The Competitive Power of Communication Technologies

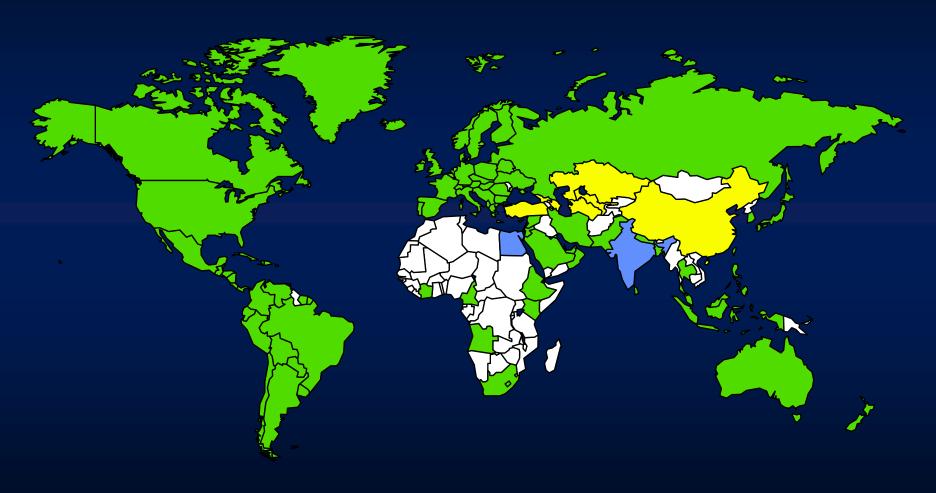
Bruno Zuccaro
V.P. Information Systems
Benetton Group
2.9.1998

Internetworking the Global Enterprise

UNITED COLORS OF BENETTON.

THE BENETTON WORLD

(120 Countries)



