggle for advantage over the subject enterprise.

Dictionary basis:

- an organization or country that is engaged in commercial or economic competition with others [NODE ‘competitor’]
- a contest between rivals : a match or trial between contestants [MWUD ‘competition’ (2)]
- a market condition in which a large number of independent buyers and sellers compete for identical commodities, deal freely with each other, and retain the right of entry and exit from the market [MWUD ‘competition’ (4b)]

## Corporate Value

is an [Internal Influencer](#) that is an ideal, custom, or institution that an enterprise promotes or agrees with. It may be positive or negative, depending on point of view.

Dictionary basis:

- a person’s principles or standards of behavior; one’s judgment of what is important in life [NODE ‘values’ (2)]

## Course of Action

is a [Means](#) that is an approach or plan for configuring some aspect of the enterprise involving things, processes, locations, people, timing, or motivation undertaken to achieve [Ends](#).

Categories of [Course of Action](#) include:

- [Strategy](#)
- [Tactic](#)

### A Course of Action ...

- is governed by Directives.
- may be formulated based on Directives.
- may enable other Courses of Action.
- may be enabled by other Courses of Action.
- may include other Courses of Action.
- may be included in other Courses of Action.
- channels efforts towards Desired Results.
- is realized by Business Processes.
- may define Offerings.
- may deploy Assets.
- may discharge Liabilities.

#### Additional constraints:

- The related (enables/enabled by) Courses of Action must be of the same type.
  - » Specifically, Strategies may enable Strategies, and Tactics may enable Tactics. Strategies do not enable Tactics, and vice versa.
- The related (composed of/part of) Courses of Action must be of the same type.
  - » Specifically, Strategies may be composed of (sub)Strategies, and Tactics may be composed of further Tactics. Strategies are not composed of Tactics, and vice versa. Strategies and Tactics are related via a separate, distinct fact type ‘implements / is implemented by’.

#### Dictionary basis:

- a mode of action; “if you persist in that course you will surely fail”; “once a nation is embarked on a course of action it becomes extremely difficult for any retraction to take place” [www.dictionary.com - Source: WordNet® 2.0 ‘course of action’]
- a chosen manner of conducting oneself : way of acting “our wisest course is to retreat” [MWCD<sup>33</sup> ‘course’ (3b)]

## Customer

is an External Influencer that is a role played by an individual or enterprise that has investigated, ordered, received, or paid for products or services from the subject enterprise.

#### Dictionary basis:

- a person or organization that buys goods or services from a shop or business [NODE ‘customer’ (1)]

## Desired Result

is an End that is a state or target that the enterprise intends to maintain or sustain.

Categories of Desired Result include:

- Goal
- Objective

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<sup>33</sup> Merriam Webster Collegiate Dictionary

### A Desired Result ...

- may have its achievement supported by Directives.
- may include other Desired Results.
- may be included in other Desired Results.
- may be supported by Courses of Action.

#### Additional constraints:

- The related (composed of/part of) Desired Results must be of the same type.
  - » Specifically, Goals may be composed of (sub)Goals, and Objectives may be composed of (sub)Objectives. Goals are not composed of Objectives, and vice versa. Goals and Objectives are related via a separate, distinct fact type “quantifies / is quantified by”.

#### Dictionary basis:

- a satisfactory or favorable outcome of an undertaking or contest [NODE 'Result' (bullet 3)]

## Directive

is a Means that defines or constrains some aspect of an enterprise. It is intended to assert business structure or to control or influence the behavior of the enterprise.

Synonym: Element of Guidance [SBVR]

#### Categories of Directive include:

- Business Policy
- Business Rule

#### A Directive...

- governs Courses of Action.
- may be the source of Courses of Action.
- supports the achievement of Desired Results.
- may act as some other Organization Unit's Regulation.
- may be motivated by Assessments.
- may be motivated by Potential Impacts.
- may govern use of Assets.

A Business Policy or Business Rule made by senior management may be obeyed as Regulation lower down in the organization.

#### Dictionary basis:

- an official or authoritative instruction [NODE 'directive']

## End

is something that is to be accomplished.

#### Categories of End include:

- Vision
- Desired Result

#### An End ...

- may be impacted by Influencers, expressed in Assessments.
- must be defined by at least one Organization Unit.

Dictionary basis:

- an outcome worked toward especially with forethought, deliberate planning, and organized effort [MWUD 'end' (4a)]

## Environment

is an External Influencer that is the aggregate of surrounding conditions or Influencers affecting the existence or development of an enterprise.

Dictionary basis:

- the surroundings or conditions in which a person, animal, or plant lives or operates [NODE 'environment' (1)]

## Explicit Corporate Value

is a Corporate Value that is explicitly declared

Dictionary basis:

- See Corporate Value

## External Influencer

is an Influencer outside an enterprise's organizational boundaries that can impact its employment of Means or achievement of Ends.

