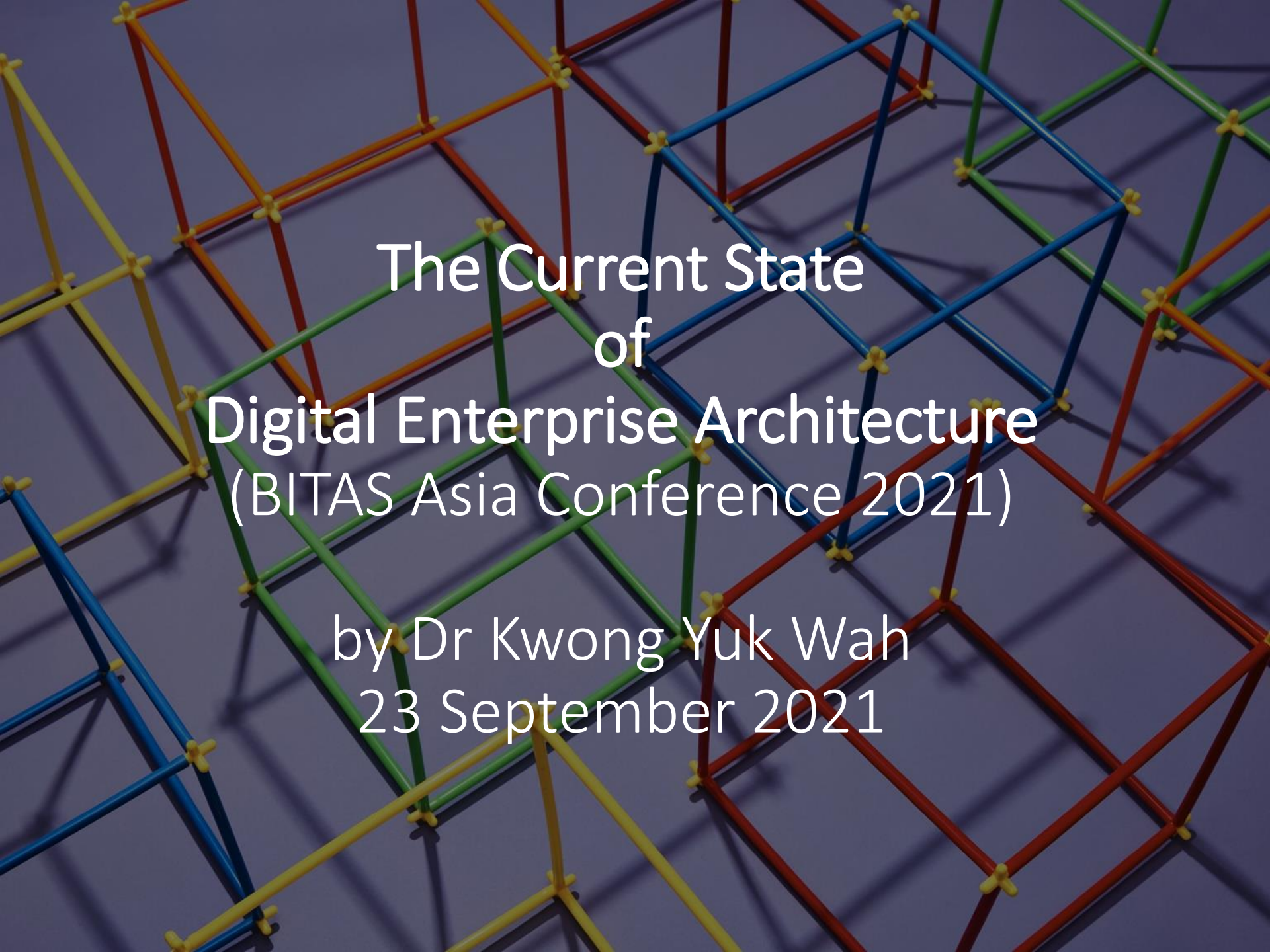
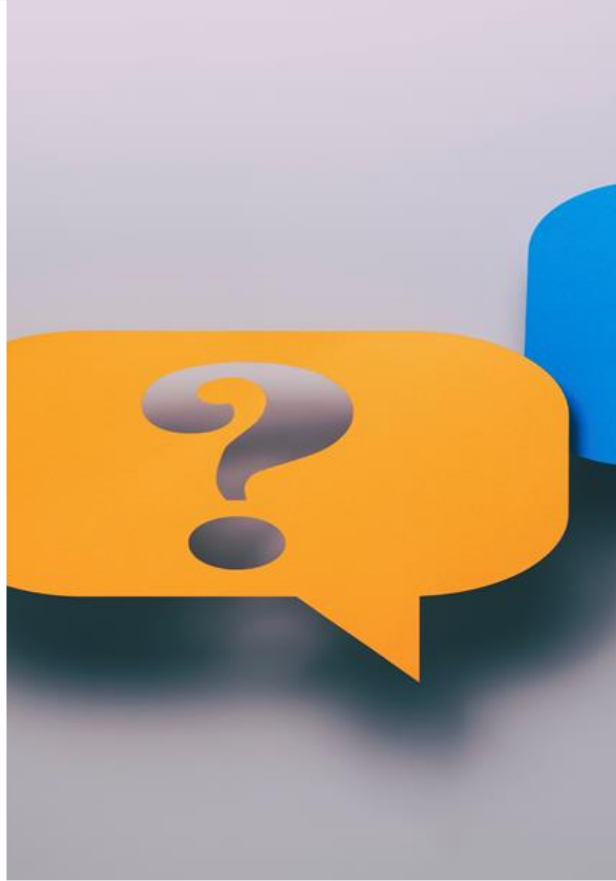


