EXHIBIT C

2009

Expert Report of Paul C. Pinto

Oracle USA, Inc., et al. v. SAP AG, et al.
<u>Designated Highly Confidential</u>
<u>Pursuant to Protective Order</u>

Paul C. Pinto
Managing Partner, Sylvan VI. Inc.
November 16, 2009

I.   INTRODUCTION AND SUMMARY OF OPINIONS

I, Paul Pinto, submit the following expert report in the case *Oracle USA, Inc., et al. v. SAP AG, et al.*, Civil No. 07-CV-1658 (N.D. Cal.), on behalf of Plaintiffs Oracle USA, Inc., Oracle EMEA, Oracle International Corporation, and Siebel Systems, Inc. (collectively, "Oracle" or "Plaintiffs"). I am the co-founder and managing partner of Sylvan VI, Inc., an advisory services firm that provides management consulting services to clients contemplating the selection of a packaged software product or engaging an external service provider to custom-develop software. Prior to founding Sylvan VI, I served as a Senior Executive with Infor Global Software and Epicor Software, both of which publish software products that directly compete with Oracle and SAP. In these roles, I was responsible for running the Software Product Implementation and Managed Services business lines, which focused on implementing, upgrading, customizing, and supporting a variety of ERP and Financial Management software products.

The law firm Bingham McCutchen, on behalf of Oracle, engaged my expert services to estimate the costs associated with development of certain products Oracle alleges were accessed, copied, and used by Defendant TomorrowNow, Inc. ("SAP TN") through the actions specified in the Fourth Amended Complaint ("Complaint"). I have reached the opinions expressed in this report based on my experience and review and analysis of certain materials produced in this matter.

As explained in more detail below, to reach a conclusion regarding the cost of development, I conducted a series of formal analysis techniques on certain software applications identified in the Complaint to estimate what it would have cost SAP AG, SAP America, Inc., and SAP TN (together, "Defendants") to independently develop certain software applications accessed, copied, and used by SAP TN as alleged in Complaint. As part of that assessment, I analyzed the available materials and employed industry-accepted methods for estimating the costs associated with conducting all phases of the Product Development Life-Cycle (PDLC), including Plan, Specify, Design, Build, Test, Document, and Deploy, for what I understand to be

the most current copyrighted versions of certain JD Edwards and PeopleSoft software products for which SAP TN provided support services to customers:

- JD Edwards EnterpriseOne, Version 8.12,

- PeopleSoft 8.8 Customer Resource Management ("CRM"),

- PeopleSoft 8.8 Human Resources Management System ("HRMS"),

- PeopleSoft 8.4 Financial Supply Chain Management - rev 1 ("FSCM"),

- PeopleSoft 8.0 Student Administration ("Student Admin"), and

- PeopleSoft 8.8 Enterprise Performance Management - rev 1 ("EPM")

Using two industry-accepted and reliable methodologies known as Function Point Analysis and COCOMO, I estimated Defendants would have incurred costs in the range of $764M to $2,323M (depending on the selected staffing model) to independently develop JD Edwards EnterpriseOne and PeopleSoft CRM, HRMS, FSCM, Student Admin, and EPM modules. Further, the Complaint also alleges Defendants violated Oracle's intellectual property rights with respect to JD Edwards World and Siebel products. While I did not conduct a low-level Function Point Analysis for these two products, I did conduct a high-level COCOMO analysis. Based on reasonable assumptions regarding likely costs of development of these additional products, in light of the range of costs of development estimated for JD Edwards EnterpriseOne and PeopleSoft products, I estimated that Defendants would have incurred costs in the range of $1,134M to $3,477M (depending on the selected staffing model) to independently develop the most current version of JD Edwards EnterpriseOne, JD Edwards World, PeopleSoft, and Siebel applications.

Based on my analysis, it is estimated that 9,772,236 person-hours of productive effort would be required to perform full life-cycle application development for the cited software products (JD Edwards EnterpriseOne, JD Edwards World, PeopleSoft, and Siebel). Assuming there are 144 productive hours in a month, this translates into 67,863 person-months of effort. If the development effort were to be completed within a two-year time frame, the organization would require access to, and the ongoing retention of, more than 2,828 well-trained resources,

throughout the 24-month duration of the project.

II.　QUALIFICATIONS OF EXPERT WITNESS

A.　Background

A copy of my curriculum vitae is attached as Appendix A. I have worked in the field of Software Development and Enterprise Resource Planning ("ERP") system related services for 24 years. I spent the first half of my career as a delivery agent assuming progressively more challenging roles in providing Product Development, System Integration, and Managed Services associated with SAP, Oracle, PeopleSoft, and JD Edwards products. The second half of my career has been focused on leveraging my product knowledge to serve as a backdrop for evolving my skills as a management consultant that is focused on providing product development and outsourcing advisory services to global clients.

I am the co-founder of Sylvan VI, Inc., an advisory services firm, which provides management consulting services to clients contemplating the selection of a packaged software product or considering engaging an external service provider to custom develop software. In this role, I leverage my deep knowledge of the software industry and system development life-cycle to provide independent and unbiased advice associated with a client's "buy" vs. "build" decision.

Prior to founding Sylvan VI, I served as a Senior Executive with Infor Global Software (a $2.3B Software company in 2008) and Epicor Software (a $480M Software company in 2007), both of which publish software products that directly compete with Oracle and SAP. In these roles, I was responsible for running the Software Product Implementation and Managed Services business lines, which focused on implementing, upgrading, customizing, and supporting a variety of ERP and Financial Management software products.

Prior to my employment with Epicor, I served as a Senior Vice President for NIIT Technologies (one of the largest India-based systems integration firms). In this role, I was responsible for the day-to-day operations of the U.S. business entity, along with overseeing the sales, estimating, and product development functions for a number of India-based software development centers.

The original input for Step One was the software products/modules for the Analyzed

Products. Below, Table 3 (ORCLX-PIN-000065 Table 3) displays the number of Source Code

programs, for the identified groupings.

Number of Source Code Programs					
Software Product Version	**Programming Language Groupings**	**Number of Source Code Programs**		**Totals**	
JDE EnterpriseOne Version 8.12	C	28,471	Programs	38,634	Programs
	Java J2EE	10,163	Programs		
PeopleSoft Version 8.X	COBOL/400	3,657	Programs	17,480	Programs/Files
	SQC, SQR, DMS and SQL	12,146	Programs		
	RPT and MDL	1,663	Programs		
	PeopleCode	14	Files (w/multiple programs)		
	Totals:	**56,114**	**Programs/Files**	**56,114**	**Programs/Files**

Table 3 - Source Code Programs

Detailed inventories of Source Code files, grouped by stratum, have been produced

as bates number ORCLX-PIN-000063 for JD Edwards EnterpriseOne, and bates number

ORCLX-PIN-000064 for PeopleSoft.

