

# MIT 1.464 E-Business Strategies John D. Macomber Spring 2004 Course Wrap-up

### 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

#### BECK

#### 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

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#### Knowing a Winning Business Idea When You See One COLLABORATIVE

- 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

**STRUCTURES** 

## **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

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#### **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 <u>virtual</u> 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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May 4, 2004

MIT E-Business Strategies 1.464