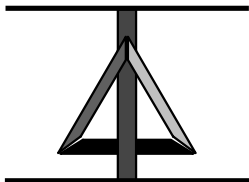


# Data Model Patterns: A Metadata Map

***East Coast Regional DAMA 2006***

David C. Hay

*May-June, 2006*



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☎ (713) 464-8316

✉ [dch@essentialstrategies.com](mailto:dch@essentialstrategies.com)

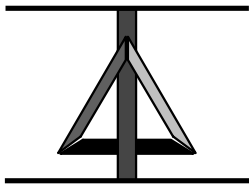
🌐 [www.essentialstrategies.com](http://www.essentialstrategies.com)

One of the many reasons for the bewildering and tragic character of human existence is the fact that social organization is at once necessary and fatal. Men are forever creating such organizations for their own convenience and forever finding themselves the victims of their home-made monsters.

**Aldous Huxley**

*Variations on a Philosopher*

## Column 4: people And organizations



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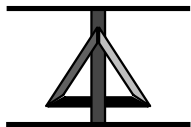
☎ (713) 464-8316

✉ dch@essentialstrategies.com

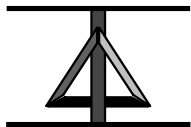
🌐 www.essentialstrategies.com

# The Architecture Framework . . .

	<i>Data (What)</i>	<i>Activities (How)</i>	<i>Locations (Where)</i>	<i>People (Who)</i>	<i>Time (When)</i>	<i>Motivation (Why)</i>
<b>Objectives / Scope (Planner's view)</b>	List of things important to the enterprise 	List of processes the enterprise performs 	List of enterprise locations 	Organization approaches 	Business master schedule 	Business vision and mission 
<b>Enterprise model (Business Owners' Views)</b>	Language, divergent data model 	Business process model 	Logistics network 	Organization chart 	State / transition diagram 	Business strategies, tactics, policies, rules 
<b>Model of Fundamental Concepts (Architect's View)</b>	Convergent e/r model 	Essential data flow diagram 	Locations of roles 	The viable system, use cases 	Entity Life History 	Business rule model 
<b>Technology Model (Designer's View)</b>	Data base design 	System design, program structure 	Hardware, software distribution 	User interface, security design 	Control structure 	Business rule design 
<b>Detailed Representation (Builder's View)</b>	Physical storage design 	Detailed program design 	Network architecture, protocols 	Screens, security coding 	Timing definitions 	Rule specification program logic 
<b>Functioning System</b>	<i>(Working System)</i>					
	Converted data	Executable programs	Communications facilities	Trained people	Business events	Enforced rules



From the business model . . .





**PERSON**  
\* GIVEN NAME  
o MIDDLE INITIAL  
\* SURNAME

**ORGANIZATION**  
\* ORGANIZATION NAME  
\* DESCRIPTION

**COMPANY**  
\* DATE OF INCORPORATION

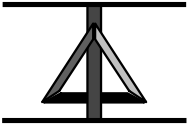
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**GOVERNMENT AGENCY**

**SEMANTIC COMMUNITY**

**SPEECH COMMUNITY**

**OTHER ORGANIZATION**





**PARTY**  
# ID

**PERSON**  
\* GIVEN NAME  
o MIDDLE INITIAL  
\* SURNAME

**ORGANIZATION**  
\* ORGANIZATION NAME  
\* DESCRIPTION

**COMPANY**  
\* DATE OF INCORPORATION

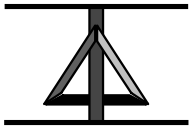
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**SPEECH COMMUNITY**

**OTHER ORGANIZATION**

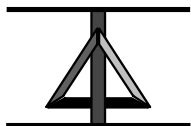
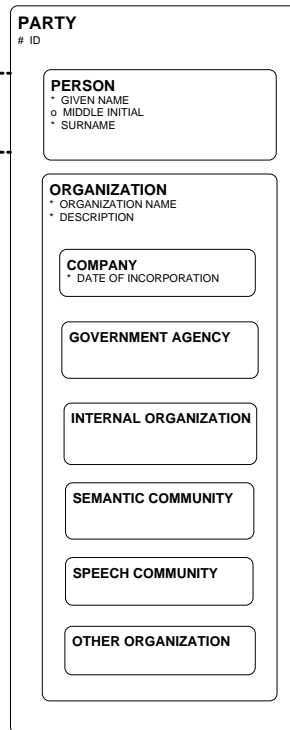


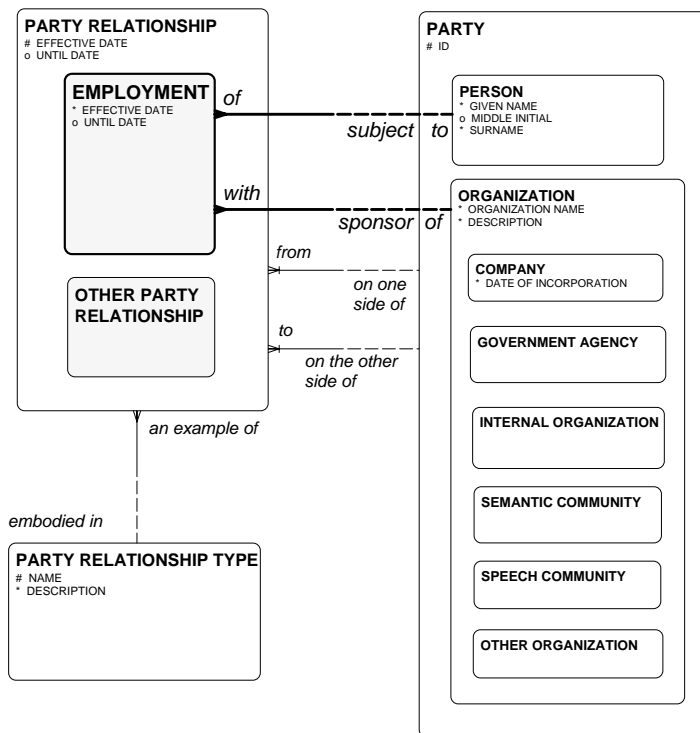


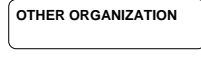
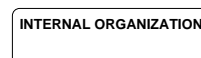
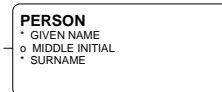
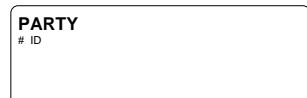
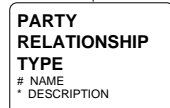
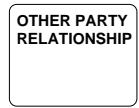
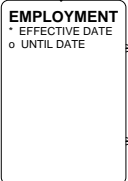
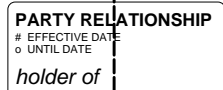
*from*  
*on one side of*  
*to*  
*on the other side of*