B.   Step Two: Count the Number of Source Lines of Code

The next step involved counting Source Lines of Code ("SLOC") using specially-

designed counting utilities. Counting SLOC is a simple procedure that provides an accurate

predictor of development effort. [10] When development effort is appropriately attributed to the

roles that participate in the Product Development Life-Cycle, and then combined with hourly

rates, enough information is available to develop a reliable estimate of the cost of product

development.[11]

Counting SLOCs still requires a certain amount of nuance, however. Imbedded within

Source Code are various statements such as: physical lines of code, logical source lines of code,

blank lines, and commented (unused or educational) lines of code. Each software development

---

text files produced at ORCLX-PIN-000024 to ORCLX-PIN-000062.

[10] <u>Software Size Measurement: A Framework for Counting Source Statements</u>, Technical Report CMU/SEI-92-TR-020, ESC-TR-92-020, September 1992, Robert E. Parker, Software Engineering Institute at Carnegie Mellon University, pgs. 13-15. [ORCLX-PIN-000017]

[11] *Id.* at 1-15.

language has rules for constructing its Source Code, in the same way that the English language has rules for constructing statements and sentences. These software coding rules, or standards, enable software utilities to be built that can distinguish the different rules and, therefore, count the different types of statements. The end product is the total number of logical Source Lines of Code.

Since 1984, the Software Engineering Institute (SEI), at Carnegie Mellon University, has established standards for defining a Logical Source Code Statement. SEI is a federally-funded research and development center that conducts software engineering research in acquisition, architecture and product lines, process improvement and performance measurement, security, and system interoperability and dependability.[12] I relied on these standards for this portion of my analysis.

In order to use the logical Source Lines of Code count as the foundation for estimating software size and ultimately deriving the total cost of development, I constructed a number of software utilities that counted the logical Source Lines of Code, which are produced as ORCLX-PIN-000066 to ORCLX-PIN-000085. Each line counting utility was specifically designed and tailored to address the specific needs of each type of source code that was analyzed (e.g., COBOL, C, SQL, SQR, etc). Below, Table 4 (ORCLX-PIN-000065 Table 4) is a sample of the output from the automated code counting utility for a series of "C" program files.

Sample SLOC Counting Utility Output (for JDE EnterpriseOne example)		
File Name	**Total Lines of Source Code**	**Logical Source Lines of Code**
n4002340.c	701	379 SLOC
n4002350.c	984	519 SLOC
n4002380.c	882	315 SLOC
n4002400.c	192	81 SLOC
n4002440.c	801	410 SLOC

Table 4 - Sample SLOC Counting

In sum, Step Two involved counting the number of logical SLOC within each grouping, which then served as the basis for establishing the size of the code base in subsequent steps. The

---

[12] *Id.* at 13-21.

Source Code components, as identified in Step One, were used as the input for determining the number of logical SLOC. Below, Table 5 (ORCLX-PIN-000065 Table 5) displays the size of code base, for the identified groupings, expressed as the number of logical SLOC.

Number of Source Lines of Code				
Software Product Version	**Programming Language (stratum)**	**Number of logical Source Lines of Code**	**Totals**	
JDE EnterpriseOne Version 8.12	C	6,906,168	7,774,791	SLOC
	Java J2EE	868,623		
PeopleSoft Version 8.X	COBOL/400	2,057,468	7,650,493	SLOC
	SQC, SQR, DMS and SQL	2,282,005		
	RPT and MDL	244,760		
	PeopleCode	3,066,260		
	Totals:	**15,425,284**	**15,425,284**	**SLOC**

Table 5 - Source Lines of Code

C. Step Three: Determine the Amount of Functionality

Step Three involves a process known as Backfiring to determine the amount of functionality. As explained above in Section V, Function Point Analysis is a method for determining the size of a software product, by describing it in terms of the amount of work being performed within the programming code. The major objective of Function Point Analysis is to describe the quantity of functionality that is contained in a component of Source Code, and to establish an objective statement of software size, which is independent of the technology in which it is written. Function Point Analysis, when paired with Backfiring, is a valuable technique for deriving the size of software in normalized terms. Backfiring refers to the process of using the end-product, in this case the Source Code, to determine the size of the application development effort that was used to produce it.

Considerable research has been performed regarding the expressive power of computer languages. In particular, this research indicates how many logical SLOCs are required to implement a Function Point of work, with a single Function Point of work consisting of an elementary process that performs one of the following types of system-related activities:[13]

---

[13] Function Point Counting Practices Manual, Release 4.2, ISBN 0-963-1742-9-0, The International Function Point

Analysis of Full Life-cycle Product Development Costs for JDE EnterpriseOne Version 8.12					
Cost Category	Offshore	On-staff in Bryan Texas	U.S.-based JDE SI	Oracle/JDE	Hybrid
Cost per program	$5,732	$6,245	$9,518	$19,397	$8,276
Per Source Line of Code	$28	$31	$47	$96	$41
Per Function Point	$1,663	$1,812	$2,762	$5,628	$2,401
Total Cost of Development	**$221,456,475**	**$241,250,703**	**$367,718,303**	**$749,367,618**	**$319,722,837**

Table 22 - Analysis of JDE EnterpriseOne Development Costs

Below, Table 23 (ORCLX-PIN-000065 Table 23) displays an analysis of the total development costs for PeopleSoft Version 8.X, across the five staffing scenarios.

Analysis of Full Life-cycle Product Development Costs for PeopleSoft Version 8.X					
Cost Category	Offshore	On-staff in Bryan Texas	U.S.-based PeopleSoft SI	Oracle/PeopleSoft	Hybrid
Cost per program	$31,052	$33,307	$47,913	$90,012	$40,433
Per Source Line of Code	$71	$76	$109	$206	$92
Per Function Point	$2,105	$2,258	$3,248	$6,101	$2,927
Total Cost of Development	**$542,790,232**	**$582,200,895**	**$837,511,574**	**$1,573,417,402**	**$706,763,803**

Table 23 - Analysis of PeopleSoft Development Costs

VII.   ALTERNATE ESTIMATES

While Function Point Analysis represents the most rigorous approach to performing a detailed assessment of the level of effort required to independently develop the analyzed products, I performed an alternate method of estimation, also reliable, as a mechanism for confirming or denying the results of this "bottom-up" analysis, and for estimating the development costs associated with producing JD Edwards World and Siebel.

In support of developing these estimates, I chose to use the Constructive Cost Model (COCOMO), which is also accepted as a valid approach to estimating, but from a "top-down" perspective, as opposed to performing a detailed-level Function Point Analysis.

