**Theme 3 –Managing 21st Century Network Organisations – Snow, Miles, Coleman**

**Intro:**

* In industry after industry, multilevel hierarchies have given way to clusters of business units coordinated by market mechanism rather than by layers of middle management planers and schedulers.
* These market guided entities commonly called ‘network organisations’
* The widespread changeover is producing a new agenda for managers, there is growing agreement about the basic characteristics of network orgs, the forces that shaped it and the arenas.
* What is unclear is how networks are designed and operated and where their future application lie.

**Network Structures- Causes and Effects**

* Vertically integrated companies in us economy used their advantages of scale and experience to expand overseas.
* 1980s- markets worldwide changed dramatically. Today competitive pressures demand both efficiency and effectiveness.
* Firms must adapt with increasing speed to market pressures and competitors innovation, simultaneously controlling and even lowering product or service costs.
* Enterprises of 1950s and 1960s failed because of scale of economics through central planning and control mechanism.
* Instead of advocating resource accumulation and control, the new business equation linked competitive success to doing fewer things better with less.
* Managers who want their companies strong in 21st century urged:
  + Search globally for opportunities and resources.
  + Maximise returns on all assets dedicated to business.
  + Perform only function for which the company has, or can develop, expert skill.
  + Outsource those activities that can be preformed quicker, more effectively or at lower costs by others.
* Firms following these prescriptions often found themselves organising into networks
* By using a network structure a firm can operate an ongoing business efficiently and innovatively focusing on those things it does well and contracting with other firms for the remaining resources.
* Alternatively it can enter new businesses with minimal financial exposure and at an optimal size giving its unique competencies.

**Globalisation and Technological Change:**

* 70-85% of Us economy feeling impact of foreign competition.
* Foreign competitors reduce profits margins on low end goods to the barest minimum and they innovate across high end product and services at increasing rates.
* Foreign competitors are technologically sophisticated. Technological innovations are transferring from one industry to another and across international borders at increasing speed. Firms find it hard to build barriers of technology or location around their businesses.
* By limiting operations and performing them expertly firms require less planning and coordination so they can accelerate product and service innovation.
* Whether the objective is to extend distribution reach, increase manufacturing efficiency, add design capability the global economy is full of opportunities for networking.

**Deregulation:**

* Financial deregulation has caused an explosion of international profit seeking activity.
* Frequently firms find the rules of the game being rewritten after they have placed their bet.
* Essentially deregulation unleashes entrepreneurial behaviour, which in turn raises the level of competition.
* Deregulation creates new outsourcing opportunities.
* Most importantly deregulation reduces margins and requires companies to maximise returns on all assets.

**Work force Demographics:**

* As work forces matures, human resource costs will rise mainly because older workers draw on companies health care and pension benefits.
* Flexibility and mobility in work will decline as old people wont be retrained.
* Rising costs and decreasing flexibility are stimulating US companies to search globally for new human resources and to develop empowerment schemes that generate greater returns from their current stock of human capital.
* Given these demographic trends the network structure and its operating mechanisms offer some distinct advantages.
* Firstly will accommodate older workers with part time jobs, secondly firms will retain as small a permanent work force as possible, taking more temporary employees.
* Third more and more firms will allow their employees to make their services available to other firms on a contractual basis.
* Although network form allows for a smaller permanent work force, it requires it to be highly trained.
* For permanent workers firm must be prepared to make large continuing investments in training and development.

**Communications and Computer Technologies:**

* Network orgs cant operate efficiently unless member firms have the ability to communicate quickly accurately and over great distances.
* The cost of data transmission has been declining consistently since 1970s.
* Information processing capacity and geographic distance are no longer major constraints in designing an org.
* Computers are changing traditional concept of product design and production.
* A single manufacturing site can serve several product designers,
* Globalisation and technological change, coupled with deregulation and changing work force demographics have created a new competitive reality.

