#### **Rolando Hernandez**

# **Decision Modeler, Business Rules Architect, Enterprise Architect**

Dallas, TX / Miami, FL 214-810-6585 Jobs2014@BizRules.com

### **EXPERIENCE**

- Decision modeler who helps companies make better decisions.
- Experience using big data, analytics, data mining, decision models, rules, and processes to help companies disrupt competition, seize market share, ensure compliance, prevent fraud, compete on knowledge, & rule the world.
- Data mining to automatically discover business rules and decision trees from big data (e.g. e-commerce orders, POS transactions, batch transactions, data warehouse). Design predictive models using the rules discovered during data mining.
- Build predictive models that predict what will happen (e.g. pays back the loan, defaults on loan, shops but does not buy, buys, cancels the order, returns the product, equipment breaks, part fails, rain, snow, ice, get audited, fraud).
- Create decision models (using the predict rules in the predictive models) that decide what to do (e.g. approve
  loan, deny loan, pre-position snow removal/salt trucks, select for audit, detect fraud), or whether to influence what
  happens (e.g. offer grace period, lower the price, offer a discount, do preventive maintenance or wait until it
  breaks, reduce audit risk, prevent fraud). Use business intelligence to analyze what actually happened vs. what
  was predicted.
- Use big data analytics to discover hidden patterns, relationships, and correlations in the transaction data.
   Collaborate with subject matter experts to analyze the results, and recommend improvements to the rules in the models.
- Follow business rules methodology to create rule models and continuous improvement rules that recommend changes to the predict rules and the decision rules. Use artificial intelligence, rule engines, and decision engines to automatically execute all the rules (i.e. predict rules, decision rules, continuous improvement rules, expert rules).
- Use enterprise architecture to integrate all the components (data, decisions, rules, models, processes, etc.) in a decision-oriented architecture so the whole system works and is aligned with the business strategy.

## WHAT CAN I DO FOR YOUR BUSINESS?

- Enterprise Architecture modeling: Business Capability Modeling. Process, Rules, and Decision Modeling.
- Business and technology strategy: Architecture frameworks, methodology, standards, training, KM COE.
- **Tactical IT systems planning:** Design, engineer, manage, build, deliver, support, governance; BRM/BPM COE, share best practices, design reusable processes, rules, and components. Business rules strategic planning.
- Enablement and adoption of new technologies: Methodologies, processes, tools, standards, and best practices.
- Become a trusted advisor to business executives, IT directors, and SMEs. Finance, Tax, Legal, Risk, Compliance, Financial products and services, Sales, Customer service, Engineering, Operations, etc.
- Align IT solutions to business strategy: Create the enterprise architecture models, frameworks, and blueprints
  of your As-Is and To-Be models: Business concepts, business capabilities (what); Business processes (how);
  Strategy, Policy, Goals, business rules, internal transacting/monitoring/reporting rules, external filing/compliance
  rules (why); Legal entities, hierarchies/structures (where); Schedules, projects, durations, deadlines (when);
  People, roles, work, workflow, workforce (who); Databases, rulebases, and knowledgebases.
- **Knowledge Engineering:** Knowledge acquisition, knowledge representation, and knowledge management. "Clone" your top experts to automate their decisioning "expert rules," and preserve your Intellectual Capital assets.
- Build architectures, models and intelligent systems: Al Bots, Rules-Based, and Knowledge-Based Systems to solve complex problems, maximize revenue, minimize tax, make expert decisions, and outsmart competition.

## WHAT HAVE I DONE FOR BUSINESS AND GOVERNMENT?

- Decision modeler on Sapiens DECISION professional services consulting team implementing decision management software at Goldman Sachs and Wells Fargo.
- Helped design the Business Rules, BPM, and KM strategy & methodology for Mobil Oil, IRS, and GE.
- IBM's Business Rules SME on the IRS PRIME CADE \$10 billion 15-year IRS Modernization Program. As a BIZRULES sub-contractor, I was one of IBM's "Key Personnel" on their IRS PRIME contract.
- Experience working on and/or leading strategic EA, Decision Modeling, BPM, and BRMS projects for GE, Mobil Oil, Pepsi, IBM, EDS, IRS, Goldman Sachs, and Wells Fargo. Business Rules Architect for large, complex, mission-critical Rules-Based Systems in Fortune 500 firms. Exceptional ability to work with world-class Subject Matter Experts and quickly extract their domain knowledge, business rules, decisioning process, and expertise so it can be documented, digitized, and preserved.