A.   Constructive Cost Model (COCOMO)

COCOMO is an algorithm-based software cost estimation model that employs the use of regression formulas, coupled with parameters that were derived from historical project characteristics. The model was originally published in 1981, by Barry Boehm, as a method for

estimating the level of effort, project duration, and costs associated with developing software. This original model was referred to as COCOMO 81. [28]

In 2001, the second version of the model, COCOMO II, was published. This recent iteration is better suited for estimating modern software development projects, by providing an updated set of project characteristic that are more aligned with today's software development tools, iterative approaches, and relational databases. The need for this new model was prompted by the evolution of software development technologies, which moved away from mainframe and overnight batch processing, and moved toward desktop development and code reusability.[29]

COCOMO II estimates the software development effort as a function of a limited set of "scaling drivers" that describe the development process, and a set of "cost drivers" that include subjective assessments about the product, platform, personnel, and project attributes. Below, Tables 24 (ORCLX-PIN-000065 Table 24) cites the scaling drivers and their supporting attributes. [30]

COCOMO II Scale Factor - Parameters							
Scaling Drivers	**Short Name**	**Very Low**	**Low**	**Nominal**	**High**	**Very High**	**Extra High**
Precedentedness	PREC	4.05	3.24	2.43	1.62	0.81	
Development Flexibility	FLEX	6.07	4.86	3.64	2.43	1.21	
Architecture / Risk Resolution	RESL	4.22	3.38	2.53	1.69	0.84	
Team Cohesion	TEAM	4.94	3.95	2.97	1.98	0.99	
Process Maturity	PMAT	4.54	3.64	2.73	1.82	0.91	

Table 24a - COCOMO Parameters

Effort Multipliers - Parameters								
Category	**Cost Drivers**	**Short Name**	**Very Low**	**Low**	**Nominal**	**High**	**Very High**	**Extra High**
Product	Required Software Reliability	RELY	0.75	0.88	1	1.15	1.39	
	Database Size	DATA		0.93	1	1.09	1.19	1.29
	Product Complexity	CPLX	0.75	0.88	1	1.15	1.30	1.66
	Required Reusability	RUSE		0.91	1	1.14	1.29	1.49
	Documentation to match lifecycle needs	DOCU	0.89	0.95	1	1.06	1.13	

---

[28] COCOMO Model II, Center for Systems and Software Engineering, http://csse.usc.edu/csse/research/COCOMOII/cocomo_main.html. [ORCLX-PIN-000003]

[29] *Id.*

[30] *Id.*

COCOMO II Scale Factor - Parameters								
Scaling Drivers		Short Name	Very Low	Low	Nominal	High	Very High	Extra High
Platform	Execution Time Constraint	TIME			1	1.11	1.31	1.67
	Main Storage Constraint	STOR			1	1.06	1.21	1.57
	Platform Volatility	PVOL		0.87	1	1.15	1.3	
Personnel	Analyst Capability	ACAP	1.5	1.22	1	0.83	0.67	
	Programmer Capability	PCAP	1.37	1.16	1	0.87	0.74	
	Personnel continuity	PCON	1.24	1.1	1	0.92	0.84	
	Applications Experience	AEXP	1.22	1.1	1	0.89	0.81	
	Platform Experience	PEXP	1.25	1.12	1	0.88	0.81	
	Language and Tool Experience	LTEX	1.22	1.1	1	0.91	0.84	
Project	Use of Software Tools	TOOL	1.24	1.12	1	0.86	0.72	
	Multi-site operation	SITE	1.25	1.1	1	0.92	0.84	0.78
	Required Development Schedule	SCED	1.29	1.1	1	1	1	

Table 24b - COCOMO Parameters

B.   COCOMO II Estimate for JD Edwards EnterpriseOne

In performing this top-down analysis for JD Edwards EnterpriseOne, the 7,774,791

Source Lines of Code (SLOC) (identified pursuant to the procedure described in Section VI.B.,

above) was used as input, along with my assessment of the characteristics of the JD Edwards

EnterpriseOne application, which are annotated in the following tables (ORCLX-PIN-000065

Table 25). I assigned the "Ratings" for the various Effort Drivers in Table 25 below, based on

my familiarity with the products and my industry experience.

JD Edwards EnterpriseOne Source Lines of Code	
Number of Source Lines of Code	7,774,791
Number of Source Lines of Code (in 1,000s)	7,775

Table 25a - COCOMO Analysis for JDE EnterpriseOne: SLOC

Scaling Characteristic		
Categories	Assessment	Weighting
Precedentedness	High	1.62
Development Flexibility	High	2.43
Architecture / Risk Resolution	High	1.69
Team Cohesion	High	1.98
Process Maturity	High	1.82
Total:		9.54
Process Scale Factor:		1.1054

Table 25b - COCOMO Analysis for JDE EnterpriseOne: Scaling

Effort Characteristics			
Category	**Effort Drivers**	**Rating**	**Weighting**
Product	Required Software Reliability	High	1.15
	Database Size	High	1.09
	Product Complexity	High	1.15
	Required Reusability	High	1.14
	Documentation to match lifecycle needs	High	1.06
Platform	Execution Time Constraint	Nominal	1
	Main Storage Constraint	Nominal	1
	Platform Volatility	Nominal	1
Personnel	Analyst Capability	Very High	0.67
	Programmer Capability	Very High	0.74
	Personnel continuity	Very High	0.84
	Applications Experience	Very High	0.81
	Platform Experience	Very High	0.81
	Language and Tool Experience	Very High	0.84
Project	Use of Software Tools	High	0.86
	Multi-site operation	High	0.92
	Required Development Schedule	High	1
Overall Weighting Factor:			**0.316340143**

Table 25c - COCOMO Analysis for JDE EnterpriseOne: Effort

JDE EnterpriseOne Estimated Effort	
Person Months	15,491
Person Hours	2,230,746
Average Blended Rate	$145.72
Total Cost	$325,061,334

Table 25d - COCOMO Analysis for JDE EnterpriseOne: Cost

As a result of the performing COCOMO II analysis, the model indicated that the development effort would require 15,491 person-month of effort, or 2,230,746 person-hours of effort. When the number of person hours is multiplied by the average blended rate of $145.72/hour (identified pursuant to the "Hybrid" staffing scenario for JD Edwards EnterpriseOne discussed in Section VI(I), above), the estimated development cost is calculated to be $325,061,334. This cost estimate is within 10% of the estimate that was derived for JD Edwards EnterpriseOne through Function Point Analysis using the "Hybrid" staffing scenario (specifically 1.7% higher), and confirms the reasonableness of the estimated development costs associated with JD Edwards EnterpriseOne.

