

 $I D \equiv R A^{\circ}$ Business Process Modeling Solution Brief

BETTER BUSINESS OCESS MODELING

A Comparison of IDERA ER/Studio Business Architect and Microsoft Visio

Business process models are not meant to be just a one-point-in-time documentation of business processes. They should be dynamic and flexible enough to change as needed. Microsoft Visio is a good tool for the capabilities it provides; however, its scope is limited as business needs mature and evolve. IDERA ER/Studio Business Architect provides a focused set of features for establishing a business architecture, offering deep functionality for conceptual modeling, business process modeling, and capturing the connections between process and data.

This document is meant to outline the business needs for Business Process Modeling (BPM) and compare IDERA ER/Studio Business Architect (ERBA) to Microsoft Visio to help you determine the relevant capabilities to fit your needs.

IMPORTANT THINGS TO CONSIDER WITH BUSINESS MODELING TOOLS

- TRACEABILITY In the case of business processes, you need to know who is
 responsible for a task, why this task is performed, and how it is automated by the
 IT system infrastructure. You also need visibility to the effects that a change to
 the processes can have across the business.
- INTEGRATED MODELS Documenting business data flows involves different types of models such as business processes, data models, etc. You need those models to be tightly integrated to be the most effective.
- CUSTOMIZATION Every business is different, so the modeling solution you select needs to take that into account. Your business model should be able to adapt and change to reflect the specific details that make your business unique, while maintaining consistency across models.
- COLLABORATION & SHARING Information that is in the model is important to all the people in your company. Your colleagues should be able to access the models as needed based on work roles and understand how their function contributes to the business goals.

TOP 6 BUSINESS PROCESS MODELING FEATURES YOU MAY NEED

Metadata Repository

MS Visio is primarily a tool for basic diagramming, and it cannot capture & organize metadata for further usage. IDERA's ERBA captures true metadata associated with business processes allowing you the ability to model the relationships between business processes and data models. Additionally, you can export the information into a variety of formats and organize models by project for more effective sharing across teams.

Expanded Task Properties

Organizations who mature beyond a high-level disconnected diagram need BPM with extended properties and categories within the model. ERBA has standard properties such as categories & assignments, task properties such as loops and more extensive support for objects and properties including extensive events, tasks, and gateways for documenting your processes with rich validation capabilities.

Change Impact Analysis

Often organizations need to understand data lineage and analyze the impact of changes made to the models. For example, "what does the data connect to elsewhere?" And, "How does the business process affect other data?" This objective requires complex version control and check-in that tracks any changes made between the models and data structures. This cannot be accomplished using MS Visio. With ERBA, you can not only track such changes, but you can create impact analysis reports that show interrelationships between process, data, stewardship, business rule, diagram usage, heritage, and connecting objects.

BPMN 2.0 Standards

For organizations that want to meet BPMN 2.0 standards, Microsoft Visio does little to help in this regard. ERBA provides automatic validation of process diagrams to ensure compliance with BPMN 2.0 specifications, plus you can view syntax violations against the specifications for further compliance control.

Compliance With Regulations

Some businesses need to comply with industry and government regulations (e.g. GDPR, HIPAA, PCI DSS, and SOX) by clearly documenting certain business processes. This is difficult to do effectively using MS Visio. With ERBA, you can assign stewardship roles as owners for specific processes. CRUD (create, read, update, delete) can be used as well to establish what you can do with the data like permissions to make changes. You can also designate which data is considered sensitive and personally identifiable, to ensure compliance with internal business standards and external regulations.

Data & Conceptual Model Integration

Many organizations evolve and need to integrate data models, conceptual models and business process models across the business and maintain consistency between them. This cannot be done within MS Visio. With ERBA, you have the capability to model the relationships between people, processes and data, and to export the information into a variety of formats for better collaboration and sharing.

EXAMPLES OF ORGANIZATIONAL NEEDS FOR BUSINESS PROCESSES

- I need to model the data requirements and interactions for all our projects.
- Our company has gone through acquisitions and I need to streamline all of our business processes and data processes in one place. We need to get out of the chaos created by documents scattered in Sharepoint, Word, Excel and Access databases.
- Our organization has gone through a restructuring and our challenge is consolidating terms from the various departments and relating them to data objects.
- I want to identify the stewards who have access to the information via BPM.
- I would like a better perspective on our change management and data governance processes.

With ER/Studio Business Architect, you can achieve the above objectives. ERBA can access a scalable model repository for storing your business process and conceptual models to show a high-level visual representation of an organization, and share them with key stakeholders.

