Eleonora Escalante, MBA - MEng

Strategic Corporate Advisory Services Creating Corporate Integral Value (CIV)

Leg 6. Value Chain Analysis Innovations Through Value Chain Analysis





OUTLINE Leg 6. Value Chain Analysis





OUTLINE Leg 6. Value Chain Analysis





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Today we will see 5 different value chains which are used as essential tools for analyzing companies and find sources of innovation.







- a) The Supply Chain
- b) The Extended Value Chain
- c) The Digital Value Chain
- d) The Global Value Chain
- e) The Shared Value Chain



We are

here!



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a. The Supply Chain.

"A supply chain emphasizes the **manufacturing and distribution-related steps**, whereas a value chain also includes the importance of other activities such as design and branding, marketing, human resources, etc. The value chain includes more value activities that add value to a product, but do not necessarily reflect a physical transformation.









Figure Source: http://shafeelaw.com/supply-chain-management/



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a. The Supply Chain.

- Keith Oliver, a consultant at Booz Allen Hamilton is credited with the term's invention in 1982.
- When we remember the two main uses of the Value Chain Analysis: Cost Analysis and Differentiation Analysis, it is easier to understand why the use of Supply Chain Analysis boomed in the 1980s.
- The term Supply Chain management (SCM) was developed to express the need to integrate the key business processes, from original suppliers to end users in MANUFACTURING and PRODUCTION.
- SCM is the active management of supply chain activities. It represents a conscious effort by the supply chain firms to develop and run supply chains in the most effective and efficient ways possible.
- The concept of SCM is based on two ideas.









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b. The Extended Value Chain.

Legal

Systems



Manufacturers Suppliers Retailers **Distributors** Consumers Merchants Carriers Governments **NGOs**

Technology Developers

Logistics **Providers**

Example of a Mobile Company extended value Chain ecosystem by Hau Lee, PhD Professor at Stanford.





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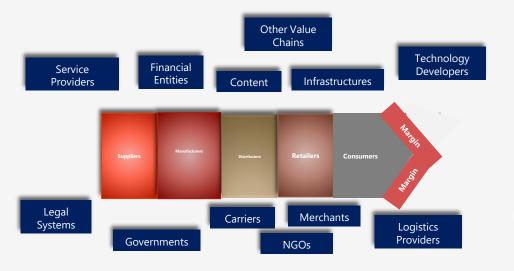


b. The Extended Value Chain



Hau L. Lee
The Thoma Professor of Operations,
Information and Technology at
Stanford University Graduate School of
Business.

- Professor Lee has been working at Stanford since 1983.
- He is Director, Supply Chain Management: Strategies and Innovations and Co-Director, Value Chain Innovation Initiative.
- He teaches a course about Value Chain Innovations at Stanford.
- Professor Lee utilizes the Extended Supply Chain to teach us how to recognize aspects of innovation in our businesses.
- He utilizes the term extended value chain ecosystem.







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b. The Extended Value Chain



Hau L. Lee The Thoma Professor of Operations, Information and Technology at Stanford University Graduate School of Business.

- Professor Lee comes from a background of Operations and Information Technology.
- The term Business Ecosystem has been adopted by the technological and internet companies based in Silicon Valley as part of their buzzword and jargon to describe their own value chain systems.
- The word Ecosystem applied to business was coined by James Moore in 1993. Let's see what is Professor Moore perspective and interpretation of the business value chain system and why does he use this term when explaining IT – communications companies.



Silicon Valley is

Source: https://itif.org/publications/2014/11/30/how-silicon-valley-innovation-ecosystemcreates-success



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Google

YAHOO!

