Agenda: Tuesday May 4

- Administration - Papers
- Auctions and Exchanges
- Exploiting the Virtual Value Chain
- Review of Concepts and Key Ideas
- Lessons Learned
- Evaluations
Exploiting the Virtual Value Chain - 1

• Compare the PHYSICAL value chain and the VIRTUAL value chain
• Visibility
• Mirroring
• Value Matrix
  – Gather
  – Organize
  – Select
  – Synthesize
  – Distribute
Exploiting the Virtual Value Chain - 2

- Law of Digital Assets
- New Economies of Scale
- New Economies of Scope
- Transaction Cost Compression
- Balance of Supply and Demand: “Sense and Respond”
Companies We Covered:

- George B. H. Macomber Co.
- Collaborative Structures
- World Co. Ltd.
- DESTINI
- Blockbuster Video
- Regency Plaza
- Colliers
- Andersen Consulting (Accenture)
- Freemarkets.com
Issues in Real Estate, Design, and Construction

• Fragmentation
• Low barriers to entry
• Low economies of scale
• Single projects
• Hard to find the incentives to adopt new technologies that rely on many companies sharing information
How Information Gives you Competitive Advantage

- Increase Revenue
- Reduce Cost
- Change the Competitive Landscape
- Spawn New Businesses
- Who are you and what are you trying to do?
Fundamentals of Competitive Advantage:

- **Industry Value System**
- **Market Segmentation !!!**
  - Can you pick them?
- **Attractiveness of Segments (Five Forces):**
  - Can you change them?
- **Generic Strategies: Cost v Differentiated, Broad vs Focus**
  - Can you select them?
- **Firm Value Chain**
  - Can you implement it?
3D Modeling tied to...

- 4D could be schedule, data, time, other algorithms
- Leads to changes in the roles and responsibilities of the team
- Could lead to increased barriers to entry
- Going beyond visualization and into commerce depends on multi-firm sharing
Supply Chain Management and Optimization

• Optimize the whole system
• Visibility into demand
• Visibility into supply
• Who is the channel master?
• How to articulate the elements of the chain?
• Segment the industry and the items for the initial attack
Knowing a Winning Business Idea When You See One

• How to Write a Great Business Plan
  – The People
  – The Opportunity
  – The Context
  – Risk and Reward

• Knowing a Winning Business Idea When You See One
  – Purchase, Delivery, Use, Supplements, Maintenance, Disposal
  – Productivity, Simplicity, Convenience, Risk, Fun and Image, Environmental Friendliness
Aligning Incentives

• Consider the players and their preferences
• Can you take advantage of the preferences to improve the situation for all?
• How do you spread the benefits so that everyone wants to participate?
• Think outside the obvious:
  – Are there more players in the game?
  – Are there preferences other than money?
Alliances and Franchising

• Expand an idea or an asset by using other people’s:
  – Capital
  – Personnel
  – Sales Channels
  – Entrepreneurial drive
Knowledge Management

- Build economies of scale
- Reuse knowledge
- Point to experts
- Alter the dynamics by changing buyer negotiating power and supplier (labor) negotiating power
- What are the incentives to take time out to feed the system?
Auctions, Procurement, and Exchanges

• What are all of the value activities:
  – Complete vendor qualification
  – Thorough specification of the desire
  – Technology to conduct the process
  – Fair award and consummation

• Commodities are one thing. Services are another.

• This can lead to the best (or the biggest) getting bigger and better…what’s it to you?

• What are the core skills: who is threatened?
Exploiting the Virtual Value Chain

• What are the value adding activities in the physical value chain?
• Do some of these diminish in importance in the virtual value chain?
• What are the value adding activities in the virtual value chain?
• Can you leverage the bits vs the atoms to use information to create competitive advantage?
Queries for Us:

• Do 3D and Supply Chain technologies lend themselves to new knowledge management or procurement options?

• Will this drive new economies of scale?

• Can alliances/franchises better leverage individual entrepreneurship?
My Personal Vision:

- 3D solid models
- tied to databases
- acting to optimize the system across material and labor
- with compensation based on a multiparty agreement
- coordinated by a profit-based algorithm
- with multi-firm visibility into constraints
- Delivered through a federation of independent entrepreneurs

Reduce time 50% and reduce cost 25%
Concluding Questions:

• Follow the Money!
  – (not as a destination but as a pragmatic tool)

1. Who are you and what are you trying to do?

2. How do these technologies impact productivity and therefore profitability… and employment?

3. What do you think customers and employers of the future will value the most?
Thank you. Keep in touch.

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