C.   COCOMO II Estimate for PeopleSoft

In performing this top-down analysis for PeopleSoft, the 7,650,493 Source Lines of Code (SLOC) was used as input, along with my assessment of the characteristics of the PeopleSoft application, which are annotated in the following tables (ORCLX-PIN-000065 Table 26). I assigned the "Ratings" for the various Effort Drivers in Table 26 below, based on my familiarity with the products and my industry experience.

PeopleSoft Source Lines of Code	
Number of Source Lines of Code	7,650,493
Number of Source Lines of Code (in 1,000s)	7,650

Table 26a - COCOMO Analysis for PeopleSoft: SLOC

Scaling Characteristic		
Categories	**Assessment**	**Weighting**
Precedentedness	High	1.62
Development Flexibility	High	2.43
Architecture / Risk Resolution	High	1.69
Team Cohesion	High	1.98
Process Maturity	High	1.82
Total:		**9.54**
Process Scale Factor:		**1.1054**

Table 26b - COCOMO Analysis for PeopleSoft: Scaling

Effort Characteristics			
Category	**Effort Drivers**	**Rating**	**Weighting**
Product	Required Software Reliability	Very High	1.39
	Database Size	Very High	1.19
	Product Complexity	Very High	1.30
	Required Reusability	Very High	1.29
	Documentation to match lifecycle needs	Very High	1.13
Platform	Execution Time Constraint	Nominal	1
	Main Storage Constraint	Nominal	1
	Platform Volatility	Nominal	1
Personnel	Analyst Capability	Very High	0.67
	Programmer Capability	Very High	0.74
	Personnel continuity	Very High	0.84
	Applications Experience	Very High	0.81
	Platform Experience	Very High	0.81
	Language and Tool Experience	Very High	0.84
Project	Use of Software Tools	High	0.86
	Multi-site operation	High	0.92
	Required Development Schedule	High	1
Overall Weighting Factor:			**0.569239041**

Table 26c - COCOMO Analysis for PeopleSoft: Effort

JDE PeopleSoft Estimated Effort	
Person Months	27,384
Person Hours	3,943,243
Average Blended Rate	$164.08
Total Cost	$646,995,805

Table 26d - COCOMO Analysis for PeopleSoft: Cost

As a result of the performing COCOMO II analysis, the model indicated that the development effort would require 27,384 person-month of effort, or 3,943,243 person-hours of effort. When the number of person hours is multiplied by the average blended rate of $164.08/hour (identified pursuant to the "Hybrid" staffing scenario for PeopleSoft discussed in Section VI(I), above), the estimated development cost is calculated to be $646,995805. This cost estimate is within 10% of the estimate that was derived for PeopleSoft through Function Point Analysis using the "Hybrid" staffing scenario (specifically, 8.5% lower), and confirms the reasonableness of the estimated development costs associated with PeopleSoft.

D.   COCOMO II Estimate for JD Edwards World

In performing this top-down analysis for JD Edwards World, I assumed that the product had similar functionality to that of JD Edwards EnterpriseOne. This assumption is based on the fact that JD Edwards World was the predecessor to JD Edwards EnterpriseOne, and that it was predominantly developed in the RPG programming language as opposed to COBOL.[31] As a result of this base assumption, I assumed that JD Edwards World contains the same number of SLOC as JD Edwards EnterpriseOne (specifically, 7,774,791 SLOC), as well as similar application characteristics to those found in the JD Edwards EnterpriseOne application, with two modifications. The modifications are associated with Reusability and Platform Volatility stemming from its underlying technology for the product (namely, that JD Edwards World was written in RPG programming language and is run on the IBM I-Series platform), with my assessments annotated in Table 27 (ORCLX-PIN-000065 Table 27), below.

---

[31] Oracle Indefinitely Extends the life of JDE World, IT Jungle Newsletter, April 24, 2008, by Timothy Prickett Morgan, http://www.itjungle.com/tfh/tfh042406-story02.html. [ORCLX-PIN-000010]

X.   OPTION TO REVISE

I reserve the right to modify and/or supplement this report and/or the opinions set forth herein if additional damages rulings are made by the Court and/or additional evidence becomes available.

I, Paul C. Pinto, having conducted the aforementioned analysis and having authored this report, confirm that the opinions contained herein represent a fair and unbiased analysis of the facts presented to me.

Date: 11/16/09
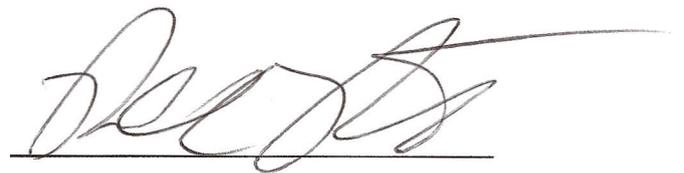
                                                 Paul C. Pinto

Paul C. Pinto
13525 Blakmaral Lane
Alpharetta, Georgia 30075
(H) 770.667.6252   (C) 678.644.6170

Executive Summary

Mr. Pinto has dedicated his entire 24-year career to the field of Consulting Services. Through his professional experiences, he spent the first half of his career as a delivery agent assuming progressively more challenging roles in providing package implementation and system integration services to client organizations. The second half of his career has been focused on leveraging his consulting knowledge to serve as a backdrop for evolving his business management and leadership capabilities. Mr. Pinto prides himself on his understanding of the global consulting services business, and his ability to provide thought leadership to his clients.

Mr. Pinto is a Managing Partner for Sylvan VI, an outsourcing advisory services agency that provides guidance around business process reengineering, software package selection, and Vendor implementations. In this role, Mr. Pinto is responsible for working directly with Fortune 1000 clients, and Influencers (e.g. Legal firms, Management Consulting Firms, Software Vendors…) on developing mutually agreeable outsourcing strategies, and associated implementation efforts.

Prior to Joining Sylvan VI, Mr. Pinto carried the title of Vice President of Worldwide Consulting Services at Infor Global Solutions (a $2.3 billion software company). In this role, Mr. Pinto is responsible for optimizing the way the consulting team delivers services to its worldwide customers. This initial assignment, is that of a change agent, and is acknowledged to be a pre-cursor to assuming full responsibility for the entire $660 million division, within the next 12-months.

Prior to his employment with Infor, Mr. Pinto carried the title of Senior Vice President of Worldwide Consulting Services for Epicor Software (a $560 million software company). In this role, Mr. Pinto was responsible for managing the P&Ls for $176M line of business, which includes the complete responsibility for the sale and delivery of consulting services to clients in 144 countries. Mr. Pinto is credited with retooling the consulting group, and attaining record revenue and profit growth.

Prior to his employment with Epicor, Mr. Pinto served as a Senior Vice President for NIIT Technologies (the 8th largest offshore-based consulting services firm). In this role, Mr. Pinto was responsible for managing a team of Business Consultants that provided business and I.T.-centric advisory services to clients interested in performing vendor evaluations, business process outsourcing, ERP implementations, assessing project risks, and measuring the value of initiatives. Mr. Pinto was responsible for leading the 22 customer initiatives over his 5-year tenure.

