



The Revenue Multiplier Effect

How enabling technology drives company value

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The historical norms of investment are being challenged today in Wall Street. Over the last few decades, the drivers and determinants of corporate value have evolved—tangible assets no longer exclusively dictate a firm’s value.

Investors and stockholders are beginning to look at underlying economic or business models, in addition to historical performance, forecasts, and analyst reports to make investment decisions. Without assessing which approach is optimal, one thing is clear: Newer business models that use enabling technologies are more important than ever. But why?

Technology-enabled industry convergence is disrupting the automotive industry at a pace not seen in the past 20–30 years, and continues to re-

shape the roles that will exist in tomorrow’s world. In *Patterns of Disruption*, we outline a scenario in which five roles will exist within the future automotive industry¹:

1. **Hardware providers:** Will provide the physical devices (automobiles, connected hardware, smartphones) needed in the future automotive industry.
2. **Fleet operators:** Consumers are moving from automotive ownership models to usage-based models where they want a car on demand, when they need it and where they need it. We are likely to see the continued growth of mobility fleet operators that will leverage network effects to provide more tailored services.
3. **Operating system providers:** These companies will provide horizontally functioning operating systems for car providers that can span across connected vehicles, connected consumers, and connected infrastructure to facilitate interaction across these domains.

4. **Data aggregators:** These companies will capture, interpret, and provide information and analytics that will drive value to consumers and producers of the industry.
5. **Mobility advisors:** Businesses that know their individual customers and can be trusted to proactively suggest where they should go to increase customer return on mobility.

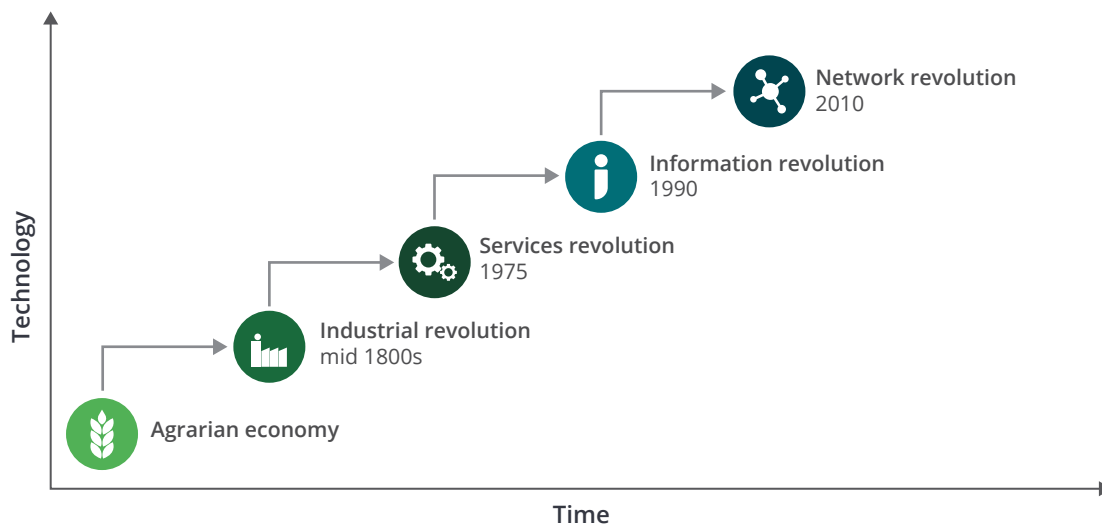
As automotive companies evaluate their business models, it is important to understand how investors are valuing companies and acknowledge that investor confidence is influenced by industry convergence. Well-known companies like Airbnb and Uber are now recognized for their ability to meet users' demands in the hospitality and transportation industries, without using physical assets. Unlike traditional hotels, Airbnb does not own the properties it offers and the same can be said about the cars used to "Uber" riders around. Are these, then, technology firms? The answer is: It's not clear—at least not entirely. Looking forward, traditional industry classifications will continue to evolve and lines separating industries will likely blur. Some believe that, eventually, today's industry classifications will become outdated. In addressing these changes, some analysts claim that all companies will become tech companies, while others assert that technology as a sector itself will become "the" enabler and the industry may cease to separately exist.

The reality is that it doesn't matter how we choose to define industry classifications created by technology. What matters is how innovation and the integration of technology enable the physical aspects of each company. This is what makes companies like Apple and Google unique and valuable to investors—they focus on consistently expanding their intellectual property and core capabilities to drive value to their products, services, and ecosystems. It's also where incumbent companies within the automotive industry need to go in order to continue to drive value for their shareholders.

