

A. G. RAYMOND & COMPANY
Incorporated

Management and Technical
Solutions for the Wood Products Industry



***Breaking Compromises:
Manufacturing for the Market***

**Hardwood Manufacturers Association
2003 National Conference**

**Charleston, SC
11 March 2003**

Introduction

Our objective is answering four questions...

- **What happened to the U.S. furniture industry?**
- **What is the cabinet industry doing?**
- **What are the lessons learned?**
- **What should you do?**

Learning From History

“Those who cannot remember the past are condemned to repeat it.”

- *George Santyana*

Furniture Headlines

- **Ascension of China to no. 1 import source.**
- **Insolvency of major furniture retailers.**
- **Entry of producers into furniture retailing.**
- **Entry of retailers into furniture production.**
- **Loss of thousands of furniture industry jobs.**

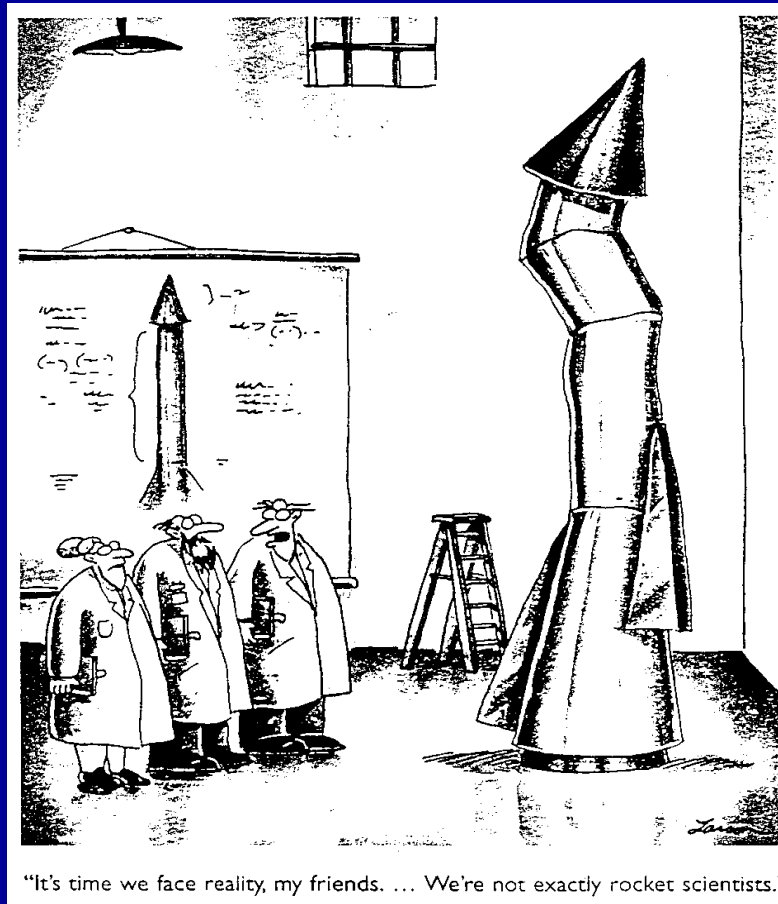
Furniture Headlines

- **Closure of over 20 million ft² of plants**



It's Not Rocket Science

It's more complicated than that...



Wood Furniture Industry Weaknesses

- **Product Proliferation**
- **Low Unit Volumes**
- **High Labor Content**
- **Low Selling Prices**
- **Low Profitability**
- **Low Capital Investment**
- **Chaotic Retail Distribution**

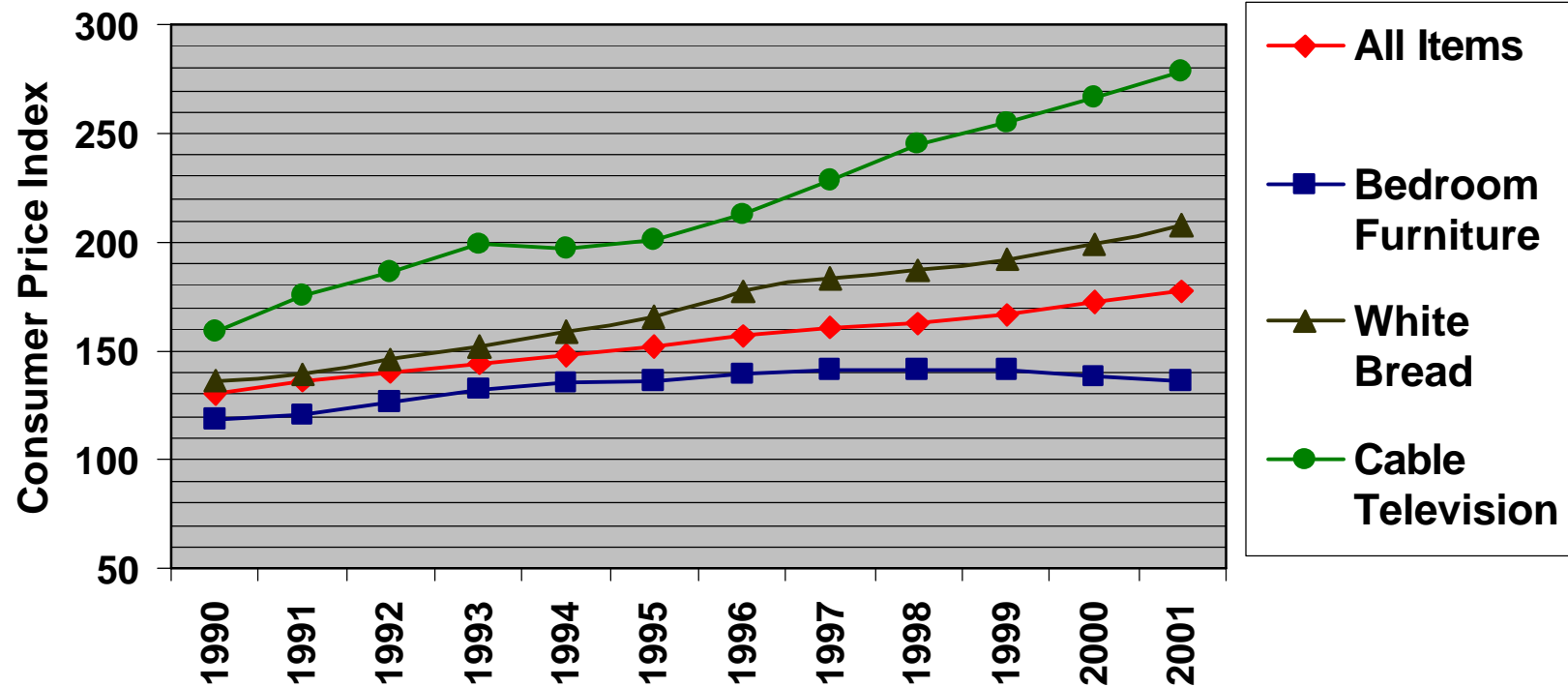
Commoditization

These products are becoming 'commodities'...