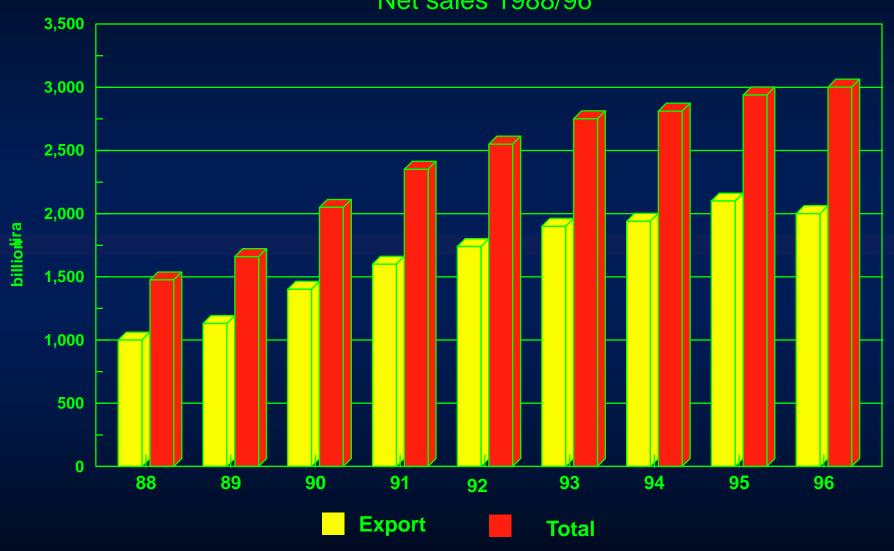
DIRECT MARKETS



LICENSING

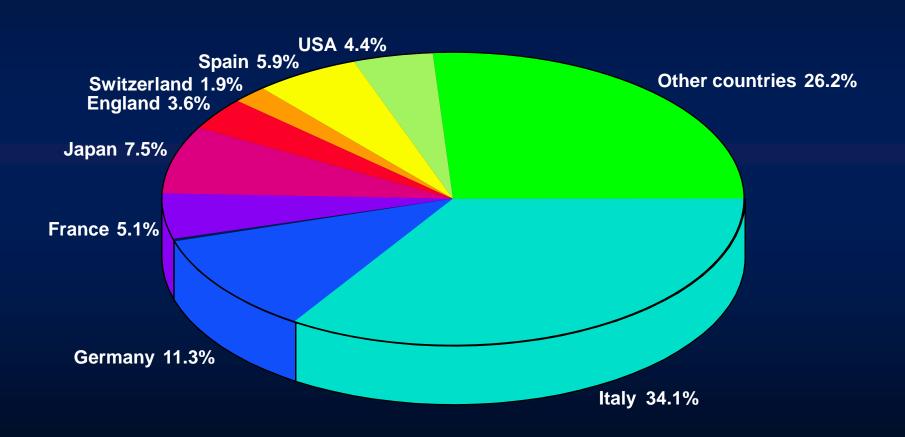
BENETTON

Net sales 1988/96



BENETTON

1997 Sales by Countries



BUSINESS OVERVIEW

- World leader in the Design, Manufacture and Marketing of distinctive casual apparel for men, women and children
- Wide array of colors, fashionable italian design and youthful image
- Offering a worldwide basis product lines to accomodate the needs of many markets
- New products (underwear, shoes, fragrances and cosmetics) to complement the product lines

BENETTON'S ENTREPRENEURIAL MODEL IS BASED ON:



External Production



Indirect Sales organization utilizing Agents



Widespread indirect Retailing Network

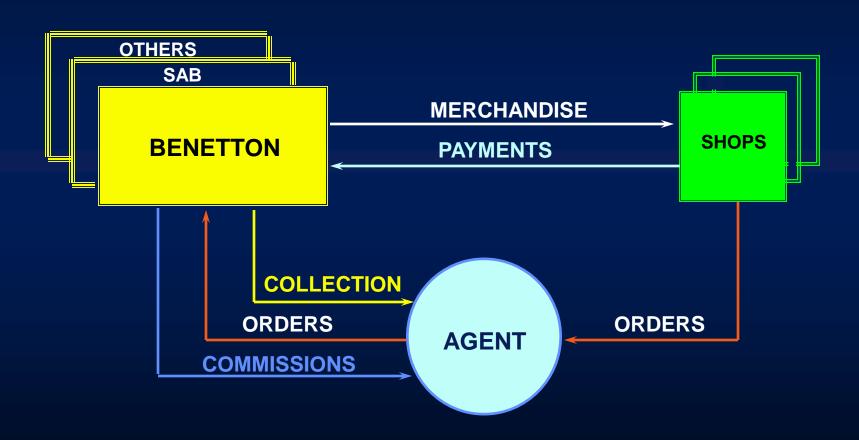


Centralized management and operations

- More than 80 million garments produced
- 7000 different items, with avr 4 sizes and 5 colors
- More than 6.000 tons of wool used
- About 40.000 kilometers of fabric used
- 90% manufactured in Europe (80% in Italy)
- More than 700 subcontractors integrated in the production process



INDIRECT SALES ORGANIZATION



AGENT

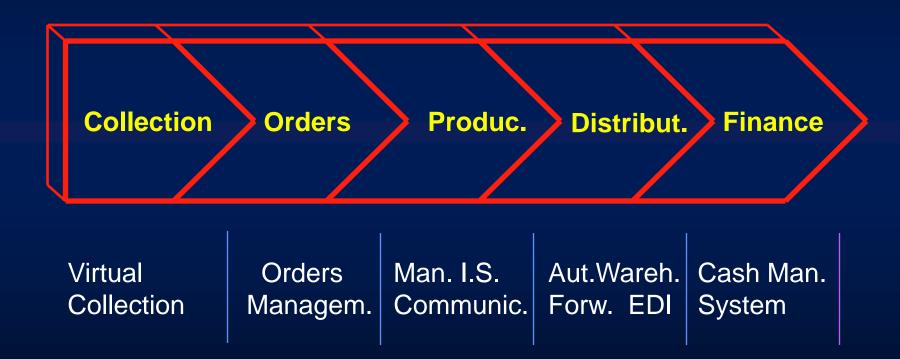
- An entrepreneur, wirh goals of orders, revenues and credits for a commercial area
- Manages business only for Benetton companies
- Selects potential investors for shops and defines shop locations
- Presents the collections to shop owners and collects orders
- Benetton's monitor on the market