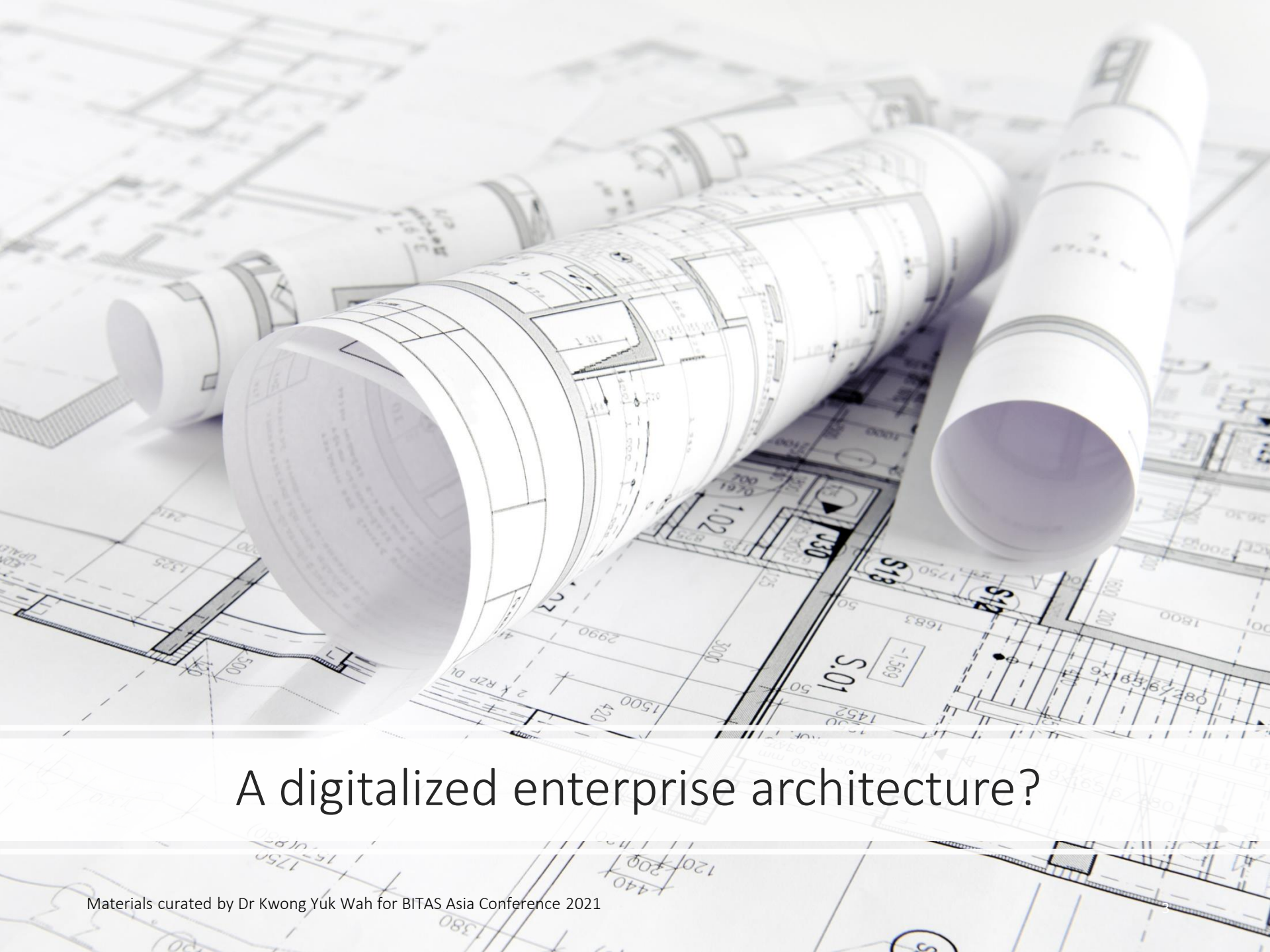
The background of the slide is a complex, abstract geometric pattern. It consists of numerous interconnected lines in four colors: yellow, orange, blue, and green. These lines form a mesh of various polygons, primarily triangles and quadrilaterals, creating a three-dimensional effect. The lines are set against a dark, muted purple background. The overall impression is one of a dynamic, interconnected network, which metaphorically represents the 'Digital Enterprise Architecture' mentioned in the title.

The Current State of Digital Enterprise Architecture (BITAS Asia Conference 2021)