Sample categories of External Influencer are:

- Competitor
- Customer
- Environment
- Partner
- Regulation
- Supplier
- Technology

Dictionary basis:

- See Influencer

## Fixed Asset

is an Asset that is maintained over time and reused.

For example: Production equipment, IT equipment, buildings, vehicles.

For example: Patents, brands, licenses, designs, people's skills.

A Fixed Asset ...

- may be used by Offerings.
- may provide Resources.

Dictionary basis:

- tangible assets (as land, buildings, machinery, equipment) of a permanent or long-term nature [MWUD 'fixed assets']

Dictionary basis:

- long-term assets either tangible or intangible (as land, buildings, patents, or franchises) [MWUD 'capital assets']

## Goal

is an End that is a state or condition of the enterprise to be brought about or sustained through appropriate means.

Compared to an Objective, a Goal tends to be:

- ongoing.
- qualitative (rather than quantitative).
- general (rather than specific).
- longer term.

A Goal ...

- amplifies at most one Vision.
- is quantified by Objectives.

Dictionary basis:

- the end toward which effort or ambition is directed [MWUD 'goal' (2)]
- the object of a person's ambition or effort; an aim or desired result [NODE 'goal' (2)]

## Habit

is an Internal Influencer that is a customary practice or use.

Dictionary basis:

- a settled or regular tendency or practice, especially one that is hard to give up [NODE 'habit' (1)]

## Implicit Corporate Value

is a Corporate Value that is not explicitly declared but understood by some or all of the people in an enterprise.

Dictionary basis:

- See Corporate Value

## Influencer

is something that has the capability of producing an effect without apparent exertion of tangible force or direct exercise of command, and often without deliberate effort or intent.

Categories of Influencer include:

- External Influencer
- Internal Influencer

Categories of Influencer may themselves be categorized in broader categories; a narrower category may be included in more than one broader category.

An Influencer ...

- has effect on Ends and/or Means that is judged in Assessments.
- is recognized by Organization Units.
- may be from Influencing Organizations.

Dictionary basis:

- the capacity to have an effect on the character, development, or behavior of someone or something, or the effect itself [NODE 'influence' (1)]

### Influencing Organization

is an organization that is external to the enterprise modeled in a given enterprise Business Motivation Model and that influences that enterprise.

An Influencing Organization ...

- is a role that may be played by an Organization Unit.
- may be the source of Influencers.

### Infrastructure

is an Internal Influencer that is the basic physical and organizational structures and facilities needed for the operation of the enterprise.

Dictionary basis:

- the basic physical and organizational structures and facilities (e.g., buildings, roads, power supplies) needed for the operation of a society or enterprise [NODE 'infrastructure']

### Internal Influencer

is an Influencer from within an enterprise that can impact its employment of Means or achievement of Ends.

Sample categories of Internal Influencer are:

- Assumption
- Corporate Value
- Habit
- Infrastructure
- Issue
- Management Prerogative
- Resource

Dictionary basis:

- See Influencer.

### Issue

is an Internal Influencer that is a point in question or a matter that is in dispute as between contending partners.

Dictionary basis:

- an important topic or problem for debate or discussion [NODE 'issue' (1)]

## Liability

is a reservation of some resource to meet commitments.

A Liability is a reservation of actual resources (materials, finished goods, people's time, cash etc.) to meet commitments, rather than the accounting sense of 'liability' — the monetary value of these resources.

A Liability ...

- may be discharged by Courses of Action.
- may be the responsibility of Organization Units.
- may claim Resources.

Dictionary basis:

- something for which one is liable: as a (1): an amount that is owed whether payable in money, other property, or services [MWUD]

## Management Prerogative

is an Internal Influencer that is a right or privilege exercised by virtue of ownership or position in an enterprise.

Dictionary basis:

- a right or privilege exclusive to a particular individual or class [NODE 'prerogative']

## Means

is a device, capability, regime, technique, restriction, agency, instrument, or method that may be called upon, activated, or enforced to achieve Ends.

Categories of Means include:

- Mission
- Course of Action
- Directive

A Means ...

- is established by Organization Units.
- may be impacted by Influencers, expressed in Assessments.

Dictionary basis:

- an action or system by which a result is brought about; a method [NODE 'means']

## Mission

is a Means that is the ongoing operational activity of an enterprise.

A Mission ...

- makes operative at most one Vision.
- is planned by means of Strategies.

Dictionary basis:

- the chief function or responsibility of an organization or institution [MWUD 'mission' (4b)]

## Objective

is an End that is a specific time-targeted, measurable, attainable target that an enterprise seeks to meet in order to achieve its Goals.

Compared to a Goal, an Objective is:

- short-term.
- not continuing beyond its timeframe (Of course such timeframes can be cyclical — i.e., monthly, quarterly, etc.).

An Objective ...