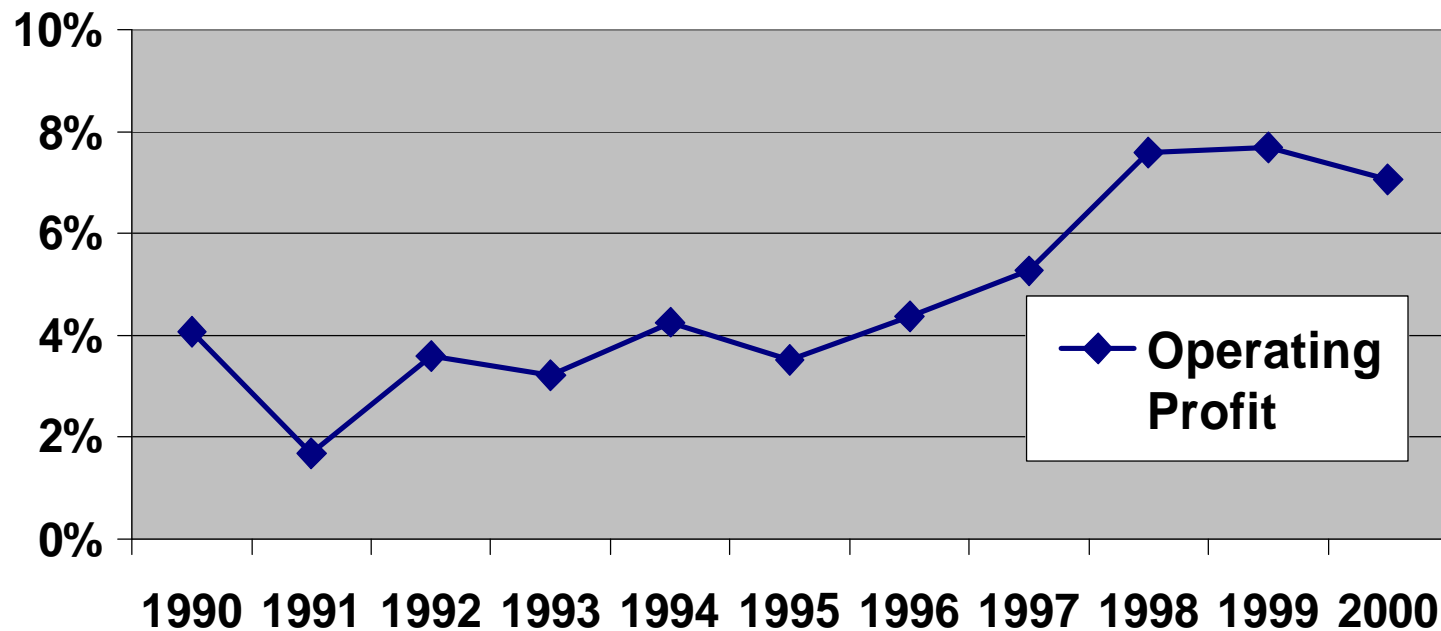
Low Selling Prices

Price Inflation



Low Profitability

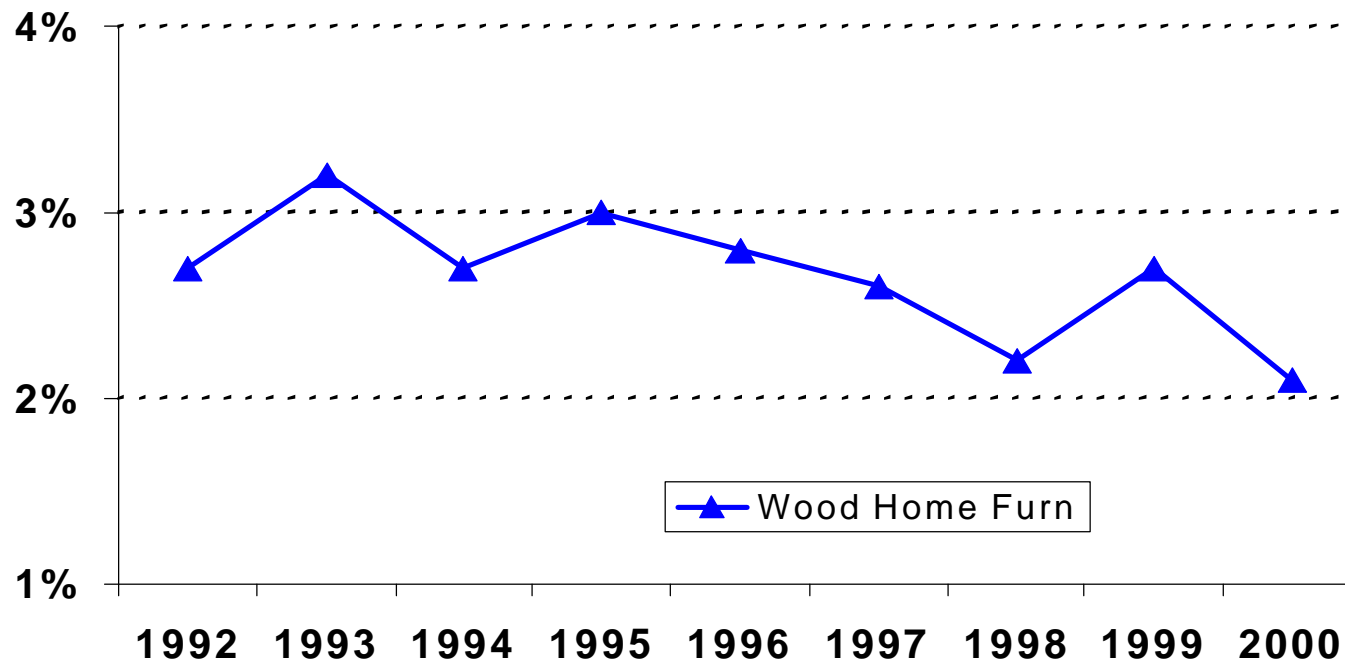
Wood Furniture Industry Statistics
Operating Profit