by Dr Kwong Yuk Wah
23 September 2021



Digital Enterprise Architecture

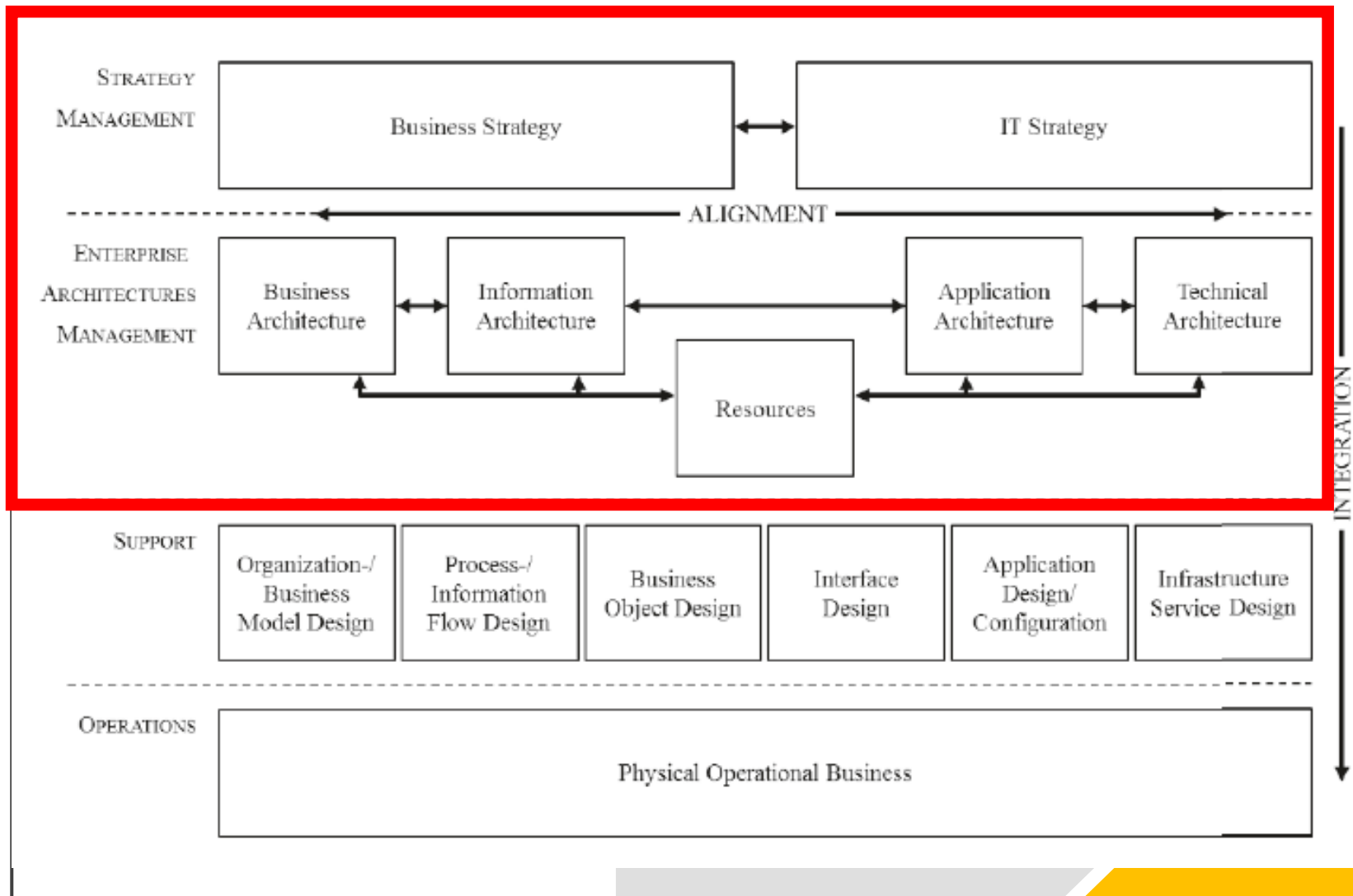
The background of the slide is a high-angle, close-up photograph of architectural blueprints. Several sheets of paper are unrolled, showing detailed technical drawings with lines, dimensions, and labels. Three large, white, cylindrical objects, which appear to be rolled-up sections of the blueprints, are positioned diagonally across the frame. The lighting is soft, creating a professional and technical atmosphere.

A digitalized enterprise architecture?



Digital Respository of the architecture

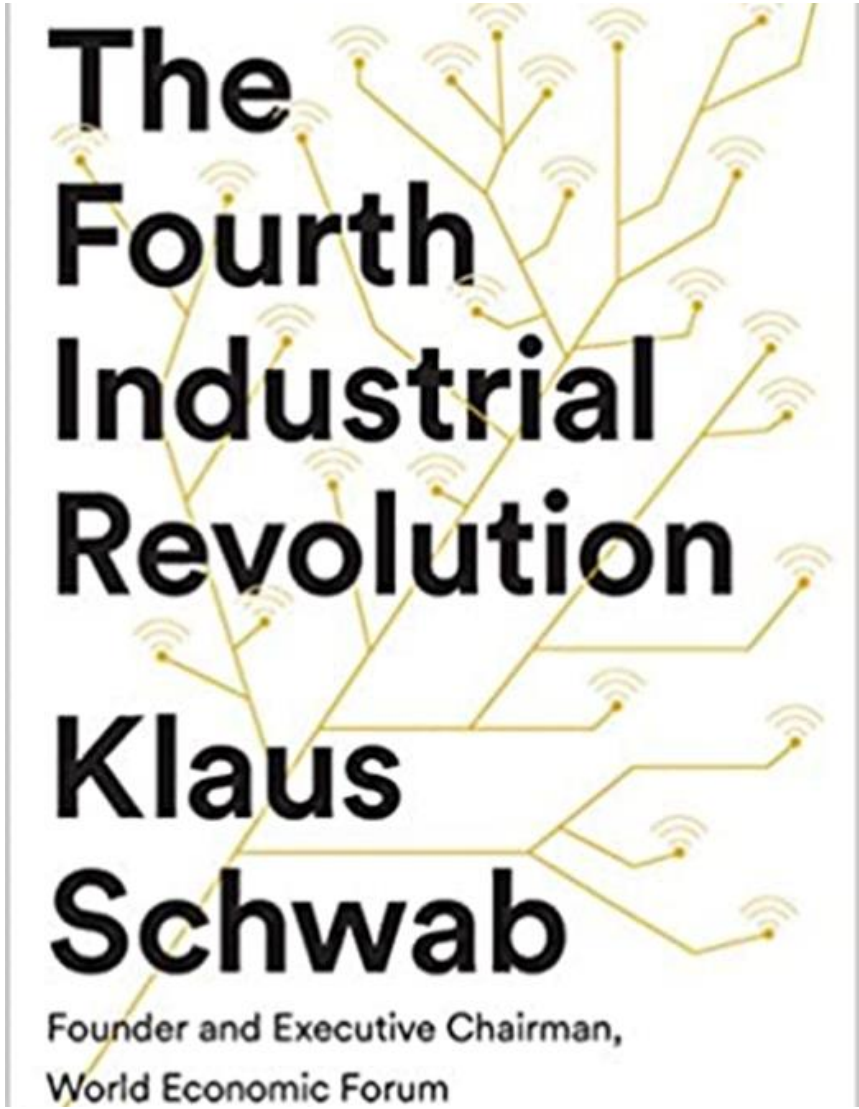
Models of architecture and textual descriptions presented in digital format



