

Lesson 3

Integration, collaboration and Supply Chain Management

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The grand purpose of SCM

In (y)our own words

- ❖ “Awareness for a total unit – Seeing a whole flow, a network, a system as object for improvement and management“
- ❖ “Seeing the whole thing as an integrated thing – and design, coordinate, adapt accordingly”
- ❖ “Aligning the whole thing to the needs of – in ideal – the ultimate customer”
- ❖ “To provide value for the customer and the actors in the chain”

Today's Topics



Integration, collaboration and SCM – The relationship lecture

- Organization, coordination and integration issues in the global supply chain
- Intra/inter-organizational relationships
- Supply chain collaboration methods and initiatives

The Case “pain in my (Supply) Chain”

Question Set 1

- ❖ Read it, fast, if you have not done before!
- ❖ What are the key actors in the single episodes?
 - Company name and type of the company
 - Role within the company (Functions)
 - Role within the supply chain
- ❖ What are the key issues discussed in the single episodes?

Episode 1



MONDAY, 10:42 AM
Manufacturing Facility 14,
Exceso Corporation

- ❖ **Actors, roles, objectives:**
 - Foley, CEO of Exceso shows analyst Andrea Valdini one of the manufacturing sites (#14)
- ❖ **Key topic, key messages:**
 - Production Bottleneck of key machine
 - Three shift to catch up production
 - End of Quarter
 - 98 % capacity utilization
 - But also: 60 % of optimal speed
 - What products?
 - What market? 9 % increase in sales or tight market?

Episode 2

TUESDAY, 1:38 PM

Midwest Regional Headquarters,
Flemings ValuMart



❖ Actors, roles, objectives:

- Alice Dias, Purchase of Flemings and her intern talking on negotiations with Exceso

❖ Key topic, key messages:

- Purchase of ClickZipPlus (4-pack)
- Negotiate 6% discount for 3000
- Needs only 1800/2 per quarter: 900 per Quarter
- Transfers excess purchase to other region (southwest that has only 4 %) and also to VXT
- Keeps 1000 that are then promoted

Episode 3



WEDNESDAY, 7:49 AM
Underground Parking Garage,
Exceso Tower

- ❖ Actors, roles, objectives:
 - Foley Vinton, CEO and Martin Wu: Sales man
- ❖ Key topic, key messages:
 - Discussion on potential sales
 - Forecasts, raw data, anomalies etc.
 - “I hear that every quarter“
 - Boss overrules his sales man
- “Sell more for making the analysts happy“

Episode 4



WEDNESDAY, 9:27 AM

Flemings ValuMart, Near
McKenna, Palash & Zweig Securities

- ❖ Actors, roles, objectives:
 - Andrea Valdini (now in the role as a consumer)
 - Store manager
- ❖ Key topic, key messages:
 - Out of stock on the 8-packs
 - “They’re having problems with the eights, I will discount a four-pack if you want”
 - Take the Carlex eight pack
 - Cheaper and just as good
 - “They can’t keep this up much longer”

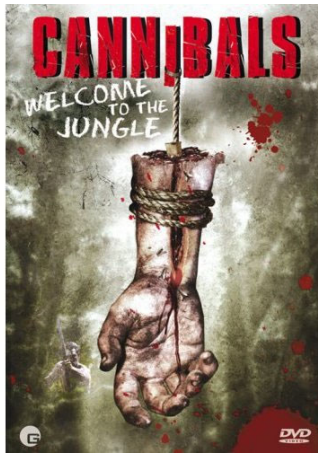
Episode 5



THURSDAY, 6:52 PM
Sales Conference Room,
Exceso Headquarters

- ❖ Actors, roles, objectives:
 - High rankers of Exceso
 - Talking about the situation of the company
- ❖ Key topic, key messages:
 - ❖ “Do we still need to make a profit“?
 - ❖ “We still make a margin at the deeper discounts“ ... “even after you figure in the cost of display and sampling?“ ... “not sure“
 - ❖ “Why is number 14 making so much products?“ ... “they must have believed our forecasts“
 - ❖ Appearance of a “white Knight“: 40.000 cases for Regency Brand, selling in Eastern Europe and China
 - ❖ But Deep discount of 9 %
 - ❖ But Due diligence?

Episode 6



FRIDAY, 10:42 AM
**Midwest Regional Headquarters,
Flemings ValuMart**

- ❖ Actors, roles, objectives:
 - Phone call to Alice Dias of ValuMart by an unknown from Regency Brand
- ❖ Key topic, key messages:
 - ❖ “Immoral” offering of Regency to sell to ValuMart

Episode 8

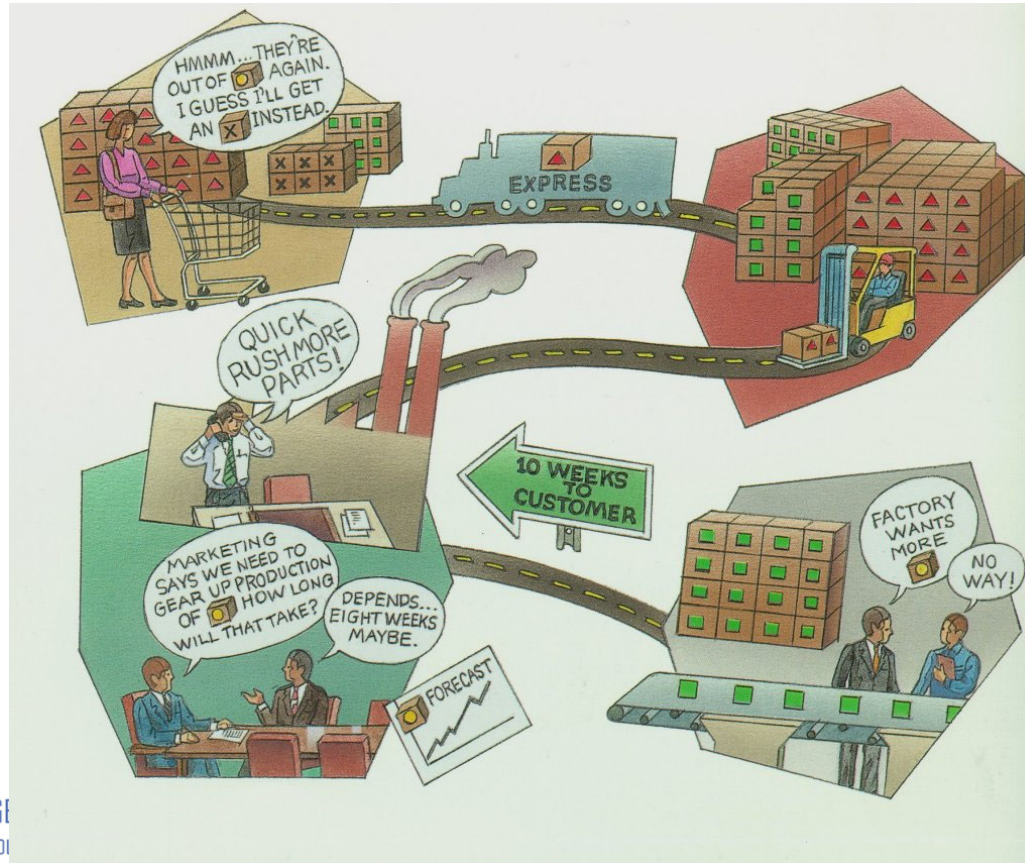


FRIDAY, 11:59 PM

Bedroom,
Residence of R. Foley Vinton

- ❖ Actors, roles, objectives:
 - The CEO of Exceso
- ❖ Key topic, key messages:
 - ❖ Do we have a
problem??
??
?
 - ❖ Do we?

Typical picture? – Why is that so?

