ANALYSTS NEED NEW TOOLS TO EVALUATE NEW BUSINESS MODELS

Do analysts need a new analytical framework? If the goal is to assess corporate value in the new digital economy, the answer is yes because business models have changed so much since valuation practices began in the industrial era. In 2015, Tom Goodwin, executive vice president and head of innovation at Zenith USA, summed up the strangeness of the new economy when he said, “Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world’s largest accommodation provider, owns no real estate. Something interesting is happening.”

The digital economy could also be called “the second machine age.” That’s the term used by MIT professors Andrew McAfee and Erik Brynjolfsson. They say the first phase of the second machine age began in the mid-1990s when digital technologies started taking over routine tasks done by humans. Now we are in the second phase, in which computers can do non-routine work and technologies once thought of as science fiction, such as driverless cars and artificial intelligence, are real.

Back in 2011, economic theorist Jeremy Rifkin wrote that we have reached maximum productivity with older technologies. According to his book The Third Industrial Revolution, with the advent of big data and the Internet of Things, an economy is emerging in which we will manage scarce resources through sharing, clean energy, and fuel-efficient transportation, and we will produce at zero marginal cost. The way we do business is completely changing via a new digital infrastructure that is efficient and cost effective, with a built-in mechanism for establishing trust.

Somehow, analysts need to find ways to make sense of all of these changes and gain valuable investment insights. [For more perspective on the challenges of valuing intangibles, see the column by Ray Rath, CFA, in the Opinion section of this issue.]

DEFICIENT MODELS

Earnings no longer reliably reflect changes in corporate value and are an inadequate driver of investment analysis, according to a Financial Analysts Journal article titled “Time to Change Your Investment Model,” published in September 2017. The authors, Feng Gu of the University of Buffalo and Baruch Lev of New York University, advocate shifting the focus from a company’s earnings to its value-creating strategic assets and their deployment.

So what are strategic assets? Gu and Lev say they are assets that generate net benefits, are rare or in limited supply, and are difficult for competitors to imitate. The authors particularly note the rise of the online, direct-to-consumer, subscription-based model, with its emphasis on the customer franchise, patents, and trademarks.
The digital economy has become more intertwined with the traditional economy as mainstay companies have jumped on the bandwagon. For example, Procter & Gamble launched a subscription-based offering for its Tide PODS products. In 2016, Unilever bought Dollar Shave Club, which has millions of members, for $1 billion (about five times estimated revenues). Unilever’s 2016 annual report states that “we will preserve [Dollar Shave Club’s] entrepreneurial approach, taking valuable lessons for the rest of our portfolio.”

Gu and Lev warn, however, that analysts rarely perform a comprehensive competitive analysis of how companies are taking inventory of their strategic assets, enhancing and defending those assets, and deploying them for value creation.

Glen Kernick, managing director and technology industry leader at Duff & Phelps Corporation, a global valuation and corporate finance adviser, agrees with Gu and Lev. He says earnings are losing their relevance, particularly for companies that are making significant investments in strategic intangible assets through R&D and other activities. He explains that the US GAAP accounting model, developed during the industrial age, is not equipped to evaluate technology companies and the digital economy.

For example, a company would typically expense R&D through its profit and loss statement. No asset is created from that R&D investment, so there is no future benefit related to it. To this end, the valuations of such companies as Amazon.com and Netflix have not been highly correlated with their accounting earnings. Clearly, investment in R&D is driving future benefit, but balance sheets do not reflect that benefit. In fact, these companies may be incurring large period losses from these investments.

So does it matter whether the market values of digital economy companies have no relationship to their book value or to the assets on their balance sheet? Kernick sees a problem because part of the market value of S&P 500 Index companies is attributed to intangible assets that are largely not reflected in those companies’ financial statements.

“Most investors and users of financial statements would prefer enhanced disclosure and more information about assets that are generating future income and future cash flows,” he says. “So the fact that those assets are not reflected on the balance sheet, I think, is a deficiency in our accounting model.”

In a cost-based accounting model, a company buys an asset for a certain amount of money, records it on the balance sheet for the amount paid, and subsequently depreciates that asset. In today’s mixed accounting model, tangible assets are measured and booked at cost. But intangible assets acquired in a business combination (a transaction in which the acquirer obtains control of another business) are measured at fair value and recorded on the balance sheet. They are potentially re-measured and only written down—never up—if there is an impairment.

But if intangible assets are generated internally, they are generally not reflected on the balance sheet, and this scenario creates a distortion. If certain value-driving assets are recognized because they are considered important in the context of an acquisition or business combination, then why are they unimportant while being developed internally?

Kernick suggests the accounting model is deficient because it lacks a complete fair-value balance sheet. Instead, in the mixed model, certain assets are recorded on the balance sheet at cost and other assets reflect fair value. Unless intangibles were acquired in a business combination, they are not generally recognized on the balance sheet at all.

For instance, digital economy companies such as Facebook and Alibaba have disclosed that they are using data to enhance their income and margins, but their balance sheets do not capture this dynamic.

**THE RATIO OF INTANGIBLE ASSET VALUE TO TANGIBLE ASSET VALUE IN PUBLIC AND PRIVATE COMPANIES HAS GROWN SIGNIFICANTLY DURING THE LAST COUPLE OF DECADES, AND THE TRENDS IS LIKELY HERE TO STAY. TO THIS END, EVEN NON-SPECIALISTS NEED TO AT LEAST UNDERSTAND THE DRIVERS OF VALUE.**

“It is widely known that digital economy companies use artificial intelligence and proprietary software algorithms in combination with data to improve and customize the user experience, which ultimately results in higher income and margins,” says Kernick. “But there’s nothing reflected on the balance sheet for those assets.”