Industry convergence and technology enablement has led investors to allocate their capital more toward companies that leverage intangible (versus tangible) assets to serve customers . . . and thereby maximize returns. It's also led to an influx of capital, even toward companies that haven't yet turned a profit. This is accelerating the growth in value of such tech-enabled companies, thereby creating a virtuous cycle. We have found that corporate value is higher in companies that rely less on tangible assets, but leverage technology "as the business" rather than "in (supporting) the business."

As a way to explain the fundamental differentiating factors of firms and how they drive value, Deloitte developed a new way of viewing companies. We looked at what companies with a high stockholder value-to-revenue ratio (which we've labeled as the "Revenue Multiplier")² have in common and

Figure 1. New technologies birth economic revolutions...shifting value



Source: Deloitte analysis.

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how they differentiate themselves from those that have lower valuations. To understand how, exactly, it is helpful to look back at the four key economic revolutions in US history and define the business model for each stage (figure 1):

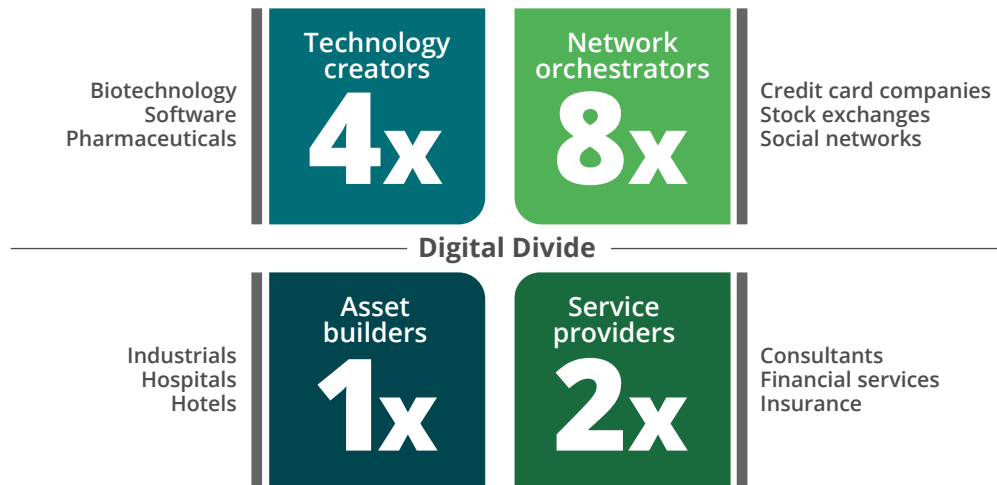
1. The Industrial Revolution sparked a change from hand production to machines and capital-intensive processes. In this “Asset builders” phase, physical assets were the key determinants of performance and value.
2. In the 1970s, US firms shifted focus to a lower-capital/lower-risk model where they leveraged human capital (in the form of services), yielding higher returns. This is depicted in the “Service provider” model.
3. With the development of the modern Internet in the 1990s, the Information Revolution was characterized by enhanced communications and broader access to information. “Technology creators” used capital to develop and sell (license) intellectual property (IP).
4. During the latest decade, companies have found ways to drive value based on interactions with users, suppliers, and other (community) points of contact. “Network orchestrators” are adept at using their digital presence to create, market, and sell goods/services . . . or to just connect people.

Our research has shown that as these four new economic models came into existence, each revenue model had a multiplier worth twice the value of the model it succeeded. We call this phenomenon the Revenue Multiplier (“RMx”) Effect (figure 2). The key thing to consider with these business models and the value that is assigned to companies in each group is the scalability of their offerings—marginal costs are significantly lower for technology and information-based companies.

This helps explain why the S&P 500 has seen a significant drop in the number of top-valued firms whose business model relies primarily on physical assets and human services. These have been replaced with companies with business models that rely more on intangible and network assets (figure 3). But, where does this leave auto companies?