**Types of Network Organisations:**

* As firms turned to some form of network organisation to meet competitive challenges 3 types of structures became prominent: *internal, stable and dynamic.I*

**Internal Network:**

* Arises to capture entrepreneurial and market benefits without having the company engaging in much outsourcing.
* Owns all or most of the assets associated with business
* Basic logic of internal network is that if internal units have to operate with prices set by the market then they will constantly seek innovations that improve their performances.
* GM-reduced number of its components divisions to 8. Each division pursues its own speciality, together they create a ‘specialisation consortium’.
* Turning GM’s formerly rigid and inefficient components divisions into a group of coordinated and flexible subcontractors required 2 major actions.
  + First-parent corporation established clear performance measures for each of the divisions so their behaviour could be legitimately compared to taht of external suppliers.
  + Second-each division assigned an area of expertise related to a particular automotive system or subassembly.
  + Another example AC Rochester division.
* If this structure continued through GM the corporate headquarters would vecome a holding company that maintained an interest in a broad array of specialisation consortia.
* Multinational resource based companies also gravitate toward internal networks.
* International oil company- central location deployment no good. To operate properly each node must interact regularly with outsiders, thus inside the company clusters of business units grouped by region and product category can be seen buying and selling from one another as well as from outsiders.
* Internal networks may fall victim to corporate policies. Instead of exchanging goods at verifiable market prices, divisions transfer goods at administered prices that do not reflect external realities-bad decisions result.

**Stable Network:**

* Typically employs partial outsourcing and is a way of injecting flexibility into the overall value chain.
* Assets owned by several firms but dedicated to a particular business.
* Often set of vendors nestled around a large core firm, either providing inputs tto the firm or distributing its outputs.
* BMW-any part of it is a candidate for outsourcing, 55-75% of total production costs come from outsourced parts.
* BMW operating units obligated to prove competence according to market standard.
* BMW keeps pace with developments in a variety of relevant product and process technologies through its own subsidiaries any by partnerships.
* Each of subsideries focuses on extending the boundaries of knowledge related to automobile engineering and design.
* A stable network spreads asset ownership and risk across independent firms.
* The benefits of stability are the dependability of supply or distribution as well as close cooperation on scheduling and quality requirements.
* The cost of stability are mutual dependence and some loss of flexibility.

**Dynamic Network:**

* In faster paced competitive environments some firms pushing it to limit of its capabilities.
* Fashion, toys, publishing may require of allow firms to outsource extensively.
* The lead firm identifies and assembles assets owned by other companies.
* Example of broker led dynamic network- lewis galoob toys.-100 employees run the entire operation.
  + Independent inventors and entertainment companies conceive most of the products while outside specialist do most of the design and engineering.
  + Contracts for manufacturing and packaging with vendors in hong kong.
  + Distributes toys through commissioned manufacturers representatives.
* Dynamic networks can provide both specialisation and flexibility.
* Each network node practices its particular expertise and if brokers are able to package resources quickly the company achieves maximum responsiveness.
* Run risk of quality variation across firms, needed expertise being temporarily unavailable and possible exploitation of proprietary knowledge or technology.
* Works best in competitive situations and also where design and production cycles are short enough to prevent knockoffs or where proprietary rights can be protected by law or by outsourcing only standard parts and assemblies.

**The Brokers Role**

* In many network firms certain key managers operate across rather than within hierarchies creating and assembling resources controlled by outside parties.
* These managers can be though of as brokers.
* Three brokers roles important:architect lead operator and caretaker.

**Architect**

* Managers who act as architect facilitate the emergence of specific operating networks.
* 13th century- some early network architects fuelled the rapid growth of European cottage textile industry by designing a system for them.
* The architects of this system financed the network by providing workers with ram materials to be paid for when the finished goods were delivered.
* A network architect seldom has a clear or complete vision of all the specific operating networks that may emerge from his efforts.
* Frequently only has a vague concept of the product, business concept is brought into clearer focus as broker seeks out firms with desirable expertise.
* In designing an internal network it may be relatively easy to identify the appropriate organisational units for each stage of the value chain.
* In both stable and dynamic networks architects role is complicated because the resources that must be organised are not contained entirely within the firm.
* BMW-had to identify outside firms who would be suitable partners for R&D. When partners and relationships change frequently as in dynamic networks certain manages must devote ongoing effort to the architects role.
* Overall result of architects efforts can be potrayed as a grid of firms and value chain elements.
* Computer business-Tandy corporation offers a product that is mostly designed manufactured and sold in house. Apple computers are like Tandy but contains more distributors and retailers downstream. Third network has as its centre of gravity the distrib and retail portion of value chain. Here dis-retailers buy off the shelf component form various manufactures and assemble them themselves.

