

SUPPLY CHAIN DYNAMICS, AGILITY AND RELATIONSHIP MANAGEMENT: BSS 421



WEEK 12: TYPES OF SUPPLY CHAIN RELATIONSHIPS: PARTNERSHIPS AND MULT-TIERED SUPPLY CHAIN RELATIONSHIPS

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Task for the Week



1. Explain why you visit certain retail outlets for the goods you buy.
The retailers provide extra services or are supportive.
1. Identify industries where you experience adversarial behaviour and explain why that happens.
In public transport and hawking of merchandise.
1. Explain how you about repairing any breakdown in the house. I find the artisans who work on temporary basis in the neighbour hood. **They advise on items to be bought for repairs, buy them and fix the problem.**
4. Identify the goods that you do not purchase without asking for advise first.
Electrical repairs, plumbing, buying electronic devise like a phone, iPad, camera etc.

Recap of Last Week's Topic



We discussed various types of business relationships and their characteristics. These were ;

1. **Tactical relationships which includes** adversarial, arm's length and transactional buyer- supplier relationship.
2. **Closer tactical relationships** can be divided into closer tactical relationship and single sourced relationships.
3. **Strategic Relationships.** These include outsourcing relationship, strategic partnership relationship, partnership relationship and co-destiny relationship .
4. How relationships relate with supply chain dynamics.

Objectives of this Week's Topic



The overall objective is to describe supply chain partnerships and mult-tiered relations. Specific objectives are;

1. Differentiate the concepts of supply chain partnerships, supply chain collaborations and supply chain integration.
2. Describe mult-tiered relationships.
3. Explain the role of mult-tiered relations in certain industries and supply chain dynamics.
4. The influence of partnerships, collaborations, integrations and mult-tiered relations to supply chain dynamics.

Introduction to Supply Chain Partnerships Cont'd



- **Definition:** Fogg (2006) pp287-292 and Mozafari & Tafazoli (2012). defines partnerships as a long term commitment between buyer and supplier based on trust and mutually agreed upon objectives.
- The relationship involve sharing information, risks and rewards for the mutual benefit.
- They are close relationship that leads to joint gains.
- Performance of partnerships is therefore higher compared to companies working together without a partnership because of synergies.
- There are concepts that are closely related to partnerships. These are collaboration and integration.

Characteristics of Supply Chain Partnerships

Cont'd



- Lambert et al. (1996) observes that partnerships are characterized by three dimensions namely ; Drivers, facilitators and components that lead to outcomes.
- Svetlana, & Tevanyan, (2019) equally identifies closely related characteristics. These are motivators, contributors, business process components and results, along which a working partnerships model can be established. Therefore linking the literature to today's relationships. the Lambert et al. (1996) definition still applies with additions related to changing times and in the context of the industry.

Characteristics of Supply Chain Partnerships

Cont'd



Buyer and supplier partnerships can therefore be explained by-;

1. **Drivers** : These are aspects that provide benefit for the members of a supply chain where cost reduction provides the greatest incentive although in recent times there is more emphasis on value addition. Others aspects include customer service, improvement, marketing and profit stability.
- **Cost reduction** includes transportation costs, packaging costs, information costs, product cost and increased managerial efficiency.
- **Customer service** results from integration activities that lead to reduced inventory, shorter product cycles, more timely and accurate information.

Introduction to Supply Chain Partnerships Cont'd



- **Marketing advantage** is achieved through enhanced marketing mix, ease of entry to the new markets and better access to technology and innovation.
 - **Profit stability and growth** are aspects of performance and they are the main drivers for members in most partnerships.
2. **Facilitators or contributors** refer to corporate elements that facilitate the partnerships such as corporate compatibility, common philosophy, techniques of production, mutuality, values, cultures and business objectives.

Introduction to Supply Chain Partnerships

Cont'd



3. Components or business processes are activities and processes that management establishes and controls throughout the year. They make the partnership work and create benefits for the partners. Examples of components are; joint planning, operations, communication, sharing risks and rewards, trust , commitment, financial investment etc.

4. Out comes / results are profit enhancement, process improvement and competitive advantage.

1. Lambert, D.M., Emmelhainz, M.A. and Gardner, J.T. (1996), "Developing and Implementing Supply Chain Partnerships", The International Journal of Logistics Management, Vol. 7 No. 2, pp. 1-18.
<https://doi.org/10.1108/09574099610805485>.