Source : Matthias Wißotzki, Capability Management Guide -
 Method Support for Enterprise Architectures Management, Springer Vieweg (2016)

Challenges for Enterprises

- Digital disruption
- Pace of change is exponential
- Consumers & customers are empowered



The Fourth Industrial Revolution

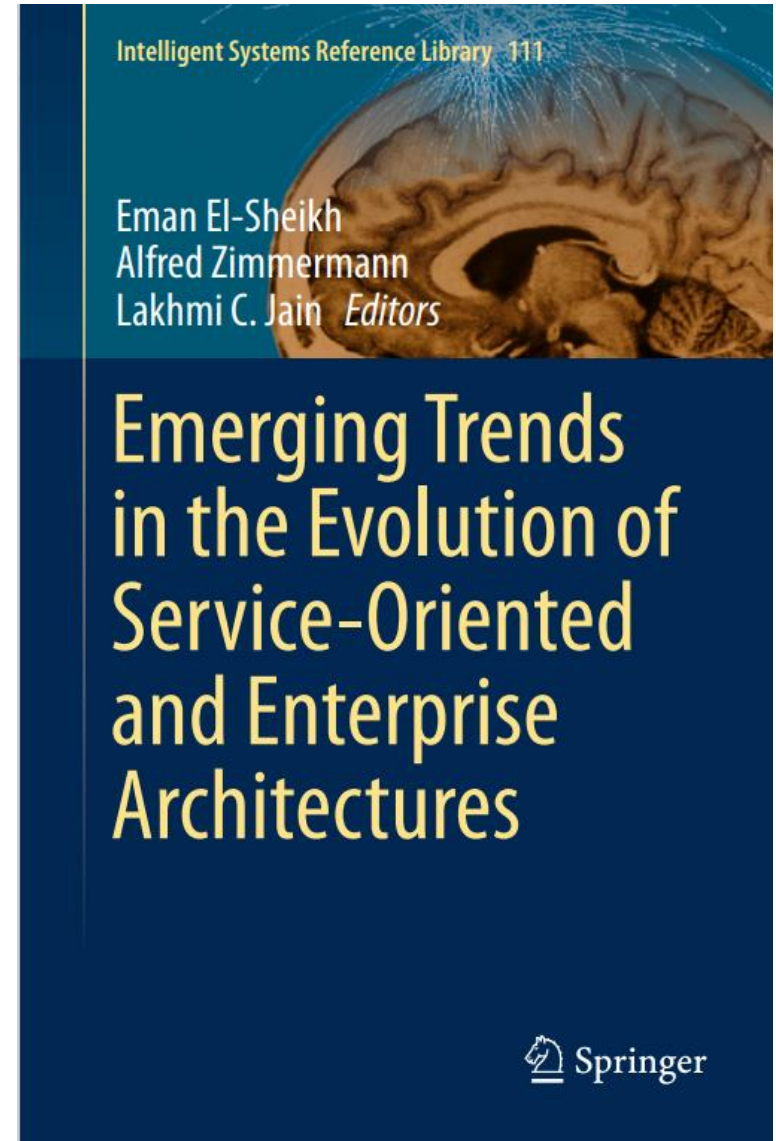
Klaus Schwab

Founder and Executive Chairman,
World Economic Forum

Changed Role of IT and the Enterprise Architecture in the Times of Digital Transformation

“IT no longer supports the business, IT is the business”.

This subtle play on words shows the role change information technology underwent in recent years. There is a growing part of enterprises and organizations, where information technology is in the core of the business, where IT not just supports but enables new or enhanced offerings. We call this evolution—or better, looking at the time frame—revolution “Digital Transformation” or “Digital Business Transformation”

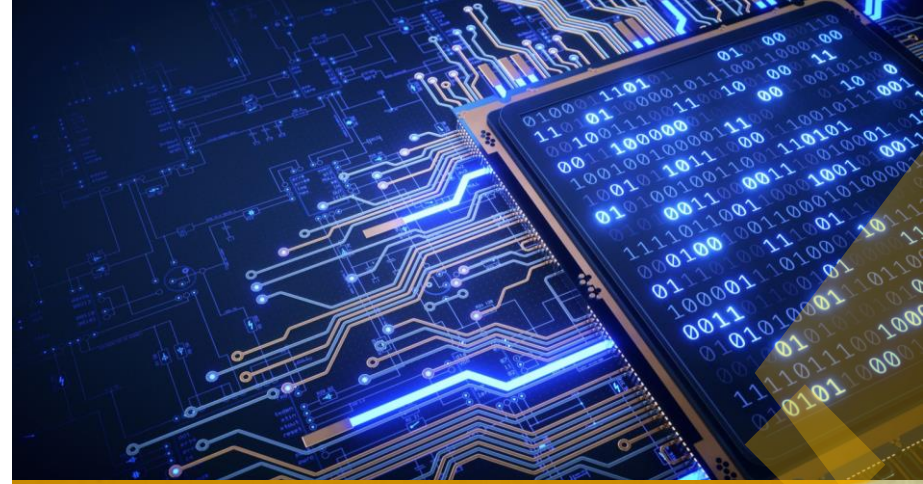


Source: Oliver F. Nandico, Chapter 7 – A Framework to Support Digital Transformation

Digital business is integral to the business strategy.