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IBM

BIZRULES subcontract w/ IBM ODM ILOG Professional Services

# **IBM ODM Business Policy Analyst**

Nov. 2013 – Present

- Loyalty System Modernization Project for a \$15 billion Fortune 500 online/retail store chain during M&A.
- As IBM's business rules analyst on the IBM ODM team implementing Operational Decision Management (IBM ODM ILOG), I represented IBM on-site and worked closely with the client's SMEs to document the business rules and decisions for a new rules-based Loyalty Management System. This included discussing best practices, knowledge transfer, creating templates, deep dive discussions about complex rules and decision logic, designing the promotion rules, terms glossary (BOM), conceptual models, process models, data models, loyalty lifecycle timing/event models, business rules (if/then, decision tables, decisions trees), and decision models.

## Sapiens Americas (Financial Services software vendor)

Client sites in NJ and MD

## **Business Rules Architect - DECISION software**

Nov. 2012 - Sep. 2013

 Decision modeling on a Mortgage Rules Modernization project at Wells Fargo. Also worked on a Decision Management POC for FINRA/KYC compliance at Goldman Sachs. As a member of Sapiens professional services consulting team implementing Sapiens DECISION Business Decision Management System (BDMS), gained indepth hands-on modeling experience using DECISION. Formal/advanced training on DECISION. Advanced training on The Decision Model by KPI thought leaders Barbara von Halle and Larry Goldberg, and training on BPMN by Bruce Silver.

# **BIZRULES (Founder & CEO)**

Miami, FL / Dallas TX

## Rules Architect, Decision Engineer, Enterprise Architect

1995 - Present

- Help Fortune 500 firms modernize legacy applications and design new eBusiness apps using breakthrough technologies Big Data, Analytics, Data Mining, BPM, BDMS, BRMS, BRE, KM, AI, and ES.
- Rules Architect & Knowledge Engineer on G.E.'s tax knowledge supply chain: Helped G.E. "Write the Rules" of Tax Compliance & Tax Minimization. How do you build Tax Apps to help G.E. (1) act with integrity regarding tax obligations, (2) ensure compliance with global tax rules, (3) pay all legally obliged taxes, and (4) meet their responsibility and obligation to shareholders to legally minimize costs?

You start with 19 rules in the G.E. tax dept. mission statement, the best tax experts in the world, and a knowledge transfer function to capture 1,000's of rules from the minds of the tax experts. Then you digitize the rules in BRE Tax Expert Apps and Smart BPM Apps:

- My BIZRULES® rules harvesting methodology, knowledge acquisition process, and knowledge engineering process is used to (1) discover, define, document, and model GE's Statutory Tax Compliance Rules and Tax Expert Rules, (2) build GE's tax knowledgebase, and (3) build GE Tax Expert applications.
- o Interviewed GE's tax experts, designed Enterprise Architecture Models, Business Capability Models, Business Rule Models, Expert Rule Models, and Process Models to help GE document, assess, test, and certify that Finance/Tax rules, processes, controls are in place to comply with U.S. GAAP and IFRS tax rules.
- o Designed Business Rules architecture and methodology for GE's e-TAX Digitization Initiative.
- Documented GE rules for Corporate Governance, SOX, Regulatory and Statutory Tax Compliance in 120 countries, Tax Minimization, CIT, WHT, VAT, Transfer Pricing, Cross-Border Transactions, Entity Management, and Tax Provision. Expert rules ensure tax compliance and reduce tax expense.
- Rule Harvesting & Gap Analysis of Transfer Pricing Rules for GE Energy, GE Healthcare, and NBC-Universal. Used BIZRULES automated utilities to extract business rules from 17 million lines of code in GE Capital Fleet Leasing app.

Business Rules Architect on the GE Energy Contractual Modeling System (COSMOS). COSMOS models GE Energy Customized Service Agreements (CSA). Probabilistic models project scheduled maintenance events, unplanned outages, parts repairs, inventory levels, billing, and payment streams throughout the lifecycle of the contract, from Actualization through End of Term (EOT). Helped the GE team harvest and design optimization rules for scheduling planned maintenance and unplanned repairs. Modeled data-based and goal-based rules to determine inventory levels, replenishment method, quantity, and schedule. http://bizrules.com/clients\_GE.htm.

IBM's Business Rules Subject Matter Expert (SME) on the 15-year \$10 billion US IRS PRIME CADE
Business Systems Modernization Project. Developed custom Business Rules Methodology for the IRS.
Trained IRS SMEs to write Business Rules; Developed RFP/criteria to assist IRS with BRE selection.
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Among the goals are to take the tax agency from a paper-pushing system to an interactive online program for taxpayers, and to deliver tax refunds in as little as two days instead of five weeks. See <a href="http://bizrules.com/clients">http://bizrules.com/clients</a> USIRS.htm.