According to Robert Reilly, managing director at Willamette Management Associates, the alternative is to switch from US GAAP to International Financial Reporting Standards (IFRS), which are based on fair value accounting. Under IFRS, companies hire valuation analysts to revalue their intangible assets annually, the results are independently audited, and the balance sheet is restated to current fair value.

“Unlike IFRS, US GAAP only applies those standards in a relatively small percentage of circumstances,” he explains. “You don’t know what intangible assets exist in a company that wasn’t acquired because they don’t show up on the balance sheet. Audited financial statements of companies in most other countries show this information.”

In addition, if companies do not need to value intangible assets for tax or regulatory purposes and investors and financiers are not asking for it, most companies are unwilling to pay for the valuation.

Vincent Papa, director of financial reporting policy at CFA Institute, believes there is a good argument for not recognizing intangible assets until they are measured reliably.

“The notion that financial statements in general—and earnings in particular—are becoming less relevant for investors should be taken with a pinch of salt,” he says. “This is despite the demonstrated declining association with stock prices over the years or even the evidence that investors are increasingly relying on other information sets, including non-GAAP measures.”
While agreeing that intangibles reporting needs to be updated, Papa also questions the notion that GAAP and IFRS have failed entirely to adapt for 21st century business models. For example, the recently issued IFRS 15 and Topic 606, pertaining to the recognition of revenue from contracts with customers, were designed to be fit for purpose for various business models, including subscriber-based and intellectual property-intensive ones.

Papa believes the IASB and FASB should significantly enhance the presentation requirement around the income statement and cash flow statement so that components are better disaggregated and the classification of economically similar items is more meaningful. But he still thinks GAAP/IFRS information remains foundational despite its inherent limitations, such as largely reflecting past transactions. Admittedly, this reporting is not as timely as press releases and other information that investors rely on within management presentations. Moreover, there is an increasing appetite for more forward-looking information beyond what US GAAP and IFRS information may meaningfully convey.

**IGNORING A KEY VALUE DRIVER?**

Companies are now disclosing new types of key performance indicators (KPIs) or metrics. Among them are daily active users (DAUs) and monthly active users (MAUs) on their platforms, average revenue per user (ARPU), customer acquisition cost, and customer churn rate.

For example, Facebook’s third-quarter earnings release showed that its DAUs were 1.37 billion on average for September 2017 and its MAUs were 2.07 billion as of 30 September 2017. The company also included a slide on “Limitations of Key Metrics and Other Data,” which explains “there are inherent challenges in measuring usage of our products across large online and mobile populations around the world.”

Alibaba uses slightly different terminology in its third-quarter presentation. It reports having 549 million mobile MAUs, which it defines as the number of unique mobile devices used to visit or access certain of its mobile applications at least once during that month. It also reports having 488 million annual active consumers on its Chinese retail marketplaces, which it previously referred to as annual active buyers.

Ultimately, the company has discretion as to what and how much it discloses, so lack of information remains a challenge for investors and analysts.

“It requires a lot of analysis and digging to ensure you’re not just taking the data that exists at face value and you’re comparing apples to apples,” says Kernick. “That’s true of any financial analysis, but even more so with these types of KPIs or metrics that companies are now disclosing.”

Three models are typically used to value strategic assets—an income-based approach, a market-based approach, and a cost-based approach—but each has limitations and trade-offs. Valuing the strategic assets of digital economy companies involves a higher level of uncertainty. The biggest limitations are around access to data, inconsistency across companies, and the lack of benchmarks. Strategic assets are unique by nature and often unique to the specific company in terms of how it can extract value from them. Frequently, these assets have no comparable market transactions.

“The general perception is that the inputs may be unreliable, and therefore the output is unreliable. But that’s not an excuse to ignore something that is a key value driver for the company,” Kernick says. “Some estimate is better than no estimate.”

Reilly points out that this problem is not new. For decades, he has faced the same issue when valuing telecommunications and cable TV companies. But he agrees that there is some inconsistency in the way public and private companies report certain metrics.

“Security analysts and investors, who just get a 10K or who may be on the analyst call with the CEO or the CFO, find it difficult to get to the underlying information,” he says. “But when we’re working for [an analysis of] the company, we can sit down with the people who are collecting data to understand how it’s gathered. We can get to a normalized revenue per customer, income per customer, and cash flow per customer. Then we can estimate the remaining useful life of those customers based on the churn rate data and perform the intangible asset valuation.”

Currently, no standard-setting body has meaningfully defined the requirements for metrics such as average daily or monthly users. The International Integrated Reporting Council (IIRC) is encouraging companies to tell a coherent long-term value-creation story and focus on various types of capital that are material for them. IIRC identifies six types of capital: financial, manufactured, intellectual, human, social and relationship, and natural. Together, they represent stores of value that form the basis of an organization’s value creation.

Although the CFA Program curriculum covers valuing intangible assets, many CFA charterholders may find the process mysterious unless they work for a valuation firm and develop expertise at such valuations. That said, the ratio of intangible asset value to tangible asset value in public and private companies has grown significantly during the last couple of decades, and the trend is likely here to stay. To this end, even non-specialists need to at least understand the drivers of value.

The bottom line is that analysts can no longer limit their work to looking at historical earnings and projecting future growth rates. They need to understand the strategic assets that drive growth, such as the relative strength of a brand or the differentiation of a technology, the risk associated with them, and whether growth is sustainable. Although a lot of value is based on a company’s existing platform and assets, it is important to understand the ability to generate future strategic assets. This ability is tied to human capital, so metrics such as employee retention and attrition have also become more relevant than ever before.

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