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## **ARTICLE** **ACCOUNTING**

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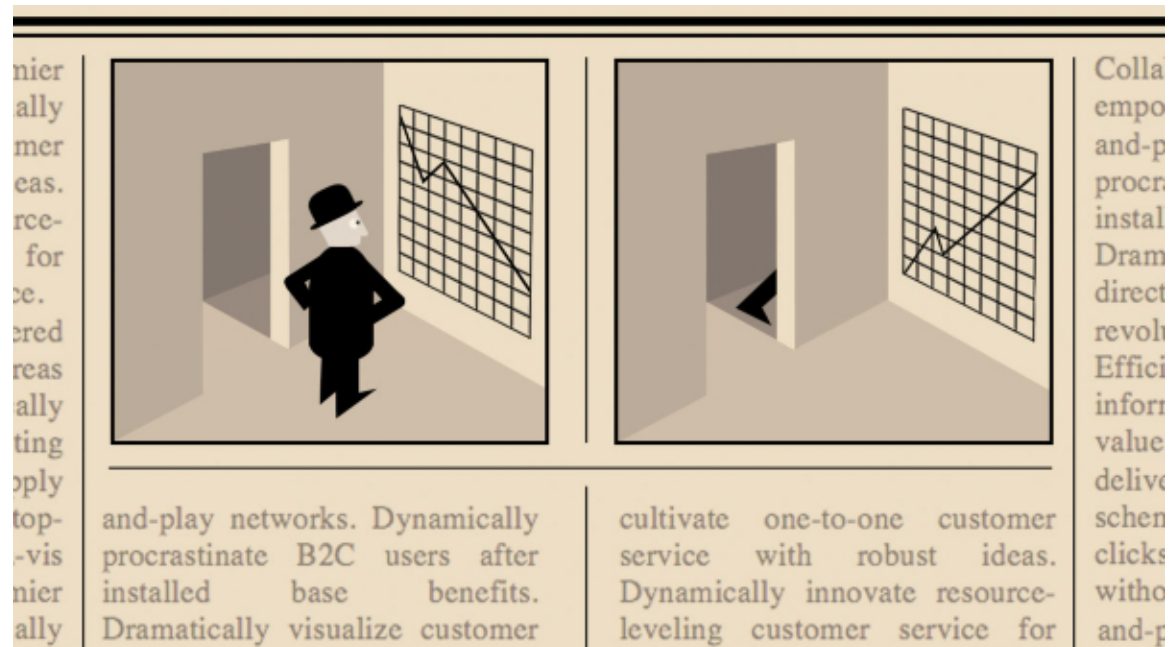
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ACCOUNTING

# Why Financial Statements Don't Work for Digital Companies

by Vijay Govindarajan, Shivaram Rajgopal and Anup Srivastava

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steven moore for hbr

On February 13, 2018, the New York Times reported that Uber [is planning an IPO](#). Uber's value is estimated between \$48 and \$70 billion, despite reporting losses over the last two years. Twitter reported a [loss of \\$79 million](#) before its IPO, yet it commanded a valuation of [\\$24 billion on its IPO date](#) in 2013. For the next four years, it continued to report losses. Similarly, Microsoft paid [\\$26](#)

billion for loss-making LinkedIn in 2016, and Facebook paid \$19 billion for WhatsApp in 2014 when it had no revenues or profits. In contrast, industrial giant GE's stock price has declined by 44% over the last year, as news emerged about its first losses in last 50 years.

Why do investors react negatively to financial statement losses for an industrial firm but disregard such losses for a digital firm?

In the 2016 book *The End of Accounting*, NYU Stern Professor Baruch Lev claimed that over the last 100 years or so, financial reports have become less useful in capital market decisions. Recent research lets us make an even bolder claim: accounting earnings are practically irrelevant for digital companies. Our current financial accounting model cannot capture the principle value creator for digital companies: *increasing return to scale on intangible investments*.

This becomes clear when you look at a company's two most important financial statements: the balance sheet and the income statement. For an industrial company dealing with physical assets and goods, the balance sheet presents a reasonable picture of productive assets and the income statement provides a reasonable approximation of expenses required to create shareholder value. But these statements have little salience for a digital company.

Let's first look at the balance sheet. Assets reported on a balance sheet have to be physical in nature, have to be owned by the company, and be within the company's confines. However, digital companies often have assets that are intangible in nature, and many have ecosystems that extend beyond the company's boundaries. Consider Amazon's Buttons and Alexa powered Echo, Uber's cars, and Airbnb's residential properties, for example. Many digital companies have no physical products and have no inventory to report. Therefore, the balance sheets of physical and digital companies present entirely different pictures. Contrast Walmart's \$160 billion of hard assets for its \$300 billion valuation against Facebook's \$9 billion dollars of hard assets for its \$500 billion valuation.

The building blocks for a digital company are research and development, brands, organizational strategy, peer and supplier networks, customer and social relationships, computerized data and software, and human capital. The economic purpose of these intangible investments is no different from that of an industrial company's factories and buildings. Yet, for the digital company, investments in its building blocks are not capitalized as assets; they are treated as expenses in calculation of profits. So the more a digital company invests in building its future, the higher its reported losses. Investors thus have no choice but to disregard earnings in their investment decisions.