2. Svetlana, S. & Tevanyan, A. (2019) : The Formation of Partnership Model in Supply Chain Management;
JIOP Conference Series: Materials Science and Engineering
DOI - 10.1088/1757-899X/940/1/012049

Partnerships, Collaborations and Integration



- **Collaborations** refer to working together to improve performance through achievement of partner member objectives.
- Collaboration is different from partnerships in that collaborations target certain objectives and in most cases may not last as long as a partnership.
- Collaborations can be vertical or horizontal. Vertical collaborations are those collaborations involving members at different stages of the supply chain. Smaller or bigger suppliers, distributors, agents etc.
- Horizontal collaborations involve supply chain members who are in the same stage of the supply chain e.g. supplier and buyer with similar capability and capacity.

Partnerships, Collaborations and Integration



Collaboration is based on ;

1. Communication about challenges that face a given industry
2. Accumulating and sharing of large data.
3. Resource sharing.
4. Industrial wide transformation of member organizations

Vertical collaboration and horizontal collaborations differ in magnitude from industry to organization to organization.

Hudnurkar *a Jakhar a, S & Rathod ,U. (2013) : Factors affecting collaboration in supply chain:

A literature Review. *Procedia - Social and Behavioral Sciences* 133 p189 – 20

Partnerships, Collaborations and Integration



1. Stefan et al.,(2005) observed that collaborations are driven by information sharing, joint planning and Joint problem solving.
2. Joint performance measures indicators and leveraging.

In supply chains, collaboration is about working together in order to improve current situation of buyer and supplier organizations without much of a future business focus.

It can develop into partnerships.

Partnerships , Integration and collaborations



- **Integration.** Supply chain integration refers to the unification of all entities involved in delivering a product to a consumer and ensuring that they operate within a cohesive system(Awad & Nassar, 2010). It's a logistical aspect of collaboration and partnerships.
- Achieving these demands require coordination and alignment of all stakeholders who consistently work towards a common objective

Lofti et al.(2013) explains that there are three forms of integration.

Customer integration. This is acquiring of information from customers that aid in delivering a desired product.

Partnerships , Integration and collaborations



- **supplier integration** refers to upstream integration with aim of acquiring inputs in form of supplies, information, finances to facilitate production process. An enterprise owns all upstream functions. E.g. a brewing industry owning grain farms and transportation. The enterprise becomes its own supplier.
- **Internal integration** refers to Integration within all departments to handle all inbound logistics, input-output operations and outbound logistics. It involves unifying all departments and functions under the control of the manufacturer in order to fulfill customers' requirements.

Partnerships and Supply Chain Dynamics



1. **Reduce costs.** Businesses share costs and risks with other entities across the supply chain to lower overall costs.

2. **Fullfil orders faster.** Working together improves the efficiency of certain parts of the supply chain and allows products to reach the end customer more faster compared to where there is no partnership.

3. **Improved customer service.** Being able to deliver products to customers more quickly can lead to improved customer satisfaction. Shared knowledge can also enable members to meet customer requirement more accurately and efficiently.

4. **Improve forecasting.** Open communication across a supply chain enable suppliers understand demand better. Members can prevent stock outs and reduce waste.

Partnerships and Supply Chain Dynamics



5. **Being sensitive to environment.** Partners can work together to make their supply chains greener. For instance, they could agree on biodegradable packaging or jointly invest in improved product that does not damage environment or living organisms.
6. **Gaining competitive advantage.** Collaborating across a supply chain can enable a firm to stay ahead of competition by understanding pricing, lead times and customer service.
7. **Identifying promotions strategies that work better for certain customers.**
8. **Improved quality.** Businesses can collaborate to ensure that individual parts of manufacturing work together in synergy to create a high-quality product.

