# How *Not* to Implement an ERP System

**MERISEL**  **SAP**  **Case Study**

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# Topics for Discussion

- My background and role at Merisel
- Overview of Merisel in 1994
- Merisel's legacy systems prior to SAP
- SAP implementation process
  - SAP selection
  - Initial budget and target milestones
  - Simultaneous Warehouse Management System (WMS) development and implementation
  - Project development team and basic approach
  - Steering committee's role

# Topics for Discussion - cont

- "Bumps" and surprises along the road
  - Benchmarks
  - Canadian implementation experiences
- The US implementation – at last
- Merisel today
- Lessons learned
- Q&A

# My background and Role

**David Malmberg, a Principal with CGR Management Consultants**, has over 30 years experience in Information Technology, Purchasing, Inventory Management and Supply Chain Management. Prior to joining CGR, he was VP of Systems Development for several multi-billion companies including McKesson Corp. and FMC Corporation. He is co-author of the Squeeze Profits Out of Your Supply Chain seminar series and a new textbook on Supply Chain Management. He has a BA from Claremont McKenna College and BS and MS degrees from Stanford University.

Dave was VP of Product and Inventory Management for Merisel from late 1993 to early 1996 where he had responsibility for all category, purchasing and inventory management. He served on the Merisel's SAP project implementation steering committee where he had a chance to see and participate in the events described in this case study.

# Overview of Merisel (in 1994)

- World's largest distributor of microcomputer hardware and software (1)

- 1994 revenues of $5 billion in US, $1 billion in Canada and $0.5 billion elsewhere (primarily Europe and South America) (2)

- Top US distributor of a number of key microcomputer products including IBM, Apple, HP, Compaq, Microsoft and Lotus (3)

- Nine US warehouses carrying approximately 20,000 items

- Purchased ComputerLand organization with its 700 plus retail stores in 1993 (4)

Foot notes are indicates by numbers in parentheses and are explained more fully in the notes section of each slide.

# Merisel & its Competitors in 1994
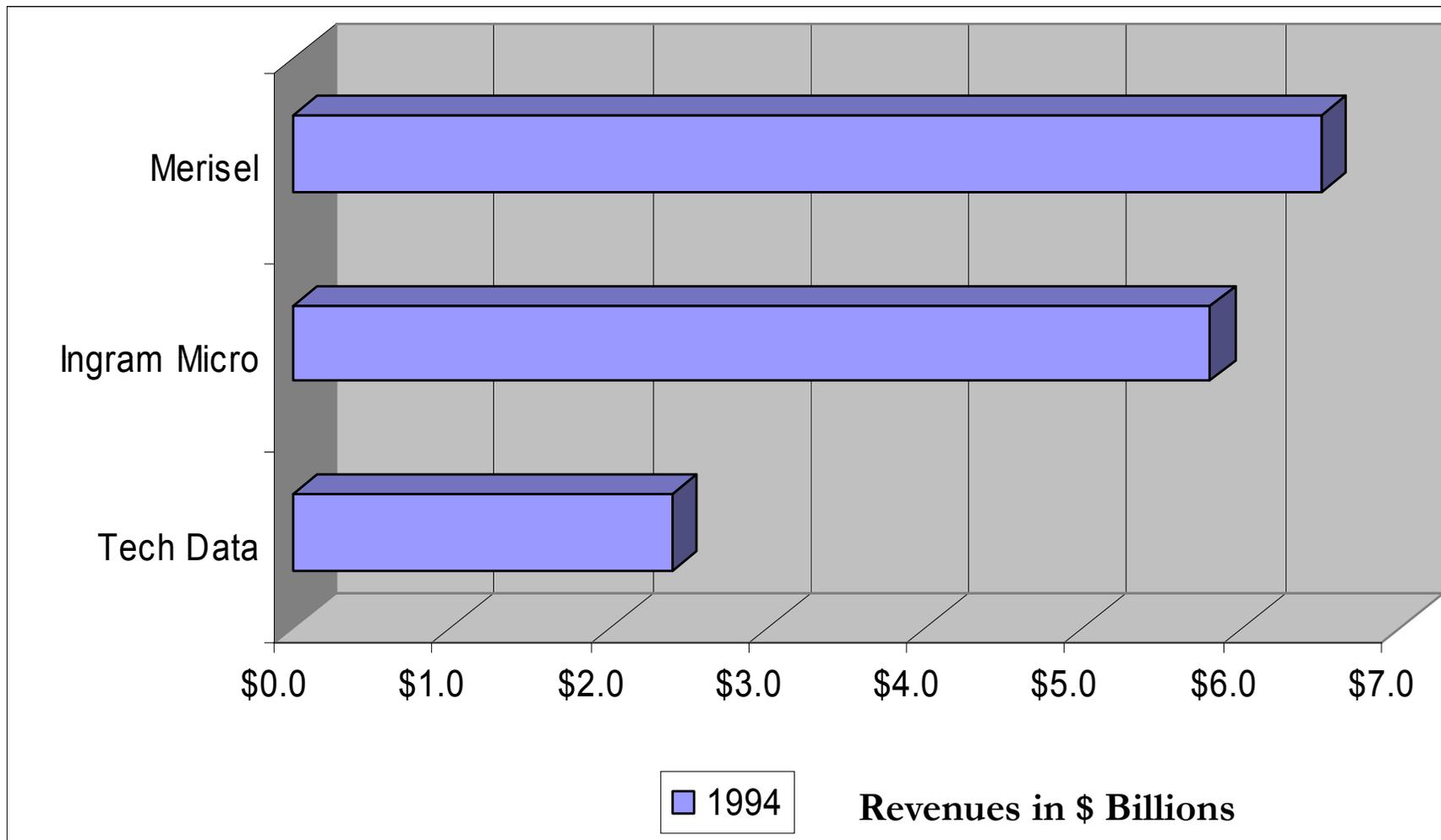
# Merisel's Legacy Systems
## (prior to SAP)