The Chief Digital officer role is leading the move to digital business.

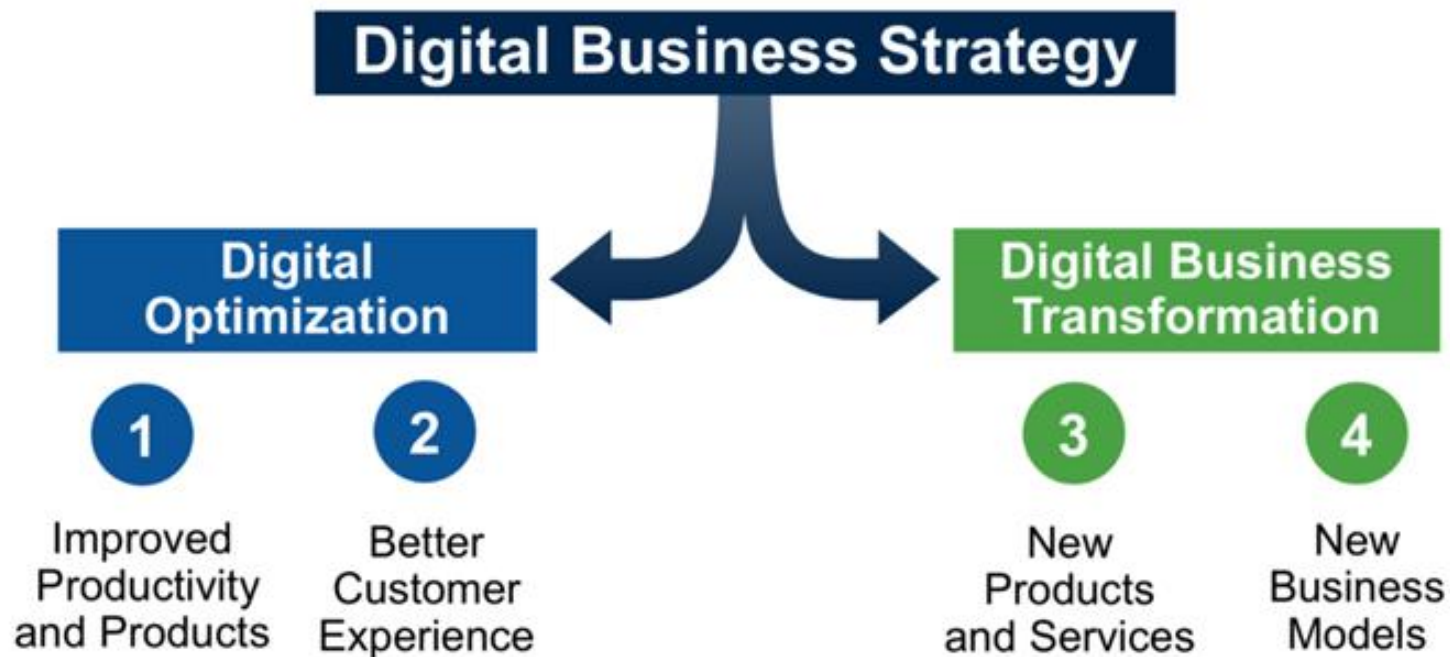
Source: “Business Architecture is not optional for business-outcome-driven EA”, by Betsy Burton, Marcus Bloch, Gartner(2016)





Digital Business Strategy

So, what is exactly Digital Transformation and Digital Optimization?



Source: Gartner Enterprise Architecture (EA) Summit 2018



A new way of thinking at all levels



Cross-functional team from different backgrounds and of perspectives



Discussions on capturing the strategic value and creating business value



Rapid change of the operating models and re-designing the business processes to capture the value enabled by new technologies



Management of sheer number and breadth of digital solutions and the risk involved



Enterprise architecture is a management tool

Exploitation of technology at transformative scale involves.....

The background image is a silhouette of a construction site at sunset. A worker is visible on a platform, and a large rectangular object is being lowered by a crane. The sky is a gradient of orange and pink.