Mult-tiered / mult-level supply chain Relationships



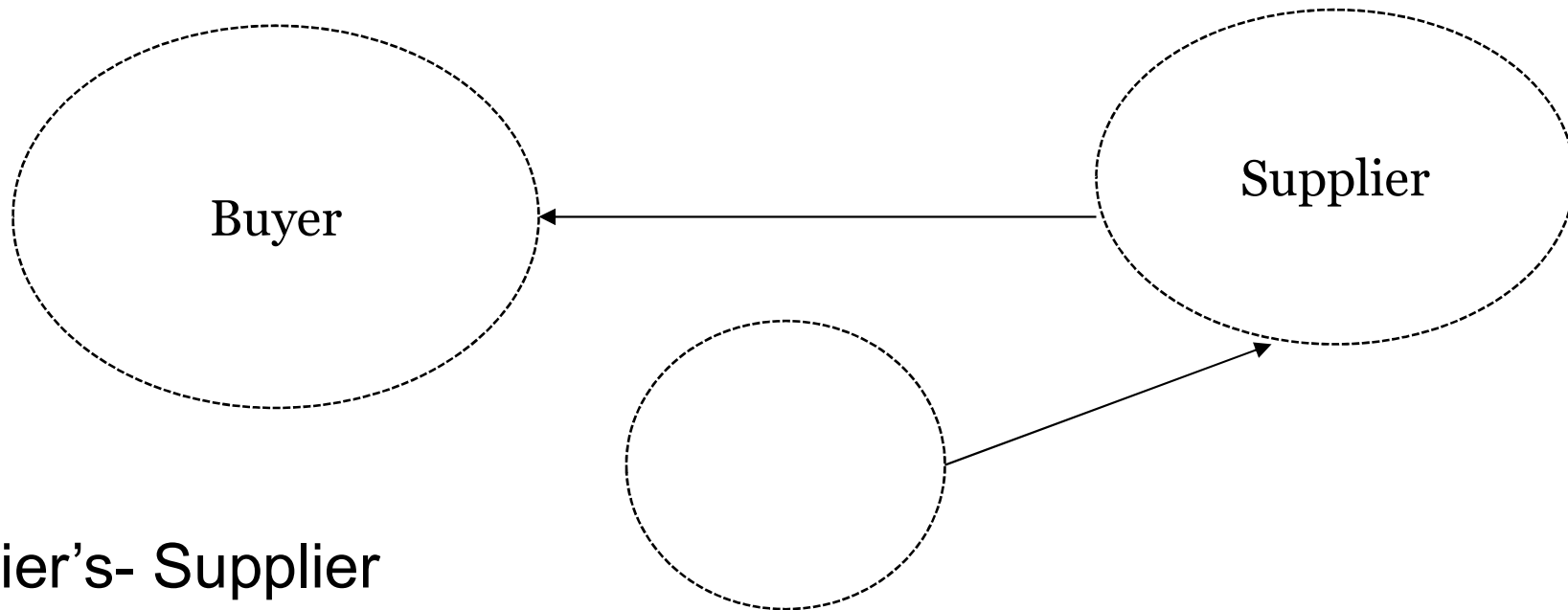
Ordinarily supply chain relationships are known to be between a buyer and supplier who relate on certain terms that they have agreed upon.



Partnerships and Supply Chain Dynamics



The business environment has become very complex such that A buyer and a supplier may have other business relations that affect their closeness but are not part of the reasons that bind them together. The relationship can be as follows



Supplier's- Supplier

This is referred to as a triad buyer – supplier relationship (Mena et al, 2013) p 68.

Mult-tiered Supply Chain Relationship



A mult-tiered relationship are also know as multi level buyer-supplier relationships. They are found in relationships of large manufacturer with a huge supplier base such that if the buyer was to deal with the suppliers, only receiving of supplies would result and no time would be dedicated to actual manufacturing.

Consider a car manufacture.