- quantifies a Goal. (It provides the basis for measures to determine that progress is being made towards the Goal.)

Dictionary basis:

- something toward which effort is directed : an aim or end of action [MWUD 'objective' (1)]

## Offering

is a Fixed Asset that is a specification of a product or service that can be supplied by the enterprise.

Instances of Offerings, such as finished goods, are a kind of Resource.

An Offering ...

- may be defined by Courses of Action.
- may be delivered by Business Processes.
- may require Resources.
- may use Fixed Assets.

Dictionary basis:

- a thing produced for entertainment or sale [ODE 'offering' (2nd bullet)]
- to make available or accessible [MWUD 'offer' (5)]

## Opportunity

is an Assessment that an Influencer can have a favorable impact on its employment of Means or achievement of Ends.

Dictionary basis:

- a combination of circumstances, time, and place suitable or favorable for a particular activity or action [MWUD 'opportunity' (1a)]
- an advantageous circumstance or combination of circumstances especially when affecting security, wealth, or freedom (as from constraint) : a time, place, or condition favoring advancement or progress [MWUD 'opportunity' (1b)]
- a set of circumstances that makes it possible to do something [NODE 'opportunity']

## Organization Category

is a category of [Influencing Organization](#).

Enterprises can define whatever [Organization Categories](#) they need. [Organization Categories](#) may themselves be categorized in broader categories; a narrower category may be included in more than one broader category.

Dictionary basis:

- a class or division of people or things regarded as having particular shared characteristics [ODE 'category' (1)]

## Organization Unit

*The concept 'Organization Unit' is to be adopted from an external standard once such standard has been established. A placeholder definition is given:*

The fundamental element of an organization structure is the organization unit. This represents any recognized association of people in the context of the enterprise. In a hierarchical structure, it may be the corporation, a division, a department, a group or a team. In addition, it may be a committee, a task force, a project management organization, a class (for education) and so on. [OMG OSM submission, Nov. 2006]

An [Organization Unit](#) ...

- may define [Ends](#).
- may establish [Means](#).
- may make [Assessments](#).
- may recognize [Influencers](#).
- may be defined by a [Strategy](#).
- may act as an [Influencing Organization](#).
- may be responsible for [Business Processes](#).
- may be responsible for [Assets](#).
- may be responsible for [Liabilities](#).

Dictionary basis:

- a group of people that has a more or less constant membership, a body of officers, a purpose, and usually a set of regulations [MWUD 'organization' (2a)]

## Partner

is an [External Influencer](#) that is an enterprise that shares risks and profit with the subject enterprise (or is associated with the subject enterprise to share risks and profit) because this is mutually beneficial.

Dictionary basis:

- a person who takes part in an undertaking with another or others, especially in a business or firm with shared risks and profits [NODE 'partner']

## Potential Impact

is an evaluation that quantifies or qualifies an [Assessment](#) in specific terms, types, or dimensions.

Categories of [Impact Value](#) include:

- [Potential Reward](#)
- [Risk](#)

A [Potential Impact](#)...

- is significant to an [Assessment](#).
- may provide impetus for [Directives](#).

## [Potential Reward](#)

is a [Potential Impact](#) that indicates the probability of gain.

Some [Potential Rewards](#) are expressible as formulae of the type:

- Probability of gain. (e.g., 30% probability)
- Potential gain. (e.g., \$40,000 gain)
- Unit-of-measure. (e.g., gain in USD)

Dictionary basis:

- something that is given in return for good or evil done or received and especially that is offered or given for some service or attainment [MWUD 'Reward' (1)]

## [Regulation](#)

is an [External Influencer](#) that is an order prescribed by an authority such as a government body or the management of an enterprise.

A [Regulation](#) ...

- may be a role played by a [Directive](#) (e.g., a [Business Policy](#) or [Business Rule](#) made by senior management may be obeyed as [Regulation](#) lower down in the organization).

Dictionary basis:

- a rule or directive made and maintained by an authority [NODE 'regulation' (1)]
- a rule or order having the force of law issued by an executive authority of a government [MWUD: 'regulation' (2b)]

## [Resource](#)

is an [Asset](#) that is consumed in the operations of the enterprise and replenished.

is an [Internal Influencer](#) that is a stock or supply of money, materials, staff, and other assets that can be drawn on by an enterprise in order to function effectively.

A [Resource](#) ...

- may be claimed by [Liabilities](#).
- may be provided by [Fixed Assets](#).
- may be required by [Offerings](#).

Dictionary basis:

- a stock or supply of money, materials, staff, and other assets that can be drawn on by a person or organization in order to function effectively [NODE 'resource(s)' (1)]

Dictionary basis:

- assets of a short-term nature (as cash, accounts receivable, or merchandise) [MWUD 'current asset']

## Risk

is a Potential Impact that indicates the possibility of loss, injury, disadvantage, or destruction.