- EDS Business Rules Programmer: Designed and programmed business rules for the \$400 Million Government of Canada Social Security System Modernization Project. Coded rules in CA AION CleverPath Business Rules Engine. Error & fraud reductions due to new Rulebase of \$45 Million/year or \$703 Million/15yrs. See http://bizrules.com/clients CADISPR.htm.
- Designed, built & delivered Mobil Oil's Global Knowledge Management Strategy & Expert System Strategy. Created Mobil's Global Lubricant Knowledgebase (LKB), an integrated suite of intelligent systems, diagnostics systems, product recommenders, and field force automation apps used by Sales Force to seize market share.
- Developed the BIZRULES® VISION™ Methodology for documenting, managing, and automating business rules and processes, and for preserving expert knowledge. Used by GE, Mobil Oil, and IRS. (Three of the Fortune 10 use my <u>BIZRULES methodology</u> for BPM, BRM, KM, and EA.)
- My clients include GE Capital, GE Energy, Countrywide (Bank of America), CSX, IBM, EDS, Chubb & Son, USAA, Allstate, Penn National Insurance, Daylight Forensics, Burger King, CARFAX, Foot Locker, Cunard Cruise Line (Carnival Cruise Line), Royal Caribbean Cruise Line (<a href="http://bizrules.com/clients\_cruiseline.htm">http://bizrules.com/clients\_cruiseline.htm</a>), the United Stated Internal Revenue Service, Canada Social Security Department, South Carolina Dept. of Revenue, Bexar County Crime Lab (San Antonio, TX), and Office Depot.
- Model business rules, decisions, and business processes with SMEs using Knowledge Acquisition,
  Knowledge Engineering, Business Rules Harvesting; Business Process Redesign, Requirements Analysis,
  Modeling, and Design; Enterprise Architecture governance, standards, methodology, and best practices.
- Create Rulebooks, Decision Models, Process Models, and Enterprise Architecture Blueprints (e.g. Concept models, capability models, application design, database design, rulebase design, rulesets, business rules, expert rules, processes, decisions, events, messages, cases, flows, workflows, inputs, outputs, outcomes, UI wireframes, UX (User eXperience), information architecture (IA), enterprise architecture (EA) frameworks, object models, hierarchy models, and reuse models; Business Rules Strategic Planning; Rules Methodology.

## SPECIALTIES: INTELLIGENT SYSTEMS

- Business Intelligence: BI, BAO, EDM Big Data, Analytics, Optimization, Decision Management, Data Mining.
- **Intelligent Systems:** QA predictive maintenance, problem diagnostics, equipment troubleshooting, selection, configuration, solution optimization, recommenders, intelligent agents, interactive question-answer systems.
- Artificial Intelligence: AI, ML, ES, CBR Cognitive systems, machine learning, machine intelligence, inference, expert systems, expert advisors, production systems; case-based, deductive, probabilistic, deterministic and heuristic reasoning; AI algorithms, AI software.
- **Knowledge Management:** KM, KA, KR, KE, KT, KBS, KB Knowledge acquisition, knowledge representation, knowledge modeling, knowledge engineering, knowledge transfer, knowledge-based systems, knowledge bases.

### INDUSTRY EXPERTISE & FUNCTIONAL EXPERTISE

- Energy, Oil & Gas Mobil Oil, GE Energy.
- Travel/Cruise Royal Caribbean, Carnival, Cunard, American Classic Voyages, American Queen Steamboat Co.
- Finance, Tax, Governance, Risk, Compliance GRC 11 years: IRS, General Electric.
- Finance, Global Investment Banking, Mortgage, Insurance (P&C, Life) 2 years: Goldman Sachs, Wells Fargo.
- Intelligent systems for product recommenders, customer service advisors, equipment failure diagnostics, oil/lubrication troubleshooting, prognostics, cognitive systems, and preventive maintenance 5 years at Mobil Oil.
- Federal Govt. Business Systems Modernization US IRS (Income Tax), Canada ISPR (Social Security).
- Food and Beverage Burger King, Pepsi-Cola Brazil; Railroad & Transportation CSX.
- Healthcare / Medical Informatics / Clinical Information Systems 4 years (High school/College internship).

## **EDUCATION**

- M.S. Master of Science, Computer Information Systems with a Concentration in Artificial Intelligence, 1988.
- B.S. Systems Analysis, 1986. Both degrees from the University of Miami School of Business.

## **ATTRIBUTES**

• US Citizen. Bilingual–Fluent in English & Spanish. Can travel– Int'l. exp: England, France, Japan, Brazil, Canada.