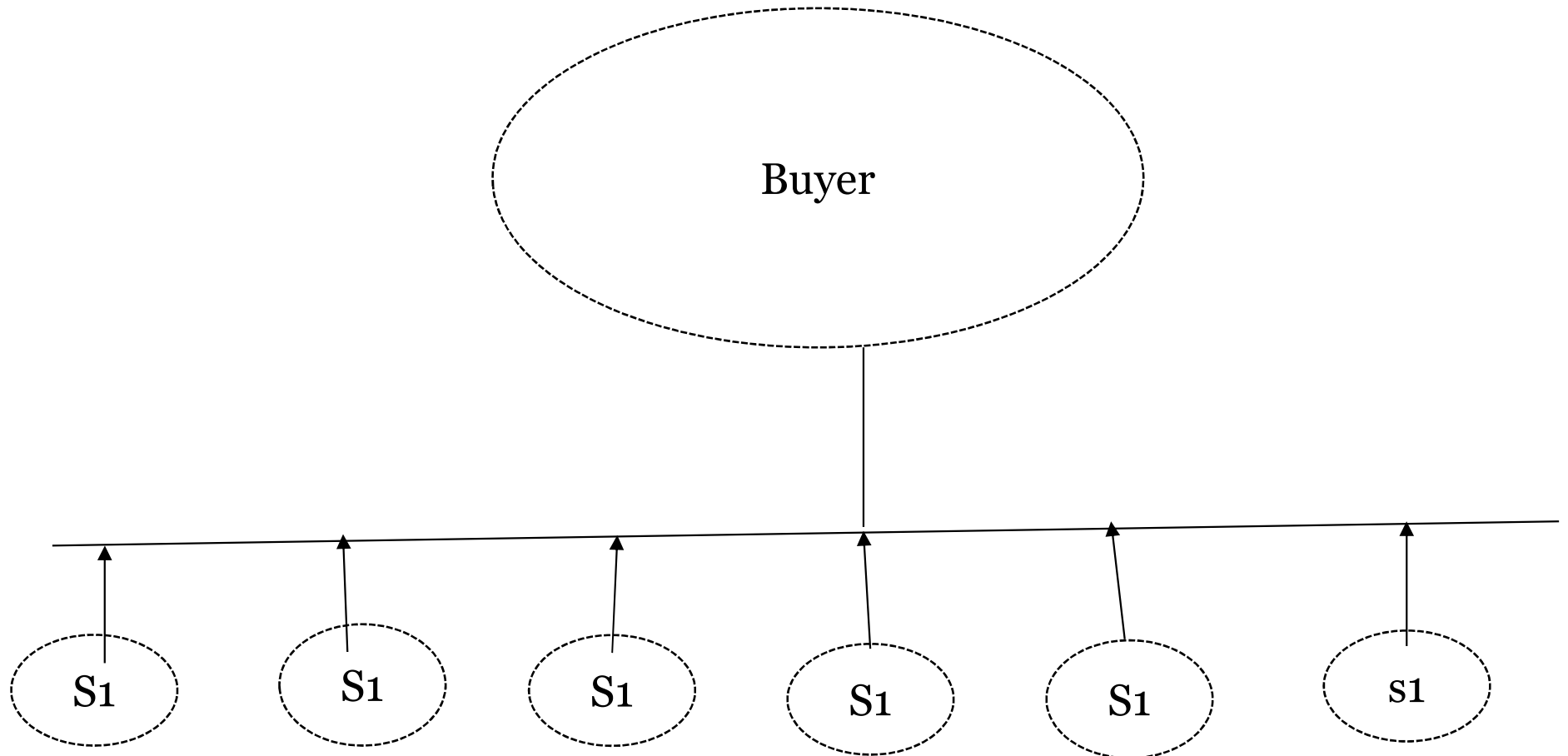
A car can be decomposed into metal, rubber and glass which results into small components like screws, mirrors, panels, small metals etc. If supplies of all parts that make a car is done, the relationship would look as shown below.