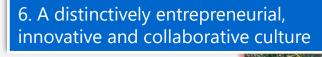
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Silicon Valley is a business Ecosystem

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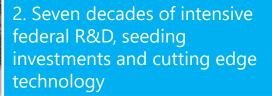
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1.The world's greatest assembly of scientific research capacity: five world class research university, five US National Laboratories, Multiple world-class research institutions



5. Inviting location for high-skilled talent, especially foreign immigrants for study higher degrees.





4. Many of the world's most innovative companies: Six of the top technology companies are located within 10sq mile radius

3. World-Leading Access to Risk Capital: 40% US Venture Capital is invested in Silicon Valley



Source: https://itif.org/publications/2014/11/30/how-silicon-valleyinnovation-ecosystem-creates-success Eleonora Escalante MBA-MEng, Strategic Corporate Advisory Services



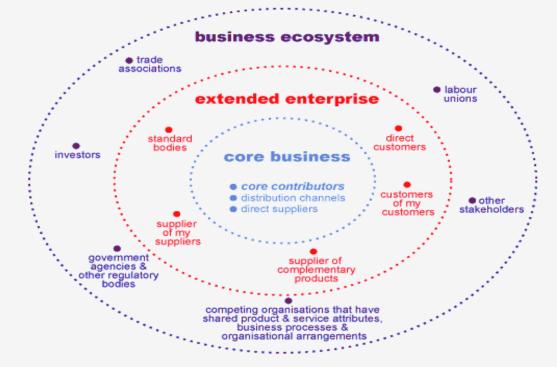
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In 1993, James Moore wrote an article about a term which is loved in the tech community: Ecosystems. This term comes from a paper which won the Mckinsey Award of the year for through Value 1993, "Predators and Prey: A new Ecology of Competition".







Jim Moore belongs to a mix of two Strategy schools: The Environmental School and The Configuration School.

Dr. Moore coined the term: "Business ecosystems" to describe networks of companies that collaborate and co-evolve to generate economic value.



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Moore, pioneered the concept "Business ecosystem" and its entrance into the lexicon of business strategy...







James Moore (1948-). Born in Illinois. Doctorate in Human Development Harvard University in 1983. A post-doc in organizations at Stanford University. He earned his undergraduate degree at The Evergreen State College in Washington.

- Dr. James F. Moore studied the interaction of law, technology and economic development in Africa.
- Moore is the Dean's Council of the Harvard School of Public Health and is a member of the International Advisory Board of the Harvard AIDS Institute and the Harvard AIDS Initiative.
- He was a Senior Fellow at Harvard Law School's Berkman Center for Internet and Society where he founded the Open Economies Project.
- He studied change in large scale social, economic, and technical systems and is the pioneer and originator of biological metaphors of organization behavior such as "business ecosystems", "Internet ecosystems" and the ecological approach to alliances and alliance-based competition. His research is primarily based on case studies in the high technology sector where the PC and Internet technologies favored network based competition.



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Moore, pioneered the concept "Business ecosystem" and its entrance into the lexicon of business strategy in the technology industry.

A business ecosystem describes the structure and behavior of a network of high-tech organizations that share a key technological platform and the ways individual firms can flourish in such an environment.

The 5 elements of an ecosystem are:

- customers
- markets
- products
- processes
- organizations
- stakeholders
- government / society.

Actors of the Ecosystem



- Temporal
- Spatial
- Shared Species (diagonal coupling)
- Different interaction type (Node-aligned, multiplex)
- Interconnected
- Multilevel

Relations Ecosystem (Network)



- value (niche creation)
- critical mass (robustness)
- continuous performance improvement (productivity)
- •co-evolution or the joint learning and optimization effects.

Performance OUTSTANDI or Health of the Ecosystem

- Birth
- Expansion
- Leadership
- Self Renewal

Dynamics or **Evolution of** the Ecosystem

- Keystone
- Physical Dominator
- Value Dominator
- Niche Players

Strategic Roles within the Ecosystem





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The term "Business Ecosystem" has been used in technology, particularly used within the Silicon Valley internet based companies.

- The essence of a business ecosystem is that networks between companies need to be analyzed from a higher conceptual level rather than from the viewpoint of individual organizations.
- A business ecosystem's scope is the set of positive sum relationships (symbiosis) between actors who work together around a core technology platform. Irrespective of an organization's individual strength, all actors in a business ecosystem are connected and share the success or failure of the network as a whole.