Prior to his employment with NIIT, Mr. Pinto served as a Managing Director with marchFIRST (a $1.6 billion consulting firm).   Mr. Pinto was responsible for leading the Solution Development functions within the South Eastern region of the U.S., which delivered $27 million in annual revenues. Mr. Pinto is credited with increasing revenues by 125% within a one-year period, and significantly growing the client base and overall capabilities of the organization.

For the majority of 90's, Mr. Pinto was employed by Computer Task Group (a $500M consulting services firm). Throughout his 7-year tenure with CTG, Mr. Pinto held multiple roles on a variety of client projects. He led a number of high-profile projects, provided guidance to

troubled projects, and served as a Management Consultant focused on providing I.T. advisory services to clients based in the South Eastern U.S.

Mr. Pinto spent the early part of his career as a Business Analyst in Georgia Pacific (one of the world's largest manufacturer/wholesalers). Mr. Pinto provided project management, business requirements analysis and system design services to manufacturing plants around the world. Throughout his 5-year tenure, Mr. Pinto was credited with automating half of the company's production facilities and all of its field sales offices.

Through Mr. Pinto's travels and experiences, he has come to possess a deep appreciation for the value of independent advisory services, which are administered from the perspective of global knowledge and first-hand experience. Over the last 8-years, Mr. Pinto has provided advisory services that have resulted in the acquisition and/or outsourcing of over $1.4B of services to external service providers located in Canada and Panama, and offshore venues in China, Eastern Europe, India, Singapore, Thailand, and most recently in Egypt.

Experience

<u>Sylvan VI, Inc.</u>, Stuyvesant, New York.   **2009 - present**

Sylvan VI is privately-held, outsourcing advisory services agency, established in 2007. Sylvan VI represents a new breed of advisory services that is focused on providing big-4 quality management consulting services, but at a fraction of the traditional costs. The company provides unbiased vendor and package selection services, through its team of well-seasoned Advisors,

Managing Partner – Responsible for providing expert advisory services to U.S.-based clients

Accomplishments: Expert Witness in Dibon v. Chugach lawsuit
- ***Provided Expert Witness analysis****.* Reviewed and analyzed the root cause for the failure of an application development effort, which included the assessment of historic project deliverables, and project management artifacts..
- ***Provide Expert Witness Report***. Provided a report of my finding which included the analysis of the delivered code base, which confirmed that no copyright infringements occurred.

Accomplishments: Advisor to The Outsourcing Institute (www.outsourcing.com)
- ***Led the development of an online vendor selection process****.* Commissioned by the Outsourcing Institute to analyze and build an RFI/RFP development tool for use by premium subscribers to the Outsourcing Institute's services.
- ***Provide advice and counsel to the Outsourcing Institute***. Serve as Senior Advisor in matters of outsourcing trends and the interactions between Buyers and Sellers of outsourcing services.
- ***Led effort to develop an online outsourcing marketplace***. Led a study that was designed to understand how Buyers, Sellers, and Advisors interact through the relationship lifecycle. Then developed the interaction model in preparation for instantiation as an online tool.
- ***Provide Match-making services between Buyers and Sellers***. Based on a Buyer's specific requirements, I provide recommendations on Seller's that should be considered during the RFP process.

Accomplishments: Advisor to Bausch & Lomb
- ***Provide outsourcing advice and counsel****.* Worked with members of the executive team to develop and implement outsourcing strategies associated with Bausch & Lomb's Data Centers, Call Centers, and certain I.T. functions.
- ***Facilitate vendor selection process***. Worked with the staff to develop outsourcing requirements, and develop a long-list and subsequent short-list of potential vendors.

<u>Infor Global Solutions</u>, Alpharetta, Georgia.   2008 - 2009

Infor is a $2.3 billion privately-held, global software company, established in 2001. Infor is one of the largest software company's in the world, with a focus on providing best-of-breed solutions to meet business problems. The company provides software, services, and support to its 70,000 customers, through 9,000 employees located around the globe.

Vice President Worldwide Consulting Services – Responsible for optimizing the profitability of Infor's $660 million worldwide consulting services business, by driving 30% of the service delivery function to be provisioned from low-cost geographies. This is a new initiative within Infor, but deemed to be highly strategic.

> **Accomplishments: Change Agent**
> - ***Increase Gross Profit Margin***. Championing the effort to increase the Consulting Services Gross Profit Margin (GPM) from its current 19% (run-rate) up to 30% (run-rate) within the next 9 months. This is being done through a combination of increasing utilization, standardizing processes, and most significantly driving work to low-cost geographies.
> - ***Increase Utilization***. Worked with the Consulting Services leadership team to identify a standard approach to acknowledging the "Hours Available to be Billed" and the methods for measuring Realization (as opposed to utilization). Developed new compensation plans that were based on driving GPM, and encouraged Consultants to focus on increasing billable hours as opposed to simply increasing the number hours worked. Cleaned-up the legacy projects where the team was delivering considerable Free-of-Charge (FOC) work.
> - ***Standardize Processes.*** Introduced the use of repeatable process (CMM Level 2) to the services team. Championed the effort to collect reusable artifacts and establish a library of standard processes and deliverables. Introduced deliverable-based, fixed-fee engagement pricing that is based on historic metrics and the use of pricing models, as opposed to the traditional time & materials based pricing. Also introduced an appreciation for understanding the cost-to-company of a field Consultant, which includes the acknowledgment of all associated burden and overhead costs.
> - ***Establish the use of Low-cost Geographies***. Prior to my joining the organization, Infor delivered all Consulting services from within the local geographies. Over my 5-month tenure, I have established a 200-person Center of Excellence (CoE) in Hyderabad India, where the fully burdened cost-to-company of a Consultant is $13.51/hour. Within the next 2-months, I will put a similar-sized, low-cost, facility in Monterrey Mexico. In order to drive work to these low-cost CoEs, we have frozen all hiring at the field level.

Epicor, Irvine, California.   **2006 - 2008**

Epicor is a $630 million global Solution Provider, founded in 1987. Epicor is the 6th largest ERP software company in the world, with a focus on providing industry-specific software to satisfy business problems. The company provides software, services, and support through its 2,300 employees located in 144 countries.

Senior Vice President of Worldwide Consulting Services (Atlanta)– responsible for leading a team of Management Consultants, based in the U.S. and U.K., that provides business-centric advisory services to clients. While this team delivers $6.4M annually, it also served as the arrowhead for driving follow-on services. Mr. Pinto is also responsible for managing a $108M P&L, which includes the full responsibility for the delivery of services to a worldwide client base, and managing the deployment of 640+ consultants across 150+ active projects.