Mult-tiered Supply Chain Relationship



Fogg (2006) p 289

Shows this kind of relationships as follows



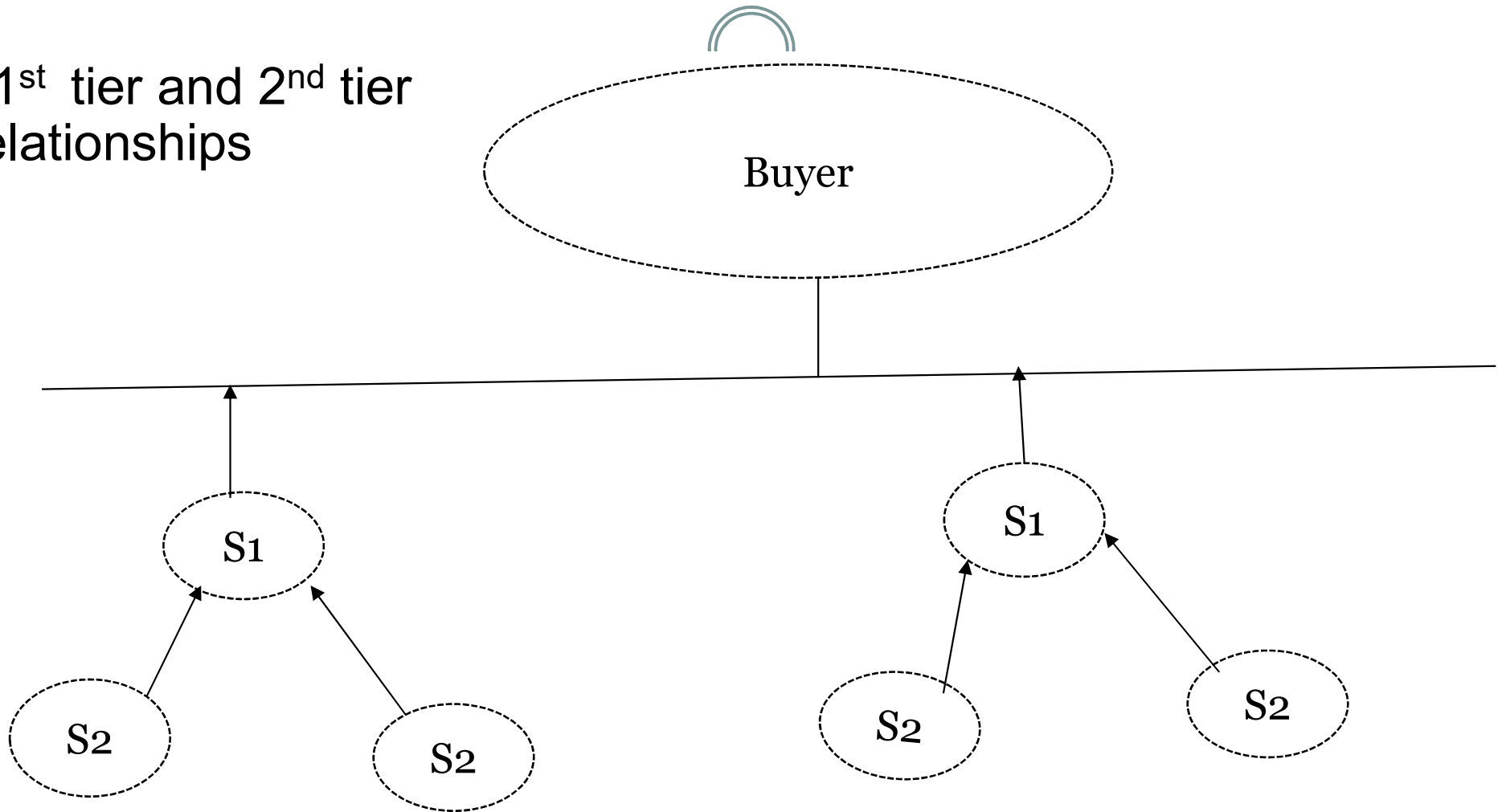
Mult-tiered Supply Chain Relationship Cont'd



- In stead of receiving small supplies that would consume all the time, manufacturing is done on modular base such that suppliers now become large companies that partner with the main producer such that they produce modules like whole engines, a car body that is fitted well ready to be fixed and get final finishing, seats and any other component that is part of a car.
- The car manufacturer deals with just a few suppliers who have different levels of other suppliers below them.
- They partner, collaborate and integrate in the supply chains with second tier suppliers. Relationship can be illustrated as show below.