- "Best-of-breed" sales order entry system
- Accounting systems that lacked flexibility and/or timeliness
- No database management system – most special reports produced by "one-off" microcomputer database applications like Microsoft's Access
- New Warehouse Management System (WMS) development and implementation was already underway
- Ancient distribution and inventory management systems
  - Camber System – no longer supported by developer
  - Merisel's version had been highly customized over the years
  - Included purchasing and inventory management, interfaces to sales order entry and warehousing

# SAP Implementation Process

## Selection Process

- Project commissioned in early 1993 because of need to replace antiquated legacy systems, primarily Cambar distribution management system

- Merisel senior financial and IT management selected SAP R/3 over Oracle principally because:
  - Of SAP's very impressive financial "drill-down" demo
  - The fact that SAP was a fully integrated suite of applications

- This was despite the fact that SAP had never implemented a system for *any* distributor

- No purchasing/inventory management involvement in decision – even though SAP had major implications in these areas

# SAP Implementation Process

## Initial Budget and Target Milestones

- After consultation with SAP and Deloitte & Touche implementation team leaders, the following decisions were made:

  - Total project budget of $10 million was presented to and approved by Board (to implement the system world-wide)

  - Target implementation date to implement in US was set for mid-1994 (approximately 18 months in future)

- Budget and date were both dependent on using approximately 120 full-time consultants from SAP and Deloitte

