

# AN APPROACH TOWARDS MARKETING SOS

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**Abstract:** *Purpose – With the increasing complexities in the technological & business environment, concept of SoS is gaining importance all over the world. The approach can help finding solutions to the complex problems with its diverse capabilities. The purpose of the study is to revisit the concept of marketing from System of System’s perspective. It was observed that in organisations marketing, which works as a system performs with the help of different components, which together forms “Marketing SoS”.*

*Design/Methodology/Approach – The paper takes the approach of conceptualizing marketing as SoS. The insights are based on intensive literature review on the concepts of system, SoS & marketing.*

*Findings – There are some characteristics deeply rooted in the marketing, making it eligible to be called as a type of system SoS. Most of the approaches define marketing merely as a function or process but marketing is more than that. Approaching the marketing from the system point of view in order to fulfil the ultimate purpose of the organization i.e. customer satisfaction is the key to remain competitive amid fierce competition.*

*Originality/Value – This paper offers a fresh SoS approach to the study of the concept of marketing.*

**Keywords:** System, System of Systems (SoS), Marketing systems, Marketing, Elements.

**Paper type:** Conceptual paper.

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## **Introduction**

Concept of SoS is still in the evolving stage & there is no clear definition or path in order to realize the SoS pertaining to some specific discipline or trade. The SoS concept is first introduced by the U.S. government in defining the strategic defense initiative (Congress, 1989). Similarly little has been talked about the marketing as a system though there are some exceptions to this point. Fisk (1967), in his seminal work on marketing system, adopted an approach based on general system theory & identified seven level of organizations from the individual to the global or world economy. Dowling (1983) defined a marketing system as “complex social mechanism for coordinating production, distribution & consumption decisions”. Dixon (1984) noted that “the marketing system is a differentiated sub-system of the society” and concluded that the marketing system has an impact on other social systems, cultural system & material environment” (Layton, 2007). In 2011, Layton gave 12 propositions that underlie the theory of marketing system. It is observed that those firms which are not adopting a certain level of flexibility in their marketing systems do not do well as compared to their competitors (Singh Nripendra, 2010). This paper attempts to approach marketing from the view point of a system called SoS. Starting with the defining & distinguishing characteristics of System & SoS, we propose why marketing should be called SoS. By discussing the distinguishing factors between system & SoS, we relate marketing to SoS. We will further strengthen our claim with the help of identification of forces in marketing that are always present in SoS but lacked by system.

## **System’s Concept**

System is the set of two or more interrelated elements with the following properties:

- Each element has an effect on the functioning of the whole.
- Each element is affected by at least one another element in the system.
- All possible subgroups of element also have the first two properties.

(Ackoff, 1981)

Illustration: Automobile can be taken as the example of system. It contains the various elements like power plant, steering, transmission, braking etc. Each part has the role to play in order to provide the mobility to occupants & has effect on the whole functioning of the system. Engine provides the necessary power required, transmission makes this power available to wheels & brakes equips the automobile with stopping power. As the elements are

interrelated, they are affected by the other elements. Transmission draws the power from engine through clutch assembly & thus affected by its functioning. Similarly the wheels are affected by the steering & brake. So in an automobile all elements have effect on the whole & are affected by other elements.

According to report on SoS engineering submitted to U.S office of the secretary of the defense in 2006, System is:

*“A whole that cannot be divided into parts without losing its essential characteristics as a whole”*

Further Russell Ackoff acknowledged that the system essential properties are product of the interactions of its parts, not the actions of the parts considered separately. If performance of each part taken separately is improved, the performance of the whole system may not be, & is not improved.

The observations can be explained with the help of above quoted example of system i.e. automobile. If we disassemble all the parts & then add them randomly that might not produce any result in terms of mobility. Only when the parts are gathered together in a specific form (engine on frame, then the transmission through the clutch assembly etc.) & when there exists a unique relationship that defines the flow of fuel as well as other fluids through the various pre-determined pattern, mobility will come. Also if we increase the efficiency of one of the parts of the total system i.e. automobile's brake, efficiency of whole automobile won't increase. Increasing the effectiveness of the brakes may equip the automobile with increased stopping power but result is far from raising the total efficiency of the system. This implies that merely increasing the efficiency of one of the parts of system won't increase the total system's output.