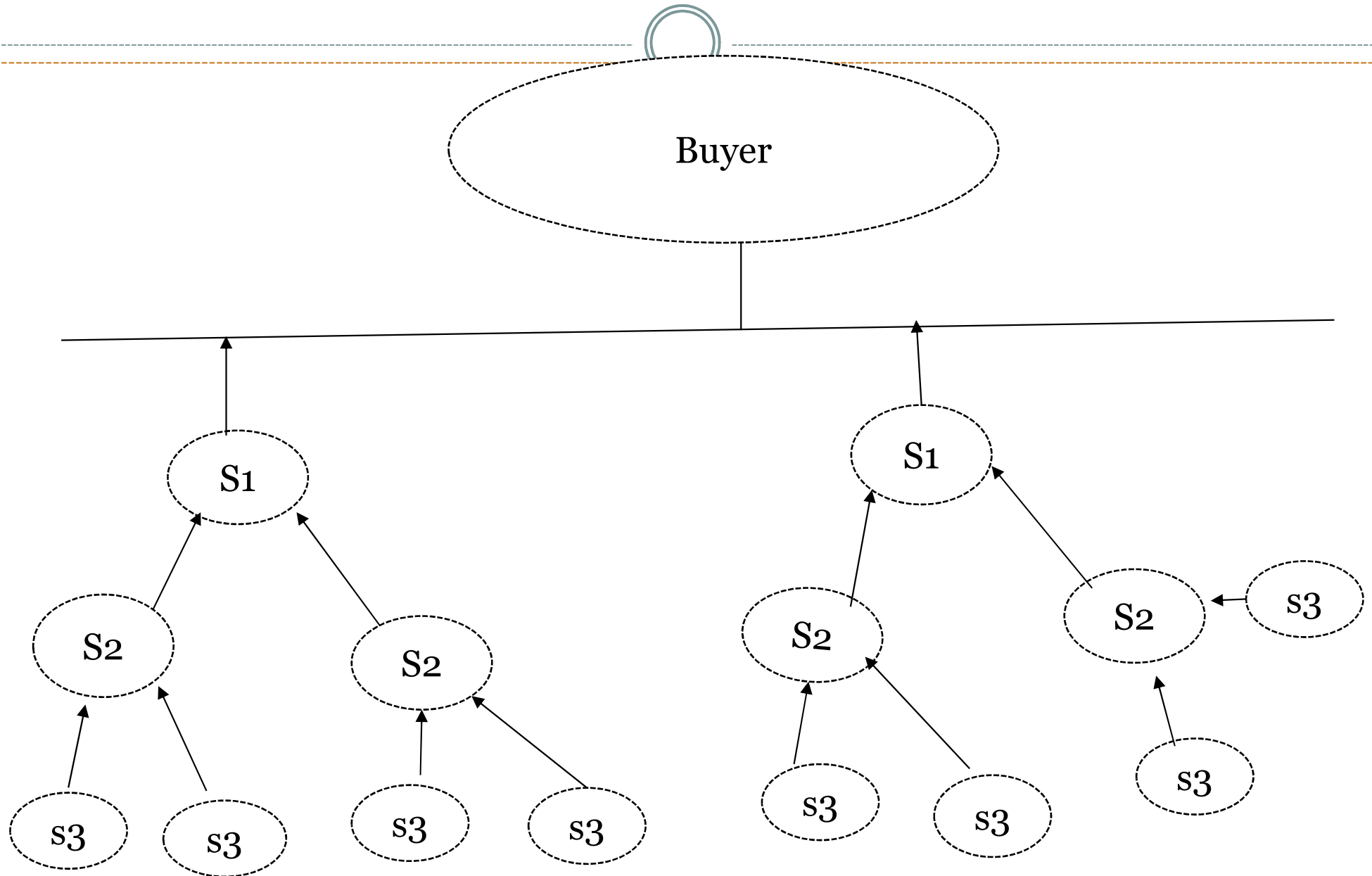
Mult-tiered Supply Chain Relationship

It 1st tier and 2nd tier relationships



If a supplier chooses to deal with two suppliers this is how the relationship would look like.

Mult-tiered Supply Chain Relationship



Mult-tiered Supply Chain Relationship cont'd



- A mult- tiered relationship can have several layers of the suppliers. The suppliers closest to the buyer forms Tier One (S1) suppliers. Tier two (S2) has tier three (S3) and tier three has tiers below.
- The mult-tiered relationships such as partnerships. Integration and collaborations blend in a way they serve the strategic requirements of the member institutions .

Mult-tiered Supply Chain Relationship Cont'd



A mult-tiered relationship has the following advantages. The main manufacturer ;

1. Has less administration and management of transactional records.
2. Reduction of the number of transactions to be done.
3. Coordination of deliveries is less.
4. There is close and better relationship with fewer suppliers.

Mult-tiered Supply Chain Relationship Cont'd



5. The suppliers have their own subcontractors. The buyer is able to harness the expertise from the subcontractors.
6. The long relationship with few trusted suppliers enable electronic integration with the suppliers .e.g. ERP
7. There is less stock at the purchasers inventory.
8. The buyer does strategic management of suppliers which is much less demanding than managing a large supplier base.