Accomplishments: Business-centric Advisory Services

- ***Business process reengineering***. Worked with Manufacturing, Distribution, Business Services and Retail clients that were interested in gaining operational efficiencies by better understanding their business processes. The typical engagement included business process modeling; high-level information needs analysis, value-chain analysis, and financial modeling. These engagements were focused on removing low value-added activities and determining the best way to leverage technology to truly serve the needs of the business.
- ***Shared services***. Worked with clients that were interested in taking advantage of the inherent economies of scale associated with running multiple businesses. These engagements include analyzing business functions that are similar across multiple business entities, identifying best practices, and establishing consolidated centers of excellence. The back office accounting functions (AR, AP, GL, C&C) and Order Entry are always identified as being viable and are then subsequently consolidated. These engagements were focused on reducing overall operating costs, in an unbiased manner, and resulted in a 22% - 30% cost savings, and a 12 – 18 month ROI.
- ***Sourcing***. Worked with large clients that were interested in harnessing the buying power of their entire organization, or were interested in participating in a cooperative buying arrangement with other entities. These engagements were centered on large clients with significant spending (>$1B annually) on indirect goods, who were yet to engineer their sourcing function. These engagements focused on reducing overall spending, and resulted in a 5% - 8% cost savings, and a 14 - 21 month ROI.
- ***Business process outsourcing***. Worked with clients to help them appreciate which business functions were truly core to their business, and which functions were viable to be outsourced to an external service provider. The typical engagement included business process analysis, value-chain analysis, technology risk assessment, and outsourcing vendor and venue evaluations. These engagements were focused on reducing headcount and operational costs, while also increasing the quality of service. These engagements resulted in a 25%-35% cost savings, and an 8 - 14 month ROI.

Accomplishments: Change Agent

- ***Leverage low-cost geographies***. Performed the strategic needs analysis and financial analysis to identify the internal and client-facing business functions to be outsourced to low-cost venues. As a result, identified and established facilities in Monterrey Mexico, Bratislava Slovakia, Kuala Lumpur Malaysia, and most recently Cairo Egypt. Each of the selected venues were then designed and staffed to specialize in providing a specific business function that was best suited for the skill sets and languages available in the region.
- ***Right-sizing staff mix.*** Analyzed staff utilization, the physical location of staff members, and client needs, then developed staff migration plans that resulted in replacing 22% of the local staff with resources located in low-cost geographies. The resulting salary arbitrage increased Gross Profit Margins by 300 basis points within 18 months.

- **M&A activities**. Led the due diligence process for 4 acquisition candidates, which resulted in the acquisition of a Canada-based Software firm, and an Australian-based System Integration firm. Developed accretion models, staffing models, shared services models and outsourcing plans for the acquired entities. Presented due diligence results to Board of Directors for review and approval of decisions. Also, Integrated the acquired entities into Epicor's functional lines of business.

Accomplishments: Consulting Leadership
- ***New revenue streams.*** Led the initiative to enhance Epicor's unique selling proposition to include the provisioning of total solutions to business problems. This represented a significant evolution from merely positioning packaged software and implementation services. As part of this initiative, the Consulting Services Group evolved a Partner-model, and added a set of enhanced service offerings, which encouraged the client to engage Epicor as the vendor of choice for all required services. On the front-end, these services include a full suite of independent advisory and BPO readiness services. On the back-end these services include End-User Application Support, Hosting, and Business Process Outsourcing.
- ***P&L management.*** Manage a $108 million P&L, while increasing year-over-year revenues by 30%, and growing the Gross Profit Margin by 400 basis points within a 2-year period. These financial goals were achieved by taking advantage of the natural economies of scale and leveraging low-cost geographies. At no time was there a reduction in force (RIF), nor were billing rates increased.
- ***Direct the service delivery function.*** Lead and participate in the delivery of independent advisory services, and oversee and monitor the delivery of all follow-on services to include package implementation and managed services associated with 640+ billable Consultants, speaking 38 languages.

Over the last 2-years of my tenure, the Management Consulting Practice provided business advisory services to: Apogee Holdings, Blackstone Group, Ericsson, FracTech, JCI, Standex, Thomas Scientific, Total Pipeline, VWR, and a number of other smaller companies.

This team was comprised of 2 Senior Managers, each with 8 senor-level Consultants. One 9-person team is located in the U.S. and focused on providing advisory services to U.S.-based clients. The other 9-person team is based in the U.K. and is focused on providing advisory services to clients located in Europe, and Asia. The average experience-level of the Consultants is 16-years of industry and domain knowledge. In 2007 the team billed a total of $6.4 million of revenue, with a 52% Gross Profit Margin. The team maintained a utilization rate of 74% with an average blended billing rate of $271/hour, with each team member focused on driving personal billings and developing new business.

NIIT Technologies, Atlanta, Georgia.   2000 - 2006

In 2006, NIIT was a $270 million global consulting services firm, founded in 1981. NIIT provided a full range of technology advisory, system integration and application development services through its global delivery model, 38 worldwide offices, and 5,000 consultants. NIIT was ranked as the 8th largest offshore-based I.T. consulting services company, and was assessed at CMMi Level 5.

Senior Vice President (Atlanta) – Responsible for managing a team of Business Consultants that provided $5.7M (annually) of Business and I.T.-centric advisory services to clients located in the U.S. market. This team acted as trusted advisors and encouraged client's to select NIIT as the service provider of choice, where it made good business sense to do so. Mr. Pinto was credited with driving the sale of $72M in follow-on services to NIIT, on an annual basis.

Accomplishments: Business and I.T. Centric Advisory Services

- ***Vendor and product evaluation***. Worked with clients to develop business requirements, identify viable products and vendors for consideration, and facilitate the selection process. The typical engagement included the development of cost-benefit analysis, ROI analysis, the preparation and review of contracts, and the assessment of project and technical risks. These engagements were focused on gaining consensus and shortening the selection process. These engagements always resulted in an agreed upon vendor being contracted, and were completed in 3 – 6 months.
- ***Risk and readiness assessment***. Worked with clients to help them understand the business, financial, technical, and personnel risks associated with any type of initiative or project. The typical engagement included the formal assessment and weighting of risk probabilities and severities, along with the development of mitigation strategies. These engagements were focused on providing piece of mind to executive management and stakeholders. These engagements were completed within 2 – 4 months.
- ***Business process outsourcing readiness***. Worked with clients to help determine their readiness to outsource, and to streamline and implement formal processes as a precursor to an outsourcing event. The typical engagement included value-chain analysis, cost/benefit analysis, manpower impact analysis, and transition planning. These engagements were focused on making the client ready for outsourcing and managing the transition in a controlled manner. These engagements served to significantly reduce the risks associated with outsourcing, and ran the duration of the transition effort (3 – 6 months).
- ***Direct process and quality initiatives.*** Worked with clients to institutionalize the processes and methods that were required to make their processes measurable, repeatable, manageable, and able to be optimized. The typical engagement included the development of process maps, and the associated KPIs required in order to appreciate the important components of their business. Most clients simply wanted the benefits associated with optimization, while other clients sought to attain one of the following certifications: CMMi, Six Sigma, PMI, ISO 9000, and BS7799.