Source: BDO Seidman LLC

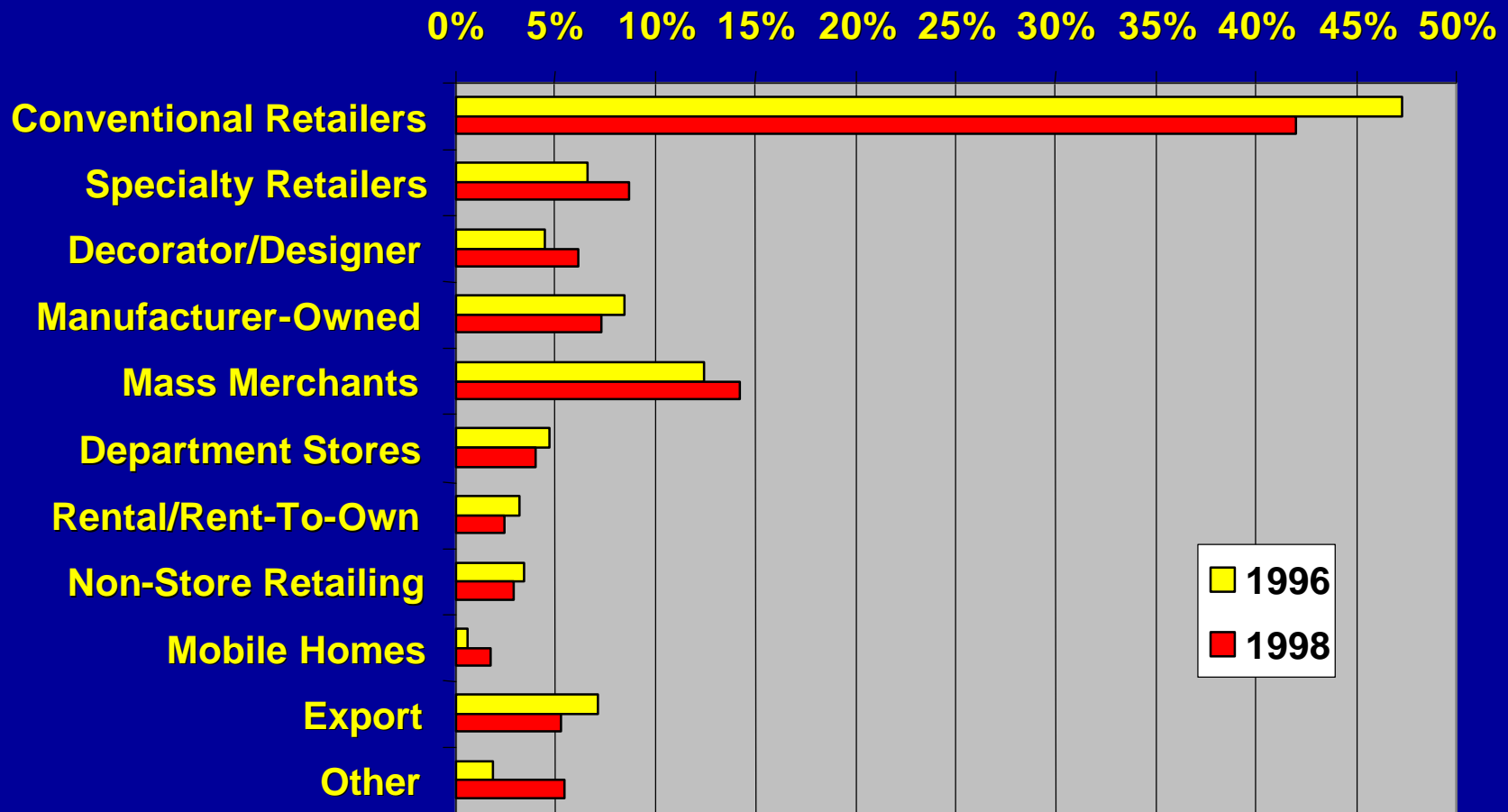
Low Capital Investment

Capital Investment % of Shipments



Source: U.S. Census data for capital expenditures on machinery, equipment, and buildings.