# SAP Implementation Process

**<u>Warehouse Management System (WMS)</u>**

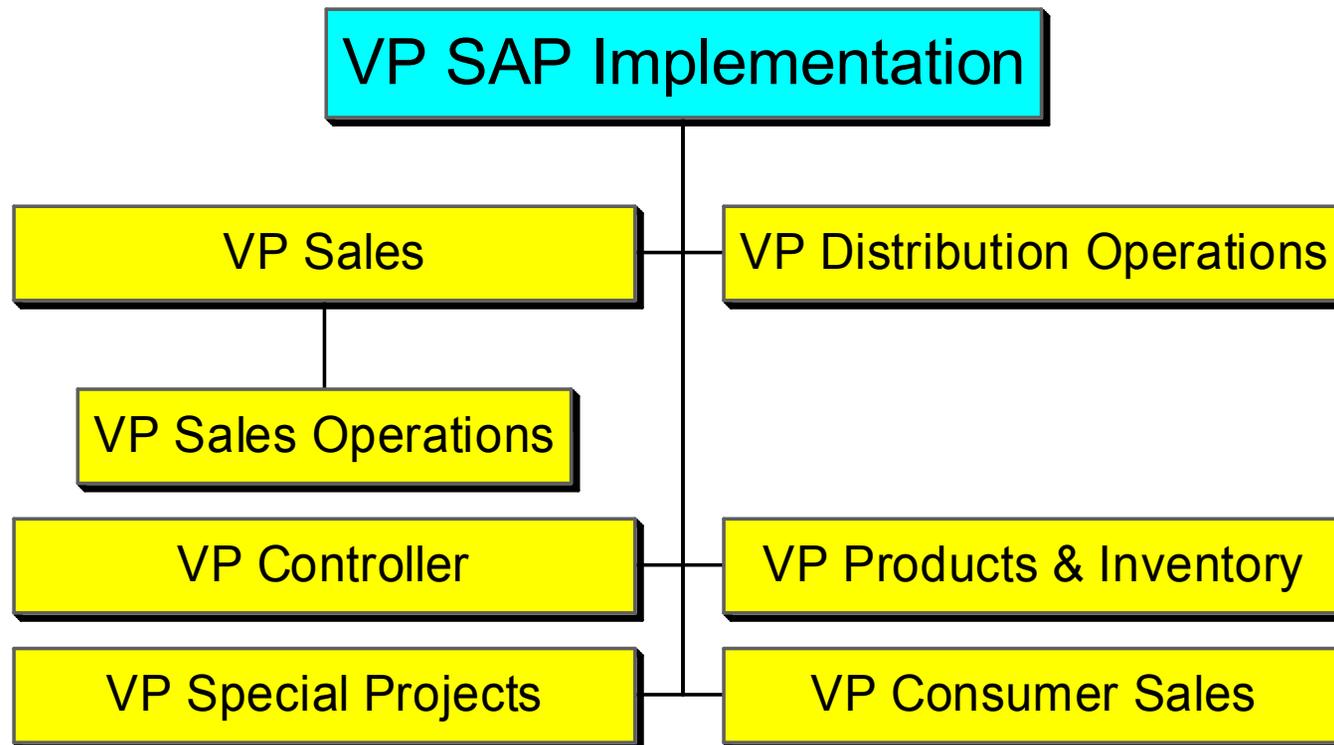- Simultaneously with the development and implementation of SAP, Merisel was mounting a major project to develop and implement a new Warehouse Management System (the Optum WMS)

- This system also had interfaces to a number of other applications such as purchasing, inventory, sales order entry and many financial applications

- This simultaneous effort made the SAP implementation like trying to "hit a moving target"

# SAP Implementation Process

## Project Development Team and Basic Approach

- The core development team consisted of approximately 120 full-time consultants from SAP and Deloitte & Touche (1)

- The consultants were assisted by about a dozen full-time Merisel people who were very familiar with Merisel's systems and manner of doing business

  - For example, I had a Purchasing/Inventory person on the team (who reported directly to me throughout the project)

- Each of the Merisel people was trained on SAP R/3

- The basic approach/philosophy taken was to modify SAP to "mirror" Merisel's legacy systems/processes rather than using SAP's built-in capabilities or to re-engineer these systems/processes prior to implementation (2)