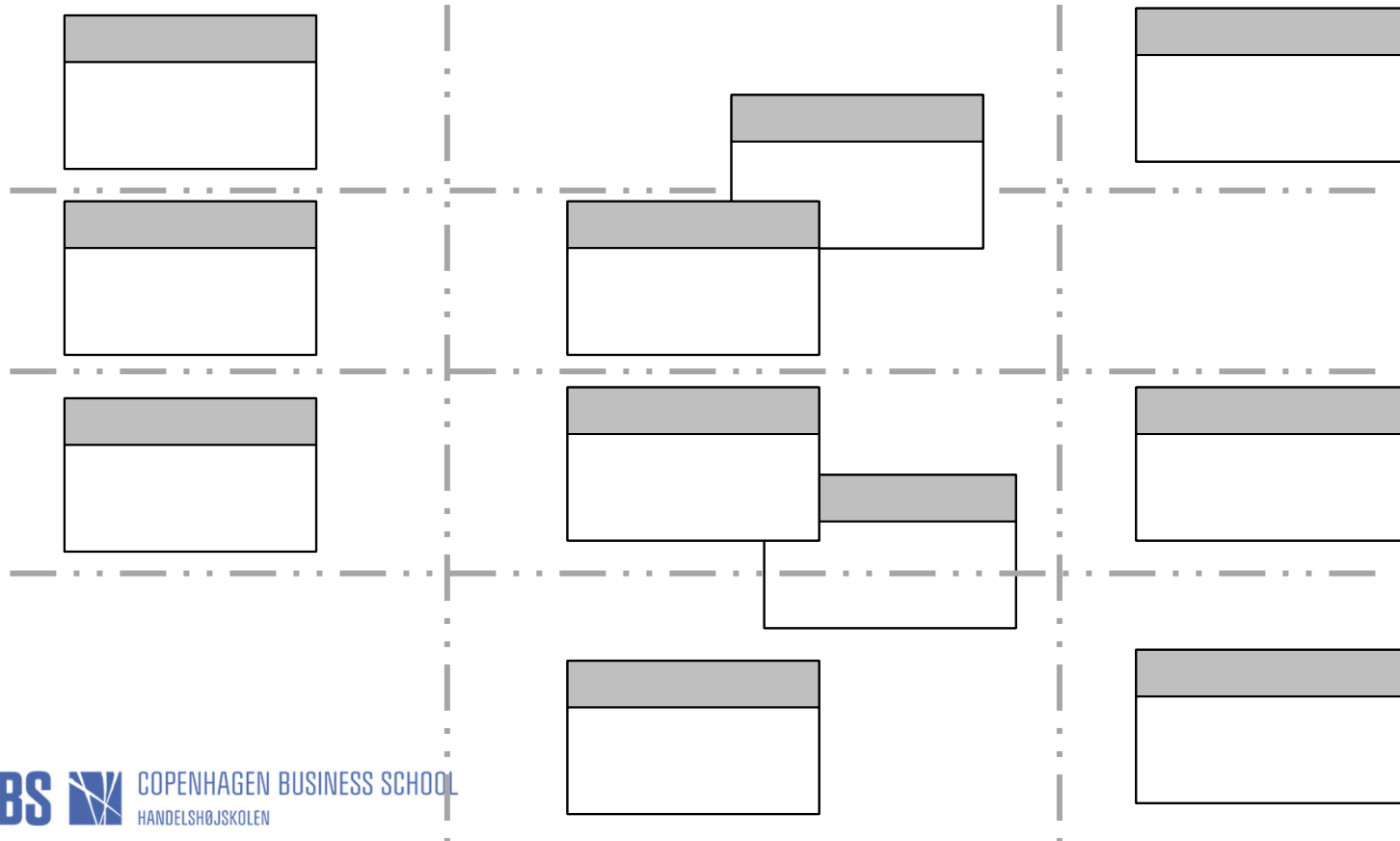


Question Set 2

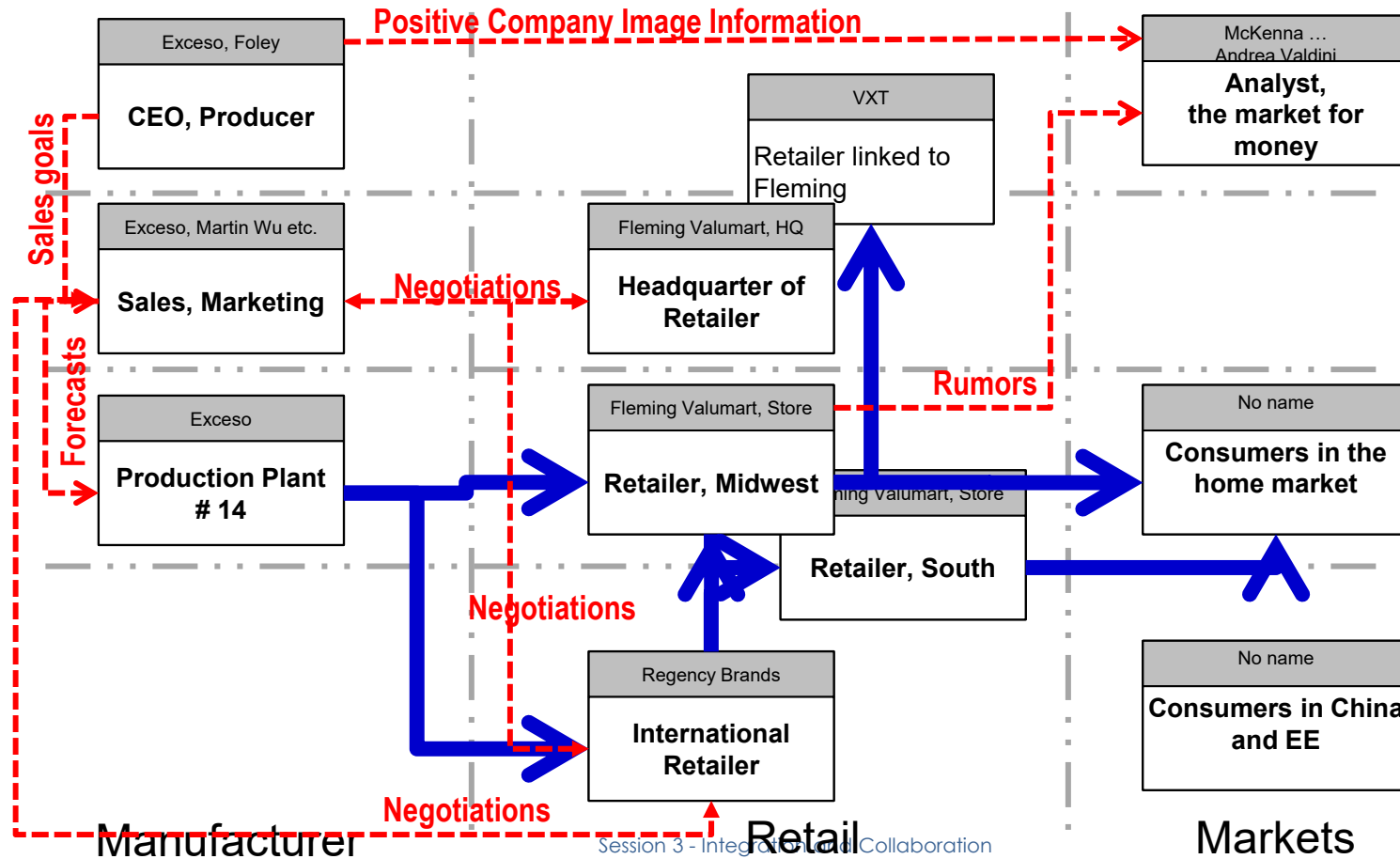
Fill in the following slides according to the following sub-questions

- ❖ Actors (or call them stakeholders)
 - Actors and their function
 - How are the actors linked
 - What are their objectives, goals
- ❖ What is their behavior, and what are their means to meet ends
 - What are supposed results of that behavior
 - who is affected
 - what is the effect

Actors and their function – Fill in!



Actors and their linkages



Actors and their objectives – Fill in!!!

Exceso, Foley

Exceso, Martin Wu etc.

Exceso

A diagram showing two rectangular boxes. The top box is labeled "VXT" and is shaded gray. The bottom box is labeled "Smart, HQ" and is also shaded gray. A vertical line connects the bottom-left corner of the "VXT" box to the top-left corner of the "Smart, HQ" box.