*an example of*

*embodied in*







to

of

holder of

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subject to

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from

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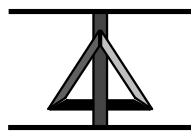
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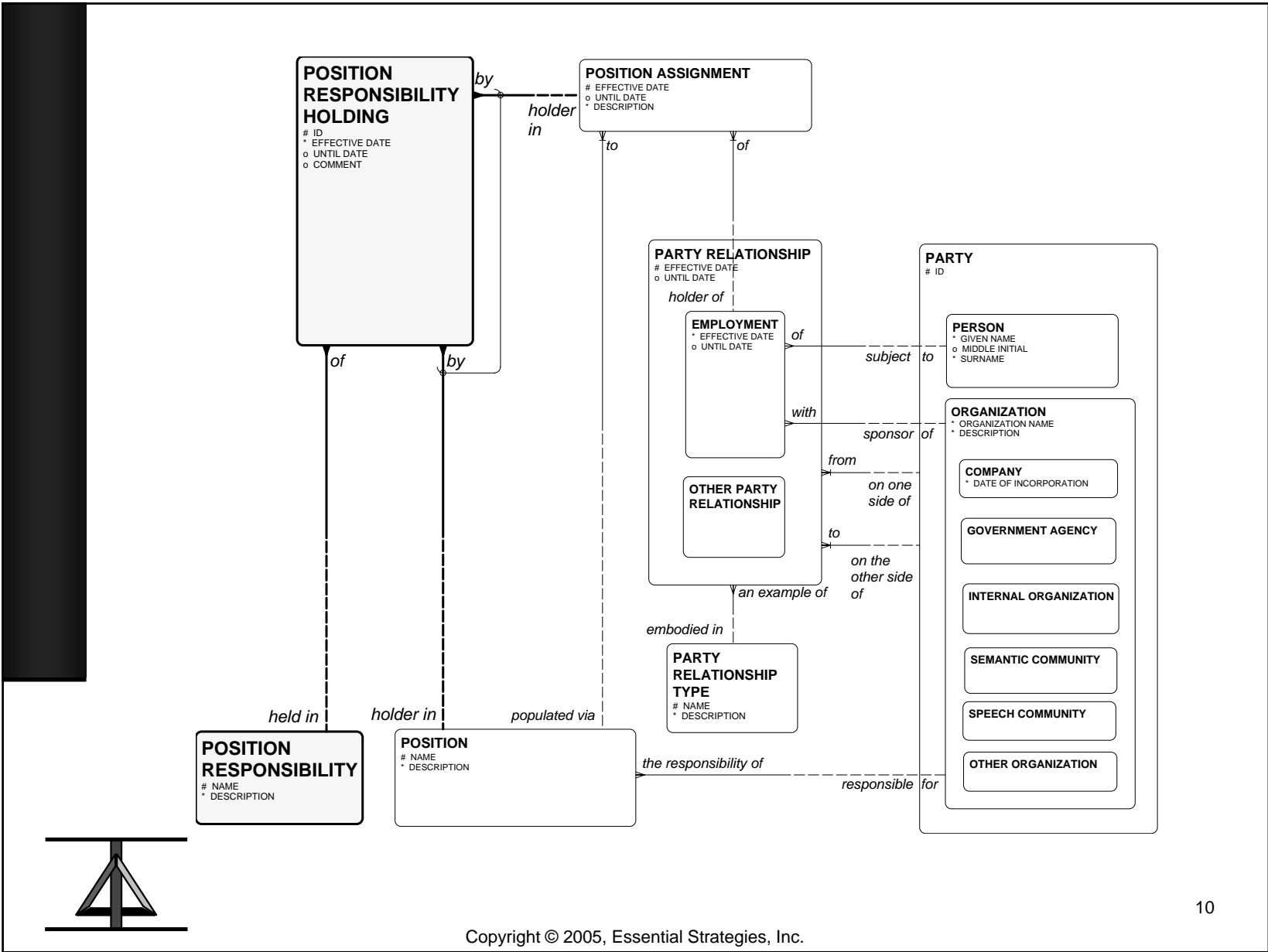