Chaotic Retail Distribution



Source: Mann Armistead & Epperson 1998 data

Chaotic Retail Distribution

Recent Retail Furniture Bankruptcies

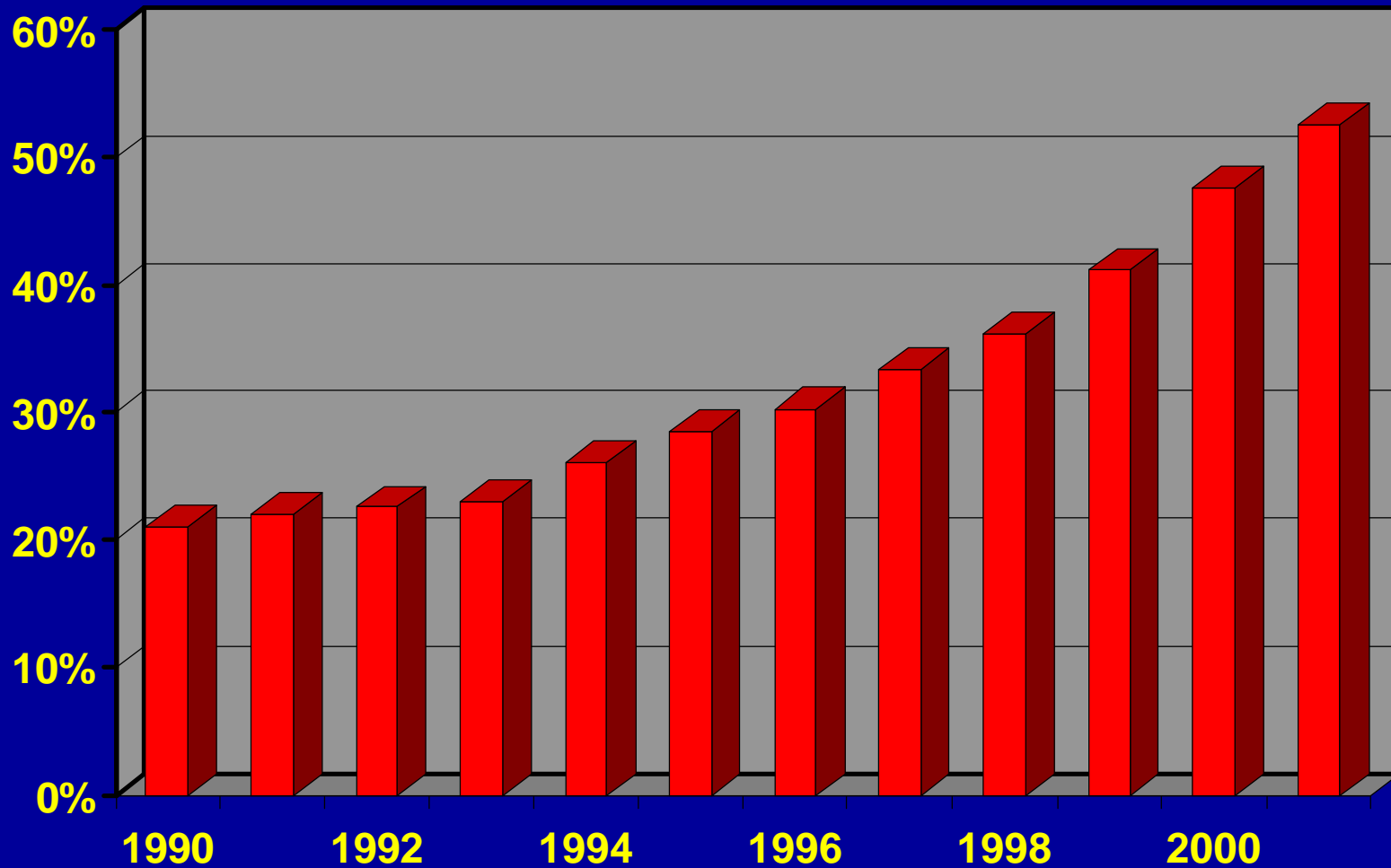
Retailer	Filing Date	Peak Volume (\$ millions)	Peak Year	<i>Furniture Today Rank</i>	No. of Stores
Roberd's	1/00	\$342	1997	19	24
This End Up	2/00	152	1997	20	152
Heilig-Meyers	8/00	1,729	1999	1	1,253
Wards	12/00	506	1999	18	252
Krause's	7/01	155	2000	40	101
Homelife	7/01	680	2000	8	133
Bedroom Superstore	7/01	60	2000	88	19
Total		\$3,624			1,934

The No Profit Zone

- **All players have the same business model.**
- **Technology is not proprietary.**
- **Products are differentiated only by price.**
- **Prices are declining.**
- **Major customers are no profit zones.**
- **Survival requires a high ratio of 'good' years.**

Furniture Imports

% Furniture Imports To U.S. Factory Shipments



Sources of Furniture Imports

Most source countries have low wage costs...

	2000	2001	%Change
China	\$3,686.8	\$4,177.1	13%
Canada	2,390.2	2,246.6	-6%
Italy	1,256.8	1,202.1	-4%
Mexico	880.2	796.2	-10%
Taiwan	813.4	608.2	-25%
Indonesia	485.1	488.0	1%
Malaysia	460.8	414.4	-10%
Philippines	271.3	228.8	-16%
Thailand	265.0	273.0	3%
Brazil	100.2	144.0	44%
Top 10 Total	\$10,609.8	\$10,578.4	-0.3%
% of World Total	87%	88%	
WORLD TOTAL	\$12,188.4	\$12,071.3	-1%

in millions of US\$

The Foreign Advantage

Low wages translate to product features...



***Hand
Carvings***

***Complex
Finishes***



Chinese Plant Attributes

World class machinery...



**CNC
Router**

**Optimizing
X-Cut Saw**



Chinese Plant Attributes

Efficient materials handling equipment...



***Towline
Finishing***

***Conveyorized
Assembly***



Chinese Plant Attributes

Competitively-priced materials...



**Cherry Veneers/
Poplar Solids**

**U.S.
Hardwoods**



Chinese Plant Attributes

Room for improvement...