Our research has found that intangible investments have surpassed property, plant, and equipment as the main avenue of capital creation for U.S. companies – which further suggests that the balance sheets has become an artifact of regulatory compliance, with little or no utility to investors. The balance sheet has also become less useful for banks' lending decisions because banks rely on asset coverage to calculate their security. Curiously, companies are allowed to report purchased brands

and intangibles as assets on balance sheet, creating distortions between earnings and assets of digital companies that rely on organic growth versus acquisitions.

As digital companies become more prominent in the economy, and physical companies become more digital in their operations, [income statements too become less meaningful in investors' decisions](#). In [another study](#), we show that earnings explains only 2.4% of variation in stock returns for a 21<sup>st</sup> century company — which means that almost 98% of the variation in companies' annual stock returns are not explained by their annual earnings. Earnings also seem to matter less for CEO pay: companies are reducing profits-based cash bonuses and shifting toward [stock-based CEO compensation](#), partly to keep opportunistic managers from cutting back on [valuable investments as a way to report higher profits](#).

The current financial accounting model fails today's companies in yet another respect. In a previous [HBR article](#), we argued that, in contrast to physical assets that depreciate with use, intangible assets might enhance with use. Consider Facebook: its value increases as more people use its product because the benefits accrue to an existing user with the arrival of each new user. Its value growth is powered by the network in place, not by increments of operating costs. Therefore the most important aim for digital companies [is to achieve market leadership, create network effects](#), and command a “winner-take-all” profit structure. Facebook's gross margin of 76% on its 2017 revenues of \$46.5 billion illustrates this reaping of rewards — every additional dollar of revenue creates almost equivalent value for shareholders. (You can contrast this to Twitter's and Yelp's 2017 revenues of \$2.4 billion and \$0.8 billion, respectively, as both companies have yet to reach the winner-take-all profit stage.)

Yet there is no place in financial accounting for the concept of network effects, or the increase in the value of a resource with its use. This actually implies negative depreciation expense in accounting parlance. So the fundamental idea behind the success of digital companies (the increasing returns to scale) goes against a basic tenet of financial accounting (assets depreciate with use).

It's important to note that companies like professional services firms are also built on intangible assets like human capital. But accounting challenges for modern, digital companies are more severe, as they have increasing returns to scale on their idea-based platforms. For example, Google can service billions more clients with the same office just by adding to its server capacity. But for an audit firm to drastically increase clients, it would likely need more manpower and office space. Furthermore, costs of services for professional services firms, mainly wages, are matched to current revenues. So their income statements accurately reflect surplus created in that period, similar to industrial companies. But for digital companies, the bulk of the cost of building an idea-based platform is reported as an expense in its initial years, when they have little revenue. In later years, when they actually earn revenues on an established platform, they have fewer expenses to report. In both phases, the calculation of earnings does not reflect the true costs of revenues.

This brings us to another question: If earnings are so meaningless, then why do investors react positively to rumors concerning a digital company turning profitable? For example, when Twitter reported its first [profits](#), its share prices jumped 20%. The same thing happened to [Yelp](#). One plausible reason could be that this news has an important signaling effect – that the company might have crossed its initial investment phase, that it might now break even, or that it might catapult into a trajectory where it can reap winner-takes-all rewards. This conjecture challenges our overall argument that earnings have no information; another challenge could be that initial [losses of digital firms convey risks](#) involved in purchasing their stocks.

As balance sheets increasingly fail to reflect the value of the company's resources and the income statements increasingly fail to capture the value created by the company, CEOs are now wondering what to do. They often ask us: What does preparing and auditing accrual-based financial statements achieve? Wouldn't digital companies be better off by simply reporting a summary of their cash transactions? What can digital companies do to enhance the informativeness of their financial statements?

The answers are not yet clear. It is unlikely that accounting standards will change in the near future to allow digital companies [to capitalize their intangible investments](#). (And even if digital firms capitalized their intangibles, the recalculated profits or assets would come nowhere close to justifying their current market values.) But there are things companies can do to convey their real worth to investors. [Our work](#) has found that investors look for certain cues about the success of a company's business model, such as acquisition of major customers, introduction of new products and services, technology, marketing, and distribution alliances, new subscriber counts, revenue per subscriber numbers, customer dropouts, and geographical distribution of customers. Companies can disclose these items in the Management discussion and analysis section of their annual report. (For example, see [Item 7 of Facebook's annual report](#).)

Any significant, value-relevant development must be immediately [disclosed](#) rather than waiting for the annual report. We have demonstrated in [other research](#) that disclosures on network advantages, such as web traffic and strategic alliances, are considered highly value-relevant by investors. When combined with these nonfinancial indicators, [financial performance measures become more value relevant](#). In addition, companies can provide detailed information on [intangible investments made by the company](#) – even if that information is not vetted by the auditors – by reporting these investments in three categories: customer relationship and marketing, information technology and databases, and talent acquisition and training.

To summarize all this, as firms become more digital and spend more on intangible investments, and as digital companies come to represent the new face of corporate America, they will also have to dramatically alter the manner and ways by which they convey their value to outside investors.

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