Mult-tiered Supply Chain Relationship Cont'd



Control and power of the main buyer on mult-tiered relationship is exercised in the following ways.

1. **Determination of what is made by the subcontractors.** The buyer gives the specification of what is made and supplied to the next tier. The subcontractors who are answerable to a higher tier may feel like they have not given a chance to suggest alternatives or innovations.
2. **Schedules are controlled by the manufacturer** whose demands are determined by the type of manufacturing orientation. E.g. for just -in-Time manufacturing the schedules are more tight.

Mult-tiered Supply Chain Relationship Cont'd



3. **Choosing of the suppliers.** The buyer may sometimes decide to choose lower tier supplier implying that that the tier one supply chains are disrupted.

4. **Standards.** In some cases the standards set by the buyer may not be possible to attain because of higher expectations compared to capability of the supplier lower in the supply chains. For example, the farm produce. The farmer may not be in control of the size or shape of the produce yet the buyer give certain specification.

Mult-tiered Supply Chain Relationship Cont'd



5. Use of the contract. The buyer may negotiate a good price with tier one supplier but tier one supplier may not extend the same to the lower tier suppliers because they have an existing contract. This becomes unfair to the lower level suppliers. (I.e. if tier 1 supplier makes a good profit, the supplier may not increase the prices for the other tiers.)

6. Differing profit margin. The buyer, the tier one supplier and other suppliers may use different costing methods. The buyer and tier one supplier may make more profit from the kind of costing methods that they use but they may use different cost structures for the lower structures to lower the profit margins.

Mult-tiered Supply Chain Relationship Cont'd



7. Purchasing organizations may also be over dependent upon a particular market niche. The sellers may use the customers to lock in the purchasers such a market niches.

1. Fogg, M. (2006). Managing purchasing and supply relationships
PMMS Consulting Group. Pp287-292
The Chartered Institute of Purchasing and Supply, SL UK.

2. Mena, C., Humphries, A. Choi, T. (2013). Toward a Theory of Multi-Tier Supply Chain Management. Journal of Supply Chain management Vol. 49 (2) p 58-75

Mult-tiered Supply Chain Relationship Cont'd



Dependency in supply chain Mult-tiered relationships.

1. The purchase standard from a single source is that an organization should put 30% only of their business with one supplier with the logic that the buyer should not be over exposed.

2. Some multitiered organizations put 100% of their business with one supplier. This is too much exposure for an organization. Tier one relationships are almost co-destiny in all mult-tiered relationship.

For example, if a product becomes obsolete, the producer is left with inventory as a waste such as the case of fashion industry.

Mult-tiered Supply Chain Relationship Cont'd



Dependency in supply chain mult-tiered relationship cont'd

3.If dominant supply chain member acts selfishly, the suppliers may suffer. To avoid this, supplier can supply to other buyers who are not part of a mult-tiered relationship in order to be well cushioned.

4.In the co-destiny relationships there should be risk management processes.

Mult-tiered Supply Chain Relationship Cont'd



Over dependence becomes critical when-

1. The main buyer insist that supplier should use certain processes and standards in order to reduce the ability of the supplier to win other businesses beyond the relationship.
2. A relationship agreement that is not enforceable may exists such that the supplier is locked in supplying a certain product to one buyer and not any other.
3. The survival of one of the supply chain members is threatened by the activity or lack of activity by another member of the supply chain.

Partnerships, Multi-tiered Relationship and Supply Chain dynamics



1. The relationships help members to grow in a way that cannot be achieved by a single institution.
2. Relationships are used for competitive advantage in a way that competitors cannot trace where competitive advantage is coming from.
3. The relationship are characteristic of large manufacturers and therefore small enterprises are disadvantaged.
4. Supply chain integration and collaborations require skills and competences to succeed unlike partnerships that are relational.
5. Smaller buyers and suppliers can form purchase consortium in order to compete with partnership of big organizations.

Task for this week's Topic



1. Why are mult-tiered relationships not common in most industries.
2. Give examples of partnerships in product and service industries.
3. Why are collaborations and integrations not as common as partnerships.
4. Why is there a wide spread attempt to form relationships between organizations in recent times? (in the 2020s)

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*THANK YOU ALL
WISHING YOU WELL
HAVE A LOVELY WEEK*