Fleming Valumart, HQ

Fleming Valumart, Store

ning Valumart, Store

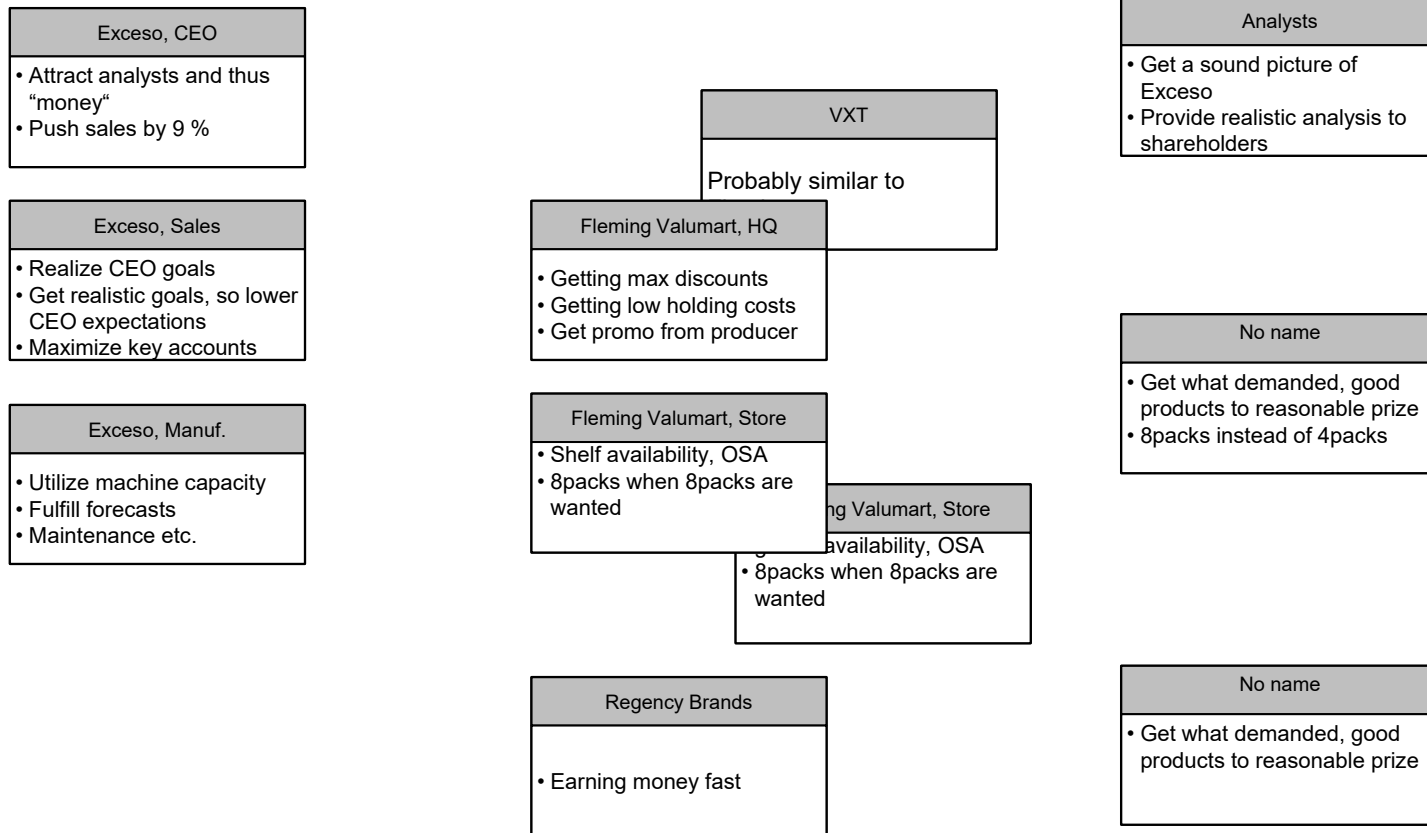
Regency Brands

McKenna ... Andrea Valdini

No name

No name

Actors and their objectives

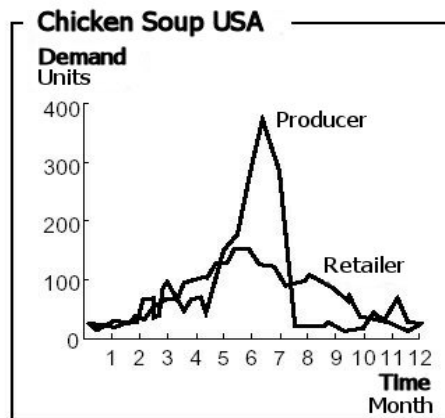


Actors, behavior and effects

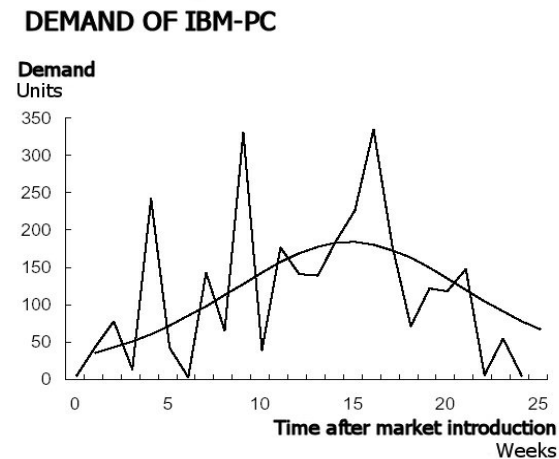
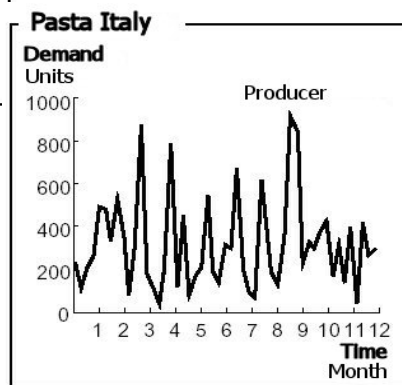
	Manufacturer		Retailers		Markets / Consumers
	CEO, Sales	Operations	Purchasing	Stores	
Objectives	<ul style="list-style-type: none"> • Push Sales • Attract Analysts 	<ul style="list-style-type: none"> • Fulfill production forecasts • Utilize machinery 	<ul style="list-style-type: none"> • Getting max discounts • Getting low holding costs • Get promo from producer 	<ul style="list-style-type: none"> • Shelf availability, OSA • 8packs when 8packs wanted 	<ul style="list-style-type: none"> • Get what demanded, good products to reasonable prize • 8packs instead of 4packs
Means, behaviour	<ul style="list-style-type: none"> • Discounts • Trade loading • Fast Sales (Regency) 	<ul style="list-style-type: none"> • When high: 3 shifts • When low maintenance and speed reduction 	<ul style="list-style-type: none"> • Buy more than needed, stock and cross sell • Wait till quarter end and “press“ 	<ul style="list-style-type: none"> • Discount and promote • Promote other OSA-items 	<ul style="list-style-type: none"> • Buy what is available or don't buy
Effects for whom	Hockey stick Stress and pressure	Nervous production; ups and downs Inefficiencies and higher cost	Lost Sales Inefficiencies are at the end priced in again? Negotiation terror and short term orientation	Lost sales Unhappy customers to handle Sales pressure from Head Quarter	<ul style="list-style-type: none"> • Lost sales for all • Unsatisfied consumers • Vanishing brand loyalty etc.

