

The Future of Productivity

David Choe,
CFA, Portfolio Manager

Nearly 30 years ago, in November of 1990, Microsoft launched its now-ubiquitous software suite, Office, which included a word processor, spreadsheet, and presentation application. At the time, an industry standard group of productivity applications was a novel concept and promised substantial benefits. Over the next decade, several other monumental technological advances occurred. In 1991, the internet was publicly launched, followed closely by another addition to the Office suite - Outlook for email. Web browsers emerged in 1995, and Google was founded in 1998. This series of technological innovations connected the world and put infinite information at the fingertips of executives, employees, and entrepreneurs alike.

Along with these changes came predictions of massive productivity increases, streamlined processes, and improved decision-making. Early signs were promising. From 2000 to 2007, U.S non-farm productivity grew at nearly double the rate of productivity gains from 1970 to 1990. Yet after 2007 through 2016, productivity growth dropped by 50 percent¹, not nearly maintaining the pace of technological change. Furthermore, business processes and decision-making tools remain littered with voluminous and clunky email threads, error-prone manual tasks, massive and confusing spreadsheets, and conflicting versions of the same document.

Across every industry and geography, a wave of technological innovation is focused on solving the problems created by overused yet unproductive tools, oversaturated yet suboptimal decisions, and overengineered yet inefficient processes. At Riverbridge, we invest in businesses not only leveraging these emerging technologies to become better, faster, and smarter, but also those creating the solutions that will enable the next surge in productivity growth.

Perhaps no profession and productivity software are more closely associated with each other than accounting and Microsoft Excel. When released, the electronic spreadsheet was a revolutionary tool, reducing manual calculations and improving the organization of large amounts of data. In modern accounting departments, however, the revolution has stalled. To close the books and reconcile accounts, unwieldy spreadsheets, confusing email chains, and frantic batch processing are the norm. Blackline, Inc. (BL) is a cloud-based software platform focused on modernizing these manual and error-prone tasks

through process automation, perpetual rather than batch recordkeeping, and workflow management. BL's next-generation tool shortens and simplifies the accounting close process to improve productivity and allow finance departments to spend more time on value-add projects.

Whereas account reconciliations require a fairly straightforward and readily accessible set of information, many of today's business processes struggle to readily synthesize siloed, voluminous, or poorly organized data. Something as seemingly straightforward as knowing whether a customer with a question about their checking account also has your bank's credit card or an investment account is in fact a complex data integration problem. Pegasystems, Inc. (PEGA) develops customer relationship and business process management software for such highly regulated industries which require complex workflows and multiple data sources. With a complete and accurate picture of the customer and a custom-built recommendation engine from PEGA, customer service personnel are better equipped to keep clients happy, improve loyalty, and identify cross-selling or upselling opportunities.

As processes become more complex, labor intensive, and subject to regulation, software becomes an increasingly powerful solution. In the pharmaceutical industry, it takes years of research, billions of dollars of investment, and hundreds of thousands of documents submitted to the FDA before a new drug is approved. Veeva Systems, Inc. (VEEV) uses software built on the salesforce.com platform to organize and orchestrate the process end-to-end, handling credentials, drafts, routing, and sign-offs. Veeva's solution reduces the labor intensity and time to submission by 3 to 5 months, while also reducing errors and paper waste.

As long-term investors, Riverbridge has always sought to own companies with a culture of continuous improvement, agility, and customer responsiveness. These characteristics are essential in building enduring earnings power. A compelling subset of these businesses actually provide the products and services to make companies better, faster, and smarter. Looking ahead, we see abundant opportunities to invest in firms both building and leveraging technology-enabled solutions to enhance productivity and decision making.

1. www.bls.gov/k12/productivity-101/content/what-is-available-and-how-do-i-access-it/home.htm

Information in this newsletter is not intended to be used as investment advice. Mention of companies/stocks herein is for illustrative purposes only and should not be interpreted as investment advice or recommended securities. The securities identified do not represent all of the securities purchased, sold or recommended and the reader should not assume that any listed security was or will be profitable. Past performance is not indicative of future results.