Some Risks are expressible as formulae of the type:

- Probability of loss. (e.g., 5% probability)
- Potential loss. (e.g., \$500,000 loss)
- Unit-of-measure. (e.g., loss in USD)

Dictionary basis:

- the possibility of loss, injury, disadvantage, or destruction [MWUD 'risk' (1)]

## Strategy

is a Course of Action that is an element of a plan devised through the science and art of business leadership exercised to ensure the most advantageous conditions.

Compared to a Tactic, a Strategy tends to be:

- longer term.
- broader in scope.

A Strategy ...

- is a component of the plan for a Mission.
- may determine Organization Units.
- is implemented by Tactics.

Dictionary basis — adapted from:

- the science and art of military command exercised to meet the enemy in combat under advantageous conditions [MWUD 'strategy' (1a2)]
- a careful plan or method or a clever stratagem [MWUD 'strategy' (2a)]

## Strength

is an Assessment that an Influencer indicates an advantage or area of excellence within an enterprise that can impact its employment of Means or achievement of Ends.

Dictionary basis:

- a good or beneficial quality or attribute of a person or thing [NODE 'strength' (2)]

## Supplier

is an External Influencer that is a role played by an individual or enterprise that can furnish or provide products or services to the subject enterprise.

Synonym: Vendor

Dictionary basis:

- provide (someone) with something needed or wanted [NODE 'supply']

## Tactic

is a Course of Action that is a device or expedient to be employed as part of a Strategy.

Compared to a Strategy, a Tactic tends to be

- shorter term.
- narrower in scope.

A Tactic ...

- implements Strategies.
- may effect enforcement level for Business Rules.

Only Business Rules that guide behavior (SBVR ‘operative business rule’) require enforcement. Definitional Business Rules (SBVR ‘structural business rule’) are “true by definition.”

Dictionary basis:

- a device or expedient for accomplishing an end [MWUD ‘tactics’ (2b)]
- a plan scheme or trick with a particular aim [NODE ‘device’ (2)]

## Technology

is an External Influencer that is caused by developments in and limitations of technology. There may be prerequisites for use of technology; there may be enterprise activity that technology enables or restricts.

Dictionary basis:

- the application of scientific knowledge for practical purposes, especially in industry: machinery and equipment developed from such scientific knowledge [NODE ‘technology’]

## Threat

is an Assessment that an Influencer can have an unfavorable impact on the enterprise’s employment of Means or achievement of Ends.

Dictionary basis:

- something that by its very nature or relation to another threatens the welfare of the latter [MWUD ‘threat’ (2)]
- the possibility of trouble, danger, or ruin [NODE ‘threat’ (2, bullet 1)]

## Vision

is an End that is about the future state of the enterprise, without regard to how it is to be achieved.

A Vision ...

- is made operative by some Mission(s).
- is amplified by Goals.

Dictionary basis:

- a mental image of what the future will or could be like [NODE ‘vision’ (2)]

## **Weakness**

is an [Assessment](#) that an [Influencer](#) indicates an area of inadequacy within an enterprise that can impact its employment of [Means](#) or achievement of [Ends](#).

Dictionary basis:

- a quality or feature regarded as a disadvantage or fault [NODE 'weakness' (bullet 1)]
- lacking in power to perform properly a function or office [MWUD 'weak' (4a)]
- lacking skill or proficiency [MWUD 'weak' (4b)]

## Appendix C

# Diagramming Conventions

The graphic representation of the Business Motivation Model is based on three non-normative conventions, as follows. These conventions have been purposely kept neutral of any particular modeling notations. The BRG selected conventions that are largely self-explanatory and visually intuitive.

- **Box:** A box of any size represents a core concept. The name in the box is the preferred term (name) given to that concept. Refer to the Concepts Catalog for the precise meaning of each term.
- **Box-Within-A-Box:** This indicates categorization — in other words, a box within a box indicates that one concept is a category of the other concept. Another way to think about this is that the inner box represents a specific kind, type, class, or variation of the outside box.

This graphic representation of categories does *not* imply any constraints; specifically it does not imply that:

- The list of categories is mutual exclusive.
- The list of categories is exhaustive.
- Any category is mandatory.

When any of these constraints do apply, that fact is always documented explicitly in the Concepts Catalog.

- **Connection-Between-Boxes:** A line connecting any two boxes (or the same box twice) indicates a logical connection — that is, a fact type — between core concepts.

Crucial to any line is its labels. These labels are written carefully as verbs or verb phrases (in both directions) so that the logical connections of the Model can be read as simple English sentences. These sentences convey the exact meaning of the connections in the context of the Model; however, more explanation is given in the Concepts Catalog, along with the definitions for each of the terms involved.

This graphic representation of logical connections (fact types) does *not* imply any constraints; specifically it does not imply that:

- The logical connection is mandatory for any concept involved.
- Any upper or lower limits apply to the logical connection.