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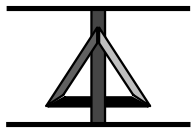
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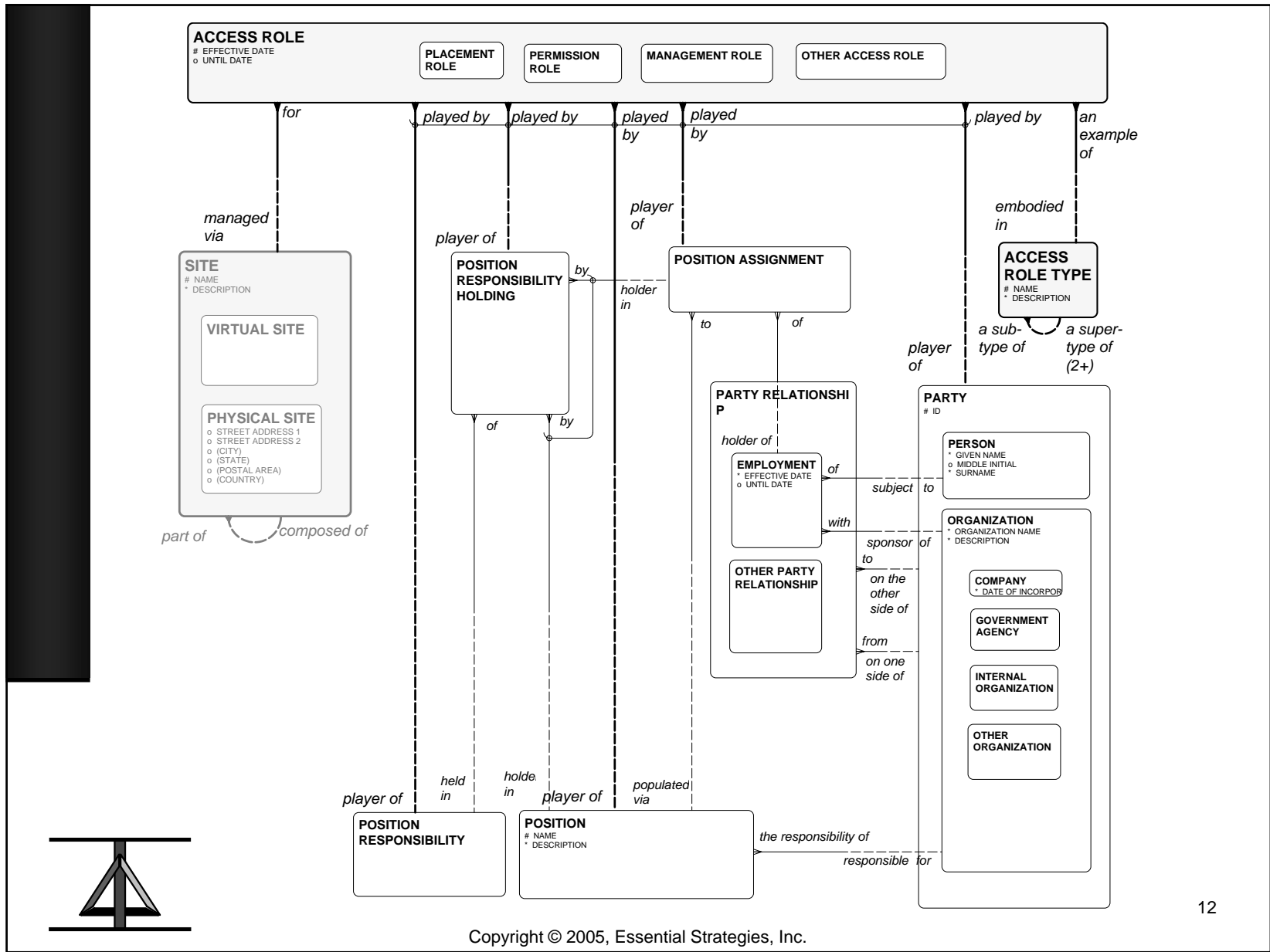
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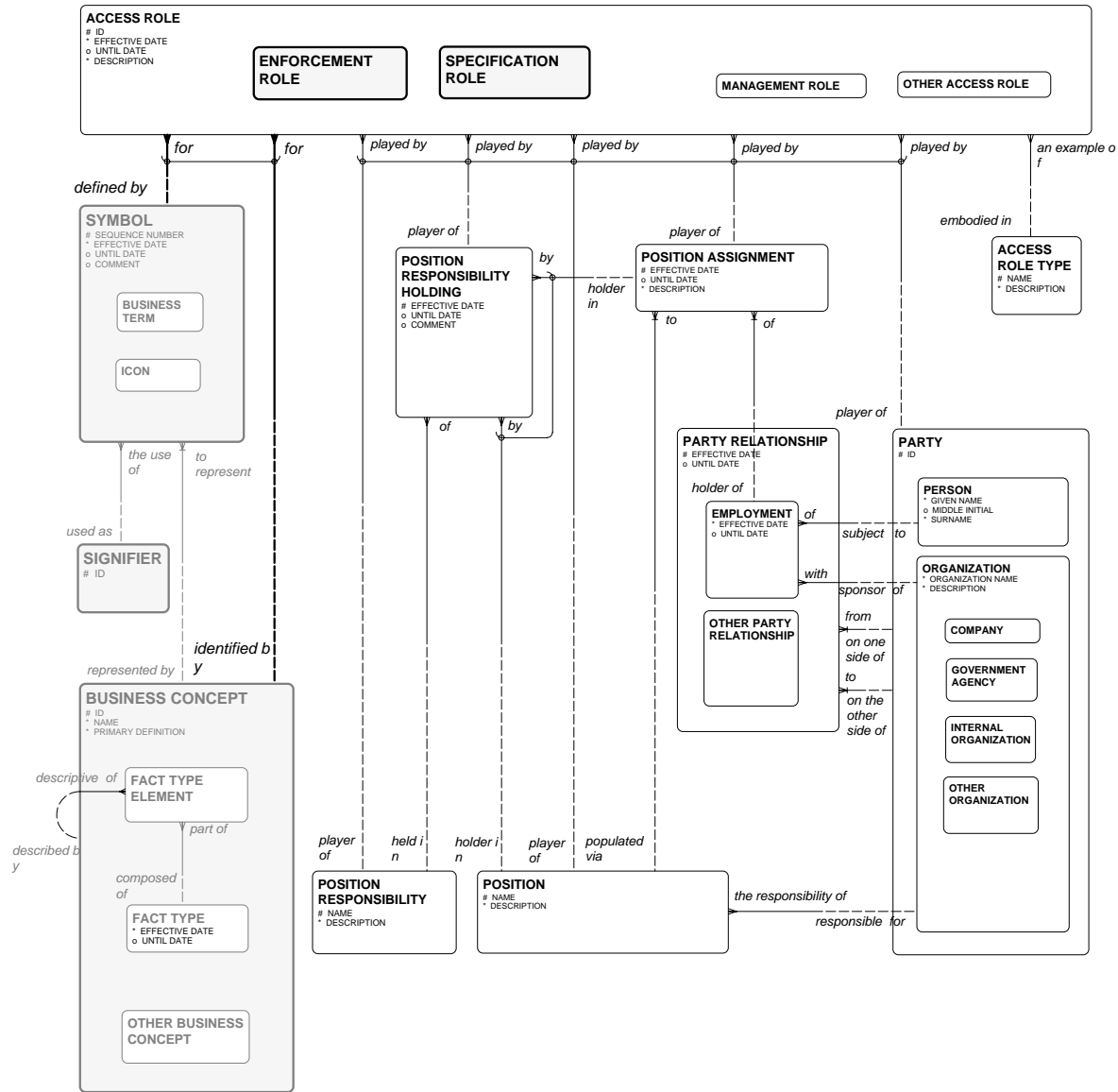