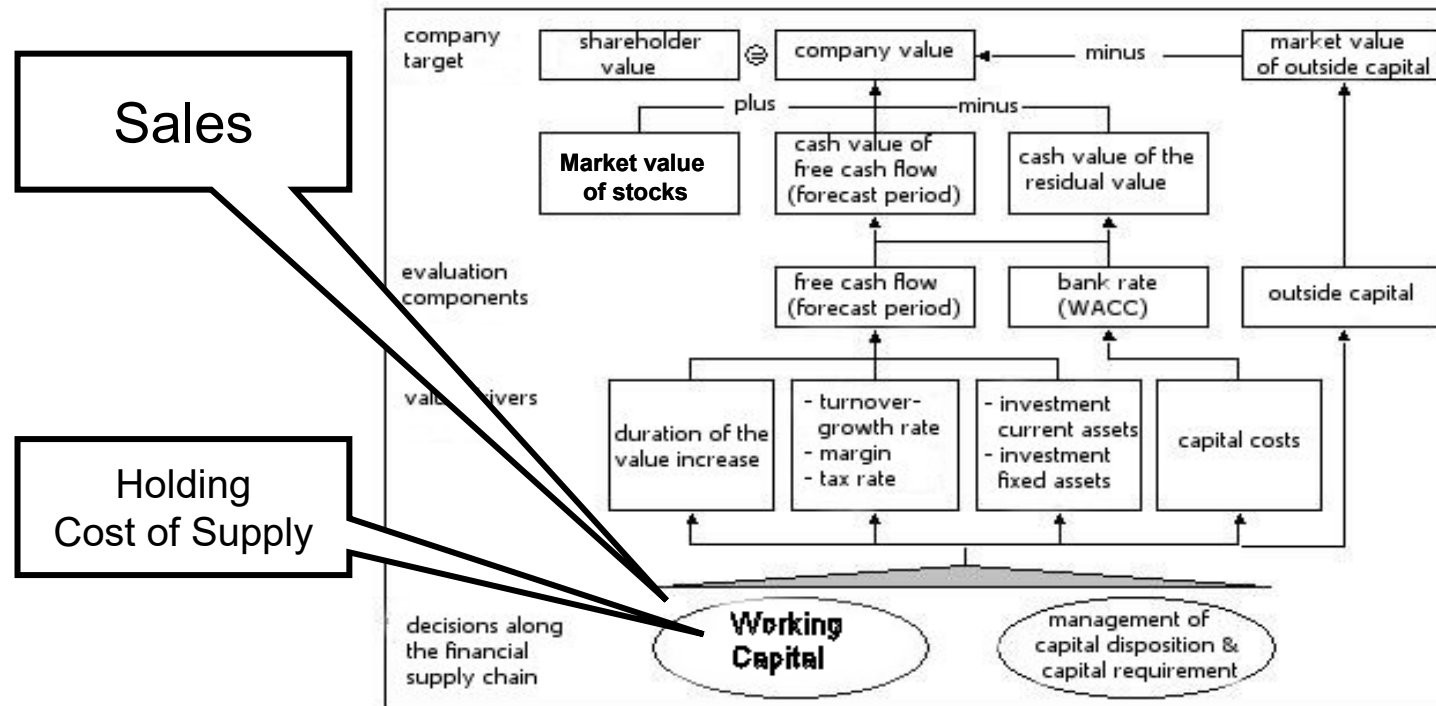
Wrap up of key issues

Fluctuations of Demand across the Chain



The „Ugly Tradeoff“:
Lost Sales vs. Increased holding costs





Three key issues

Discussion of selected key issues

- ❖ Disintegration
 - local (position and time) behaviour
 - the **hockey stick**, the **stuffed channel**, the **trade loading** and the **speculation poker**
 - i.e. fill the channels – push - without the demand; especially at the month end
 - Incentives?
- ❖ Take it a bit further - **the bullwhip**
 - functional silos even within the companies
- ❖ reluctance to changing behavior
 - what should be done to solve the problems
 - but why is it not done

Channel stuffing or “Customer orders vs. consumer sales”

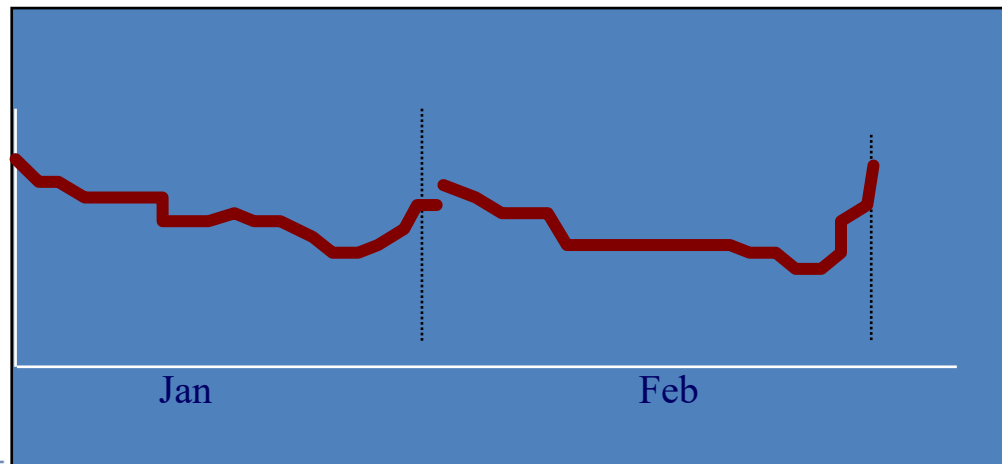


- ❖ Lots of sales booked near the end of a quarter, then sales drop off at the start of the next quarter
- ❖ E.g.,
 - A large brewer offered a vacation to the salesperson in each region who sold the most beer to stores over a 3 month period
 - One winner was able to convince a few stores to free up backroom space and fill it entirely with beer
 - Or see the case: what is Alice Dias doing?

Hockey stick effect



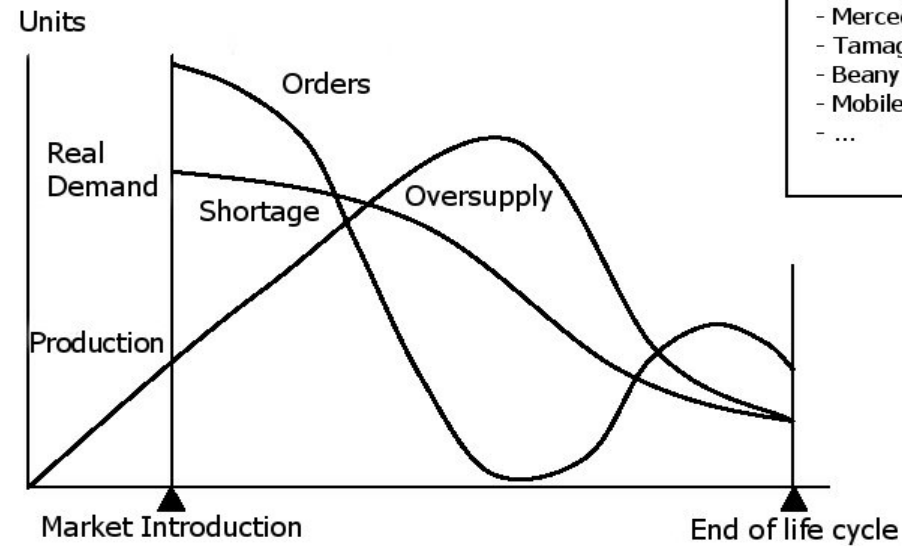
- ❖ Volume tends to pick up towards the end of a reporting period . . . why?
- ❖ Look for ways to lessen the effect
 - contributes to demand volatility, inefficiency, poor service



Speculation

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Orders,
Demand,
Production CPUs



Further Examples

- Mercedes SLK
- Tamagotchis
- Beany Babies
- Mobile phone
- ...

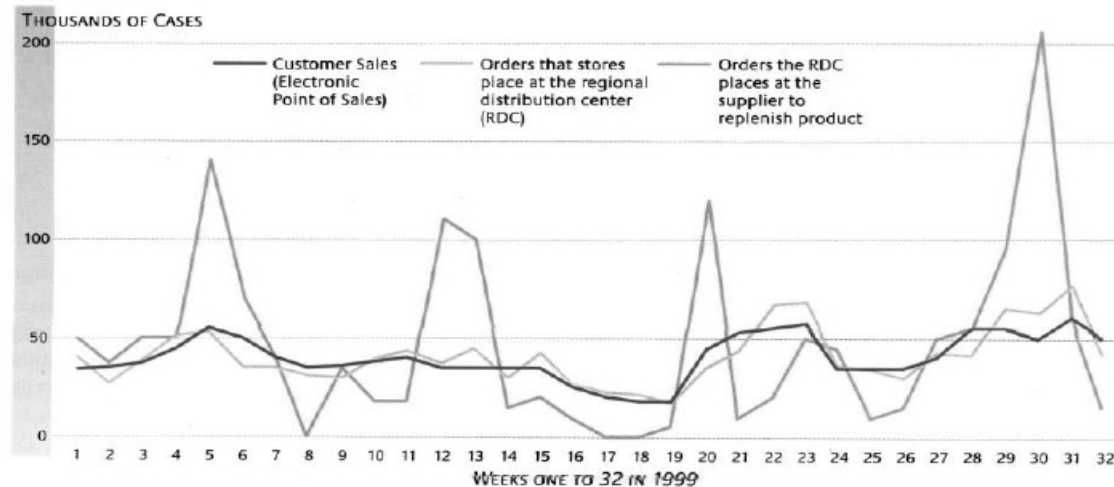
Supply Chain Awareness vs. Single company focus

The Bullwhip-Effect as a typical symptom of lacking transparency of demand



The Extent of Artificial Demand Distortion

Over 32 weeks, grocery stores in a study recorded weekly soft-drink sales of 18,000 to 60,000 cases, but by the time the supplier got the order, the range had been distorted to 0 to 205,000 cases.