SHOPS

- The shops are not owned and managed by Benetton
- Three brand names: Benetton, 012, Sisley
- Central supply of advertising material
- Standardization of shop image
- Assistance for new clients
- "Shops are our clients"



COLLECTION PROCESS



INFORMATION TECHNOLOGY IS A COMPETITIVE FACTOR IN:

Collection

- assures integration between design and production

Commercial

- is the bridge between the manufacturing companies and the market

> Production

- provides programming and control of all the external prod. units

Distribution

- manages the centralized distribution all around the world

Finance

- supports the centralized management of the financial flows

KEY INDICATORS

COLLECTION	Complexity	Avr	8.000 Styles/year
COMMERCIAL	Order collection time Reass. order servicing	Max Max	12 Hours 5 Days
PRODUCTION	Complexity	About	8 Pieces/Sec.
DISTRIBUTION	Deilivery time - Europe - USA	Avr Avr	5-6 Days 7-8 Days
FINANCE	Credit collection time	Max	6 Days

THE VIRTUAL COLLECTION

- 3.800 styles / season
- 4.000 prototypes / season
- 300 people in the design dept.





- Less prototypes
- Images database
- Merchandising
- Catalogs etc.

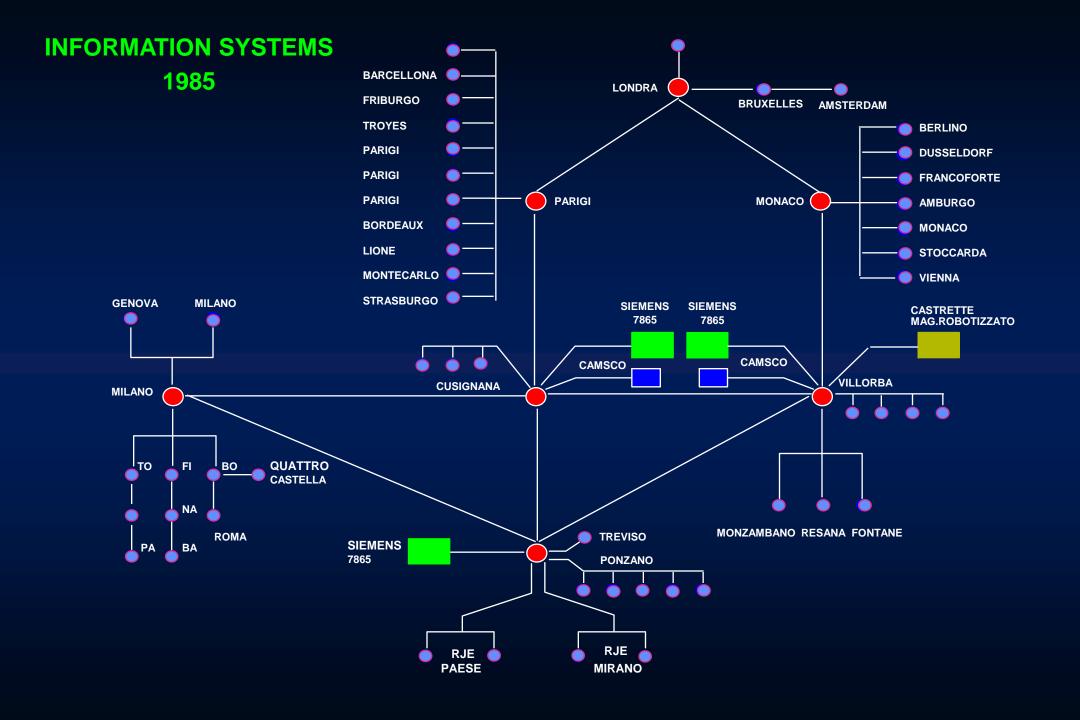
THE COMMERCIAL NETWORK

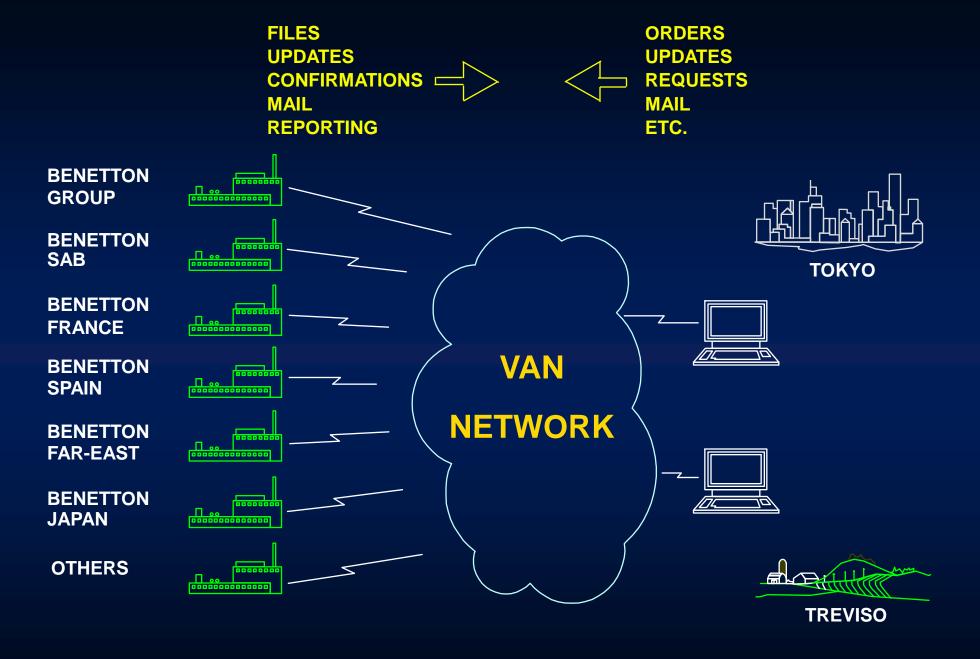
IN THE EIGHTIES...

 To collect the orders of the shops Benetton used a proprietary D.T. network with terminals in the agents offices connected by leased lines to the main computer

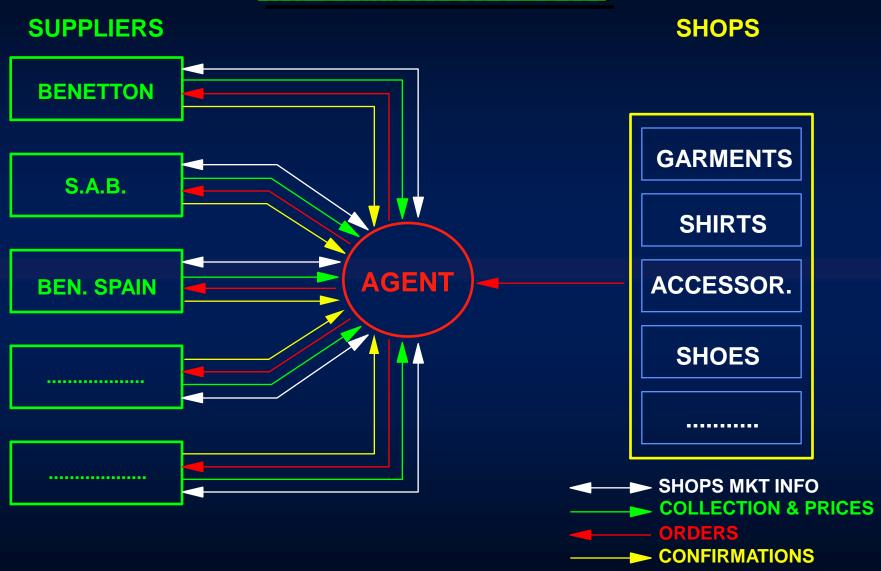
STARTING FROM 1986 network outsourced

- New network architecture based on VAN network
- New client/server agent's information system
- An application interface on AS400 for the companies
- An "EMAIL" to interchange reports, files, mail etc.





INFORMATION FLOWS



THE BASIC FUNCTIONS

COMMUNICATIONS

- Shop opening/close etc.
- Shop mkt information
- Controlled order- entry
- Confirmations
- Colors instructions
- Message interchange
- Order for local production
- Transfer of orders among plants

AGENT INFORM. SYSTEM

- DB mangement
 - Order portafolio
 - Customers, items, price-list
 - Shops
- Order portfolio analysis
 - Current collection
 - Past collections
 - Customers
 - . Items, colors etc.
- Shops Mtk anlysis
 - . Brand names
 - . Square metrs, windows, etc.
 - . Furniture, etc.