**Poor Handling
Methods**



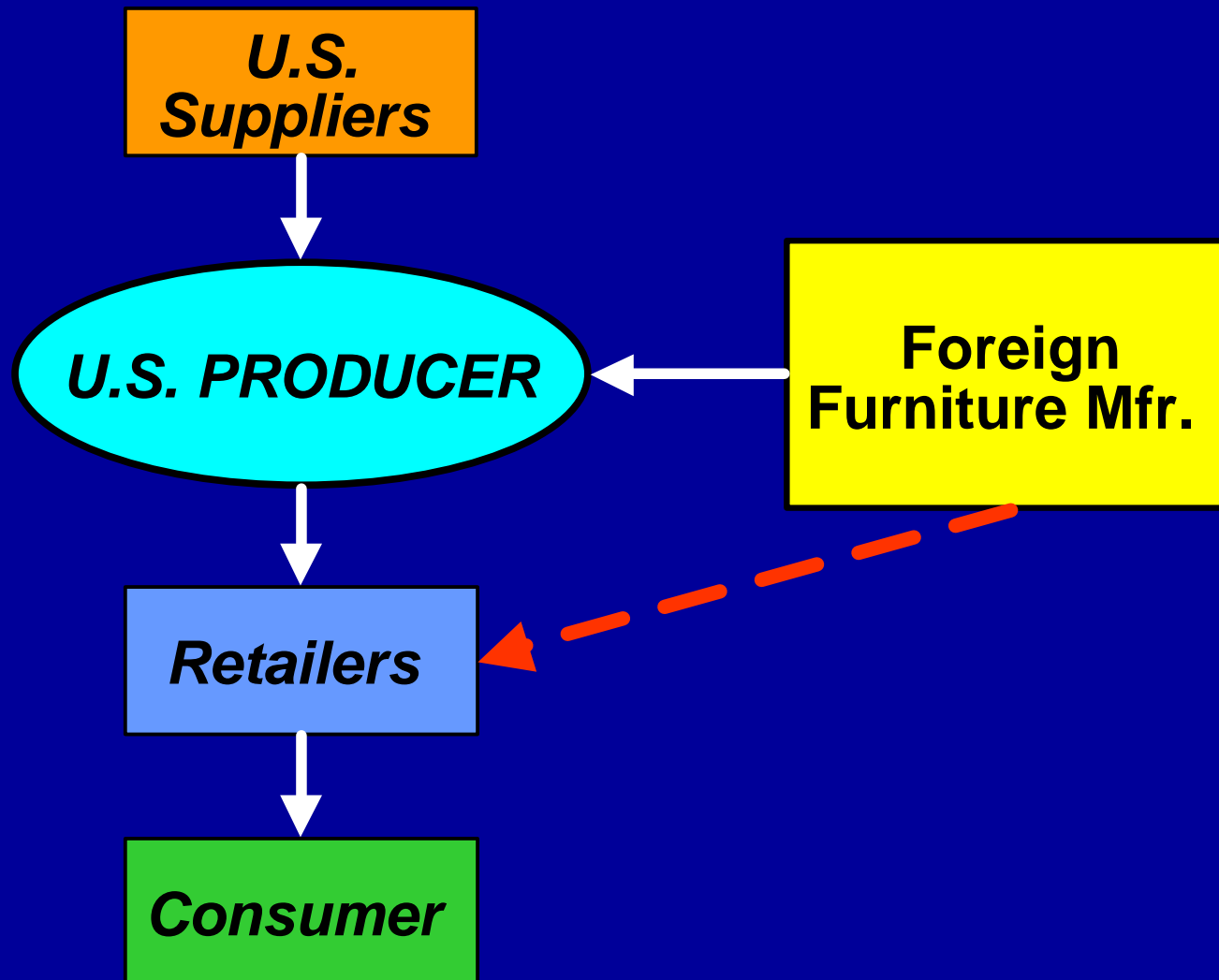
**Manual
Splicing**

Chinese Plant Attributes

Volume and quality capabilities...



The Future for U.S. Furniture Makers



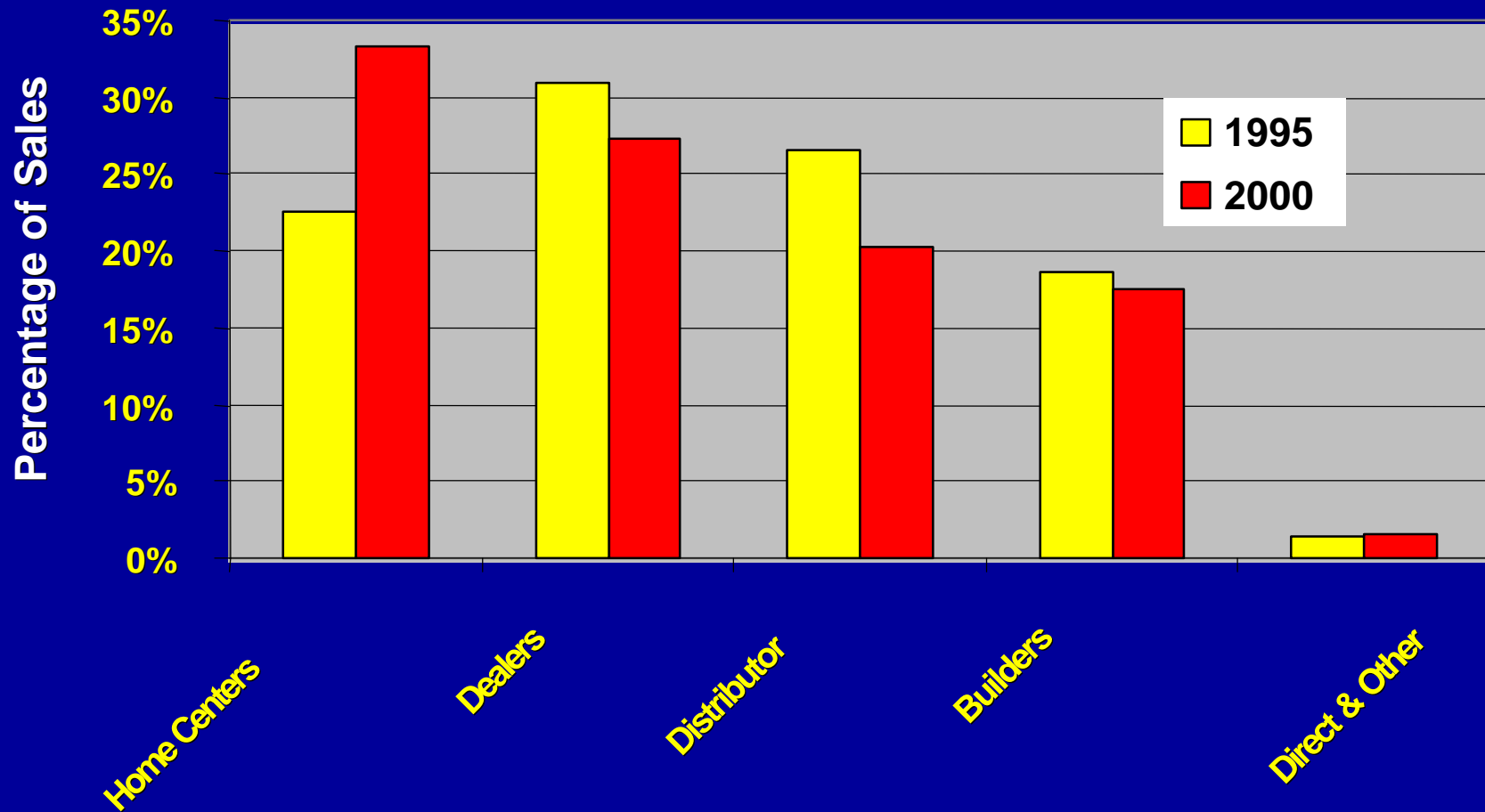
Furniture & Cabinet Similarities

Wood furniture and cabinet making share many similarities...

- **Process Machinery & Tooling**
- **Plant Infrastructure**
- **Materials**
- **Labor Skills**
- **Wage Cost**

The Changing Cabinet Marketplace

Cabinet Distribution Channels



Source: *Kitchen & Bath Business 2000 Cabinet Industry Report*

Cabinet Makers Respond

This new market environment required...

- **Longer Product Lines**
 - **More Door Styles & Materials**
 - **More Cabinet Configurations**
 - **Accessories**

- **Faster Delivery**

- **Higher Customization**

Cabinet Makers Respond

How have these needs been accomplished?