### **System of Systems (SoS)**

More recently, the context of SoS has increasingly been proposed in both industry and academia as a solution to the engineering & management of complex system problems because of the dynamic & flexible environment these systems that it is believed these systems perform (Gorod *et al.*, 2008).

There are number of view points on SoS depending upon the trade of their application, one comprehensive definition was given by Maier (1996). According to him, SoS is: (1) Operational Independence of the Individual Systems. If you decompose the SOS, each component system can still perform independently of the others; (2) Managerial

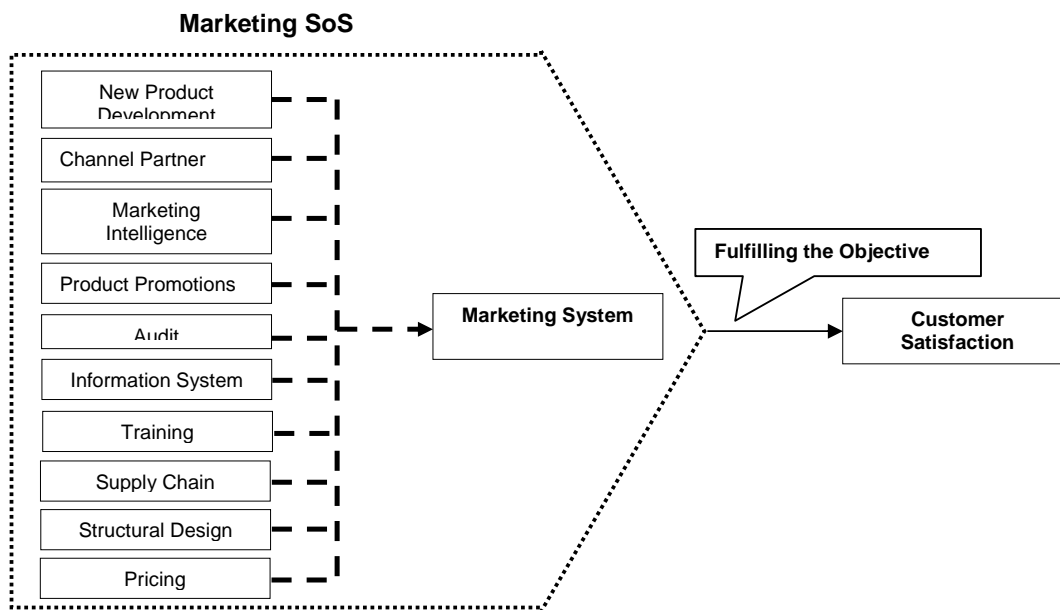
Independence of the Systems. Each individual system has its own purpose independent of the others and is managed separately for that purpose; (3) Geographic Distribution. Often individual systems are distributed over large geographic areas; (4) Emergent behavior. The SOS performs functions not possible by any of the individual systems operating alone. The reason for developing the SOS is to obtain this unique behavior; and (5) Evolutionary development. An SOS is never finished; it continually evolves as needs change and newer technologies become available.

Based on the characteristics of SoS, an airport can be taken as SoS. The components systems in airport are aircrafts, maintenance & supporting system, air traffic control, ground & flight data control, clearance system & terminal controls (in large air-ports). All these systems enjoy operational & managerial independence. The intended emergent property of airport is to provide the safe & reliable transportation to the passengers. As there are continuous change in the needs & technologies, airports are responding to these changes by including the new technologies and instruments.

### Marketing SoS

Adapting to the total system concept of marketing by Alder (1967), we adopt the approach of SoS towards marketing. By considering the various parts of marketing as systems, marketing can be proposed as SoS containing all these systems.

