



## BOEING SHATTERS ANOTHER INDUSTRY PARADIGM

### POSITION PAPER

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*In July 2017, Dassault Systèmes and Boeing announced an important [extension of our partnership](#): Boeing will deploy the 3DEXPERIENCE platform to deepen its end-to-end digital collaboration, design, engineering, analysis, manufacturing planning and shop floor execution capabilities. In other words, the 3DEXPERIENCE platform will support Boeing's digital transformation.*

*What insights can we glean from the Boeing decision? And what impact will that choice have on manufacturers in all industries? The answer lies in how innovative businesses will create value in the future.*

#### VALUE CHAIN

Every business today functions in two worlds: a physical and a virtual world. Executives must pay attention to how their companies create value in both.

By understanding the differences and the interplay between the value-creation processes of the physical world and those of the virtual one, managers can clearly and holistically see the strategic issues facing their organizations.

Managing two interacting, value-adding processes in the two mutually dependent realms poses new challenges. Academics and managers have long described the process of creating value in the physical world, often referring to the stages involved as links in a chain. A *supply chain*, for example, is the management of supply chain activities and covers everything from

product development and sourcing to production and logistics.

A *value chain* is a model that describes a series of value-adding activities connecting a company's supply side (raw materials, inbound logistics and production processes) with its demand side (outbound logistics, marketing and sales). It tracks two parallel flows: the transformation, movement and storage of goods and materials; and the information shared among the various supply chain partners to coordinate long-term plans and control the daily flow of goods and materials up and down the supply chain.

**But the value chain model treats data as a supporting element of the value-adding activity or process, NOT as a source of value itself. However, the use of data must create value.**

When the value-adding steps are established in the virtual realm first, the entire value chain can be modeled and optimized before running in the real world steps. In addition, the parallel exchange of data between the virtual and real value-adding steps enables managers to continuously measure and control business processes to perform each step at maximum potential for topline growth.

## VALUE NETWORK

A value delivery network is a part of the supply chain of a company and includes all its direct participants involved in production, distribution, marketing, customer service, etc. for a given geographical area. The links in a *value network* represent people (or roles).

The concept of value network is at the heart of the manufacturing in the age of experience. Industry no longer works in a 'between four walls supply chain system', but is capable of dynamically managing its production chain.

Digitally, this means manufacturers have access to not just their own preselected suppliers online, but also can reach in and out of an extended ecosystem that is dynamically proposed by a B2B, online marketplace of industrial services.

This is the case of the **3DEXPERIENCE** Marketplace, where Dassault Systèmes' provides 'enterprise services', i.e., the client has its own private cloud from which it manages orders, procurement, regulation, and payments to its

pre-selected suppliers, and also 'community services', i.e., the client has the ability to dynamically reach out to other suppliers on the public cloud, negotiate competitive bids or time delivery, and either use them once or select them to become a permanent supplier and incorporate them into its own private cloud system.

## VALUE CREATION

When a business moves to the **3DEXPERIENCE** platform, managers can access data generated in the course of traditional operating activities. That data helps them see their physical value chain as an integrated system rather than a set of separate-but-related activities.

In this way, they can gain new insights into managing the value chain as a whole and to model it as they go, transforming a value-adding chain into a value-creation chain. The outcome is significantly higher than the sum of the incremental parts.

We are at another turning point of the industrial era. The physical value chain gets modeled virtually first, and then operated and optimized via the parallel virtual chain. This is value creation as-you-go, where not only engineering disciplines, but also the entire extended enterprise, contributes to creating value for topline results.

Value creation is a hallmark of Business in the Age of Experience. And, as it has before, Boeing is once again leading the way.

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## Our **3DEXPERIENCE**® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE**® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).



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