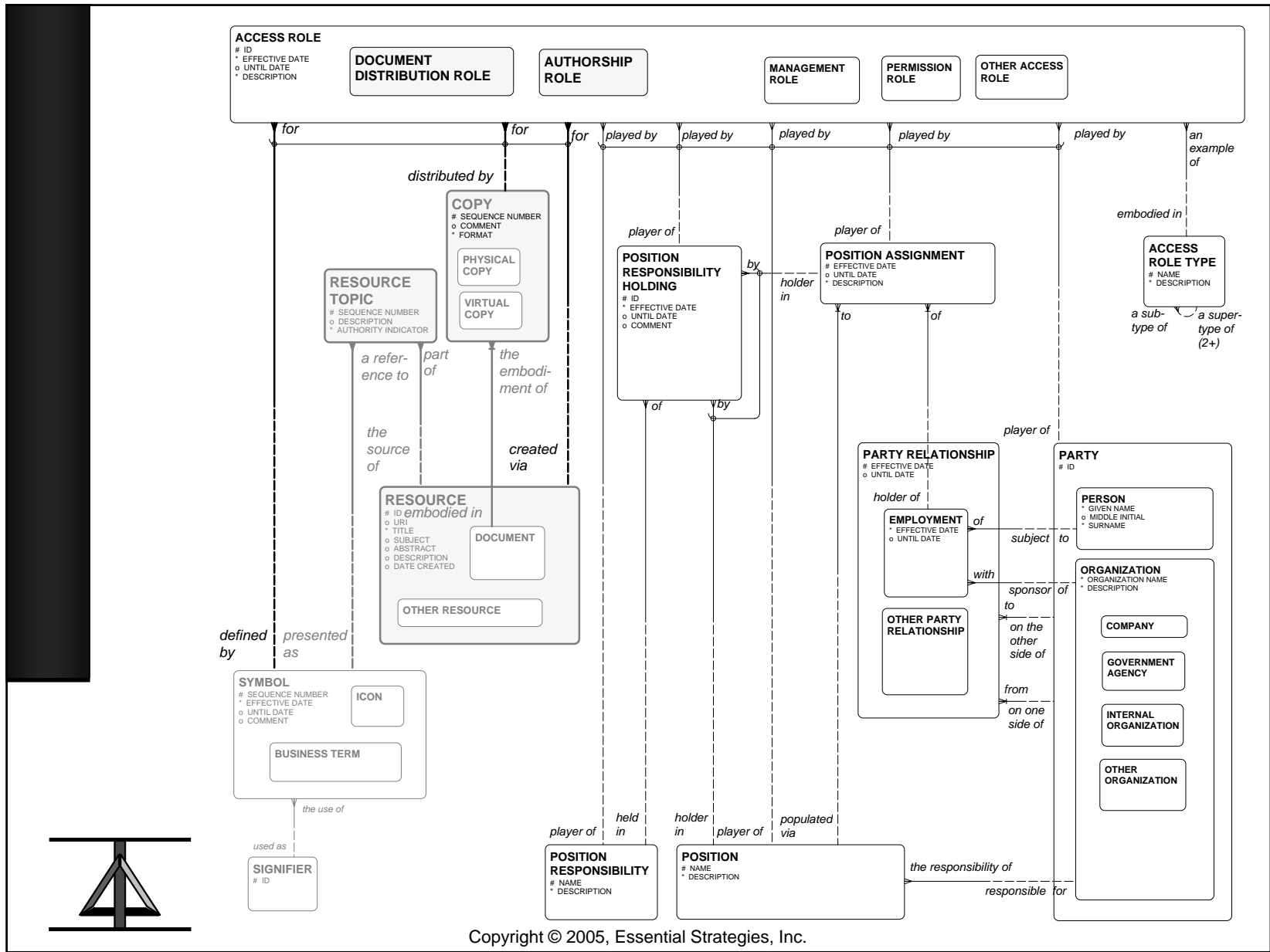


Row Two:  
The business owner's View

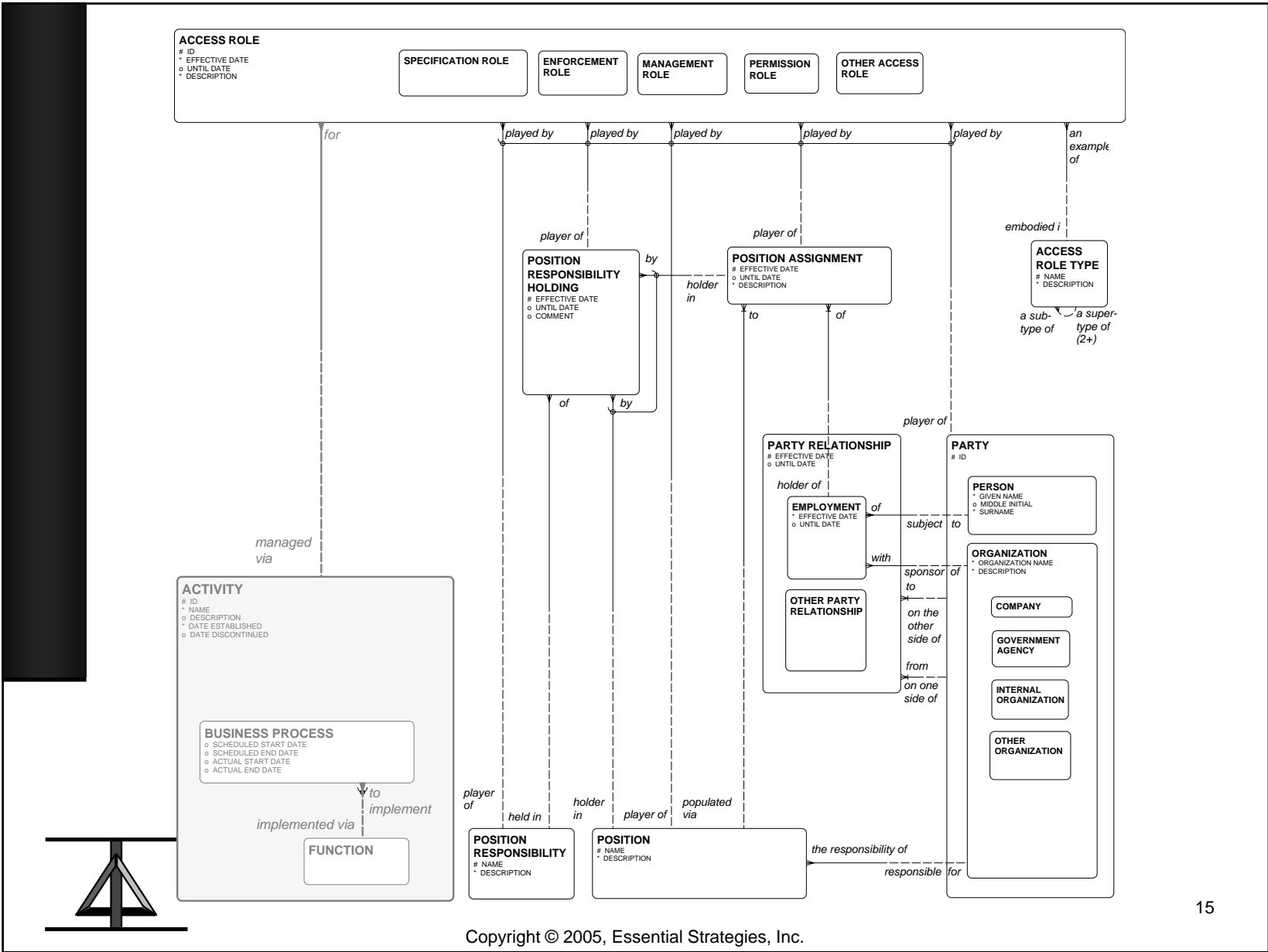


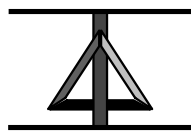
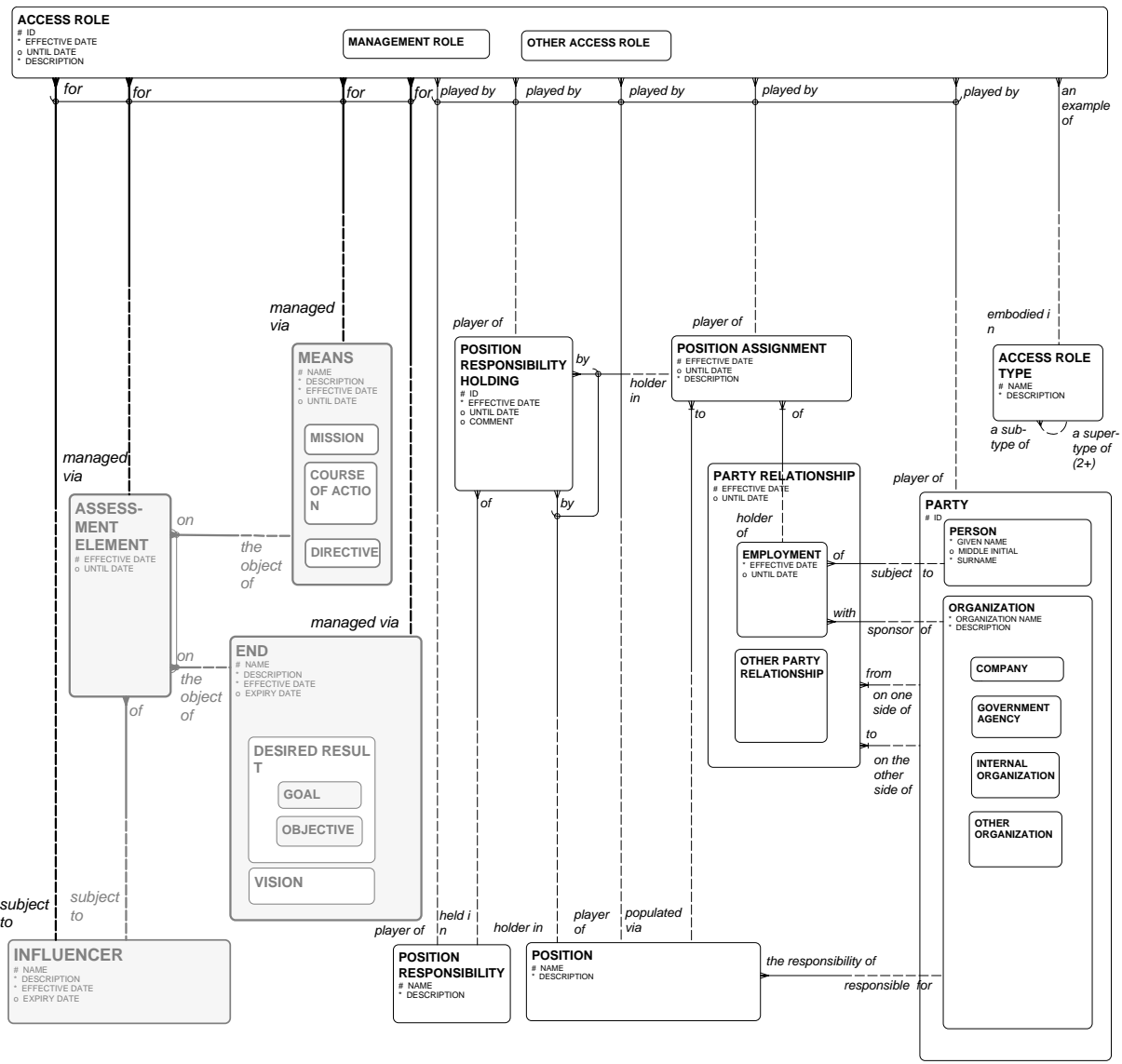