**Figure 1: A Framework for “Marketing SoS”**



The various parts of marketing like product development, Intelligence system, sales promotion & communication can be considered as the systems coming together to meet the broad objective of customer satisfaction. These can be called systems because they themselves contain the individuals, groups or entities that are forming the whole greater in significance than the sum of individual efforts. Marketing intelligence, one of the systems under the SoS of marketing may consists of the entities related to audit, panels related to consumer reports or accessing the information regarding the effectiveness of advertisement campaign. These as a whole will fulfill some purpose which can't be achieved by the individual entities. This is itself is the very basic pre-requisite for qualifying the status of system. Similarly the sales promotion may have the teams involved from sales, communication & accounts. So as a whole they will give you the result that can't be observed if you add up their individual contribution.

Now applying the SoS prerequisites to the marketing, we find that:

- There is *operational independence* of systems. Take the example of distribution system within marketing. Distribution is related to the providing the value proposition conveniently to target customers. As a part of marketing, it adds to the overall goal of achieving the customer satisfaction but it is fully independent as far as its operation is concerns. Even if we don't include it in marketing, it can still function by providing the convenience proposition. So systems within the marketing are operationally independent.
- There exists *managerial independence* in the systems of marketing. This means distribution has its own purpose either made by the head or as dictated by the top management. Now it has to fulfill the purpose it is provided with. It has nothing to do with the targets of sales, promotion but by achieving its own purpose it contribute to the supra-purpose of marketing i.e. customer satisfaction. So marketing systems enjoys the managerial independence.
- A third characteristic of SoS says that the different systems within SoS may be *located geographically at different places*. This means within SoS of marketing. There are number of examples where within marketing system, different systems are located at different geography. For example sales & promotion office can be located different from the location of distribution. For example the distribution of Maruti-

Suzuki operates from their plants in manesar & gurgaon while the head office of communication is situated at New Delhi.

- *Emergence* is one of the basic purposes behind the formation of SoS. The very reason of existence of SoS is that it can achieve some broad perspective that is not possible by individual systems. The marketing comes into the force in order to achieve the broad purpose that can't be achieved by the individual systems. For example the broad purpose of achieving the customer satisfaction can't be achieved only by communication or sales system alone. The other systems of marketing has equal role to play. By combining the outputs from all these systems, the broad purpose like customer satisfaction can e achieved.
- Marketing is *evolving* with the changes in preference of customers & introduction of new technologies. The ways of doing marketing is radically changing & not as it was done earlier. This fulfills the last condition of something to be called SoS that it has to continuously evolve as the things change.

Also Boardman & Sauser (2006) found two opposing forces that distinguish between system & SoS. These are the forces of legacy & mystery. These are present in the SoS & are completely lacked by system.

**Figure 2: Distinguishing forces inherent in SoS**



Marketing SoS is made up of the already working systems like new product development, distribution, sales etc, these results in the force of legacy. Marketing operates in uncertain environment of ever changing needs, preferences, and changes of technology etc, mystery force acts on the whole composition of the marketing. As these two forces are very much present, this gives another support to claiming marketing as SoS.

## Conclusion

SoS approach is seen as the solutions to the many complex engineering & managerial problems. The reasons behind the increased importance of SoS approach is the unpredictable & discontinuous changing pattern most of the problems now come with. The SoS approach can help in achieving the solution of the complexities by taking the advantage of the emergence, which comes due to diverse nature of the SoS. In the backdrop of the changes of 21<sup>st</sup> century, the need for treating Marketing more than as process or organization function has been felt badly. SoS approach to marketing will help to realize the effectiveness of the whole organization by delivering customer satisfaction. By utilizing the diverse nature of the various components of marketing, problems can be addressed with multi-pronged approach. As treating marketing as SoS will make diverse systems have the multi-dimensional personality to come together, the solution to the complex problems can be found with much ease. Thus, Marketing SoS has to drive the innovation culture with the help of new technologies & changes as they come. As the basis for the framework for marketing SoS has been laid out, further research may be conducted for validation. A case based approach will be of good help to appreciate this framework and to develop a conceptual and theoretical underpinning for the same.

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