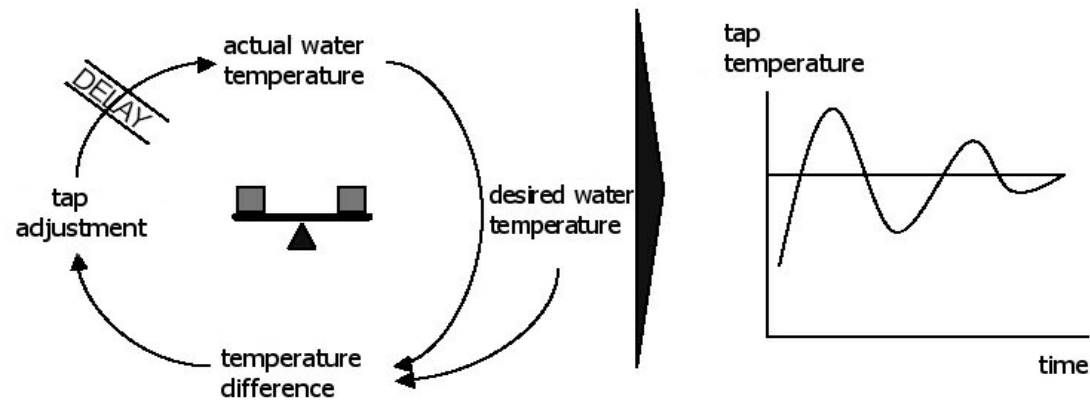


Quelle: Sloan Management Review (2001)

Other Root-Cause: The System: delayed adaptation

DELAYED ADAPTION

Example: thermostat



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Some proposed strategies to avoid the bullwhip effect – but what are the assumptions?

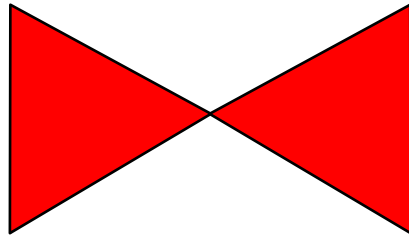
A Framework for Supply Chain Coordination Initiatives			
Causes of bullwhip	<i>Information sharing</i>	<i>Channel Alignment</i>	<i>Operational Efficiency</i>
<i>Demand Forecast update</i>	<ul style="list-style-type: none"> • Understanding system dynamics • Use POS-data • EDI • Internet • Computer-Assisted-Ordering 	<ul style="list-style-type: none"> • VMI • Discount for information sharing • Consumer direct 	<ul style="list-style-type: none"> • Lead-time reduction • Echelon-based inventory control
<i>Order Batching</i>	<ul style="list-style-type: none"> • EDI • Internet ordering 	<ul style="list-style-type: none"> • Discount for truckload assortment • Delivery appointments • Consolidation • Logistics outsourcing 	<ul style="list-style-type: none"> • Reduction on fixed cost of ordering by EDI or electronic commerce • CAO
<i>Price Fluctuations</i>		<ul style="list-style-type: none"> • CRP • EDLC 	<ul style="list-style-type: none"> • EDLP • ABC
<i>Shortage Gaming</i>	<ul style="list-style-type: none"> • Sharing sales, capacity and inventory data 	<ul style="list-style-type: none"> • Allocation based on past sales 	

The “prisoner’s dilemma” decision

		Prisoner 1	
		Breaks agreement not to confess “betrays”	Doesn't confess
Prisoner 2	Breaks agreement not to confess “betrays”	Prisoner 1 gets 5 yrs Prisoner 1 gets 5 yrs	Prisoner 2 goes free Prisoner 1 gets 10 yrs
	Doesn't confess	Prisoner 2 get 10 yrs Prisoner 1 goes free	Prisoner 1 gets 6 months Prisoner 2 gets 6 months

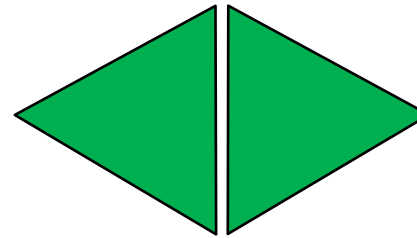
From “dicky bow” to “rhombus“?

Classic relationship



- Limited to transaction (project, task)
- Sales/Purchasing dept.

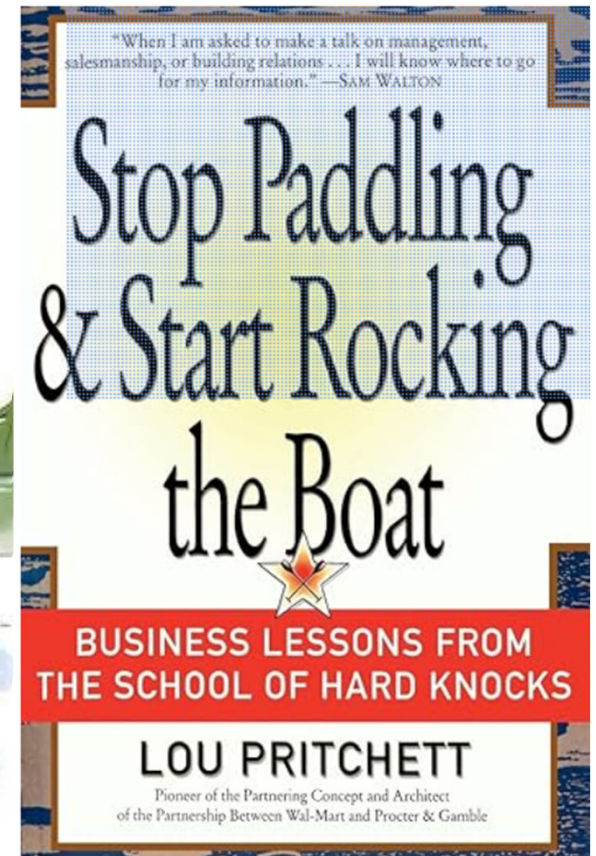
Partnership relationship



- Multiple levels, including top management
- Focus is on relationship

Lambert and Knemeyer (2004)

- Development takes time
- Development is costly (extra HR, extra coordination, extra communication)
- Development includes risks





Relationships
build in a process
that takes time,
commitment, trust
... positive
experience ...

Size matters! – see Boyson et al. 2007

Table 4: Influence of Company Size on Collaboration with Customers

Survey Respondents Key: 1 = "no collaboration"; 5 = "extensive collaboration"