- **Product Rationalization**
 - > **Modularity**
 - > **Component Standardization**

- **Reliance on Supply Chain Support**
 - > **Reduced Investment & Skills**
 - > **Broad Offering of Doors & Drawers**

- **Focused Capital Investment**
 - > **Process Technology**
 - > **Information Systems**

Cabinet Makers Respond

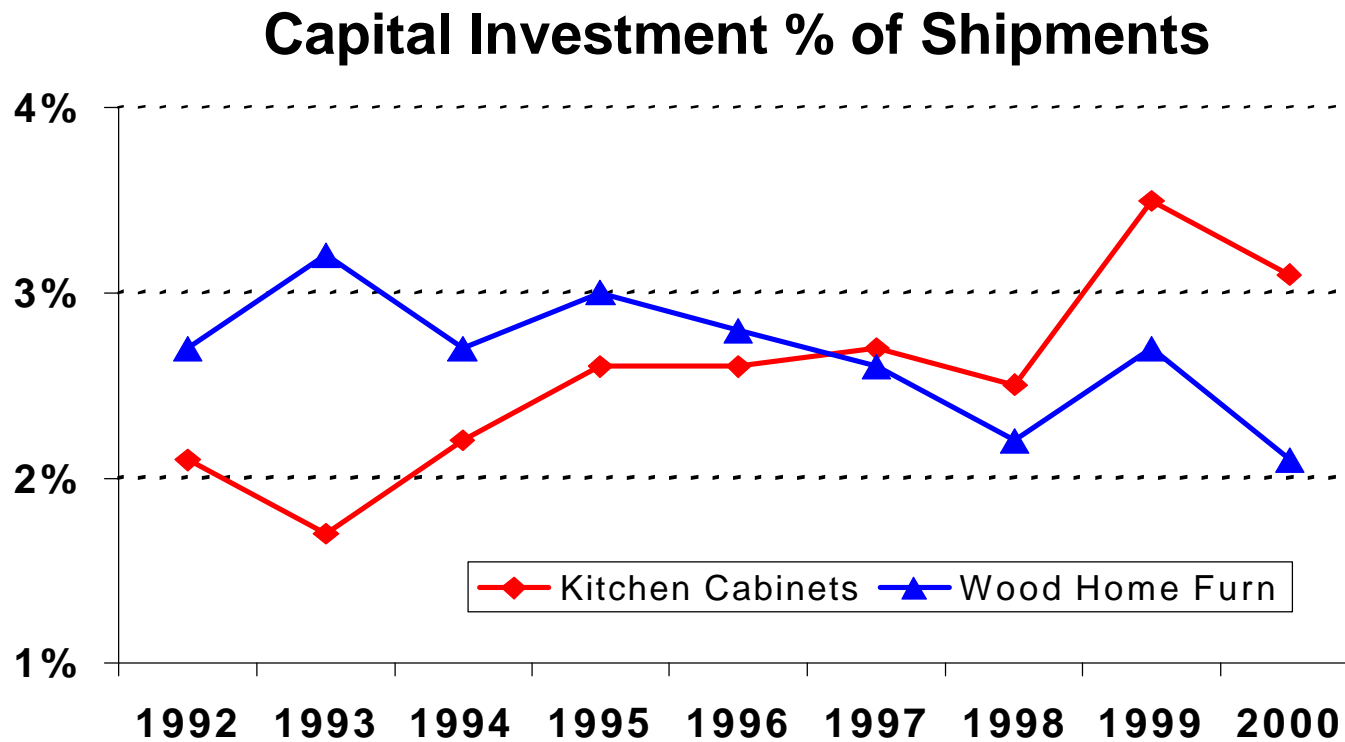
plus...

- **Investment in People**

- **Bias for Change**
 - > **Distribution Channels**
 - > **Process Models**
 - **Mass Customization**
 - **Speed of Delivery**

Comparing the Industries

Higher capital investment has yielded...



Source: U.S. Census data for capital expenditures on machinery, equipment, and buildings.

Comparing the Industries

Better financial performance...

Productivity Comparison

	Cabinet Industry	5-Year Growth	Furniture Industry
Output per Ft²	\$171/ft²	20%	\$100/ft²
Output per Worker	\$182,000	41%	\$105,000

Present Competitive Advantages

These benefits are also allowing less import penetration...

- **Customizable Products**
- **Fast Delivery**
- **'Kitchen At A Time' Service**

Lessons Learned

What do you need to compete?...

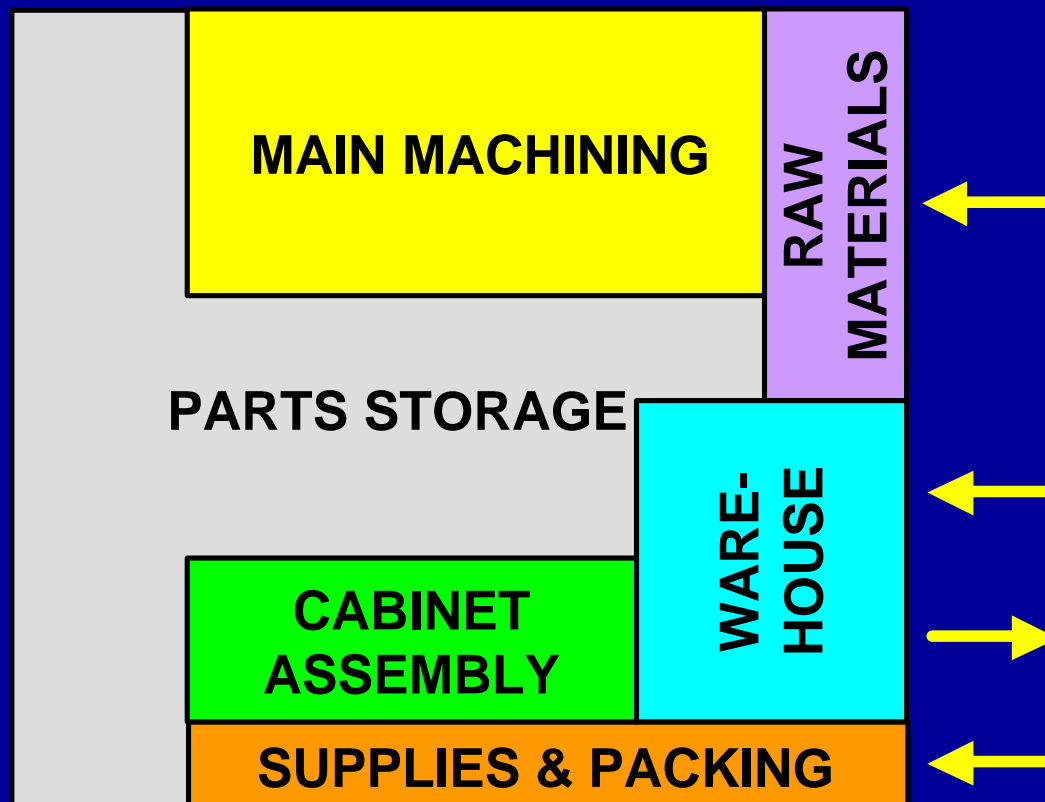
- **A Fast Process**
- **Wide Choice for Your Consumer**
- **Process Focus**
- **Bias for Change**

A Cabinet Company Case Study



Narrow Product Line

The initial plant produced a limited product line...