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# SAP Steering Committee

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                    ┌─────────────────────────┐
                    │  VP SAP Implementation  │
                    └─────────────────────────┘
                                 │
      ┌──────────────────┐       ┌──────────────────────────────┐
      │    VP Sales      │       │  VP Distribution Operations  │
      └──────────────────┘       └──────────────────────────────┘
              │
         ┌─────────────────────┐
         │  VP Sales Operations │
         └─────────────────────┘
      ┌──────────────────┐       ┌──────────────────────────────┐
      │   VP Controller  │       │   VP Products & Inventory    │
      └──────────────────┘       └──────────────────────────────┘
      ┌──────────────────┐       ┌──────────────────────────────┐
      │ VP Special Projects │    │     VP Consumer Sales        │
      └──────────────────┘       └──────────────────────────────┘
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- Bimonthly committee meetings to review progress, discuss issues and make decisions

# "Bumps" and Surprises along the Road

## Benchmarks

- "Benchmarking bunk? SAP accused of playing "numbers game" with R/3 comparisons" (9/4/95, ComputerWorld)

- "Both IBM and DEC accuse SAP of limited and inconsistent benchmarks" (9/25/95, Australian Financial Review and 9/4/95, ComputerWorld)

- Merisel, at that time SAP's largest US-based R/3 installation with 430 users, found discrepancies of more than 50% between the transactions per hour benchmarks provided by SAP and HP and it own performance tests on live systems (according to Frank DeWindt, Merisel's VP of SAP Project Implementation in 9/4/95, ComputerWorld)

- After its "ragged" initial implementation in Canada, Merisel had to upgrade its system three times in order to achieve satisfactory performance (1)

# "Bumps" and Surprises along the Road

**Canadian Implementation Experiences** (1)

- Decision made to implement in Canada rather than US approximately three months before planned US "go-live" date because of reduced risk to the overall Merisel business

- System went live in Canada (8/95) with these problems:
  - Couldn't handle volume of orders because of slower response times and/or more cumbersome interfaces
    - 250 sales people handling 100 orders per day where time to enter each order increased by one or two minutes
  - Nightly processing time increased to 28 hours from previous time of 8 hours
    - Could only update warehouse on-hand balances twice a week
    - Could only order inventory twice a week
    - Fill-rates declined dramatically
    - Late shipments were more prevalent than on-time shipments
  - Insufficient training
  - Difficulty of integrating SAP with other in-place systems such as WMS