When any such constraint does apply, that fact is always documented explicitly in the Concepts Catalog. In the absence of such documented constraint, the connection lines can be taken to represent simple unconstrained fact types (i.e., ‘many-to-many’ and optional in both directions).

Two special conventions are worth noting.

- 1) When a fact type involves three or more concepts, a simple line cannot be used to represent the fact type. In this case, the fact type is shown as a concept box, named with a term for the fact type (shown suffixed with \*) and having unlabeled lines radiating from the box to the fact type's participating concepts. One reading of the fact type is given in a Legend.
- 2) A shaded (orange) box represents a concept that is related to concepts of the Model but this concept, itself, is from a source external to the Model.

## Appendix D

# Overview of EU-Rent

*This Appendix provides an overview of the fictitious car rental company used for examples throughout the specification.*

EU-Rent is a car rental company that operates in several countries in Western Europe and North America. In each of its countries of operation, EU-Rent has an operating company that defines a number of local areas in which it locates rental branches and service depots.

EU-Rent rents cars to customers, and offers standard models from major manufacturers. Car models are categorized into groups ranging from ‘economy’ to ‘luxury’, with a different tariff for each group.

Rental branches do not own specific cars. Each local area owns a pool of cars that are available to the rental branches in the area. Each branch has an allocation (capacity, not actual cars) from the pool, which it uses to meet demand for rental bookings. If it exhausts its allocation it can request additional capacity, which is provided from a reserve pool on a ‘first come, first served’ basis.

Tariffs are set nationally. The operational rental business is managed mainly at the local area and branch level, with fairly strong national guidance on car purchase and disposal — what models can be purchased, how long to keep them, etc. — and global guidance on customer service and the EU-Rent brand.

EU-Rent accepts both rental bookings in advance and walk-in rentals. Advance bookings are accepted by phone, Internet or in person in branches. A EU-Rent branch can accept a booking for pick-up at any EU-Rent branch world-wide.

EU-Rent is a medium-sized company catering to the general car rental market. It has two major concerns:

- It is facing increasing competition from companies offering lower rates, especially in vacation and resort areas.
- It sees opportunities for expansion as Eastern European countries enter the European Community, and business and trade increase.

In response, EU-Rent has decided to:

- Position itself in the market as a ‘premium’ brand, alongside the bigger players such as Hertz and Avis.
- Expand into Eastern Europe, focusing on major business centers.
- Target business renters, in two ways:
  - » As individuals, offering convenient locations, high-quality service (value for money rather than lowest possible price), and an attractive loyalty rewards scheme for frequent renters
  - » As companies, offering corporate agreements in which discounted rental tariffs are offered in return for ‘captive business’

EU-Rent represents itself as environment-friendly and uses electric and LPG cars where suitable models are available.

## Appendix E

# The Business Motivation Model in the Context of the Zachman Architecture Framework

John Zachman has provided a useful context for discussing the architecture of an enterprise. His ‘Framework for Enterprise Architecture’ is a matrix that describes the various ways the stakeholders of an enterprise view the business and its systems.<sup>34</sup>

The Framework characterizes *architecture* in terms of the perspectives of the different stakeholders (represented by rows in the matrix) and focuses on the different aspects (or ‘abstractions’) of architecture (represented by the columns). The rows represent, successively, the *Planner*, *Owner*, *Designer*, *Builder*, and *Subcontractor* perspectives. The columns reflect the abstractions dealing with the aspects of *Data*, *Process*, *Location*, *Role*, *Timing*, and *Motivation* (What, How, Where, Who, When, and Why).

The Business Motivation Model addresses the business *Owner’s* perspective (i.e., *Row Two*) of the sixth aspect (i.e., the *Motivation* or ‘Why’ column).<sup>35</sup> Indeed, the name of the Model directly reflects this focus on *motivation*.

Also noteworthy is that the positioning of the Model in *Row Two* means that all references to Business Rules in the Model describe or prescribe elements involved in the structure and operation of the business — not its information systems or its technology.

### E.1 Relationship to Other Aspects of the Business Model

As acknowledged at the beginning of this document and again just above, motivation is just one aspect of a complete business model. So, while every effort was made to limit the scope of the Model to this single abstraction, selective reference to elements of other abstractions were sometimes necessary — specifically, to concepts of the ‘Who’ and ‘How’ columns.<sup>36</sup>

#### The ‘Who’ Connections

It is difficult to avoid references to ‘Who’ in discussions of ‘Why.’ Generally, it is not adequate to say, “the motivation is that the company wants it that way.” This leads to the perpetuation of

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<sup>34</sup> John A. Zachman, “A Framework for Information Systems Architecture,” *IBM Systems Journal*, Vol. 26, No. 3 (1987).