An IT Architect is the
technology strategist
for the business
by IASA

Four Enterprise Architectural Domains

Business Architecture

Application Architecture

Information Architecture

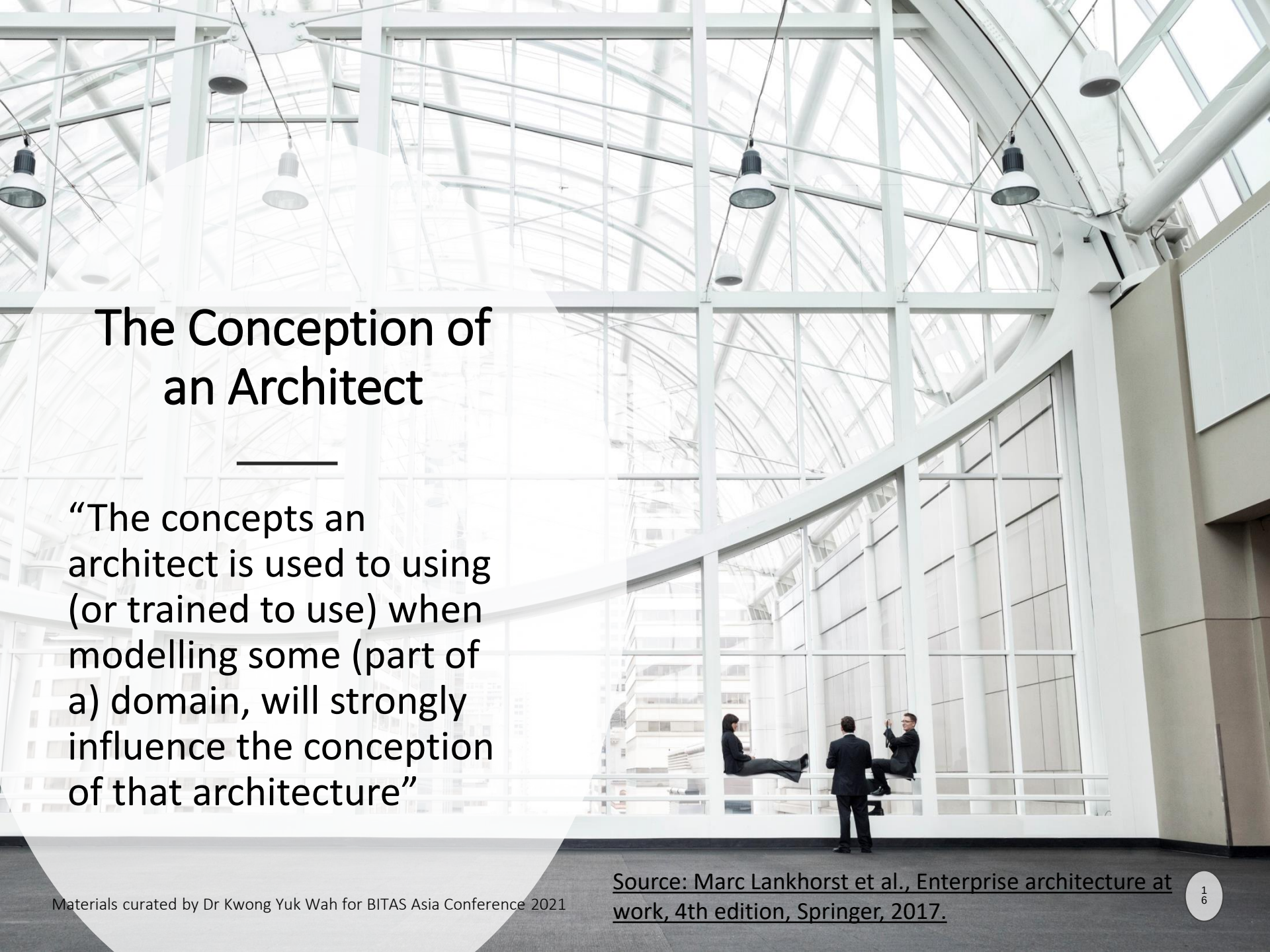
Technical Architecture



Different Domains by Different Architects



Architects model a domain from a certain perspective



The Conception of an Architect

“The concepts an architect is used to using (or trained to use) when modelling some (part of a) domain, will strongly influence the conception of that architecture”



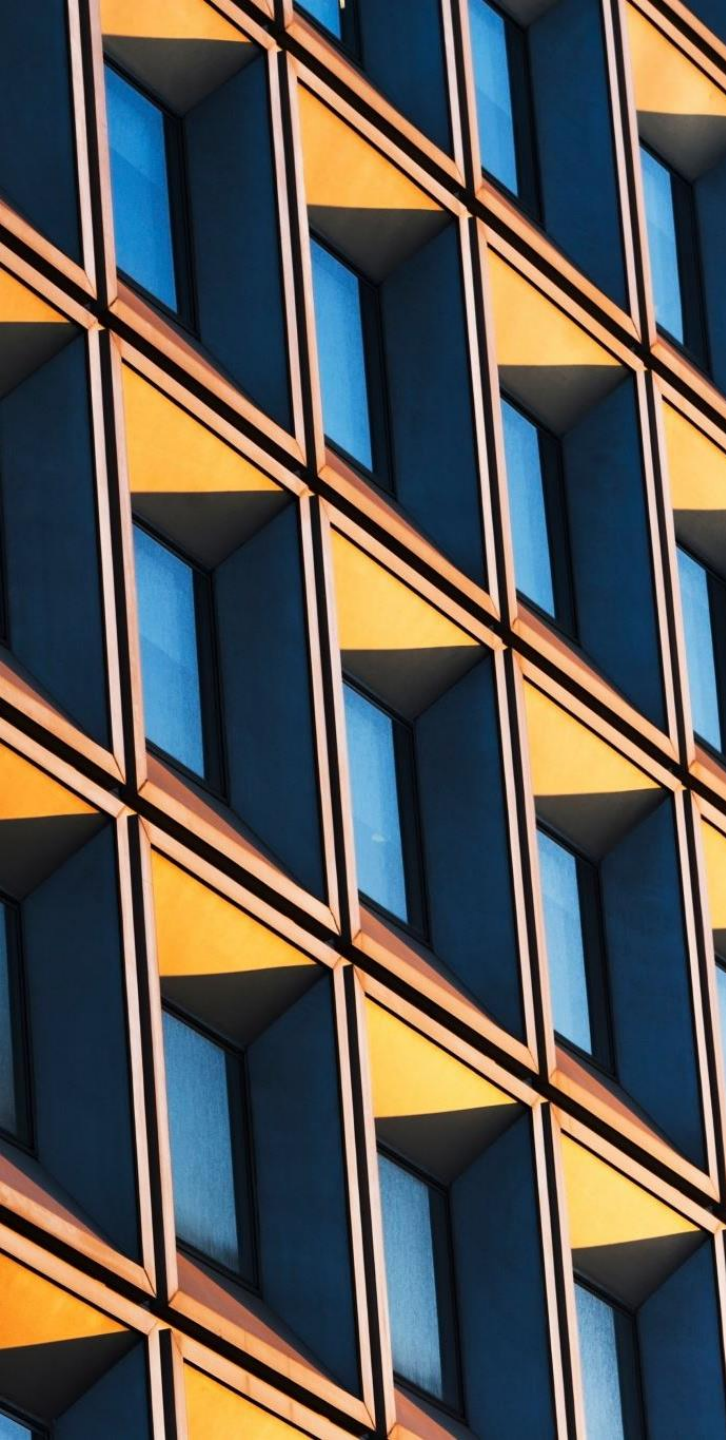
Without business architecture, “**EA efforts are just IT architecture**,” and will fail to demonstrate and deliver significant business value outcomes.