IN 1998 THE SYSTEM CONNECTS 76 AGENTS TO 10 COMPANIES IN 28 COUNTRIES...

U.S.A	SPAIN	HOLLAND
ENGLAND	SWEDEN	AUSTRIA
IRELAND	NORWAY	SWITZERLAND
GERMANY	BELGIUM	FRANCE
ITALY	CANADA	PORTUGAL
GREECE	AUSTRALIA	KOREA
HONG KONG	DUBAI	JAPAN
DENMARK	SINGAPORE	MEXICO
CHILE	PHILIPPINES	ARGENTINA
URUGUAY		

... IN A COMMON SYSTEM WHICH SECURES:

CONSISTENCY

- The common information (customer, outlets, agents, etc.) and the rules of the games are managede by Benetton Italy
- The agents has a unique interface with any company in the network

INTEGRATION

Between the manufacturing companies and the distribution network

<u>FLEXIBILIT</u>

- In 11 years this architecture has supported the worldwide expansion of the business
- New services have been added to this infrastructure

NEW SERVICES

REASSORTMENT ORDER SYSTEM

- allows the reordering of best selling items
- average 5 days service time
- improving the service to the shops

SHOP MANAGEMENT

- more than 2.000 shops connected
- supplies the P.O.S. systems all the data concerning:
 - styles, orders, prices etc.
- and for each delivery:
 - packing lists, invoices etc.

NEW SERVICES

EDI FORWARDING SYSTEM

- connecting the customs brokers
- reducing delivery time by 15%
- informing the agents and the companies

CREDIT COLLECTION

- 85% of credit managed through cash managed system
- confirmation of payment in 5-7 days
- on-line customer credit for agents

BENETTON SYSTEM NETWORK

196 Connected Units



Agencies

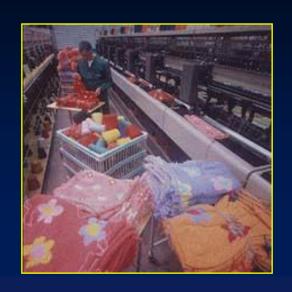
Subsid. Plants. 10

Companies 20

Others 90

- 6 Product lines, managed by 6 manufacturing divisions
- About 80 Milion garments produced in 1997:
 - 20 million wool knitted goods
 - 19 million trousers and jeans
 - 3 million coats and jackets
 - 32 million cotton knitted goods
 - 6 million shirts
 - 1 million shoes
- Production organization is unique and is fully supported by an advanced Information System

- Production and material programming is done by production divisions
- Divisions also coordinate the scheduling of production batches through about 700 subcontractors





- Benetton invested 10 Million \$ to develop one of the most advanced computer based manufacturing Information System
- The focus now is on the integration between design and production

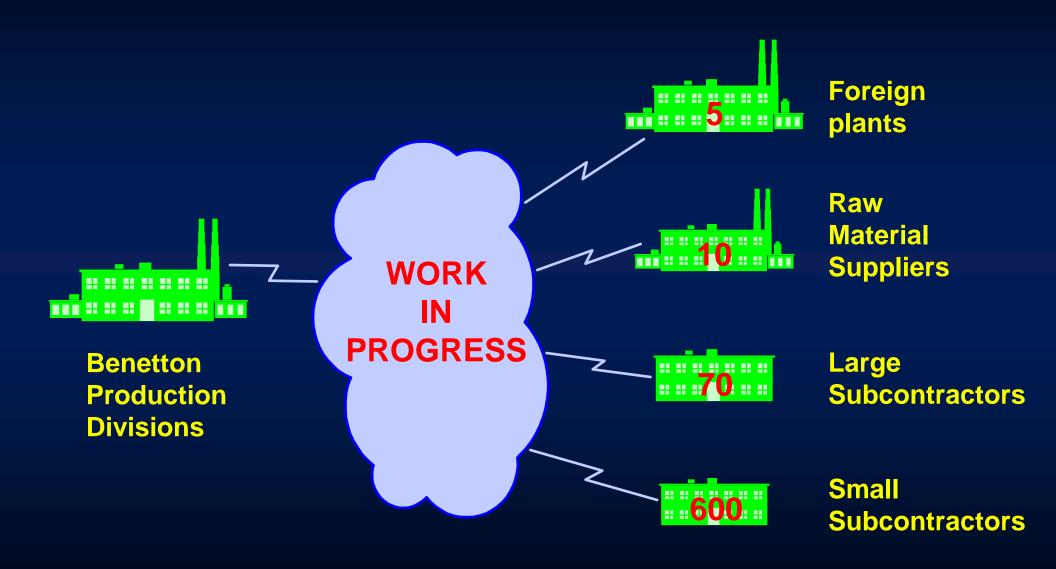
Huge investments in automation have been made:

Automatic Fabric Cutting 8.000 Km fabric/year

Automatic Packing 15.000 Boxes/day

Fabric Inventory Manag. 20.000 Km fabric/year

- Extensive use of EDI with raw materials suppliers was implemented to shorten the supply cycle time
- Currently we are designing an EDI system to integrate large and small subcontractors

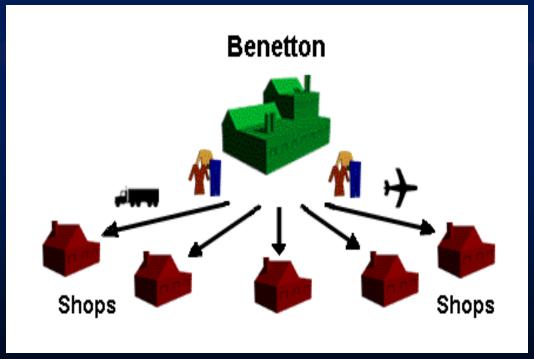


INFORMATION FLOWS

	<u>TO</u>	FROM
 Raw Material Suppliers 	Order proposal Purchase order	Order arrangement
	Delivery plan	Confirmation
 Foreign Plants 	Product Tech.Spec.	
	Shop orders	Produced quantity
	Delivery plan	Confirmation
 Large subcontractors 	Shop orders	WIP update Produced quantity
	Delivery plan	Confirmation
 Small subcontractors 	Operation order	Produced quantity

DISTRIBUTION

- The finished goods are forwarded directly from a central warehouse to the shops in the world
 - No regional warehousing
 - No reinvoicing
- The activity is seasonal with peaks in june/july and dec./jan.:
 - 80 Million items/year
 - 3 Million boxes/year
- The automated warehouse can deliver up to 25.000 boxes/day



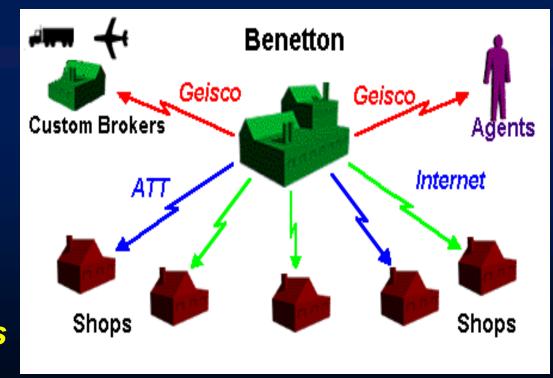
THE AUTOMATED WAREHOUSE

- Before entering the warehouse the garments are packed according to customer order
- The boxes are labeled with customer name, contents, and a barcode number to identify the box inside the warehouse
- A process computer manages the wharehouse devices
- The main-frame, to which the warehouse is connected, manages input, inventory, delivery programs, output and invoicing



DISTRIBUTION

- When the forwarding department decides to deliver to a customer, the computer selects the right boxes from the warehouse and prepares the documents
- For each delivery many information flows take place:
 - to custom brokers invoices etc.
 - to agents delivery data
 - to shops packing lists, invoices



using V.A.N. networks

INVOICING AND CREDIT COLLECTION

INVOICING

- invoicing managed centrally
- Postel service for Italian customers
- on-line invoicing for foreign customers

CREDIT COLLECTION

- 85% of credit managed through cash managed system
- confirmation of payment in 5-7 days
- on-line customer credit for agents



THE END