<sup>35</sup> The BRG’s 1995 paper addressed the first and sixth aspects (that is, the *data* and *motivation* columns) from the *Designer’s* perspective (that is, *Row Three*).

<sup>36</sup> Three concept areas discussed in this Appendix — Organization Unit, Business Process, and Asset/Liability — are designated as ‘placeholder’ in the OMG BMM Specification. In this respect, they have roles in the structure of the Business Motivation Model but actually belong in other standards, where they are defined and associated with related concepts needed for detailed business modeling. The relevant family of OMG standards for these concepts is the OMG’s *Organization Structure Metamodel* (OSM) for Organization Unit and its *Business Process Definition Metamodel* (BPDM) for Business Process. Asset/Liability, discussed in BMM “8.5.3 Asset and Liability,” is not yet referenced to any particular OMG specification. See BMM “8.5 Placeholders” for the complete discussion of the harmonization of these standards.

unnecessary rules — unnecessary either because the business requirement for them has passed, or because they were not Business Rules in the first place (e.g., they were imposed as workarounds in systems that did not fully support business needs).

Being able to pin down the motivation more precisely is essential. After all, if a responsible party cannot be found for a rule, it should probably be challenged. The Model therefore supports identifying those parties who play key roles with respect to *motivation*.

This capability is reflected in the Model by linking elements of the business plans to specific parts of the organization (i.e., its Organization Units). This has been done where the connection is important for developing, analyzing, challenging, and maintaining the business plans.

These logical connections (i.e., fact types) include the following:

- Organization Unit *is responsible for* Assets
- Organization Unit *is responsible for* Liabilities
- Organization Unit *defines* Ends
- Organization Unit *establishes* Means
- Organization Unit *acts as* Influencing Organization
- Organization Unit *recognizes* Influencers
- Organization Unit *makes* Assessments
- Organization Unit *is defined by* Strategies
- Organization Unit *is responsible for* Business Processes

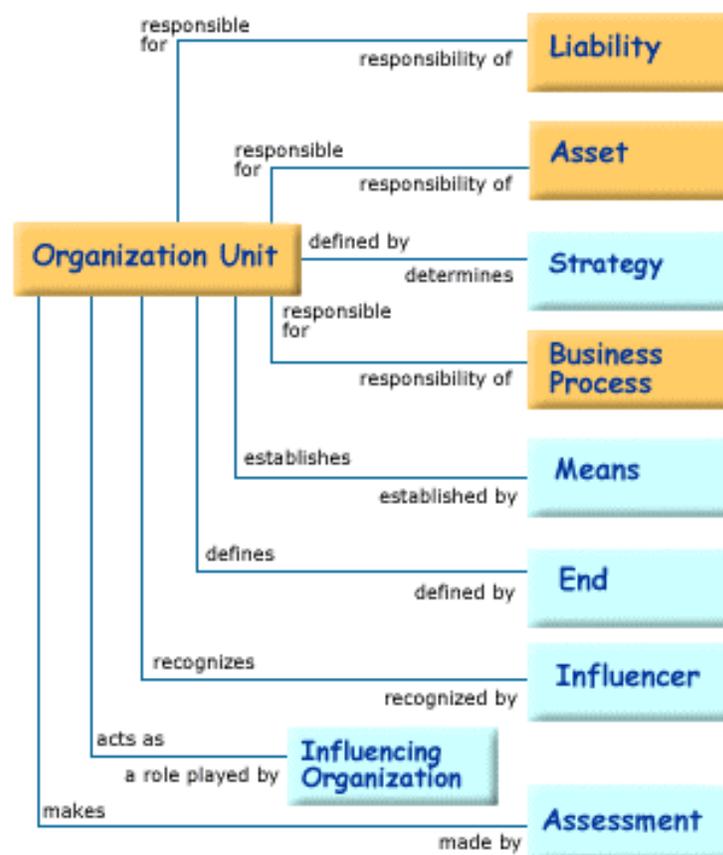


Figure E-1. Organization Unit Connections

## Influencing Organization

It is useful to be able to connect an Influencer to one or more Influencing Organizations; for example:

- To connect Regulation Influencers to their originating Regulators
- To reference some specific competitor companies from a Competitor Influencer
- To reference a Technology influencer to organizations involved in its development or delivery

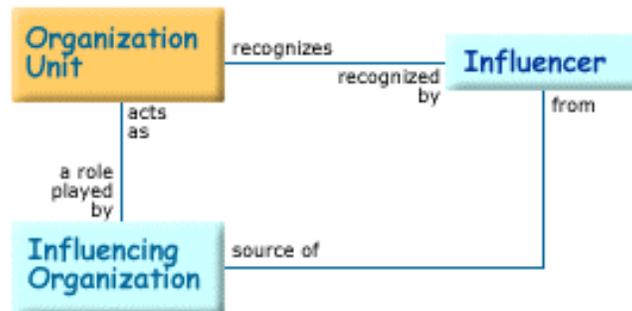


Figure E-2. Influencer and Influencing Organization

An Influencing Organization is an organization that is external to the enterprise modeled in a given enterprise Business Motivation Model, and that influences that enterprise.

