# 'Enterprise Architecture for Digital Business' Outlines Why and How to Modernize IT for a Digital-First World

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*New book clarifies why companies struggle with digital transformation and what it takes to change IT to become a data-driven, AI-supported digital business*

SEATTLE--(BUSINESS WIRE)-- As organizations build for a digital-first world, disappointment and disruption lie ahead. The challenge is rooted in the fact that organizations are banking their future on an architectural approach that was developed before mobile and the Internet became pervasive, and well before the era of digitization. To progress further in their digital transformation journeys, companies will require a new approach to enterprise architecture that is purpose-built for the digital economy.

As businesses and their brands become indistinguishable from the digital services that represent them, key processes, governance guidelines, organizational structure, and strategy must adapt. F5 CTO Geng Lin, Principal Technical Evangelist Lori MacVittie, and several members of the Office of the CTO at F5 (NASDAQ: FFIV) today released *"Enterprise Architecture for Digital Business: Transforming IT"* to provide organizations with a framework for modernizing enterprise IT to successfully navigate becoming a digital business.

"The need for a new digital enterprise architecture is both inevitable and urgent," said Geng Lin, EVP and CTO, F5. "The current prevailing enterprise architectures lack the key elements—such as agility, scale, security, and observability—needed to capitalize on technological shifts and to protect against the growing sophistication of cybercriminals. Without these capabilities, organizations will struggle to progress through the digital transformation journey and compete in the marketplace."

Driven by technological and societal forces, the pace of digital transformation has accelerated nearly tenfold in the two-year period 2019 and 2020 and is not likely to slow for decades to come. Today, every industry is engaged in digital transformation—from banking to retail, from media and entertainment to education, to manufacturing—and on a journey to becoming digital by default. The inevitableness of digitization means every business must make this journey to not only survive but thrive.

What stands in the way of completing this journey is an existing, rigid framework that governs how applications are developed, delivered, secured, and even integrated. It defines how data should be stored, accessed, and governed. It constrains infrastructure to aging standards. It makes assumptions about applications and their interactions, and about the nature of their users.

"While we believe the existing TOGAF architectural approach is insufficient to support fully digital and automated businesses, it is a strong foundation on which to expand and derive a modernized version that enables the adaptability and capacity to innovate that organizations require today," said F5 Principal Technical Evangelist Lori MacVittie.

To realize the full value of digital transformation and truly become a digital business, organizations will require entirely new approaches for managing telemetry, data, and application security and delivery technologies across today's distributed architectures.

"A digital enterprise is fundamentally different. To build and successfully reach maturity as a digital enterprise requires thinking differently about your tools, processes, and organization," said Julia Renouard, F5 VP of Engineering and contributing author.

The book outlines an architecture framework for transitioning IT to operate as a digital business, support innovation, and address today's biggest IT challenges. Each chapter focuses on a specific domain and analyzes the trends and technologies driving change, as well as provides recommendations to help organizations adapt.

- Chapter 1 discusses the changes to existing enterprise architecture needed to infuse the capabilities required by a digital business.
- Chapter 2 explores the capabilities enabled by the adoption of cloud and edge technologies and the ability to adapt the deployment location of applications.
- Chapter 3 looks at the need for application delivery as an IT discipline for digital business to operate safely at scale.
- Chapter 4 focuses on the expansion of the data domain to embrace operational data (telemetry) and practices required to scale analytics in order to enable a digital business.
- Chapter 5 lays out the foundations for a modern security governance and architecture framework that infuses a security-first approach to digital business.
- Chapter 6 covers the emerging need for observability and the expansion of automation from a productivity tool to an innovation accelerator.
- Chapter 7 dives into Site Reliability Engineering (SRE) as a catalyst for scaling operations in a modern, digital business.

A free digital copy is available for download from www.F5.com/DEA beginning today. Digital editions will be available for purchase by early August 2022 through most e-retailers including Amazon, Apple Books, and eBooks.com. By early September 2022, the print edition of the book will be widely available at major booksellers and independent bookstores like Powell's and IndieBound. It can be pre-ordered beginning today from Amazon and Barnes & Noble.

**About the Authors**

**Geng Lin** is Executive Vice President and Chief Technology Officer at F5. He is responsible for leading technology strategy, product evolution, and critical innovations for the company. Lin is an industry-leading expert in distributed systems, software defined infrastructure, and cloud services. He is a contributing author of two books on cloud and data-intensive computing. He has published many technical papers and holds nine U.S. patents.

**Lori MacVittie** is a technologist and principal technical evangelist in F5's Office of the CTO with an emphasis on emerging architectures and technologies including cloud and edge computing, digital transformation, automation and orchestration, microservices, and application delivery. MacVittie has more than 25 years of industry experience spanning application development, IT architecture, and network and systems operation. Prior to F5, MacVittie was an award-winning technology editor at Network Computing Magazine. As an enterprise architect, she drove architectural efforts to lead a global transportation and logistics firm into the Internet age, and has developed software for Nokia phones, Autodesk, and regional telecommunications firms. She co-authored the CADD profile for ANSI NCITS 320-1998 and holds a U.S. patent for application delivery provisioning. MacVittie is a contributing author of books on cloud security and object-oriented development and has authored books on application security and XAML.

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**About F5**

F5 (NASDAQ: FFIV) is a multi-cloud application security and delivery company that enables our customers—which include the world's largest enterprises, financial institutions, service providers, and governments—to bring extraordinary digital experiences to life. For more information, go to f5.com. You can also follow @F5 on Twitter or visit us on LinkedIn and Facebook for more information about F5, its partners, and technologies.

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