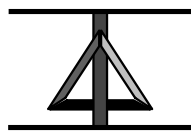
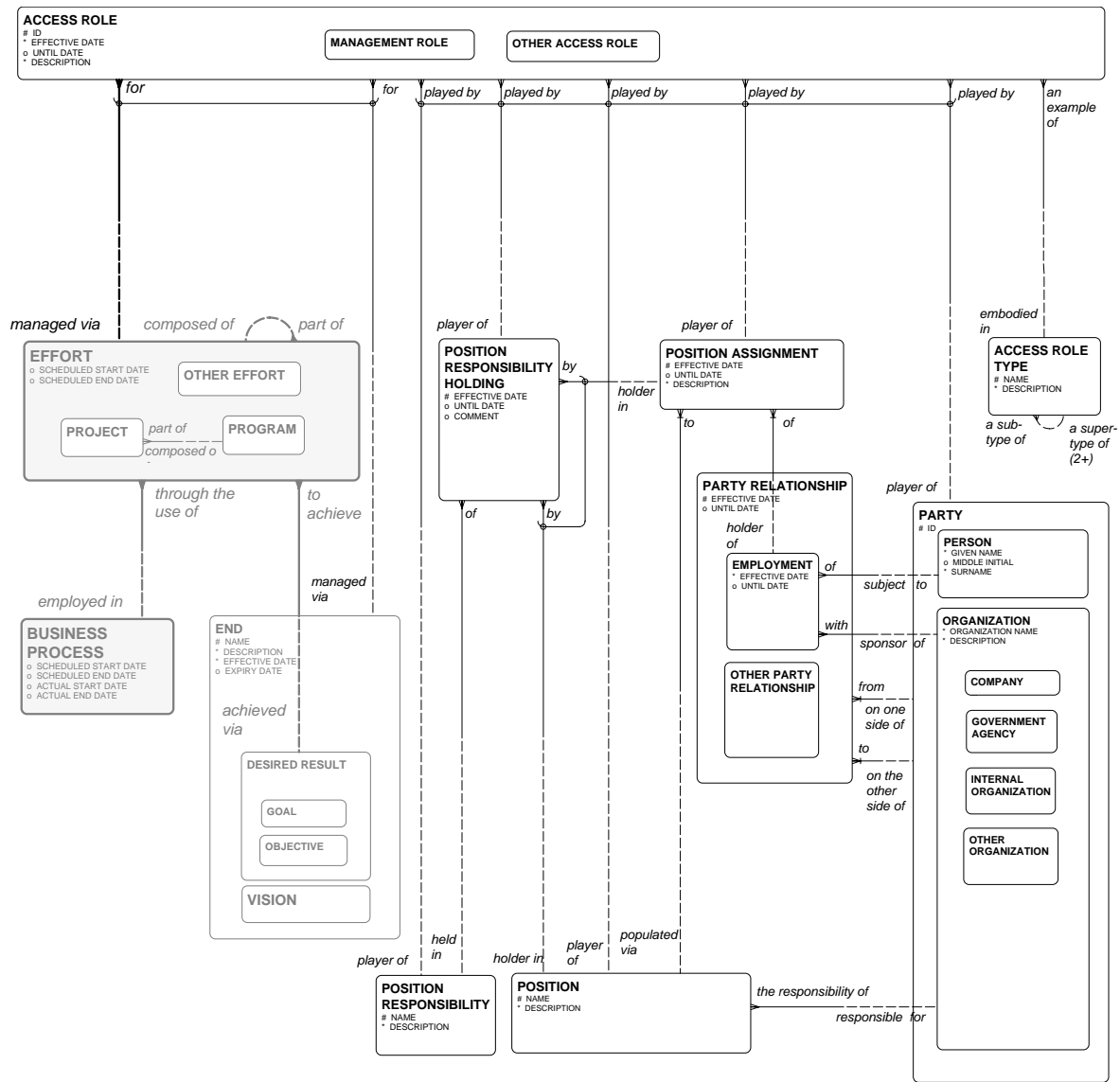




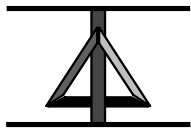
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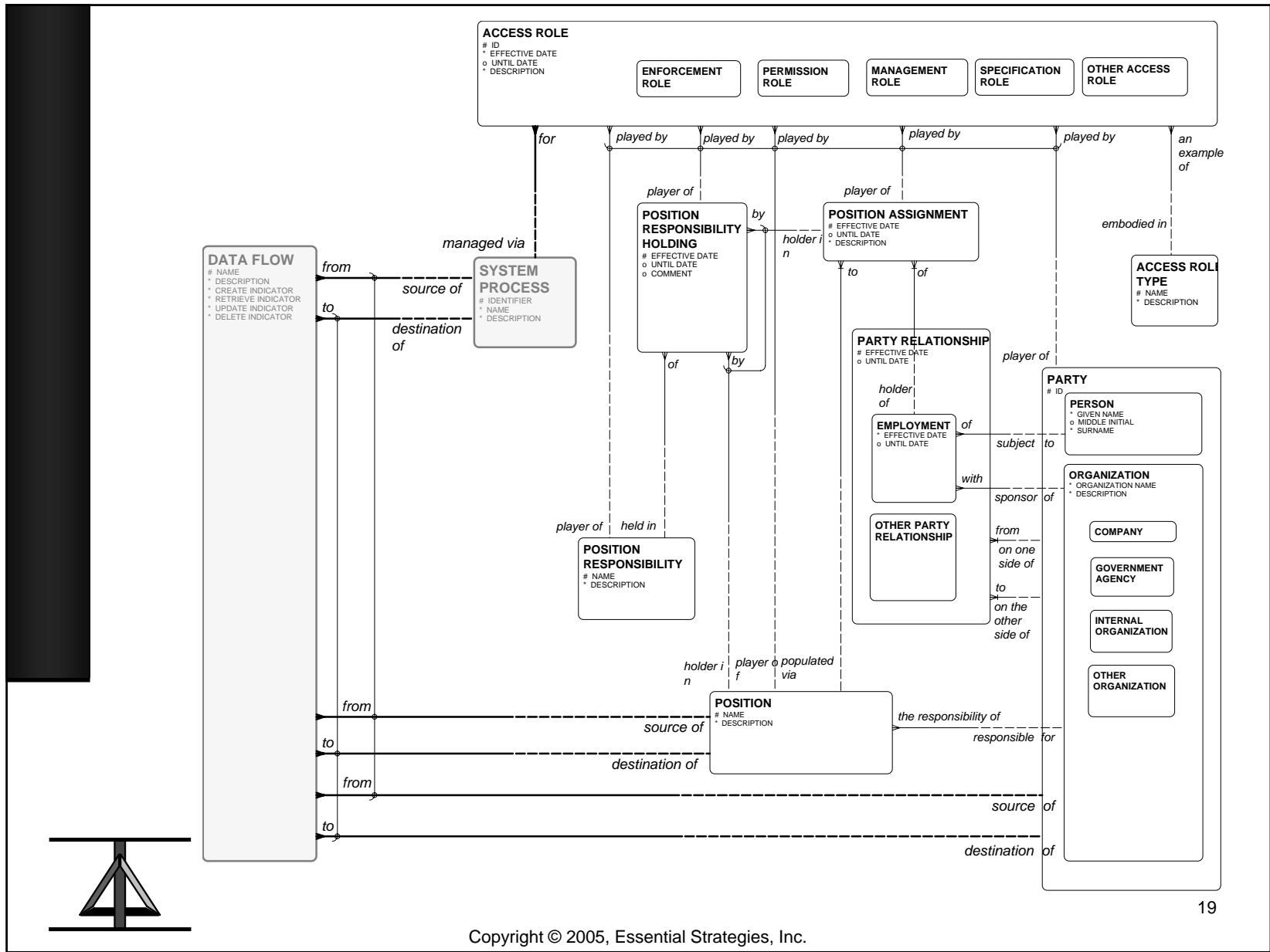