Accomplishments: Sales Leadership

- ***Direct the sales function.*** Revamped the sales function to be able to appropriately represent the full-suite of service offerings within the target the Financial, Business Services, Software, and Transportation sectors (by revenue and geography). Fostered a measurement-based model that awarded high-performers and encouraged weak-performers to deselect themselves. Conducted weekly, monthly, and quarterly status reviews to include the review of pipeline, order backlog, revenues, and projections. Perform consistency checks on projections, and performance reviews. Over 70% of the team reached their revenue and gross profit margin quotas, and earned over 100% of their variable compensation.
- ***Relationship management***. Established the relationship with key partners (BlackBaud, CheckFree, DEI, FirstWave, InterWorld, Microsoft, Mercury, PeopleSoft, Rational, and SAP); which allowed NIIT to VAR and implement certain products.

Accomplishments: Change Agent
- **M&A activities**. Led the due diligence process for 6 acquisition candidates, which resulted in the acquisition of an America-based Management Consulting Services firm, a Germany-based System Integration firm, a U.K.-based Software firm, and an India-based Business Process Outsourcing firm. Developed due diligence templates, financial models, and valuations as part of each due diligence process. Met with key clients, critical employees, and major stakeholders to confirm long-term viability of the businesses under consideration. Presented due diligence results to Board of Directors for review and approval of decisions. Also, Integrated the acquired entities into NIIT's lines of business.
- **De-merger activities**. Participated in the de-merger of NIIT Technologies (Consulting Services firm) from NIIT Education (Education firm), which resulted in increasing the market capitalization of both entities. De-merged all policies, procedures, finances, systems and staff, to include the separation of office space and bringing the newly spawned entity into SOX compliance within 1-year.

Over a 3-year period the Consulting Practice provided outsourcing advisory services to: Ajilon Consulting, Allstream, Coles Meyer, Corporate Express, Cushman & Wakefield, EarthLink, ING Financial, Mass Mutual, Office Depot, Sabre Holdings, SEI Investments, Thrivent Financial, and Utica National, along with a number of midsized companies.

The Consulting Practice was comprised of 2 Senior Managers, with each managing 7 senor-level Consultants. Each Consultant had an average of 18 years of industry experience coupled with specific domain knowledge. In 2005, the team billed a total of $5.7 million of revenues, at a 45% Gross Profit Margin. The team maintained a utilization rate of 77% with an average blended billing rate of $261/hour.

During his 6-year tenure with NIIT, Mr. Pinto championed 25+ executive-level, client-sponsored, site visits to outsourcing venues in China, India, Eastern Europe, and Central America. In this capacity, Mr. Pinto led trips to perform due diligence, review vendor operations, and formally assess the risks associated with doing business in low-cost geographies.

marchFIRST (formerly Whittman-Hart), Chicago, Illinois.   1999 - 2000

marchFIRST was formed as the result of the merger between Whittman-Hart and USWeb/CKS. At the time, the combined entity was advertised as the world's largest pure-play consulting company. marchFIRST offered its clients a full range of services in the areas of business strategy, creative design, and I.T. consulting services. marchFIRST was made up of 9,000 employees and 72 worldwide offices, with revenues of $1.6 billion.

Managing Director (Atlanta) – Responsible for managing the Sales and Solution Development functions at a regional level. The role was based in Atlanta with a primary focus on serving clients within the Southeastern United States, and driving $27 million of revenue.

Accomplishments: Direction Setting

- ***Develop market segmentation and research***. Sponsored the development of market plans based on geographic/city segmentations, client industry focus, client revenue size, and competitive threats. This included the identification of target industries and clients.
- ***Develop competitive analysis***. Conducted market research on competitors in the Southeast region. The research included analysis of competitor size, delivery capabilities, pricing and win strategies, and market focus.
- ***Develop industry practices***. Structured the sales team to proactively focus on the industries that are prevalent in the marketplace. This included the Manufacturing, Retail, and telecommunications sectors.

Accomplishments: Staff Development

- ***Establish the marketing organization.*** Developed a marketing team that focuses on driving public relations and name recognition in the local marketplace. The marketing team also launched and ran ongoing awareness campaigns.
- ***Grow the sales organization.*** Hired 15 Account Executives within one-year. Established the opportunity pursuit policies and procedures resulting in the attainment of a 34% win ratio.

Accomplishments: Customer Relationship Management

- ***Establish and maintain relationships with strategic accounts*** at the executive level. The focus was on developing long-term relationships that were mutually beneficial to the client (in the form of solutions to business problems), and to marchFIRST (in the form of referencable and repeatable business.)
- ***Establish the sales process*** through the introduction of solution-based selling and Miller-Hieman approaches.   The sales process included the tracking of opportunity pipeline, rolling 90-day forecasts, close rate, revenues, gross profit margin, and gross profit dollars. Also championed the implementation of a Sales Force Automation tool.

Accomplishments: Manage Relationships

- ***Establish and maintain relationships with strategic accounts*** at the executive level. The focus was on understanding the client's business vision and demonstrating the positive impact of value-based consulting services, to the bottom line of their business.
- ***Establish and maintain relationships with alliance partners*** at the executive levels. The focus was on building and maintaining relationships that are mutually beneficial. Established and maintained relationships with Blue Martini, I2, InterWorld, Oracle, Cisco, PeopleSoft, Microsoft and a variety of tier three product vendors.

Accomplishments: Revenue and Profit Contribution

- ***Grew revenues*** from $12 million to $27 million.
- ***Grew gross profit margin*** from 42% to 58%.
- ***Reduced cost of sales*** from 11.5% to 8.1% of revenue.

<u>Romac International,</u> Tampa, Florida.   1999 - 1999

Romac International was a $500M recruiting and staffing firm that resulted from the merger of Romac and Source Consulting.

Director (Atlanta) – Responsible for starting a new line of business that offered strategic consulting services to existing Romac clients.

Accomplishments: Business Start-up

- ***Go-to-market strategy***. Developed the unique selling proposition, and pricing model for services.
- ***Established the sales function.*** Hired 1o Account Executives within six-months. Established the opportunity pursuit policies and procedures. Lead sales activities associated with acquiring the initial clients.

