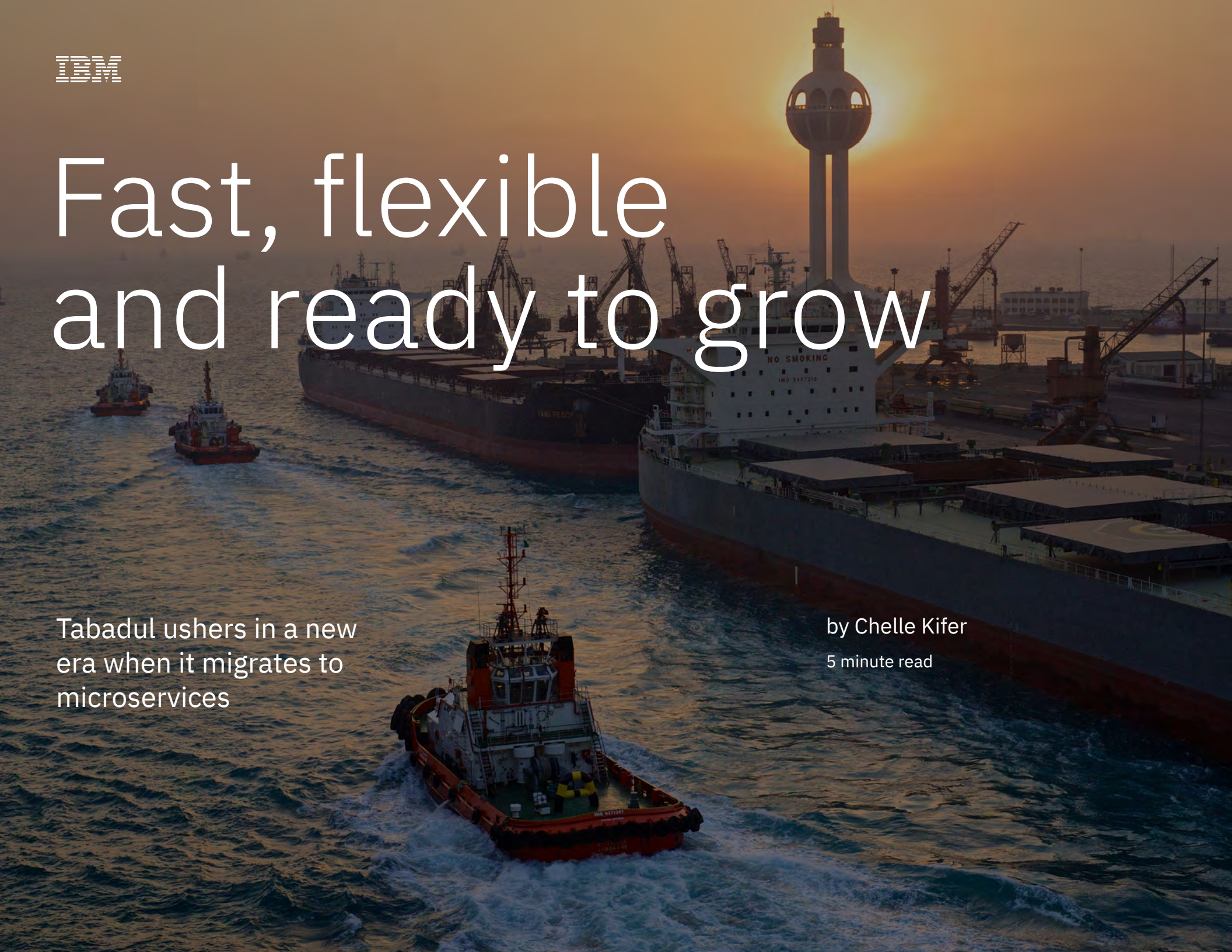IBM

Fast, flexible and ready to grow

Tabadul ushers in a new era when it migrates to microservices
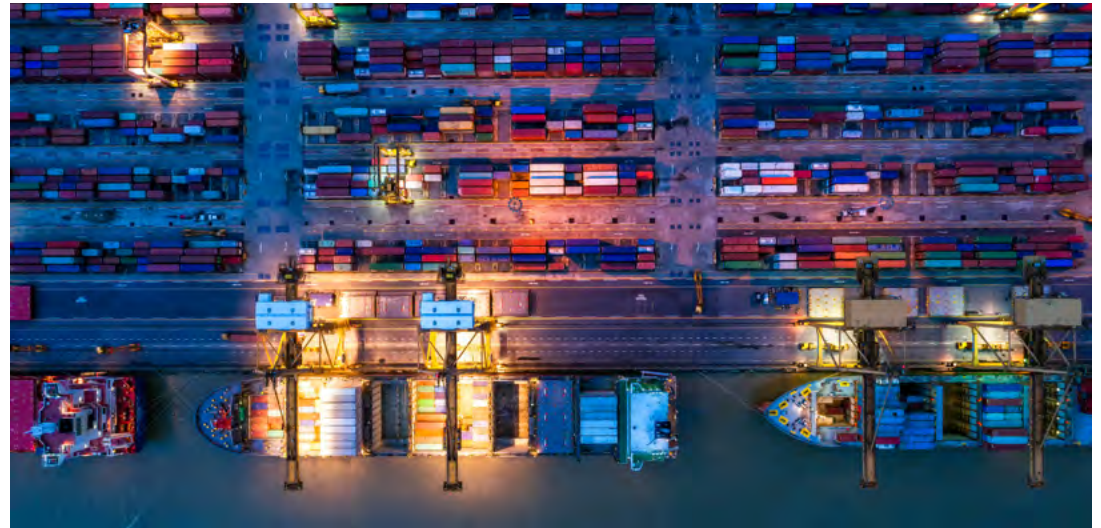
by Chelle Kifer

5 minute read

In 2016, Saudi Arabia announced Saudi Vision 2030, a government initiative setting ambitious goals for the country's cultural and economic development.