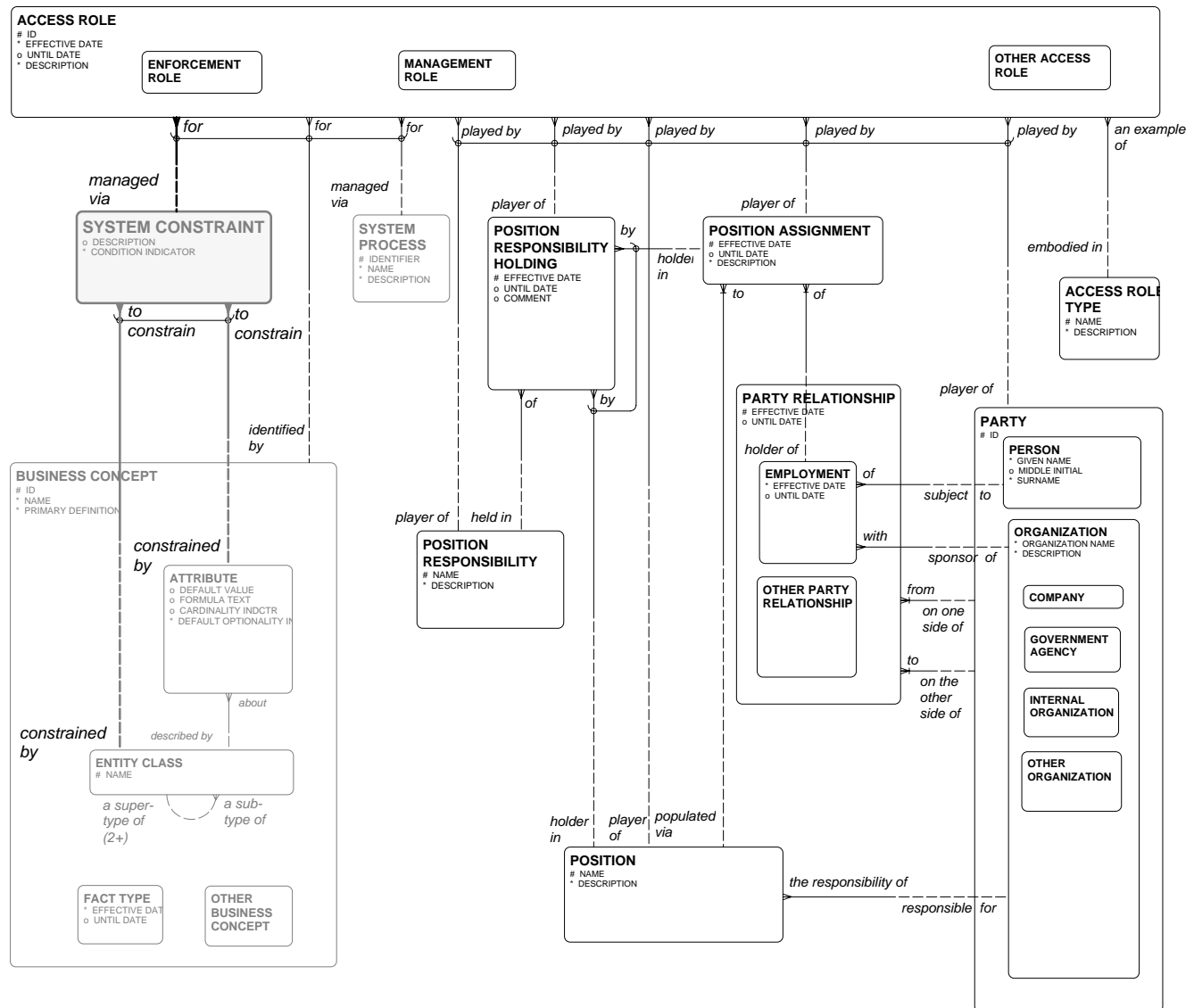


Row three:  
The architect's View

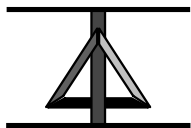


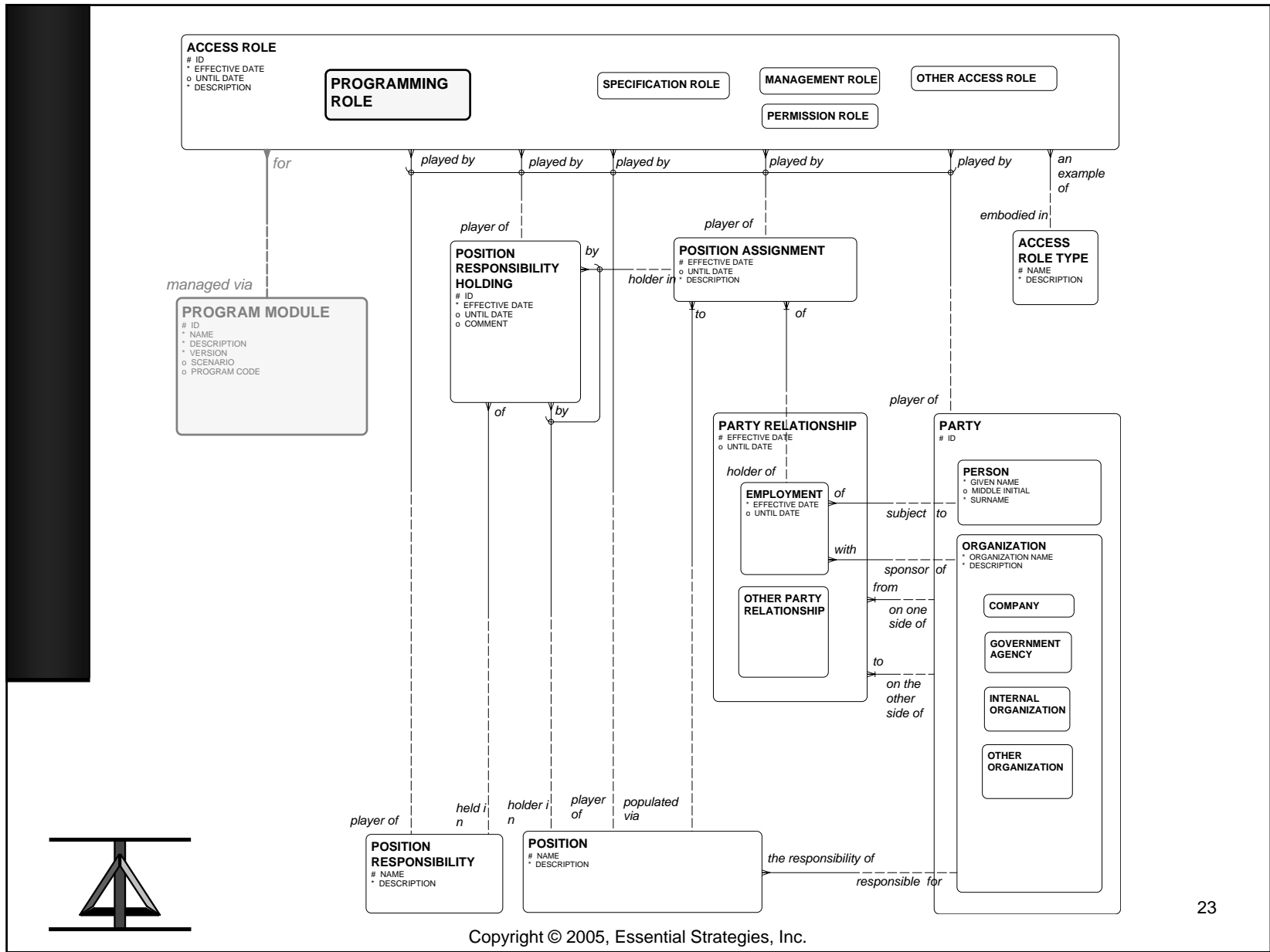


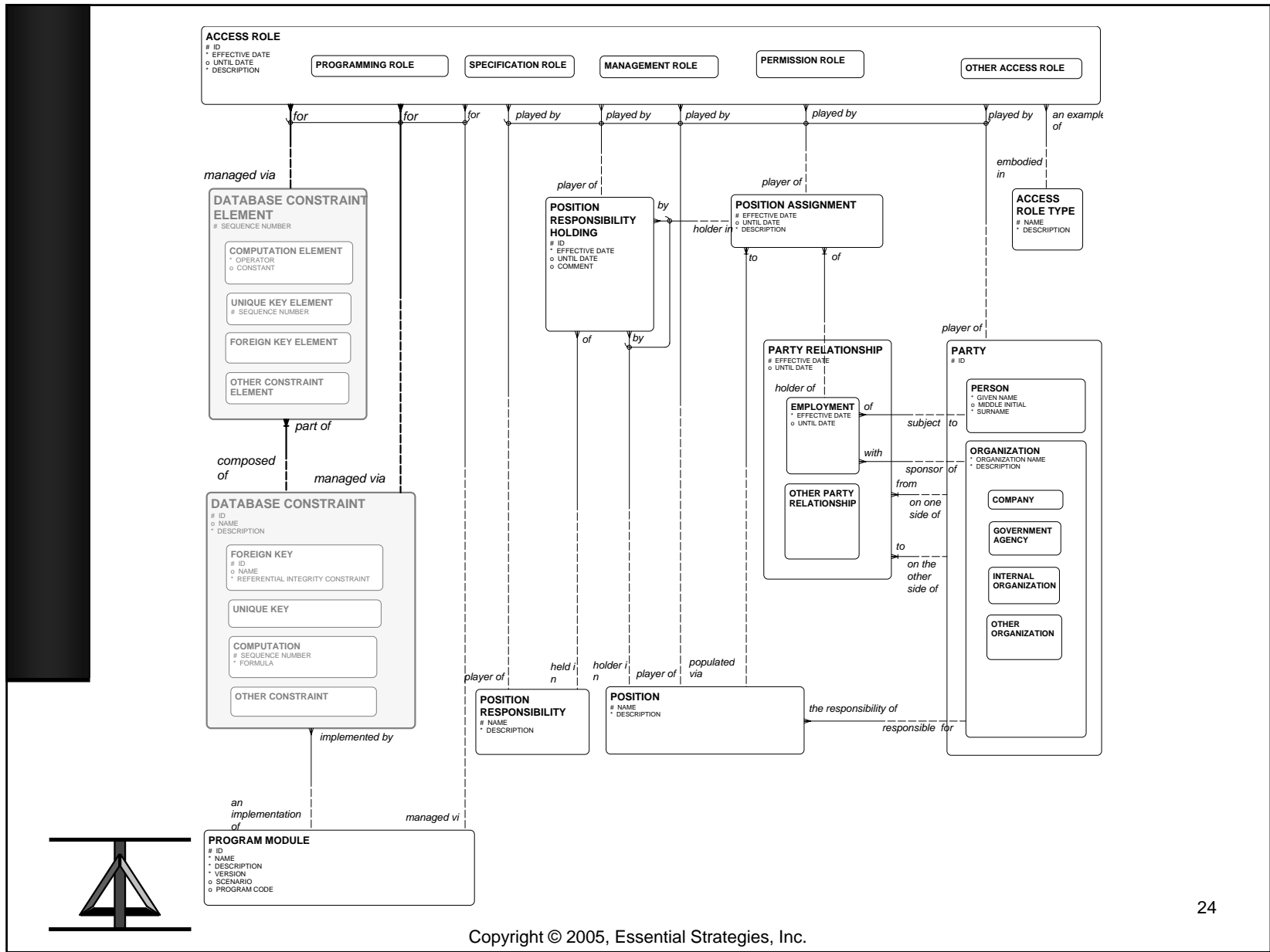


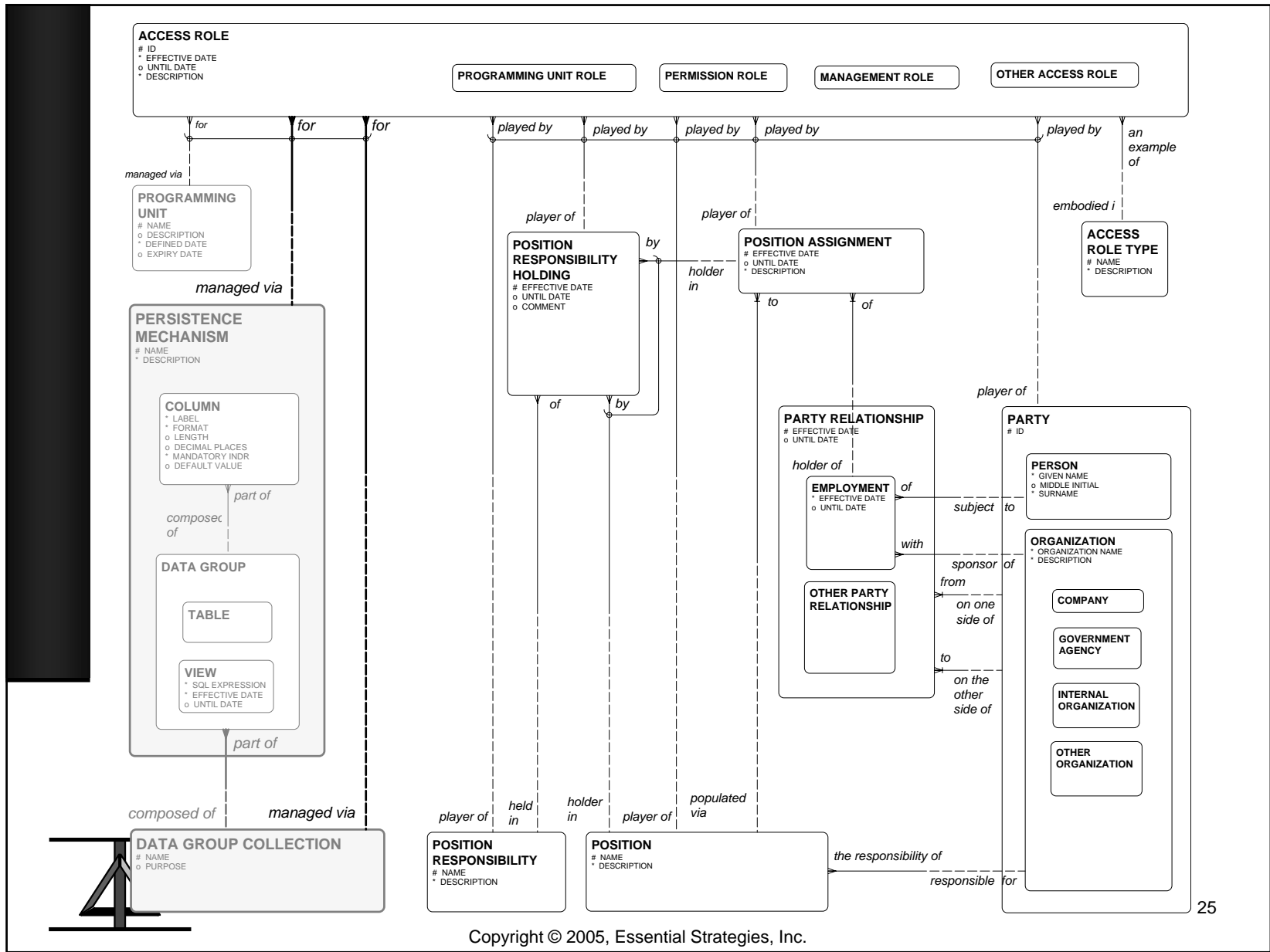


Row four:  
The designer's View









**PROGRAM MODULE**

# ID  
 \* NAME  
 \* DESCRIPTION  
 o SCENARIO  
 o PROGRAM CODE

**CLASS IMPLEMENTATION**

**ARCHITECTURAL CLASS**

**HUMAN INTERFACE CLASS**

**DISPLAY GROUP**

# ID  
 \* NAME