High Production Machinery

With high production machines...



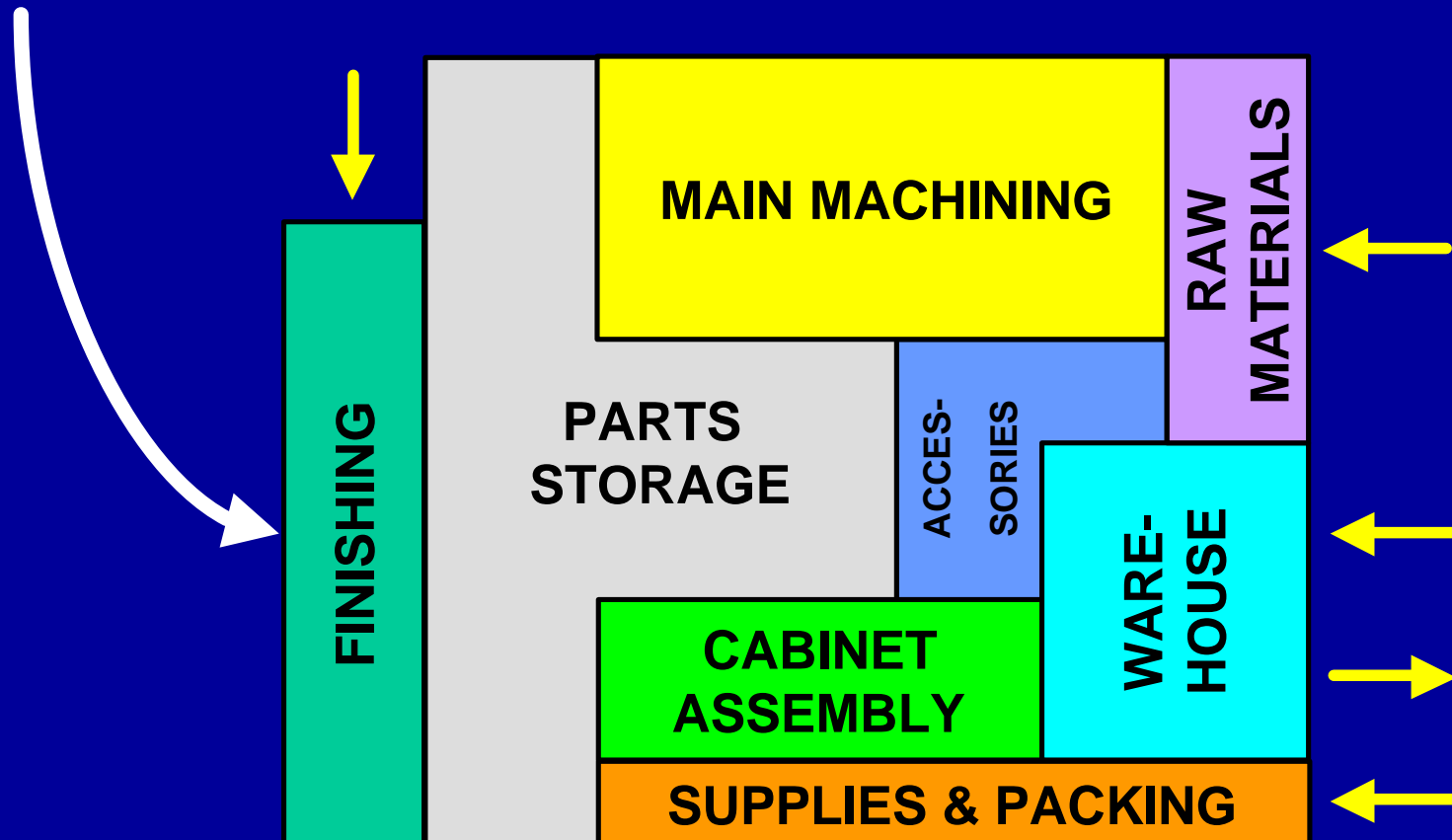
Wood Doors & Accessories

First move was to expand their door offering...



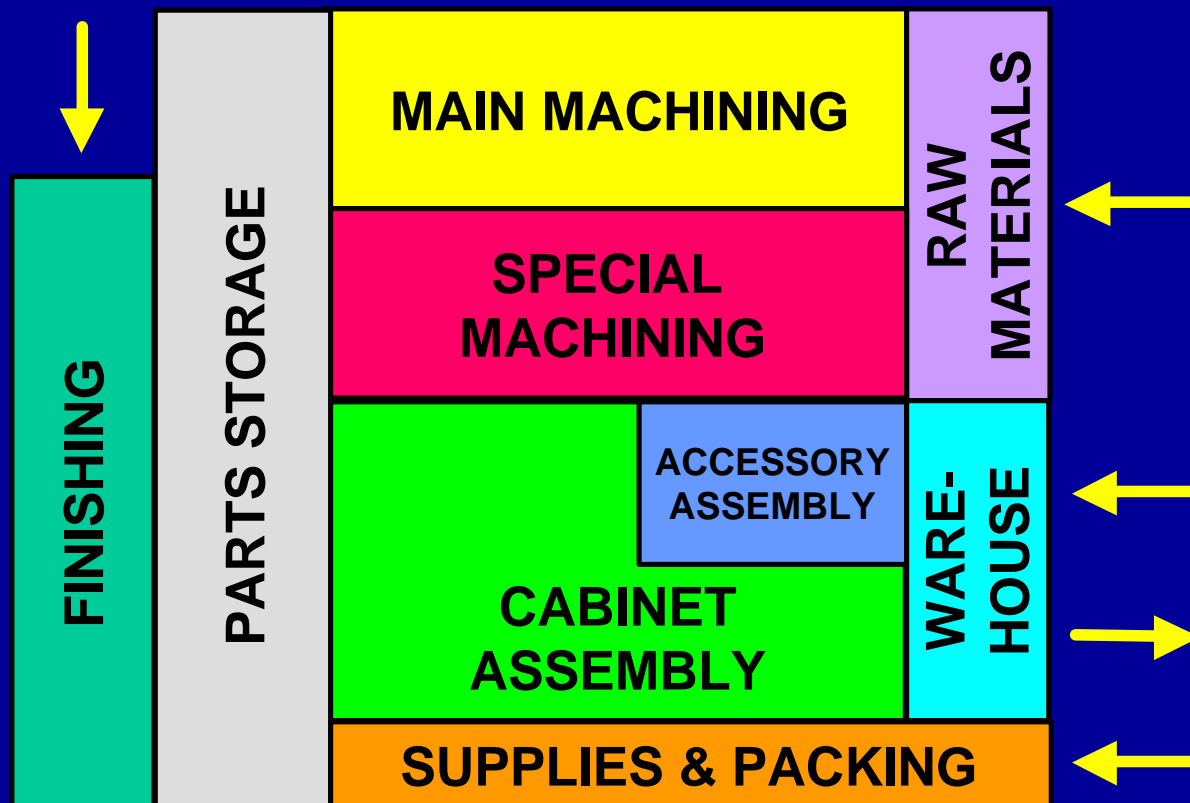
Wood Doors & Accessories

Adding wood doors required a finishing line...



