

Gartner: Digital Twins Enter the Mainstream

Written by Alice Marshall
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According to Gartner, 13% of global organisations implementing Internet of Things (IoT) projects already use digital twins, while 62% are either in the process of establishing digital twin use or plan to do so.



The results come via study by the analyst conducted on July-August 2018. It involved an online survey of 599 organisations in China, Germany, India, Japan, the UK and US, with each organisation having annual revenues greater than \$50 million, as well as plans to deploy at least one use case of IoT by 2019.

But, one might ask, what is a digital twin? As Gartner explains, "a digital twin as a software design pattern that represents a physical object with the objective of understanding the asset's state, responding to changes, improving business operations and adding value." As the survey shows, digital twins are slowly entering the mainstream, thanks to extensive marketing and education on the part of vendors, as well as by bringing business value to enterprises.

Digital twins serve different constituencies inside and outside the enterprise. According to 54% of respondents most digital twins serve one constituency, but some digital twins serve multiple. Around 30% say most or all digital twins serve multiple constituencies. For example, the constituencies of a connected car digital twin can include the manufacturer, customer service provider and insurance company, each making use of different IoT data.

Organisations also integrate digital twins with each other. For instance, a power plant with IoT-connected valves, pumps and generators can find use for digital twins for each piece of equipment, as well as a composite digital twin aggregating IoT data across the equipment to analyse overall performance. 61% of survey respondents have already implemented at least

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one pair of integrated digital twins, while 74% of organisations that have not yet integrated digital twins plan to do so in the next 5 years.

“What we see here is that digital twins are increasingly deployed in conjunction with other digital twins for related assets or equipment,” Gartner concludes. “However, true integration is still relatively complicated and requires high-order integration and information management skills. The ability of to integrate digital twins with each other will be a differentiating factor in the future, as physical assets and equipment evolve.”

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