<u>Computer Task Group (CTG),</u> Buffalo, New York   **1992 to 1999**

CTG was a tier two consulting firm, with annual revenues of $500M in 1999. CTG specialized in providing Package Implementation Services, Application Maintenance Outsourcing Services, and Custom Application Development Services to clients in the U.S. and U.K.

Director of Business Consulting (Atlanta) – Responsible for acting as a trusted advisor to clients, extending existing business and developing new client relationships.

Accomplishments: I.T. Centric Advisory Services

- ***Package software evaluation***. Worked with clients to identify business and technical needs, identify a long-list of suitable software packages, and then facilitate the package selection process. The engagements included the development of rating and weighting methods, conducting scripted product demonstrations, vendor site visits, and administering proof-of-concepts. Led numerous evaluations that resulted in the selection and subsequent implementation of GEAC, JDEdwards, Oracle, Peoplesoft, and SAP. The typical engagement duration ran between 4 – 8 months depending the number of shareholders and the number of modules being evaluated.
- ***Program and project management***. Managed strategic client programs and provided oversight on a variety projects. Applied formal methodologies, budget management, status reporting, change control, issue and risk management, and expectation management tools and techniques. Managed a $220M program for BellSouth that was focused on consolidating a number of U.S.-based call centers. The program involved team members from 5 different entities and spanned 2-years in duration.
- ***Technology infrastructure assessment***. Worked with clients to assess the ability of their I.T. and communications infrastructure, to meet the future needs of the business. These engagements included the analysis of hardware, software, and networks. Evaluated the alignment of technology to business needs, and made recommendations for improvements. The typical engagement ran between 2 - 4 months in duration.
- ***Methodology development.*** Worked with clients to develop in-house methodologies for Custom Application Development, and Package Selection. As part of these projects, a number of reusable assets were developed to include: processes, techniques, tools, templates, sample deliverables, and estimating metrics.

Accomplishments: Sales

- ***New account development.*** Opened and developed new accounts (Arthritis Foundation, The Coca Cola Company, BellSouth, Cox Communications, Delta Airlines, Georgia Pacific, ITT Institute, Kaiser Permanente, SunTrust, Wachovia, and Worldspan) by winning and staffing consulting engagements, which led to follow-on implementation services.
- ***Account penetration.*** Provided advisory services to a variety of projects within existing key accounts (American Dairy Goats, Compaq, Kimberly Clark, Lend Lease, Nations Bank, Palm Beach County…)
- ***Pre-sales support.*** Provided support to Sales Executives in the form of participation in four-legged sales calls, solution development, and proposal preparation.
- ***Increase sales revenue.*** Personally accounted for $11 Million of new orders within the last two-years of my tenure.

The Business Consulting Team was comprised of 10 Consultants, all located in Atlanta and focused on serving clients located in the South Eastern U.S. In 1999, the team billed a total of $3.6 million of revenue, with a 42% Gross Profit Margin. The team maintained a utilization rate of 80% with an average blended billing rate of $211/hour.

During his 7-year tenure with CTG, Mr. Pinto is credited with evolving CTG's South East region into a project-centric business, as opposed to its legacy staffing-company model. Mr. Pinto introduced the use of fixed fee projects, scope management, and change control, all of which served to elevate the level of value that CTG could provide to its clients.

Aetna Life & Casualty, Hartford, Connecticut.   **1991 to 1992**

Aetna, one of the World's largest insurance companies, was divided into 17 distinct business units. In order to support the consulting needs of these business units, Aetna fostered an internal consulting group: Aetna Strategic Consulting.

Business Consultant (Hartford) – Responsible for providing information technology consulting services to Aetna's Small Business Market Unit, which was tasked with providing insurance to businesses with less then 7 employees.

Role: Technology Advisor

- ***Provide technology direction*** to the Executive management team regarding the usage of technology as a competitive advantage. This included providing advice on optimizing ROI on specific technology ventures while delaying investments in unproven or low-yield technologies.
- ***Manage all system development activities*** related to Aetna's Small Business Market Unit. Coordinated system development environment with over 20 projects being conducted in parallel. The projects included an ERP implementation, client/server custom development, mainframe development, and operations maintenance.
- ***Coach project teams through the system development life cycle*** using the James Martin methodology. Transferred system development knowledge to project team members. Transferred project management knowledge to Project Managers. Trained project teams in full-life cycle development using James Martin methodology and IEF toolset. Delivered a Sales Management System, and Insurance Rating System.
- ***Provide technical lead for Information Strategy Planning*** study using customized Information Engineering methodology. Facilitated joint requirements gathering sessions. Deliver Information architecture, Business System architecture, and Technical architecture, as well as follow-on plans.
- ***Evolve and implement a standardized system development methodology***. Delivered the James Martin methodology customized for internal use.

Georgia Pacific (formerly James River), Norwalk, Connecticut.   1986 to 1991

James River was the world's 3rd largest paper manufacturer, headquartered in Richmond Virginia. In order to serve their 70 worldwide paper mills, James River developed an internal consulting group focused on process engineering, MRP, DRP, and cell control implementation services.

Business System Manager (Connecticut) - Responsible for providing information technology services to U.S. based paper mills.

Role: System Development Coordinator

- ***Responsible for the introduction of Information Engineering*** to the manufacturing business area. Responsible for successfully implementing a standardized system implementation and enhancement methodologies (James Martin) in the organization.
- ***Responsible for day-to-day project management***, including the development of project charters, project plans, project workplans, and management of risk, change, issues, quality, communications, status reporting, knowledge base, and budget. Led Business Area Analysis project around the manufacturing area using the James Martin methodology and IEF tool set. Conducted JAD session to build process and data models.
- ***Responsible for day-to-day project management***. Managed the development and implementation of organizational restructuring plan in accordance with Information Engineering required environment.

Lead Analyst – Responsible for the implementation of Information Engineering and CASE tools.

Role: Phase Leader

- ***Participate in the development of the technology infrastructure*** required to support the strategic development environment. Participated in Information Strategy Planning (ISP) study using the James Martin Methodology. Delivered information architecture, logical business models and follow-on plans.
- ***Lead phases of office automation project***, which resulted in the connectivity of 30 field sales offices using NOVELL across a Token Ring network, connecting remote PCs to IBM servers.
- ***Participate in corporate wide database evaluation study***, which resulted in the establishment of SYBASE as corporate wide standard.
- ***Participate in corporate-wide cell-control evaluation study***, which resulted in the establishment of FACTORY WORKS as a corporate wide standard.
- ***Responsible for participation in projects and ongoing system maintenance***. Participated in LAN/WAN evaluation, which resulted in James River / 3COM strategic partnership.

Education

Central Connecticut State University, New Britain Connecticut, 1985.
Bachelors of Science Degree in Computer Science,
Minor in Business Administration.