AUTHOR:	Moore, James F.	
COUNTRY:	United States	
PERIOD:	1993	
TYPE:	Model	
ACTIVITY:	Analyze, design and reflect	
TOPIC:	Strategic management, org. design & development and innovation & risk	
ABSTRACTION LEVEL:	Environmental	
PERSPECTIVE:	Transformational	2200
STATUS:	Under review	
MODULE:	Innovation	Will Street



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Now that we have understood the word "ecosystem" coined by James Moore in 1993, Professor Hau Lee from Stanford utilizes the extended value chain ecosystem in order to explore innovative opportunities:

- Within node innovations
- Linkage innovations
- Cross-nodes integration innovations
- Workflow innovations
- Nodes reconfigurations
- Business Relationship Innovations

Or Further Information about this theme visit the video of Professor Hau Lee at Stanford online YouTube Channel





https://www.youtube.com/watch?v=7Wuq1T0Kg-Q&t=1s



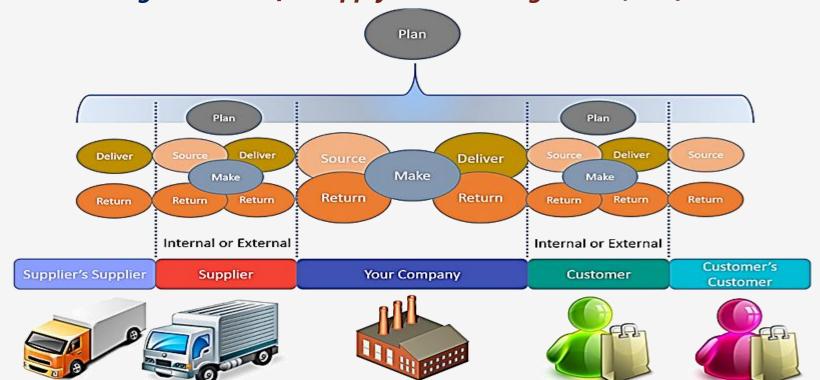
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The Supply Chain operations reference model (SCOR) model is a PROCESS reference model developed and endorsed by the Supply Chain Council as a cross industry, standard diagnostic tool for supply chain management (SCM)







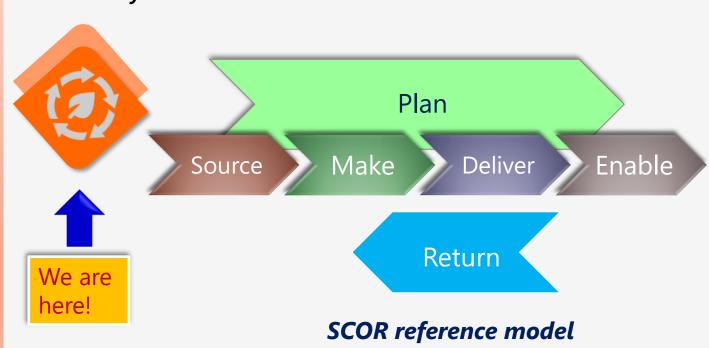




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The Supply Chain Operations Reference model (SCOR) model which helps to each of the parties involved in a value chain to satisfy a customer demand.



- This reference model enables users to address, improve and communicate supply chain management practices within and between all interested parties in the extended enterprise.
- SCOR was developed in 1996 by a firm called PRTM, now part of PWC and AMR Research, now part of Gartner.
- It was endorsed by the Supply Chain Council, now part of APICS.



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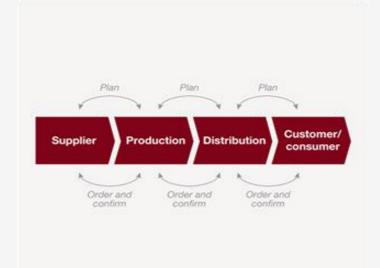




c. The Digital Value Chain

- Each big consulting company has developed their own abstraction model about how to evolve to digital. I will share with you just three examples of them, realized by PWC, McKinsey and BCG.
- PWC (Price Waterhouse Coopers) has shared with us the following (Supply Chain):

Traditional supply chain model



Integrated supply chain ecosystem



The digitally enabled supply ecosystem vs. traditional linear supply chain. Price Waterhouse Coopers.