More Cabinet Choices

More cabinet configurations and materials necessitated a special machining area...



Making To Order

Computer controlled saws to cut single parts...



Making To Order

Single sided edge banders with return conveyors to process orders of one part...



Making To Order

**CNC machines to cut, drill, and route parts
in orders of one...**



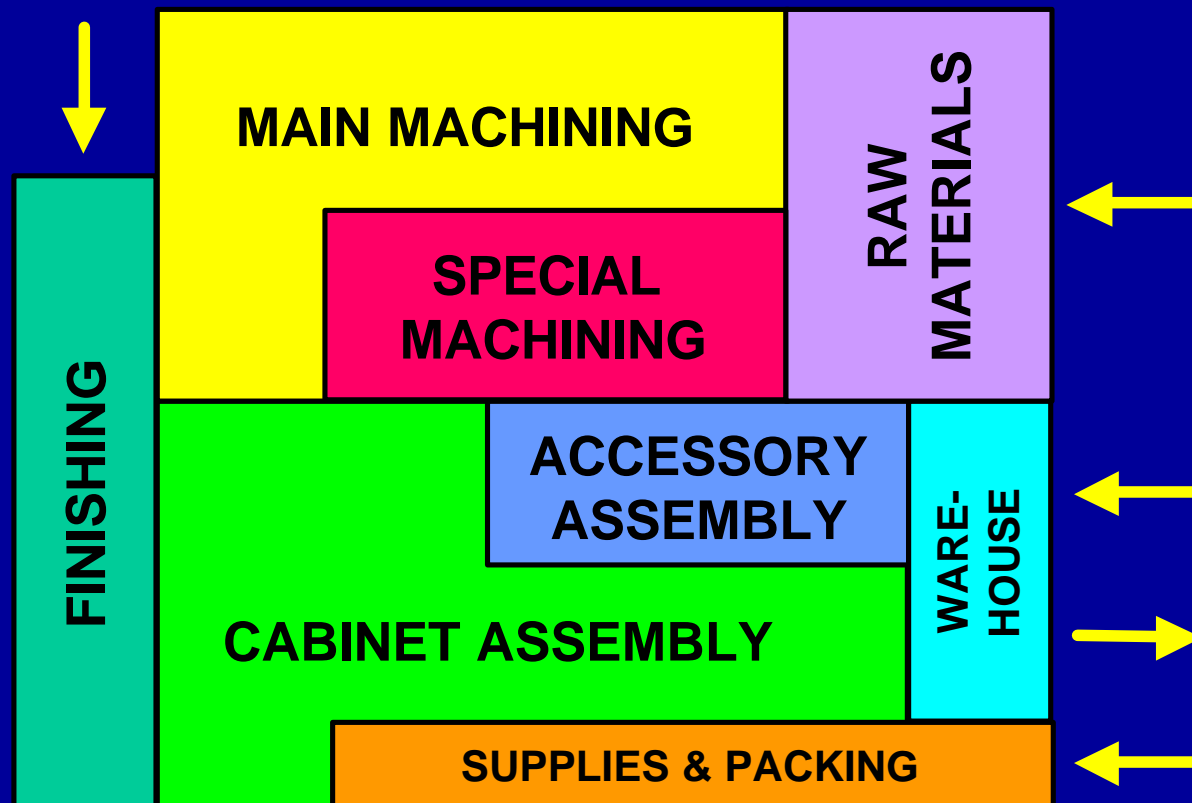
Making To Order

Automated press for clamping a random mix of cabinets...



Mass Customization

The final phase will eliminate parts storage..



Furniture Customization

Furniture makers can offer customization and fast delivery...

Choice of 6 buffet feet

Choice of 3600 color combinations

Choice of 18 table legs

DINEC

info@dinec.com • 1 888 GO DINEC

This advertisement features a photograph of a dining room with a wooden table and chairs. To the right of the photo is a list of customization options: 'Choice of 6 buffet feet' with six different foot designs, 'Choice of 3600 color combinations' with a grid of color swatches, and 'Choice of 18 table legs' with a row of 18 different leg styles. The DINEC logo and contact information are at the bottom.

Sonoma

Choice of 18 decorative hardware

Choice of over 70 fabrics and leathers

Choice of 12 chair legs

Our stylish Personalization Center is the ultimate tool needed to satisfy your decorator's desire in designing his or her own personalized dining room suite.

This advertisement features a photograph of a dining room with a dark wood table and chairs. To the right of the photo is a list of customization options: 'Choice of 18 decorative hardware' with 18 different hardware pieces, 'Choice of over 70 fabrics and leathers' with a grid of fabric and leather swatches, and 'Choice of 12 chair legs' with a row of 12 different leg styles. The text 'Our stylish Personalization Center...' is at the bottom right.

A. G. Raymond & Company

Preparing For Today

“The person who does not worry about the future will shortly have worries about the present.”

- *Old Chinese proverb*

Your Response

What should you do?...

- **Adjust your expectations.**
- **Get back to basics.**
- **Segment your customers by need not by product.**
- **Extend your offering to meet those needs.**

Your Response

and...

- **Evaluate less profitable parts of established markets.**
- **Out execute your competition.**
- **Hire and train the best people then trust them.**
- **Be creative and willing to experiment.**

Create Demand



**Starbucks is prospering
by creating demand not
just filling it...**

Learning from Starbucks

Lessons from Starbucks include...

- **Don't solve today's problems with yesterday's answers.**
- **Don't count on sales and marketing to provide insight into the needs and frustrations of your customers.**
- **Be courageous and persistent!**