– by Betsy Burton, Marcus Bloesch, “Business Architecture is not optional for business-outcome-driven EA”, Gartner(2016)

- Organisations that support business architecture as an integral part of EA have a significantly higher ability to execute on their business strategy, because they have a clear understanding of the strategy and its impact on business and IT, and guidance to drive delivery.
- Business Architecture is essential to strategically respond to massively disruptive business and technology change.
- Business architecture provides an insight into impacts, constraints, risks and opportunities to support strategic planning.
- By applying business architecture, EA practitioners can mitigate many of the key risk areas for business strategy.

Source: Betsy Burton, Marcus Bloesch, "Business Architecture is not optional for business-outcome-driven EA", Gartner(2016)





Changed Role of the Architect

“Digital Transformation” sets a new challenge for the enterprise architect: She has now **not just to align the IT with the demands from the business but to enable and even invent new business opportunities**. So the architecture capability of an organization gets an active part in shaping the business. The architect no longer sits in her office awaiting demands or requirements from the business but **is part of the leadership team shaping the new, digital transformed enterprise**. The architect does not only change her role in respect to the business, but to the IT as well. She needs not to just support, but to enable IT development for Digital Transformation.

Source: Oliver F. Nandico, Chapter 7 – A Framework to Support Digital Transformation, Emerging Trends in the Evolution of Service-Oriented and Enterprise Architectures

Enterprise Architecture Management (EAM) Process – Traditional five-step approach



Document the “as-is” state, i.e. current state



Analyse the gaps and identify opportunities



Describe the desired “to-be” state, i.e. target state



Develop the transition plan



Implement the plan



Digital Transformation and the Consequences for a Respective Framework

- When we speak of “digital transformation” of an enterprise, we mean the change of this enterprise with the intention to provide a new or significantly enhanced offering to its customers, where this new offering or enhancement is based on information technology as key enabler or even part of the offering.....**Initiatives for digital transformation are centered on envisioning new business models, customer experience and operating models with their respective operational processes**
- Though the digital transformation scenario needs to and will change the IT of the respective enterprise drastically, it is totally **business driven**, i.e., the drivers are rooted in the business, and business decides on executing the “digital transformation” scenario. As a result of this transformation, **the mission, vision and operating model of the enterprise may change radically, and so will the business architecture of the respective enterprise**. So the architecture work for digital transformation is strongly **governed by the business context, much more as it has been in the past.**

Source: Oliver F. Nandico, Chapter 7 – A Framework to Support Digital Transformation, Emerging Trends in the Evolution of Service-Oriented and Enterprise Architectures

Lightweight Enterprise Architecture Framework

- In the digital transformation scenario, it is of no use to define the whole target architecture in terms of business, information system and technology architecture after obtaining a statement of architecture work, which is based on the architecture vision.
- The enterprise architect needs her assignment based on the business strategy, the underlying business ideas and the business objective.
- **The digital transformation program cannot and will not wait for a comprehensive architecture designed by the omniscient and omnipotent enterprise architect.**

Source: Oliver F. Nandico, Chapter 7 – A Framework to Support Digital Transformation, Emerging Trends in the Evolution of Service-Oriented and Enterprise Architectures

BooksActually shuts physical store, goes online

Olivia Ho
Arts Correspondent

Independent bookshop BooksActually will be closing its Yong Siak Street store and moving entirely online. The shop, which turns 15 this year, shut its bricks-and-mortar store this year during the circuit breaker period and has not reopened its doors since.

At midnight on Saturday, owner Kenny Leck announced that it would go fully online instead.

Mr Leck, 41, wrote on Facebook: "It is a new beginning for all of us... As horrible as the pandemic has been, it has also given BooksActually its 'Online Store Sea Legs'. After nearly half a year of being solely an online store, we are now ready to make it a reality."

He told The Straits Times that the webstore, which was expanded during the circuit breaker, is doing better than the physical store by about 10 to 20 per cent.

"We have more work ahead," he added, citing his ongoing push to convert the titles of BooksActually's publishing imprint Math Paper Press into hardback editions by the end of the year.

Mr Leck opened BooksActually in 2005 with then co-owner Karen Wai on the second floor of a Telok Ayer shophouse.



Mr Kenny Leck, who co-founded BooksActually in 2005, said the bookshop's webstore, which was expanded during the circuit breaker, is doing better than the physical store, which has not reopened since the circuit breaker. BUSINESS TIMES FILE PHOTO

In 2009, he sold a three-room HDB flat left to him by his late mother and used the proceeds to set up a second bookstore in Club Street, which did not pan out.