For BPMN 2.0 users, ERBA includes extensive events, tasks, and gateways for documenting processes, and rich validation capabilities. It also includes the ability to document complex conversations with choreography to provide visibility to touchpoints.

You can publish and view business process models, including BPMN 2.0 objects. Align business goals with regulatory requirements to enable a foundation for data governance and improve compliance to audits. Increase visibility of organizational processes and data usage to identify gaps in your processes through BPMN-compliant process modeling.

With ER/Studio Enterprise Team Edition (which includes ERBA), you can extend even further with business glossaries, collaboration tools and rich data modeling capabilities that help tie business process models into the data elements of an organization. These capabilities can help you fulfill even more business needs such as:

- I would like to look up business terms in a glossary and see various different perspectives and definitions.
- I want to drill in deeper and see who owns the processes related to the business term (for Data Governance).
- I want to see all related processes in the glossary and know what needs to be done to change the process. And I want to see the business rules associated with that process.
- I want to have a business capability matrix overlaid with our technology portfolios and I want to use our technology portfolios to dive deeper into business processes.
- I would like interconnectivity between terms, models and users.

	ER/Studio BA	VISIO	
TASKS AND SUB PROCESSES	•	•	
Loop Markers	•	•	
Ad Hoc Task	٠	•	
Loop Task	۲	٠	
Compensation Task	٠	•	
Parallel Multi Instance Task	٠		
Sequential Multi Instance Task	٠	•	
Task Markers	•	•	
User Task	٠	•	
Manual Task	۲	٠	
Send Task	٠	•	
Receive Task	۲	•	
Service Task	٠	•	
Business Rule Task	۲	٠	
Script Task	٠	•	
Reference Task	۲		
Sub Processes	•	•	
Embedded Sub Process	•	•	
Reusable Sub Process	٠		
Transaction Sub Process	•	•	
Event Sub Process	٠		

	ER/Studio BA	VISIO
Call Activities		•
Call Tasks		•
Call Sub Processes	•	•
Call Processes	•	
Task Properties		
Status		
Start Quantity		
Loop Condition		
Loop Counter		
Loop Max		
Loop Test Time		
Loop Ordering		
Loop Flow Condition		
Click to Expand Sub Processes		
Click Reusable Sub Process to Go To New Diagram		
EVENTS		\bullet
Interupting		•
Non-Interupting		•
Catching	•	•
Throwing	•	•

	ER/Studio BA	VISIO
Start Events		•
None		•
Message		•
Timer	•	•
Error		•
Escalation	•	•
Compensation	•	•
Conditional	•	•
Signal	٠	•
Multiple	•	•
Parallel Multiple	٠	•
Intermediate Events		•
None	•	•
Message		•
Timer	•	•
Error		•
Escalation	•	•
Cancel	٠	•
Compensation	•	•
Conditional	٠	•
Link		•

	ER/Studio BA	VISIO	
Intermediate Events	•	•	
Signal		•	
Multiple			
Parallel Multiple	•	•	
End Events		•	
None	•	•	
Message	٠	•	
Error	•	•	
Escalation			
Cancel	•	•	
Compensation			
Terminate	•	•	
Signal			
Multiple	•	•	
Event Properties			
Add Multiple Triggers	٠		
CHOREOGRAPHY			
MESSAGES		•	
CONVERSATION			

	ER/Studio BA	VISIO
GATEWAYS		•
Exclusive		•
Exclusive with Marker (X)	٠	•
Inclusive	٠	•
Parallel	٠	•
Complex	٠	•
Event Based	٠	•
Exclusive Event Based	٠	•
Parallel Event Based	٠	•
Gateway Properties		
Incoming Condition		
Outgoing Condition	٠	
POOLS AND SWIMLANES		•
Vertical		
Multiple Lane	٠	•
Nested Lanes	•	
Multi Instance Indicator	•	•
Set Participant	•	
Link Steward or Business Unit	٠	
Remove Lanes (Black Box)	•	