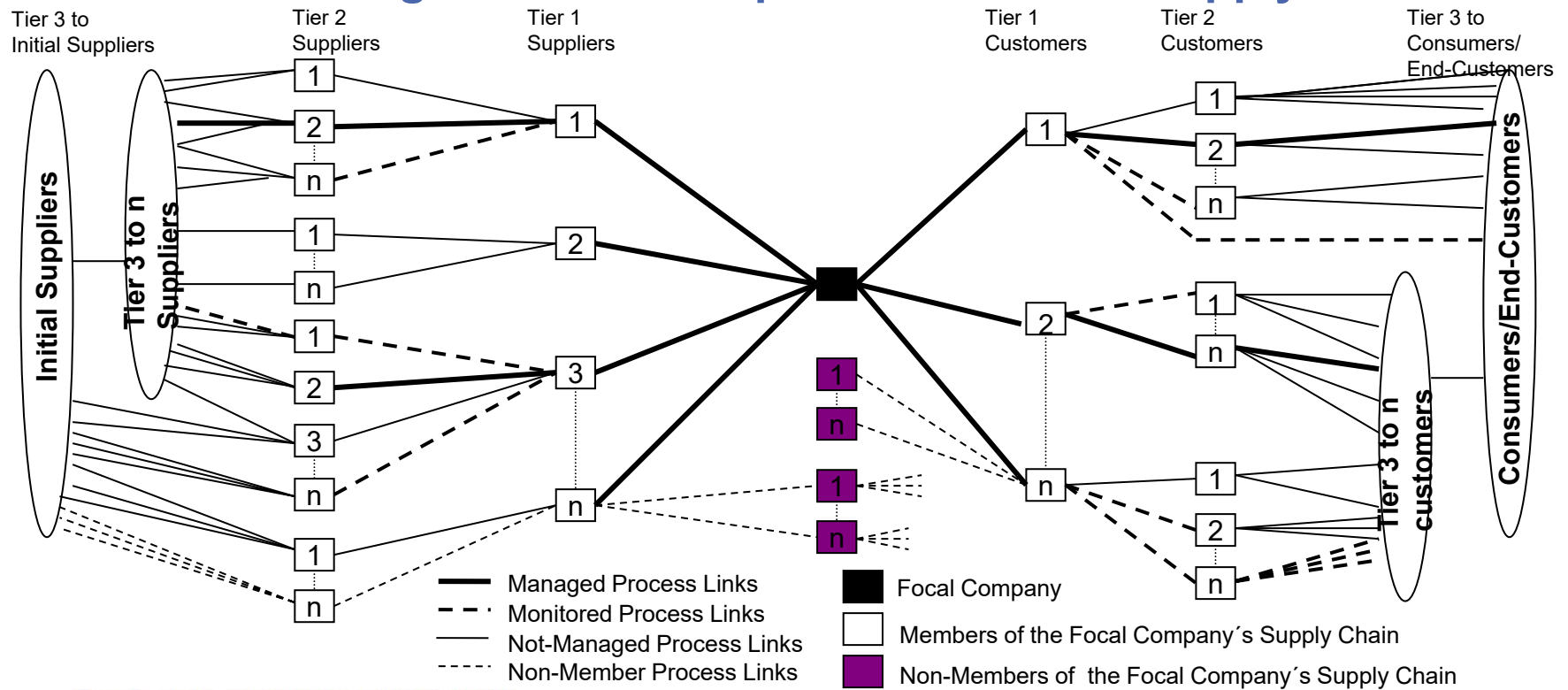
	Strategic Product Planning	Demand Forecasting	Inventory Management	Six Sigma	Joint Promotions/ Event Management
Annual sales less than \$1 million	2.3684	2.5263	2.8947	1.7368	2.1579
Annual sales at least \$1 million but less than \$10 million	2.7561	2.4146	2.9756	1.6829	2.1463
Annual sales at least \$10 million but less than \$100 million	2.9492	2.8644	3.1356	1.8644	2.4237
Annual sales at least \$100 million but less than \$1 billion	3.2424	3.3333	3.6364	2.6364	2.3939
Annual sales \$1 billion or greater	3.6222	3.2889	3.6889	3.4444	2.7778
Total	3.0558	2.9137	3.2893	2.3046	2.4162

Supply Chain Management Center; Smith Business School

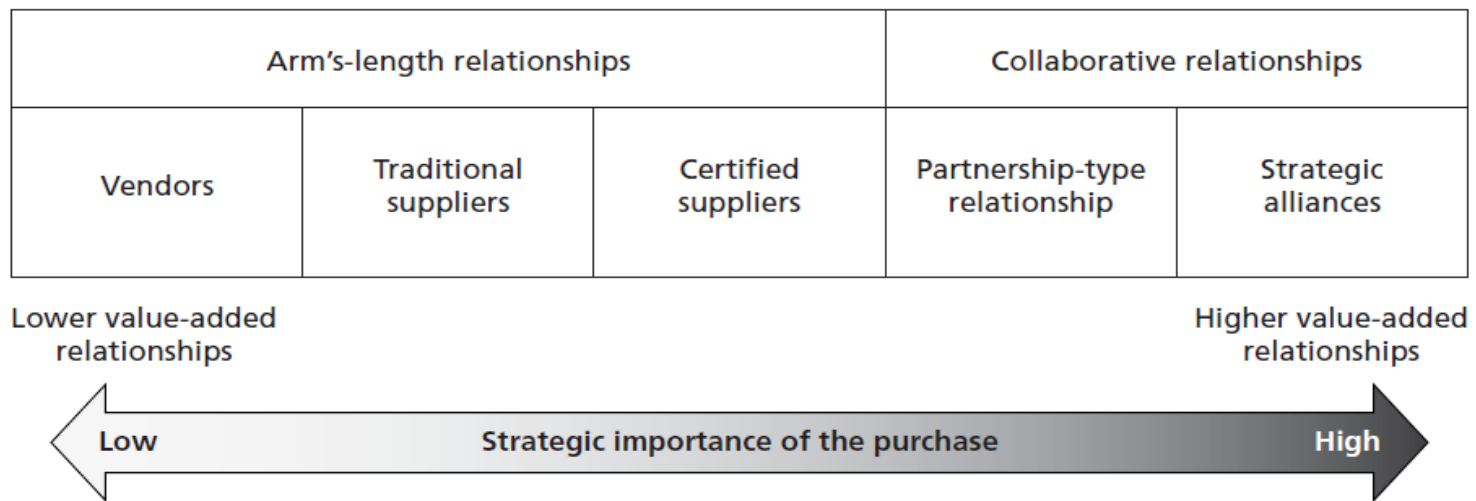
- Overseas collaboration is problematic!
- As the degree of internationalisation increases, firms will have to develop stronger SCM capabilities
- Larger companies tend to have sophisticated scm programs. Only the bigger firms find it relevant to invest in cross-border collaboration and partnership initiatives

Supply Chain Network Structure

“...is the configuration of companies within the supply chain.”



Different types of relationships when doing what?



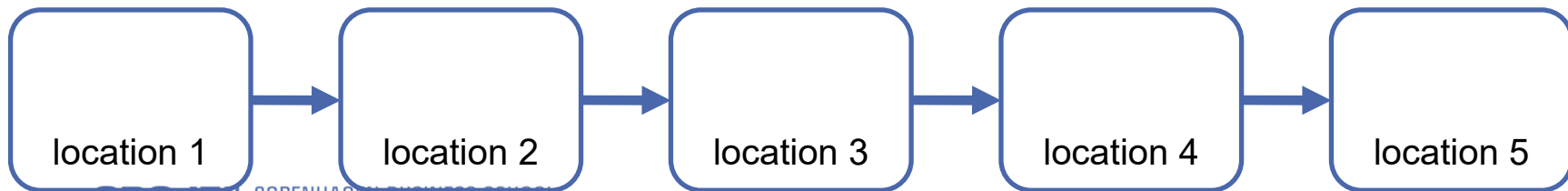
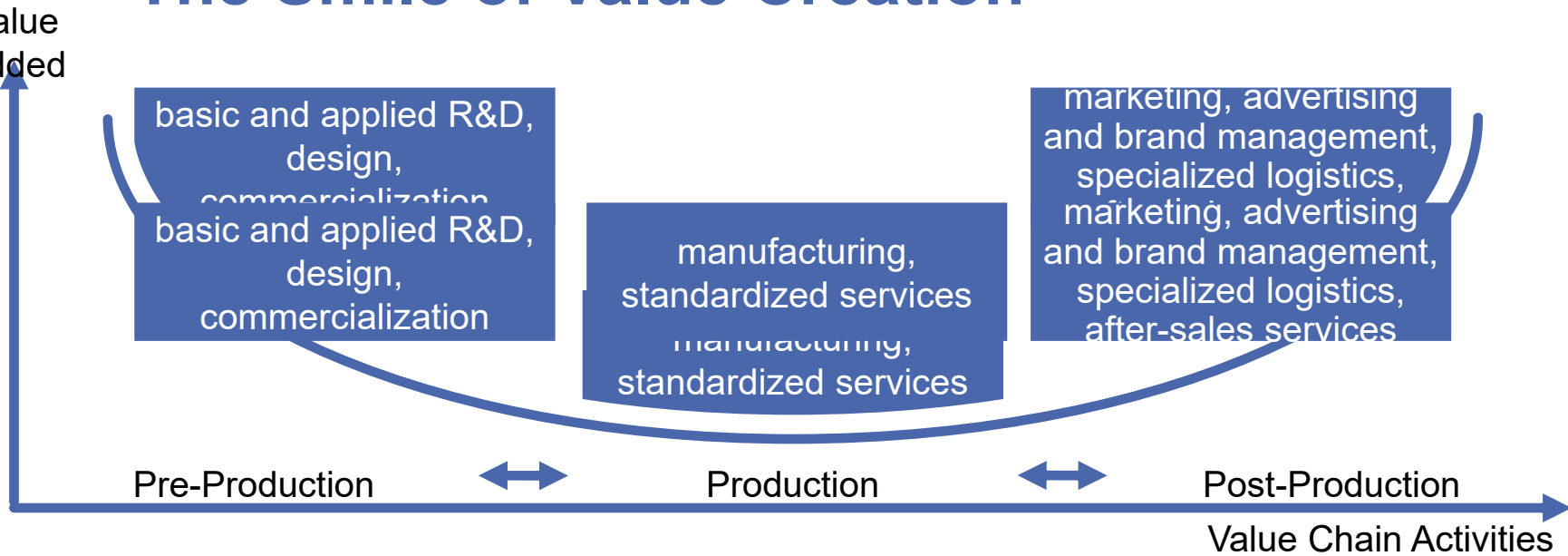
SOURCE: Dobler and Burt (1993). Copyright McGraw-Hill Companies, Inc. Used with permission.