An Influencing Organization *is the source of* Influencers. An Influencer may have multiple sources, or none.

BMM also supports Organization Category for categorization of Influencing Organizations, but does not provide a default set of categories. Enterprises can define whatever Organization Categories they need. Organization Categories may themselves be categorized in broader categories; a narrower category may be included in more than one broader category.

An Organization Unit from the same organization as the enterprise modeled in a given Business Motivation Model can act as an Influencing Organization for some Influencers. An Organization Unit playing this role would normally be outside the boundary of the enterprise modeled in the given Model.

For example, a Directive on working conditions from the Human Resources Department may have to be treated as Regulation by an operating department, such as Production. The Human Resources Department, from the perspective of the Production Department, would be acting like an external regulator. Similarly, there might be internal sources for other kinds of Influencer, such as Customer, Competitor, Technology.

## The ‘How’ Connections

To expand on the ‘being-doing’ relationships between Ends and Means, the ‘How’ column of the Framework needs to be considered. ‘How’ is specified as Business Processes.

It is widely recognized that Business Processes and Business Rules are closely related. It is important to be clear on the differences.

Business Processes *realize* Courses of Action — they provide detail of activities, plus sequencing, control, and synchronization that enable the enterprise to undertake its Courses of Action. Business Rules *guide* Business Processes — they provide the basis for decisions that need to be made within Business Processes.

Business Processes, Courses of Action, and Business Rules are all developed to help the enterprise reach its Goals. They need to be coherent and consistent. This is feasible if they are governed by a coherent and consistent set of Business Policies.

Business Processes are *governed by* Business Policies, which:

- Provide guidance (both directly and via Courses of Action) on what Business Processes have to do.
- Set limits on how Business Processes may undertake what they have to do.

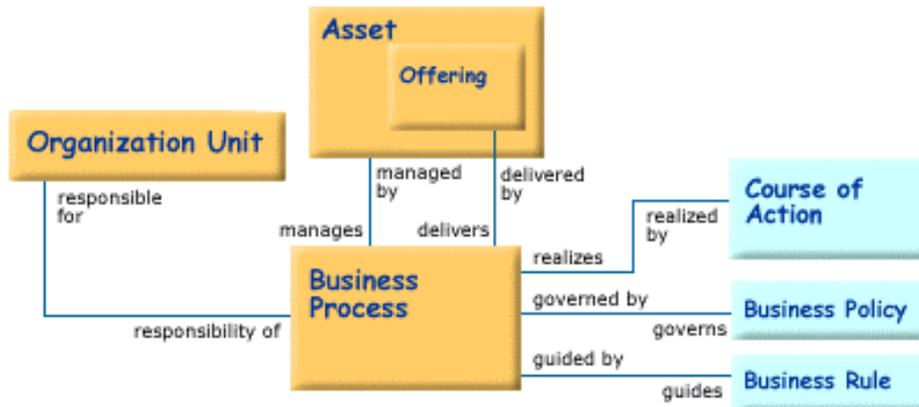


Figure E-3. Business Process Connections

‘Business Process’ in the Model is a ‘placeholder’ for a concept adopted from the OMG’s Business Process Modeling and Notation (BPMN) specification.

Each Business Process is the *responsibility of* some Organization Unit (the process owner). There are other facts connecting Business Process and Organization Unit; for example, assignment of activities in Business Processes to roles in the organization is the basis of workflow. However, these connections are again outside the scope of the Model, and are appropriately addressed by some other standard(s).

### The ‘Asset/Liability’ Connections

When Courses of Action are being defined, ‘things’ that are used in operating the enterprise often have to be considered. They are represented in the Model as Assets, of two kinds:

- Fixed Assets: things that are kept long-term, maintained, reused, and, perhaps, eventually replaced. They can be tangible, such as equipment and buildings, or intangible, such as patents and licenses.
- Resources: things that are consumed and replenished, such as raw materials, parts, finished goods, and cash.

Two things should be borne in mind. Firstly, the term ‘Asset’ has an accounting flavor, but it is not used in that sense in the Model. Most users of the Business Motivation Model will probably have an operational perspective. They will want to refer to the real things in the business — the actual equipment, buildings, and stocks of materials — and that is what ‘Asset’ means in the Model. The accounting perspective would be the monetary values, rather than the things themselves. Also, a Business Motivation Model can include Assets that might not be explicitly valued financially, such as skills of people in the enterprise.

Secondly, Asset, Resource, and Fixed Asset are placeholders — references to things defined in detail elsewhere in the enterprise, outside its Business Motivation Model. Only those that are relevant to governance decisions need be included. There is no requirement for a coherent, complete structure of Assets within a Business Motivation Model; that will be maintained in the system(s) referenced by the Model placeholders.