- A month after implementation, Merisel Canada's Management issued a letter of apology to its customers attributing the service degradation to the R/3 conversion
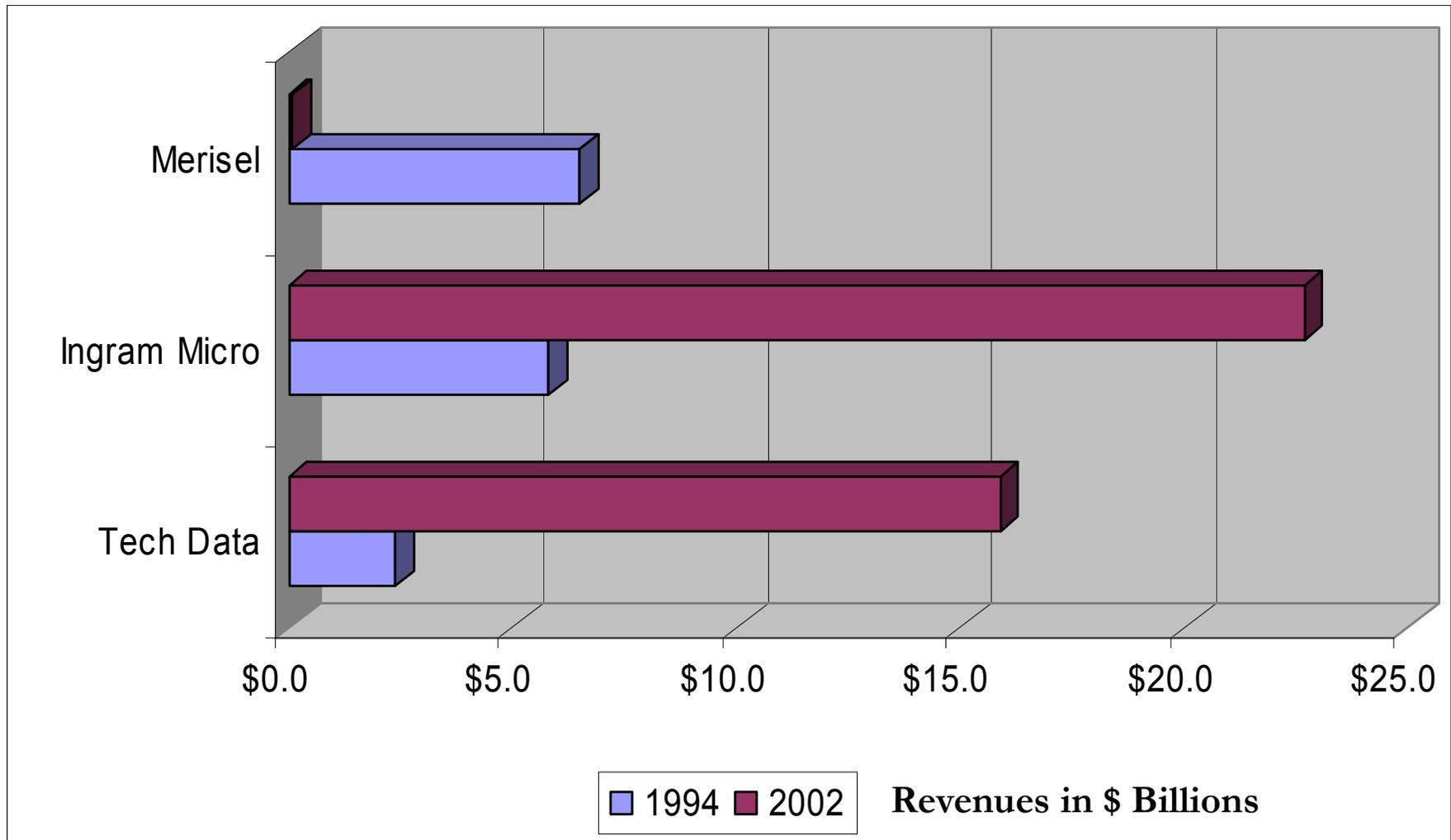
# The US implementation – at Last

- In April of 1999, Merisel US "flipped the switch" on it US implementation of SAP R/3 -- four years behind the original target of late 1995 (1)

- By the time the system was implemented in the US its total cost was in excess of $ 50 million or approximately 600 % over the original estimate approved by the Board of Directors (2)

- Even then, there were several "post-implementation" surprises: (3)

    - 1,400 people had to go through eight weeks of additional training
    - "Post-go-live" costs (that had not been forecast) were $ 1 million

- Despite its implementation problems, Merisel still considered the system a success (4)

# Merisel Today

- Primarily because it lacked the capitalization and the cash-flow to support its distribution businesses, Merisel has been forced to sell most of its operations:
  - MOCA (its SUN distribution business)
  - Merisel Europe
  - Merisel South America
  - ComputerLand
  - Merisel Canada

- In 2000, Merisel changed it entire business model and decided to exit its last distribution business (in the US) and to focus exclusively on selling software licensing and e-commerce services (1)
  - "They're truly waving the white flag," said Bear Sterns security analyst John Ford

- In 2002, Merisel had revenues of $ 81.6 million and operating profits of $ 4.6 million (2)

# Merisel & its Competitors in 2002



Horizontal bar chart comparing revenues in $ Billions for 1994 and 2002.

Legend: 1994, 2002 — Revenues in $ Billions

Categories: Merisel, Ingram Micro, Tech Data

X-axis: $0.0, $5.0, $10.0, $15.0, $20.0, $25.0

# Lessons Learned

- Don't be a pioneer
- Don't just listen to the vendor – interview/visit multiple installations with similar business models
- Ask tough questions
- Re-engineer processes first, then implement new systems based on those improved processes
- Try to minimize the number of simultaneous process and/or system changes
- Be extremely careful in interpreting/believing benchmarking results
- Allow yourself plenty of time to do the job right (Don't set the deadline first!)
- Never underestimate the amount and/or cost of the training required

# THE END

## Any Questions or Comments?