The majority fall into the asset builder quadrant, or hardware provider *business model* in our future world. Original equipment manufacturers (OEMs) are especially labeled as such and many, with their traditionally heavy focus on manufacturing and sales as the main business model, have multiples below 1x, indicating that investors are not rewarding their approach. Despite the significant “new” technology that traditional automotive companies are developing and bringing to market, and the vast sums of capital being invested, especially for autonomous vehicles, they receive little credit for being technology creators and their valuations still hold

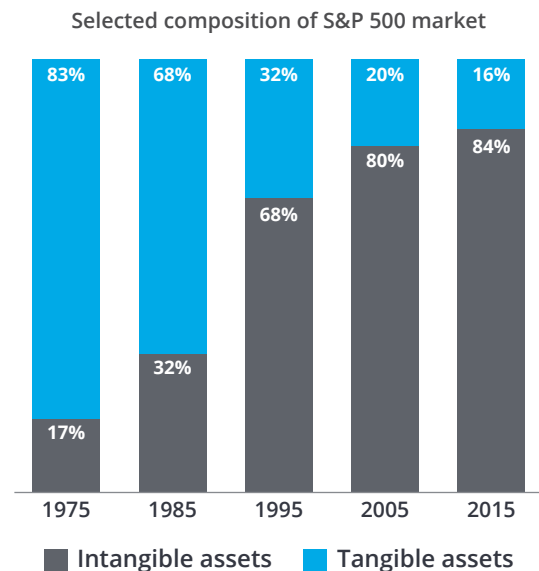
Figure 2. The Revenue Multiplier Effect



Source: Deloitte analysis.

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Figure 3. Investors reallocated capital toward technology-based models



Source: Deloitte analysis.

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tight to the asset builder quadrant. Investors are clearly signaling that new business models must accompany and leverage the investments being made in this new technology.

With this understanding of the auto industry in mind, the question is: Can automotive OEMs shift and create complementary business models that position them to move beyond the asset builder quadrant? The answer (optimistically) is yes, but it will require a new perspective on how they use technology as an enabler to create new business models.

It is also important to consider that there is not a 1:1 mapping between the economic models presented by RMx to the models presented in *Patterns of Disruption*. A company trying to compete in the fleet operator space could potentially build a business model which places it within the service, technology, or network quadrants depending on the nature and scope of services being offered. And as a result, it can be viewed quite differently by investors and the investment community given how they participate.

For example, Uber, while a type of fleet operator, is sort of a virtual fleet operator creating a marketplace of drivers and riders, managing both supply

and demand, yet owning few assets in the process. We would view Uber in the network orchestrator quadrant as its role is largely to orchestrate or match the supply of vehicles and the demand for rides in a specific geography.

The startup technology company, RideCell, also participates in the fleet space, but does so by providing a technology platform to fleet operators, who can choose to build their own technology platform or use a company like RideCell³ to get it done. RideCell would fall in the technology creator quadrant because it essentially sells a technology that enables a network orchestration business model.

However, there are other companies like traditional livery and goods delivery services who participate in the fleet operator space as service providers, providing services like an Uber, but who either lease/own or operate their fleets.

Given this, let's pause here and look at the investments that several OEMs are making in order to make shifts in their models or diversify away from their core asset builder model:

- MOIA, an independent company created by Volkswagen, dedicates itself to providing mobility solutions to users in urban areas through ride-sharing and ride-pooling. This service seems to be targeting the service provider role, to address the challenge of congested cities through ride-sharing of electrified shuttles in dense urban settings.⁴
- GM created Maven, a new car rental platform that allows users to book its cars through mobile devices, providing an opportunity to engage with users in a way GM hadn't before and accessing its vehicles as a service. Maven is helping GM attain new information on its customers that helps them generate new insights that help drive future value.⁵
- Ford has articulated a vision to build a "holistic, organic, interconnected system powered by a transportation operating system" that will work across many transportation and infrastructure elements to address the challenges of moving people and goods in cities more efficiently: a vision toward a network orchestration model.⁶

As the automotive industry continues to mature, OEMs will need to continue to develop new capabilities and leverage technology in order to maintain competitiveness and increase shareholder value. Clearly, they understand that, and are driving to a variety of spaces and deploying different models to do so. Perhaps the most salient question at this point is whether the business model transformations necessary can keep pace with the speed of the technology development they are shepherding and the significant capital allocations being made.

There's no doubt that the evolution of the auto industry is taking place and disruption is coming. It's not a question of whether change will happen, but rather when and how it will happen, which companies will succeed, and how quickly incumbent players will adopt new models. As an auto company, it's time to take an objective look at the current state and outlook, and ask yourself: What road (business model) do we want to take?

ENDNOTES

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3. Jack Stewart, "The top 10 startups racing to remake the auto industry," *Wired*, October 5, 2017.
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5. Melissa Burden, "GM launches Maven brand, car-sharing in Ann Arbor," *Detroit News*, January 21, 2016.
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