**WINDOW**

# ID  
 \* NAME  
 \* MODAL INDICATOR

**EXECUTABLE MODULE**

PACKAGE

METHOD

INTERACTIVE MODULE

OTHER EXECUTABLE MODULE

a generalization of (dashed arrow) inheriting from (solid arrow)

made persistent in

part of

composed of

composed of

part of

composed of

part of

composed of

part of

**PERSISTENCE MECHANISM**

# NAME  
 \* DESCRIPTION

**COLUMN**

\* LABEL  
 \* FORMAT  
 o LENGTH  
 o DECIMAL PLACES  
 \* MANDATORY INDR  
 o DEFAULT VALUE

**DATA GROUP**

TABLE

VIEW

\* SQL EXPRESSION  
 ...

used by

written in

the language of

**PROGRAMMING LANGUAGE**

# NAME  
 \* DESCRIPTION

a sub-type of

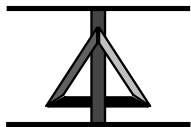
a super-type of (2+)

an example of

embodied in

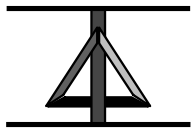
**PROGRAM MODULE TYPE**

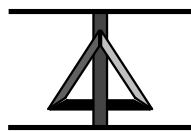
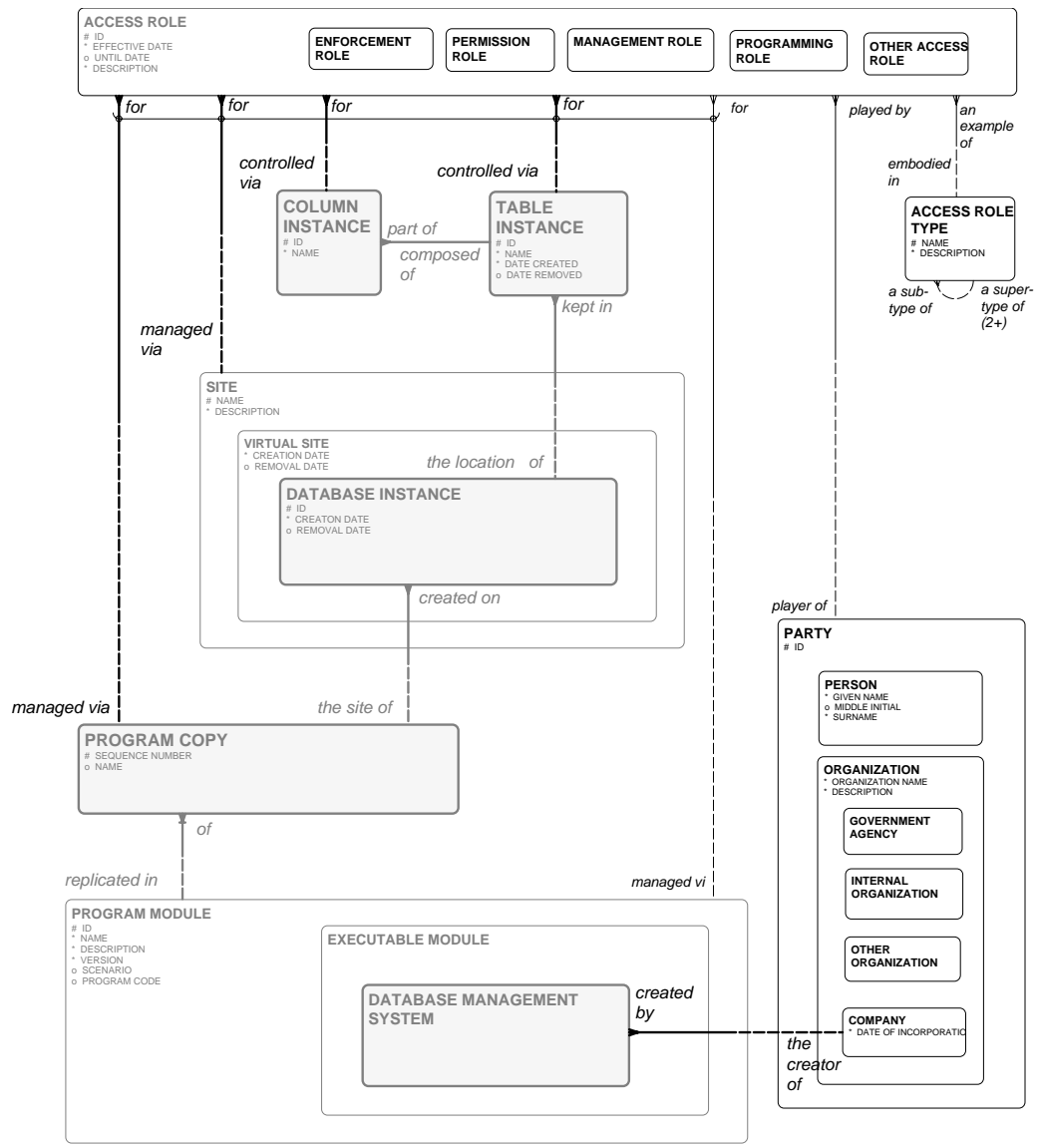
# NAME  
 \* DESCRIPTION





Row six:  
The functioning system





... To be continued ...