**Lead Operator:**

* As grid of firms clustered around a particular business evolves, emphasis shifts from design to decisions about operation.
* The lead operator formally connects specific fims together into an operating network.
* Galoob toys- key exe form this role. They select from a know set of potential partners those individuals and frims needed to design, manufacture and sell toys. Firm outsources virtually every operating activity choosing to perform only the brokering role in house.
* Often played by a firm positioned downstream in value chain. Rely on their negotiating and contracting skills to hook together firm into alliances.
* Lead operator not limited to downstream. Intel formed alliances with manufactures upstream.

**Caretaker:**

* Networks require continual enhancement if they are to operate effectively. The process of network development is ongoing.- manager who focus on echancement activity are called caretaker.
* Role is multifunctional and just as important as archietec and lead operator to success of firm.
* Monitors a large number of relationships with respect to the specific operating network as well as the larger grid
* in operating terms this means sharing info among firms about how the network runs as well as info on recent technological and marketing developments.
* Caretaker does more than help the network plan; managers who play this role also help network learn.
* Caretaker may also take nurturing and disciplinary behaviour is firm appears to be falling behind.

**Implications for broker selection and development:**

* If as seems likely, network orgs continue to spread it is important to consider how managers with broker skills will be selected and developed.
* It seems that many corporate experiences and even some uni courses may be vechicles for developing needed skills.

**Network Design:**

* Many business experiences have characteristics related to network design.
* Network designers are essentially entrepreneurs , pulling together skills and equipment needed to produce a new product and occasionally arranging and financing.
* In most corporations only a limited number of managers are individuals with direct entrepreuneurial experience that can be drawn on a resource.
* 3M- intrapreneuring-rewarding employees for turning ideas into prototypes with limited resources.
* Consulting firm- selects and develops intrapreneurs. Have daily duties and project to work on at same time. Have to draw from all different sources .
* Business schools now offer courses in entrepreneurship which cover product and project management, intrapreneuring with writing of business plans.
* Course work not a substitute for hands on experience, give students opportunity to explore many aspects of network design and operation.

**Network Operation:**

* Task of putting netqork into operation by linking all the value chain components needed for a given product or service involves not only conceptual and organisational skills but also skill to negotiate mutually beneficial returns for the contributions of all participants.
* Partnering common in construction industry where various parties meet together to uncover mutual interests and to create the mechanisms and build the trust necessary for resolving the inevitable disputes and inequities.
* Understanding processes of collaborative negotiation is an essential characteristic of the lead operator.
* As networks extend internationally extensive international knowledge and experience required.

**Network Caretaking:**

* Maintain and enhancing an existing network.
* One aspect of caretaking is taking care or yourself by being an active member of a trade association.
* Develop a sense of community among the members of a network. Easier to install in internal network than a dynamic network where assets are spread out.
* **Brokers** involved in task of nurturing network will benefit from team building skills.
* in sum the job of broker with its attendant roles of architect ,lead operator and carekateer is unlikely to be filled by managers from any particular part of today corporation.brokers job far too complex to lend itself to the use of any available selection instruments.

**The future:**

* forces pushing toward network forms of orgs are likely to continue.
* New foreign producers will add to competitive pressures.
* Network orgs will emerge in a variety of circumstances.
* As competition intensifies companies will find themselves constantly subjecting virtually every internal asset to market tests in order to justify its ownership.
* The most successful firms will maximise the utilisation of their assets and they will learn how to market and deploy those assets to other firms.
* Ultimately every firm may have to decide whether it should creat a cost based or investment based network.
* Eventually cost based global networks which rely on inexpensive labour will approach an equilibrium from which it will be difficult to extract further competitive advantages.
* Investment driven networks can be self renewing. These networks will be constructed around firms that can make continual capital expenditures fo the most advanced technology or for additional training and development of top quality people