SCM Partnerships ... just a myth, ... Just Cooperation romanticism?

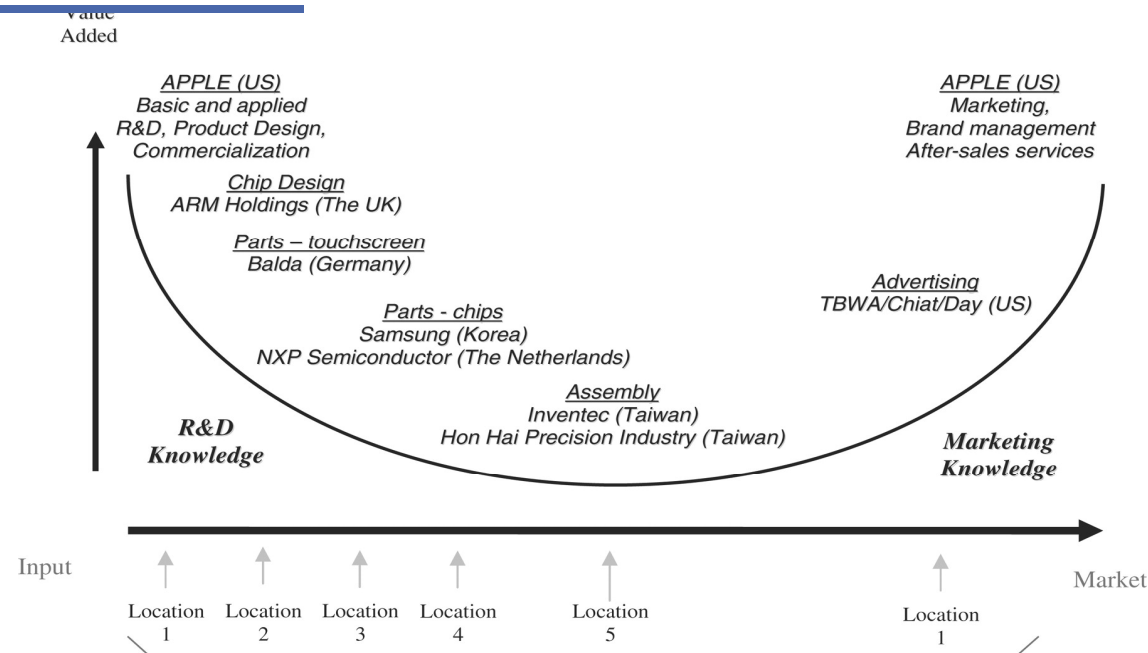


- ❖ Supply Chain Cooperation/Collaboration, THE WIN/WIN a myth?
 - idealized Cooperation
 - goal oriented partnership
- ❖ Sometimes the best Partnerships are none!
 - Emmelhainz/Gardner
 - Being functioning dominates cooperation!
- ❖ Who has the power to decide and design?
 - Balanced power in the chain as an ideal?
 - „Third party“ as ideal Supply Chain Architects?
 - Strong „Supply Chain Gorillas“ Automotive, PC?
- ❖ **WHAT/WHO COOPERATES?**
- ❖ **WHO CREATES WHAT VALUE?**

“The Smile of Value Creation”

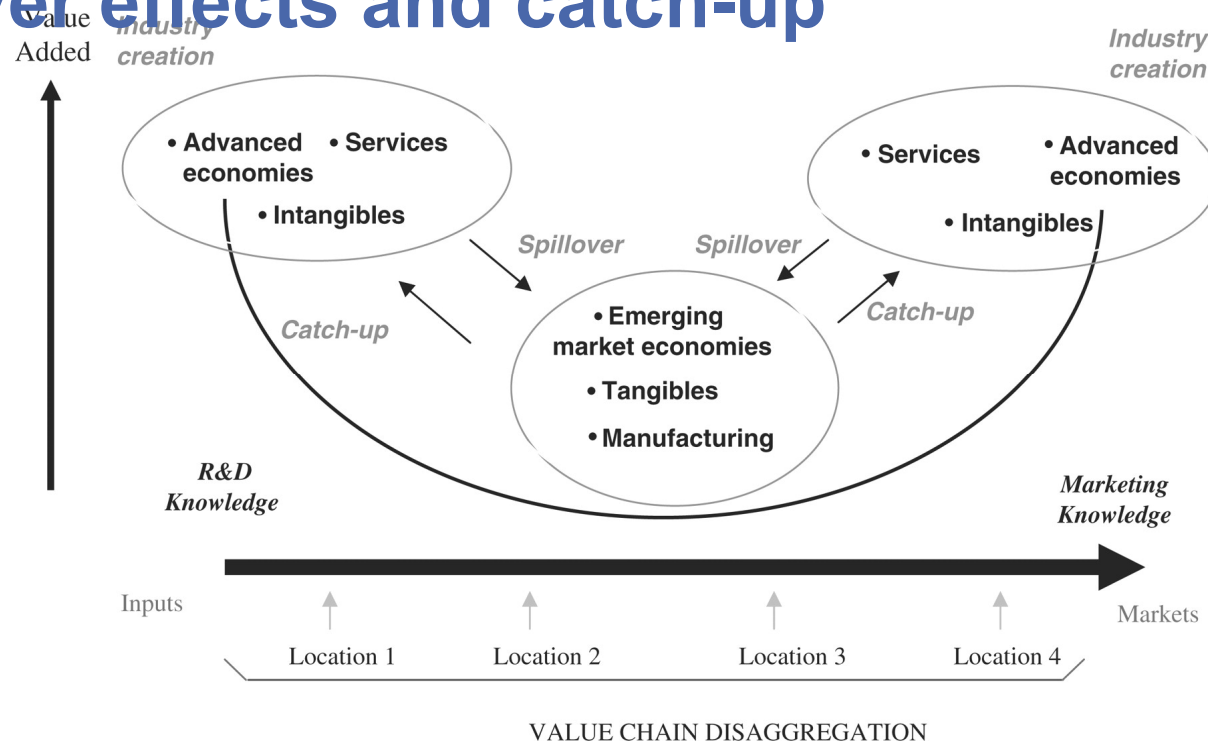


The smile of value creation (Mudambi, 2007) – e.g. Value creation in the iPhone with Apple as Supply Chain Orchestrator



The smile in a more dynamic analysis

Spillover effects and catch-up



But also: maybe new competences, new rules, new competition

How Style Bloggers Earn Sales Commissions, One Click at a Time

Blog Links That Redirect Readers to Retail Sites Are Expanding to Twitter, Pinterest and Instagram



Fashion bloggers can make money each time a reader clicks on a link leading to retailers. WSJ's Elizabeth Holmes discusses affiliate networks with Tanya Rivero. Photo: Katelyn Tanitz

Source: Wall Street Journal



H&M ONLINE

FACTS ABOUT H&M / FASHION FOR ALL / H&M ONLINE

Meet H&M Online

Trendsetting, appealing and interactive. At one of the world's most popular fashion websites, H&M offers customers an inspiring shopping experience online.

Designed to complement and grow alongside stores, H&M's interactive shop is easily navigated, completely mobile-adapted and much appreciated by customers in all 21 countries where H&M and H&M Home offer online shopping.

COS, Monki, Weekday and Cheap Monday offer online shopping in 19 markets. & Other Stories, which was launched in March 2013, is available both in stores and at stories.com, which ships to 13 European countries.

Social media

H&M's communication is global and fashion enthusiasts all over the world interact with us through social media and apps. Social media is also an important communication channel when H&M expands into new, exciting markets. And H&M is one of the leading fashion companies on Facebook, Twitter, Instagram, Google+ and YouTube, as well as on China's social network.