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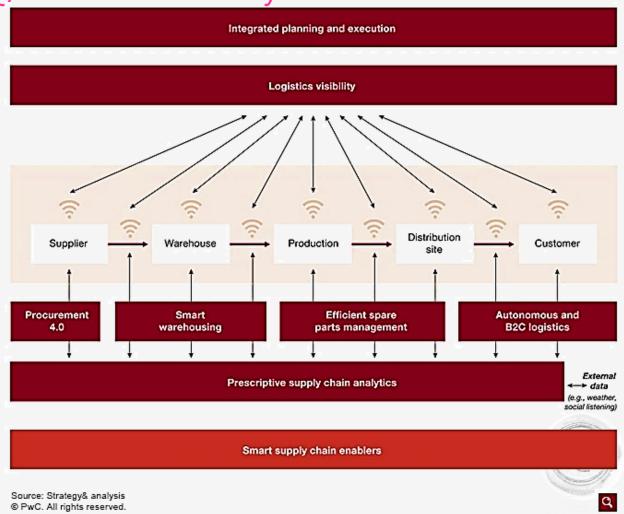
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c. The Digital Value Chain

- Supply chains operate along the traditional SCOR processes — (plan, source, make, deliver, return, and enable).
- The technologies are divided by PWC into eight key areas: integrated planning and execution, logistics visibility, Procurement 4.0, smart warehousing, efficient spare parts management, autonomous and B2C logistics, prescriptive supply chain analytics, and smart supply chain enablers.





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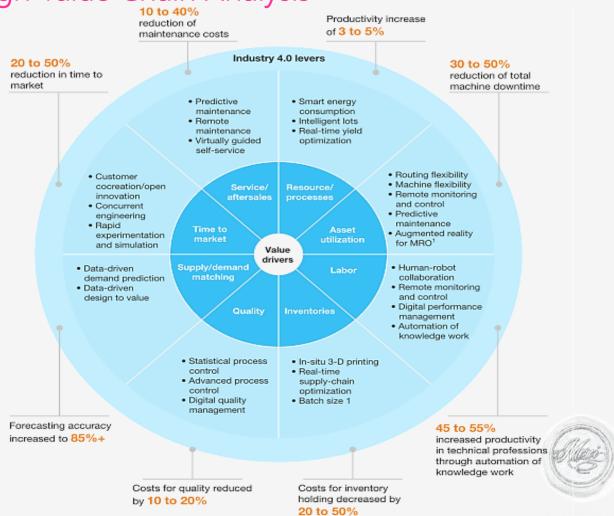




c. The Digital Value Chain

 This is an abstraction model of the Digital Supply Chain by McKinsey.

Source: "Industry 4.0: How to navigate digitization of the manufacturing sector". McKinsey, Digital 2015.





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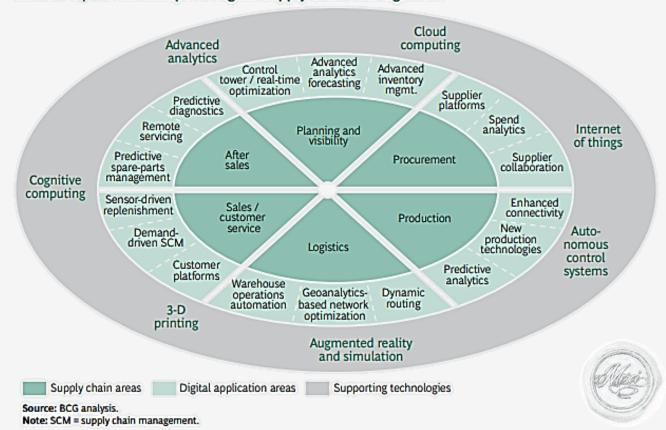


c. The Digital Value Chain

 This is an abstraction model of the Digital Supply Chain Management by BCG.