As part of its focus on maintaining a leading presence in the region, the mandate includes objectives for establishing Saudi Arabia as a global logistics hub.

Serving as the primary technology firm facilitating the country's import and export activities, Tabadul needed to gauge its readiness for supporting the new initiative. After performing a comprehensive IT assessment, the

company decided the timing was right for a complete digital transformation.

Fasah, Tabadul's system for enabling information exchange between parties involved in import and export procedures, was hosted and managed by a third-party vendor. In addition to limiting Tabadul's visibility into and control over its application environment, the provider's monolithic IT architecture

lacked the scalability, flexibility and performance the firm required moving forward.

"We wanted to be able to expand as quickly as we needed," says Jehad Alsuwaid, Solutions Manager for Tabadul. "We also wanted a faster time to market for our application changes, products and services."

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Jehad Alsuwaid
Solutions Manager
Tabadul

Better supports
Saudi Vision
2030
by enhancing scalability and performance

Time to develop
new features
decreased by
2/3
thereby speeding time to market

Modernizing with a shift to microservices

Investigating potential solutions, Tabadul decided to modernize its application environment by migrating to a microservices architecture built on IBM Cloud Pak® for Integration technology. "IBM Cloud is the main reason we went with our change in architecture," says Alsuwaid. "It gives us container management capabilities so that we can scale up as we need."

Tabadul engaged IBM Cloud® Integration Expert Labs to design its new microservices environment and IBM Business Partner Saudi Business Machines (SBM) to provide a full suite of consulting, implementation, integration, support and knowledge transfer services.

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Jehad Alsuwaid
Solutions Manager
Tabadul

"SBM's core mission is to provide innovative solutions that will empower our customers," says Amr Kalil, IBM Software Group Director at SBM. "We recommended Cloud Pak because we knew it had the potential to greatly improve development speed and agility for Tabadul."

Based on the IBM team's solution design, SBM deployed IBM Cloud clusters in Tabadul's development, testing, production and disaster recovery environments, incorporating IBM® App Connect Enterprise technology within the Cloud Pak platform for connections with external systems.

"Tabadul's backbone is integration," says Alsuwaid. "In our business, we are dealing with government agencies, companies and other external parties, so we need a robust integration layer that can handle a huge number of transactions. We use App Connect to develop those integrations between parties as quickly as possible."

IBM API Connect® technology in the Cloud Pak offering serves as the architecture's flexible platform for exposing and managing APIs in the new environment. And finally, the solution includes IBM DataPower® Gateway technology within the Cloud Pak platform to safeguard and optimize workload delivery across channels incorporated in Tabadul's architecture.

Faster development and a boost in uptime

For Tabadul, the modernization of its application environment is the first step in a larger mission: supporting its country's transformation into a logistics leader with even greater global reach. With flexible microservices architecture in place, the company can work far more quickly and efficiently to accommodate Saudi Vision 2030 requirements as they arise and easily scale its systems with demand.

Currently in the process of migrating modules of its Fasah application to the new environment, Tabadul is already seeing benefits from the shift. By integrating a DevOps platform into the architecture, the company created a continuous integration/continuous

delivery (CI/CD) pipeline that accelerates development significantly.

"For a small feature to be implemented in our legacy application, it used to take a minimum of four weeks," says Alsuwaid. "Now, we can achieve that in roughly ten days and we're targeting one week."

In addition to performing development tasks in approximately one-third of the time, Tabadul reduces application downtime and improves performance in the new environment. "We benefit from the IBM Cloud platform's Kubernetes features supporting a reliable, scalable application that stays up all the time," says Alsuwaid.

About Tabadul

Tabadul is a technology services provider focused on leading the digital transformation of the logistics sector in Saudi Arabia. Serving government and private-sector organizations, the company's logistics integration solutions include Fasah, its platform supporting information exchange during import and export activities. Founded in 2009 and headquartered in Riyadh, Tabadul is a subsidiary of the Public Investment Fund (PIF) established by the government of Saudi Arabia.

About Saudi Business Machines

Established in 1981 and based in Jeddah, Saudi Arabia, IBM Business Partner Saudi Business Machines (SBM) provides IT and telecommunications solutions to enterprises across industries. In addition to a comprehensive range of hardware and software platforms, the company offers integrated technology services, professional services and network services. SBM employs approximately 900 certified consultants and project managers.

Solution components

- IBM API Connect®
- IBM® App Connect Enterprise
- IBM Cloud®
- IBM Cloud Integration Expert Labs
- IBM Cloud Pak® for Integration
- IBM DataPower® Gateway