CONNECTION OBJECTSImage: Connection objectsDATA OBJECTSImage: Connection objectsSet CollectionImage: Connection objectsProduced at completionImage: Connection objectsEntityImage: Connection objectsTableImage: Connection objectsData StoreImage: Connection objectsData StoreImage: Connection objectsData StoreImage: Connection objectsData FeedImage: Connection objectsReportImage: Connection objectsStewardImage: Connection objectsStewardImage: Connection objectsStewardImage: Connection objectsBusiness UnitImage: Connection objectsBusiness RuleImage: Connection objectsBusiness RuleImage: Connection objectsBusiness ElementImage: Connection objectsDrawing ShAPESImage: Connection objects		ER/Studio BA	VISIO	
Set Input/Output Image: Collection Set Collection Image: Collection Required for start Image: Collection Produced at completion Image: Collection ExterNAL DATA OBJECTS Image: Collection Entity Image: Collection Table Image: Collection Data Store Image: Collection Data Store Image: Collection Report Image: Collection Report Image: Collection Steward Image: Collection Steward Image: Collection Application Image: Collection Business Rule Image: Collection Business Element Image: Collection	CONNECTION OBJECTS	•	\bullet	
Set Collection Required for start Produced at completion External Data OBJECTS Calle Finity Calle Data Store Calle <licalle< li=""></licalle<>	DATA OBJECTS			
Required for start ● Produced at completion ● ExterNal DATA OBJECTS ● Entity ● Table ● Data Store ● Data Feed ● Report ● Fat File ● Steward ● Steward ● Application ● Business Rule ● Business Element ●	Set Input/Output	•		
Produced at completion • ExtERNAL DATA OBJECTS • Entity • Intel • Table • Data Store • Data Feed • Report • Flat File • Steward • Steward • Application • Rusiness Rule • Business Element •	Set Collection	٠		
EXTERNAL DATA OBJECTSImage: Constraint of the section of	Required for start	٠		
Entity ● Table ● Data Store ● Data Feed ● Report ● Flat File ● Steward ● Application ● Business Rule ● Business Element ●	Produced at completion	٠		
Table • Data Store • Data Store • Data Feed • Report • Flat File • Steward • Business Unit • Application • Business Rule • Business Rule •	EXTERNAL DATA OBJECTS	•	•	
Data Store•Data Feed•Report•Flat File•REFERENCE OBJECTS•Steward•Business Unit•Application•Business Rule•Business Rule•Business Element•	Entity	•		
Data Feed ● Report ● Flat File ● REFERENCE OBJECTS ● Steward ● Business Unit ● Application ● Business Rule ● Business Element ●	Table	•		
Report Flat File REFERENCE OBJECTS Steward Steward Business Unit Application Business Rule Business Element	Data Store	•	•	
Flat File REFERENCE OBJECTS Steward Steward Business Unit Application Business Rule Business Element	Data Feed	٠		
REFERENCE OBJECTS ● Steward ● Business Unit ● Application ● Business Rule ● Business Element ●	Report	•		
StewardImage: StewardBusiness UnitImage: StewardApplicationImage: StewardBusiness RuleImage: StewardBusiness ElementImage: Steward	Flat File	٠		
Business Unit Application Business Rule Business Element	REFERENCE OBJECTS	•		
Application Business Rule Business Element	Steward	٠		
Business Rule Image: Constraint of the second sec	Business Unit	٠		
Business Element	Application	٠		
	Business Rule	٠		
DRAWING SHAPES	Business Element	٠		
	DRAWING SHAPES		•	

	ER/Studio BA	VISIO
OTHER FEATURES		•
Search Diagram		•
Filtered View		
Tree View of Diagrams	•	
BPMN Validation		
Appearance		•
Fill Color		•
Font Updates	٠	•
Alignment and Grouping		•
Grouping	•	•
Align		•
Snap to Grid	•	•
Standard Properties		
Set Categories	•	
Set Assignments		
Assign Links		
Include Description	٠	
Include Notes		
Create AdHoc Properties	•	

	ER/Studio BA	VISIO	
DIAGRAM TYPES		\bullet	
BPMN	٠		
Conceptual Model	•		
Other		•	
Usage (CRUD)	•		
Impact Analysis	•		
Repository Checkin (add-on feature)	•		
Import Data Models as Conceptual Models	•		

CONCLUSION

ER/Studio Business Architect simplifies how business stakeholders and data architects document the way the company uses data and aligns processes to meet business objectives. MS Visio is focused on allowing users to draw pictures to show business processes. Although this is helpful, it can be quite limiting. ERBA goes a step above with mapping and modeling the relationships between processes, people and data to provide visibility into the business. With ERBA, both business and technical users can more effectively collaborate to ensure compliance with internal business standards and external mandatory regulations. ER/Studio Business Architect helps data professionals and business stakeholders communicate better and define a business-driven enterprise architecture.

ER/STUDIO BUSINESS ARCHITECT

- Design business process and conceptual models to align with business goals
- Map and model the relationships between people, processes, and data
- Easily export conceptual models to ER/Studio Data Architect to create logical models
- Quickly validate that business process models meet BPMN 2.0 specifications
- Comply with regulatory requirements by identifying sensitive data elements

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