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GE And GM: Old Companies Become A New Breed Of Software Companies

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Here's a question to ponder: Are IT departments vanishing from the corporate scene, or are today's corporations evolving into gigantic IT departments?

With the continuing rapid growth of cloud computing, accompanied by proliferating instances of shadow IT, it's not a far stretch to predict that organizations may be soon running things without the need for cadres of IT professionals on staff. Gartner, the dean of IT analyst firms, has been [predicting](#) for some time that marketing departments are assembling larger IT budgets than IT departments themselves. IT managers and professionals may soon be part of a diaspora across the enterprises, working as direct reports to chief marketing officers, chief data officers, chief financial officers, and other line-of-business heads.

At the same time, there's the possibility that information technology is simply expanding into every nook and cranny of enterprises, to the point that modern corporations may simply veneer for the massive IT operations running everything just beneath the surface.

Consider, for example, two old-line companies that have been household names for decades: General Electric (founded 1892) and General Motors (founded 1908). Both GE and GM are making it very clear that they are no longer solely in the manufacturing business, they are software companies. Software companies that employ more IT professionals than most IT vendors out there, save the Microsofts, IBMs and Oracles of the world. In a recent [interview](#), GE's Jeff Immelt said that every company has to be a software company. "It's our belief that every industrial company in the coming age is also going to have to be a software and analytics company," he told Charlie Rose. "The people that deny that digitization is going to impact every corner of the economy is going to be left behind. So we're investing massively in that, but really around industrial assets and not around things like the consumer Internet."

GE's future relies on software, Immelt said. "We have about \$5 billion of revenue around controls and software and enterprise software, and we would like to see that grow an order of magnitude bigger as time goes on. You

can hire the talent. And it's important to change the headset of the company. We are going to play big at this intersection of physics and analytics. we have a location in California... He have 10,000 or 15,000 software engineers inside the company."

GE has been a leading proponent of what it calls the "[Industrial Internet](#)," in which devices, machines and engines are streaming data back to manufacturers for continuing analysis and maintenance.

GM also increasingly evolving to the software side of things. Melissa Burden of The Detroit News [reports](#) that GM's IT workforce grew from 1,400 in 2012 to 10,000 today, and reach 12,000 by end of 2017. (This will comprise about six percent of the total GM workforce of 212,000.) Lately She quotes GM CIO Randy Mott, who sees IT as driving the automaker's innovation going forward. It's not surprising that this much software talent is needed, as cars are becoming computers on wheels. It is [estimated](#) that many vehicles have upwards to [100 million lines of code](#), running everything from on-board sensors to brakes to entertainment systems.

The rise of digital and cloud may mean many companies will reduce their direct involvement in tech. But this doesn't mean IT is being shunted to the background. As companies such as GM and GE recognize, every company is becoming, to a large degree, an information technology company.

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