Source: "Three Paths to Advantage with Digital Supply Chains – Boston Consulting Group.

EXHIBIT 1 | The Landscape of Digital Supply Chain Management



Eleonora Escalante MBA-MEng, Strategic Corporate Advisory Services
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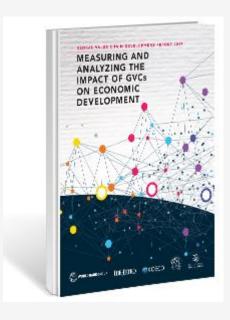
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d. The Global Value Chain (GVC)

- The Global Value Chain is nothing else than the adaptation of the Value Chain concept to the global marketplace.
- The globalization pushed for global value chains, since the "made in the world" motto is a reality since quite a while.
- The Global Value Chain is simply a value chain among different firms and spread all over the globe. It involves more than one country.
- Development organizations such as the World Bank, the OECD, The World Trade Organization (WTO), the Institute of Development Economics (IDE-JETRO) and the Research Center of Global Value Chains of the University of International Business and Economics (UIBE) are interested in the topic. In addition, several recognized universities have created research centers, and have started to publish about it. Example: The Duke University Global Value Chains Center.



If you wish to know the basics about GVCs, read: World Bank. 2017. Measuring and analyzing the impact of GVCs on economic development (English). Washington, D.C.



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d. The Global Value Chain (GVC)

Example: The Nutella Global Value Chain



Figure 6. The Nutella® global value chain



Source: Ferrero, Sourcemap and various on-line sources.



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- The Shared Value Chain is the result of the evolution of the concept of the traditional philanthropy.
- The whole definition of the role of business in the community must be included in the value chain.
- It was created by Michael Porter and Mark Kramer.



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4. The Shared Value Chain, Three pillars:

Reconceiving Customer needs, products and markets

Design products and services to address needs of the society

Open new markets by serving unmet needs in underserved communities

Business have the potential to solve social problems

> A new generation of social entrepreneurs

Social innovation is inherent to business innovation

Redefining Productivity in the Value Chain

Each value activity must include social, environmental, educational, health and cultural sources of differentiation

Enabling Local Cluster Development

A strong local cluster or ecosystem improves company growth and productivity

Companies can catalyze major improvements in the local cluster and business environment

Local cluster development strengthens the link between a company's success and community







https://www.sharedvalue.org/





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Investment in

colleges and

universities

Value adding

procurement

Reinforcement

math, sciences,

technology and

English

academic support

for all the teenagers

of the institution in

practices

partnerships with





4. The Shared Value Chain. Example.

 Creating strategic alliances with financial entities to improve credit conditions for

Support Activities

Primary Activities

employees

 Supporting the children of staff with technological devices needed in School

 Flexible time schedule for women

 Work from home alternatives

FIRM INFRASTRUCTURE HUMAN TALENT DEVELOPMENT AND MANAGEMENT

TECHNOLOGY DEVELOPMENT

PROCUREMENT

INBOUND

Scholarships by

and the kids of

employees to

arades

handling

merit to employees,

attend universities

by merit and good

LOGIS^TICSP **OPERATIONS** urchasing, Inventory, Materials

OUTBOUND LOGISTICS Warehousing and Distribution

Sales and Marketing

Dealer Support and Customer Service

Energy efficiency

- Worker safety and labor practices
- Limiting emissions and waste
- Biodiversity and low ecological impacts
- Minimizing effects of hazardous materials
- Recycle used materials

- Recruiting from Disadvantaged communities
- Diversity of employees
- Employee education and job training
- Safe working conditions
- Baby and Toddler's play group in the company
- Employee's health
- Compensation and additional benefits to support low income workers
- Mentorship to grow
- Improve women in the corporate ladder





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On my next post we will do the summary and conclusions of Leg 6.

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Thank you!



All the material shared today draws on ideas from several professors, sources, practitioner publications, books and articles. Additional Information may be found in the References provided.