Source: H&M website

SHOP

ORDER YOUR SHOES ONLINE.
 Simply select Cardrops as your shipment method during checkout.

SHIP

WHILE YOU WORK, WE LOCATE YOUR CAR.
 Cardrops opens your trunk remotely the moment our trusted delivery partner arrives. We securely lock your car and keep you updated via SMS. No hassle, no worries.

SHINE

WE MAKE YOU SMILE!
 Driving around to pickup points and postal offices is so rimeless, don't you think? With Cardrops we want you to just enjoy your new goodies.

Session 3 - Integration and Collaboration

Source: Cardrops.com



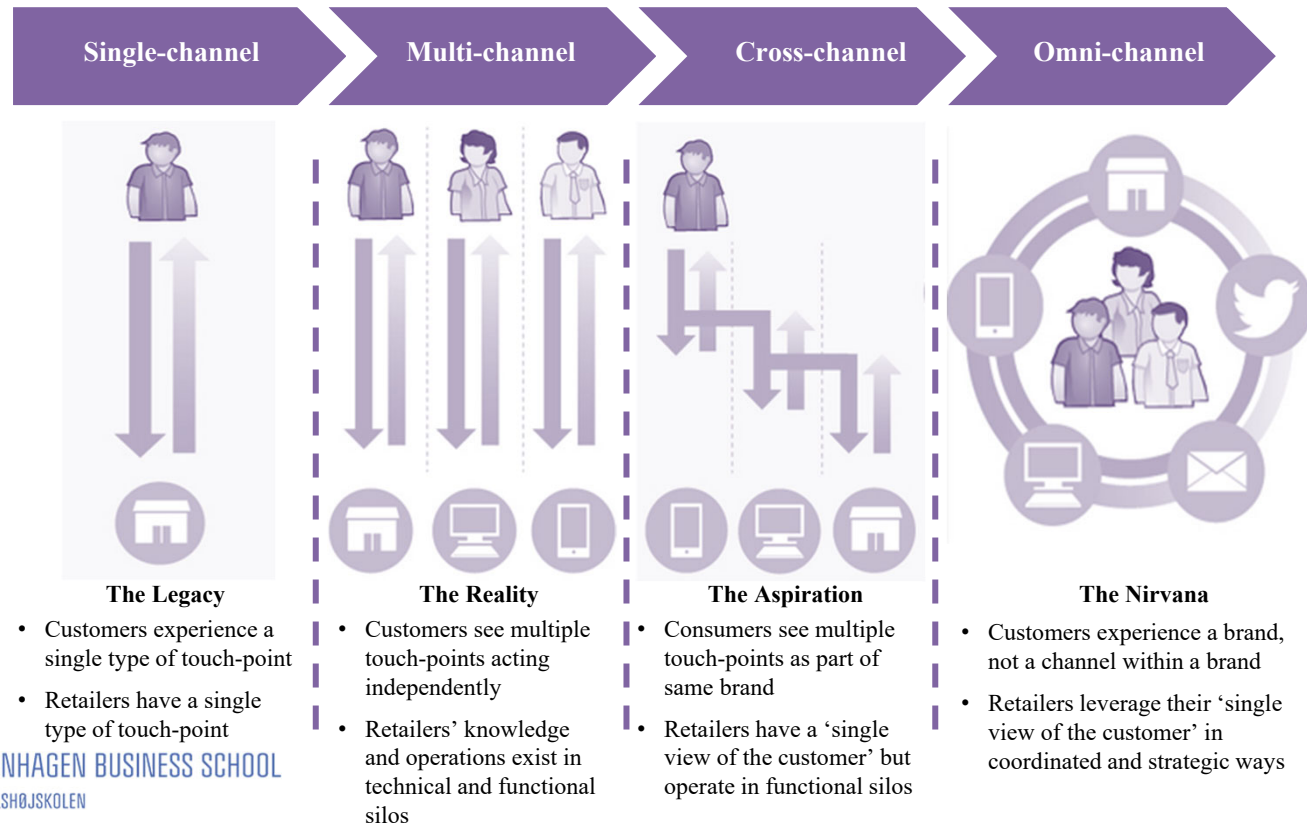
Source: Deutsche Verkehrszeitung

Slide 42

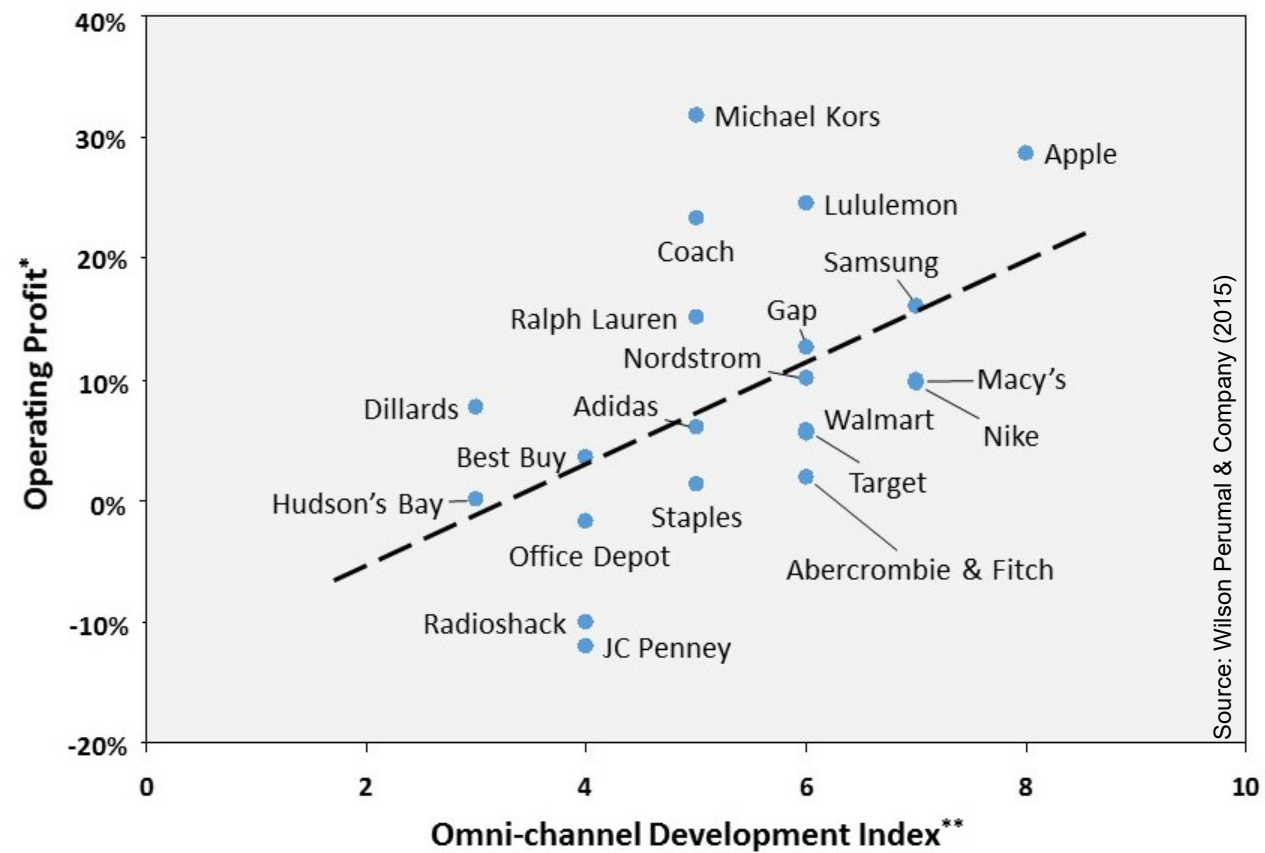
**So:
e.g. BLOGS as new sellers,
Orchestrators and thus competition
Crowd Shipping, Trunk Delivery,
Uberization, competing at
consumers front yard**

Finally also: The new Challenge of Omni-Channels

And next: Mixing the channels and the challenges: Omni-Channels



Development of Retail Omni-channels



* Sourced from the most recent, audited annual reports as of April 2015

** Index developed by Wilson Perumal & Company to indicate the level of development of a retailer's Omni-channel (e.g. cross-channel operations, technological integration, social media capabilities)

**And beyond?
Servitization, Platforms, Business
Models, Ecosystems, etc.**

See also the Module on Digitalization