One type of Asset that is often explicitly referenced is the enterprise's products and services, called 'Offering' in the Model. An Offering is a specification of a product or service — an intangible Fixed Asset. Instances of it, such as quantities of finished goods, would be a Resource.

As well as Assets, enterprises also need to consider Liabilities — again, not in an accounting sense. A Liability in the Model is a reservation of Resource(s) to meet commitments, such as materials needed to fulfill a contract or cash to pay taxes.

These Asset and Liability concepts are illustrated in Figure E-4.

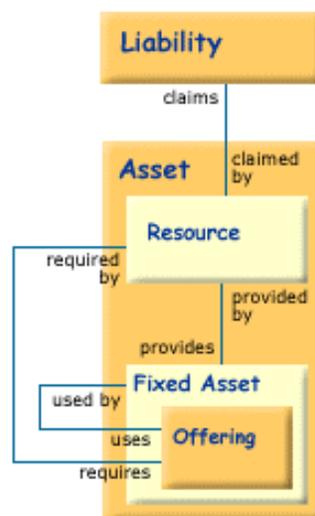


Figure E-4. Asset and Liability

Some Fixed Assets *provide* Resources in the form of capacity over time; for example: production equipment, storage buildings, skills possessed by people. The Resources they provide are either consumed or are dissipated as time passes without their being used.

Offerings — specifications of products and services — may *use* intangible Fixed Assets, such as designs, licenses, patents, and brands. An Offering *requires* Resources — materials, equipment capacity, people's time — for production of things that meet the specification.

A Liability *claims* Resources; it reserves resources needed to meet commitments — which means that the resources cannot be used for other purposes.

Figure E-5 illustrates the connection of Asset and Liability to the rest of the Model.

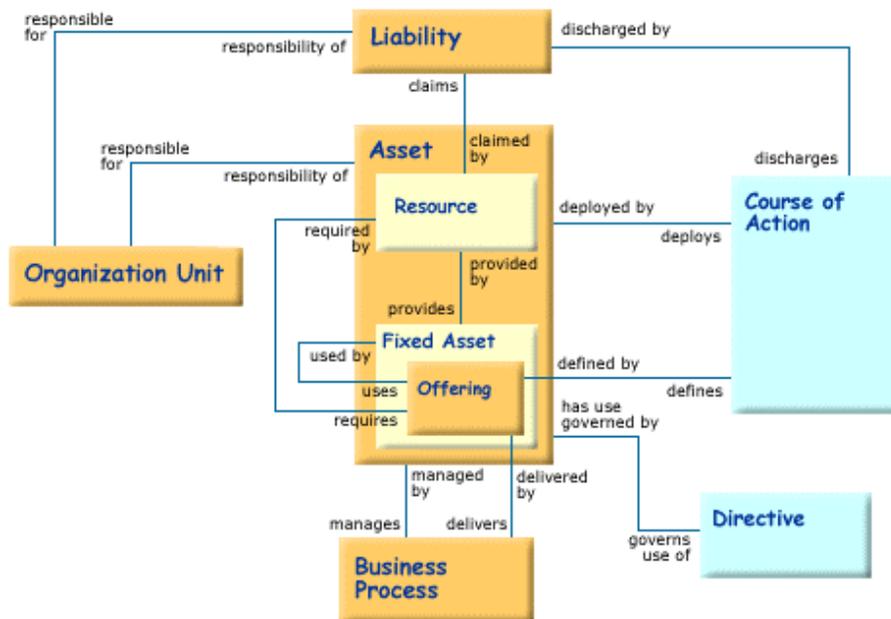


Figure E-5. Asset and Liability Connections

Courses of Action may:

- *deploy* Assets — determine how Assets will be assigned and used in realizing the Courses of Action.
- *define* Offerings — the products and services that can be supplied by the enterprise.
- *discharge* Liabilities — ensure that commitments are met.

A Directive may *govern use of* Assets, regardless of which Courses of Action *deploy* them.

Other placeholders may be associated with Assets and Liabilities. Business Processes may:

- *deliver* Offerings.
- *manage* Assets.

An Organization Unit may *be responsible for* Assets and/or Liabilities.

## E.2 Additional Aspects of the Business Model

The other abstractions of the Framework at Row 2 are significant in a complete business model. For example,

- The ‘Where’ aspect — a **Logistics Model** identifying where the business will operate and how those locations are linked together. Such a model might also prescribe application of Business Rules in different places (including differences that need to be accommodated in globalization of the enterprise).
- The ‘When’ aspect — an **Event Model** describing the events in the business cycle and how those events cause changes or activities in the enterprise.

In addition, all six abstractions of the Framework have potential interdependencies. For example, workflow to accomplish the same Ends may be different for different categories of location.

## Appendix F

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