The bookstore moved to its current location in Tiong Bahru in 2011, where it grew into the quaint literary haven that it is today, with its shelves of vintage knick-knacks, mystery book vending machine and three beloved cats, Cake, Pico and Lemon.

Mr Leck often wrangled with rising rents and once dreamed that

BooksActually would be the first bookshop in Singapore to own its own building, to which end he had started a fund-raising campaign to raise \$2 million for a permanent space.

Covid-19 has put paid to that dream for now, but he said that he plans to continue organising literary happenings when Singapore enters phase three of recovery, and that events it is known for hosting, such as the annual #BuySingLit street party, 24-Hour Bookstore and The World's Loneliest Book-

store pop-up, will return.

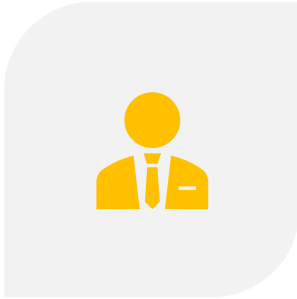
"Regardless of the uncertainties or vulnerabilities this year of change has imposed on all of us, one thing we know for sure is that the bookstore will be here for a very long time," he wrote on Facebook.

"Or at least where I am concerned, I am very certain that she, BooksActually, will continue to be your 'neighbourhood' bookstore long after I am gone."

oliviaho@sph.com.sg

Source : The Straits Times, 13 September 2020

Digital Business Opportunities for BookAcutally



FURTHER AUTOMATION (B2C) -
JUST-IN-TIME ORDER TO REMOVE
WAREHOUSE MANAGEMENT



FROM RETAILER TO WHOLESALER
OR DISTRIBUTOR (B2B)



CREATE E-MARKETPLACE OR
ECOSYSTEM

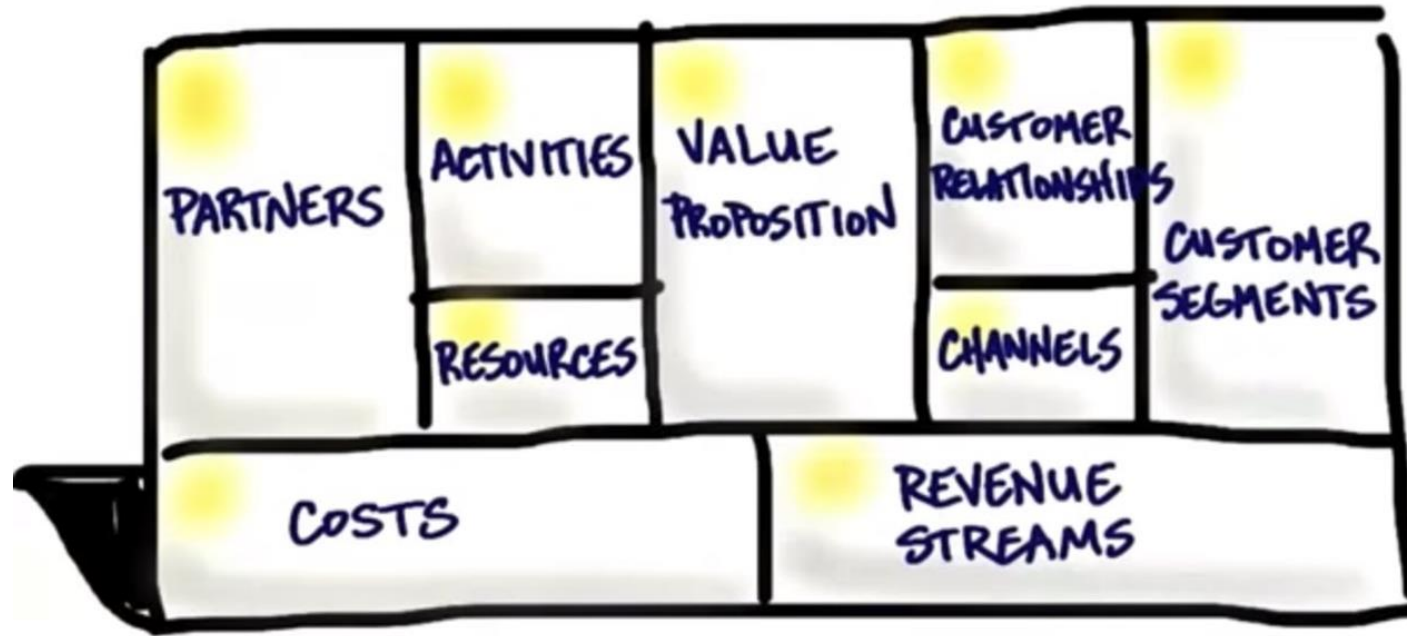


How to articulate Digitalisation Plan to BookActually?



Business Goals

BUSINESS MODEL CANVAS



Business Model



Reimagine Customer Journey

What is the customer journey?

What are the customer personas?

What is the customer experience? jobs, pains & gains

Business Capability Model

Example: retail company

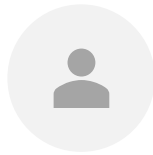
Retail capability map

Customer fulfillment	Physical store buy/sell	Store planning and layouts	Staffing management	Customer engagement	Sales (physical and online)	Inventory management
Merchandising	Assortment planning	Allocations	Buying	Pricing management	Marketing	Market research
Supply chain	Business intelligence (BI) and analytics		Logistics (warehouse management)		Vendor-managed inventory	Inventory management
Corporate services	Financial management	Tax reporting	Regulatory / compliance	Information technology	Human resources	PR & investor
						Vendor management

The Digitalisation or Digital Transformation Journey



**ENVISION
BUSINESS
MODEL**



**REIMAGINE
CUSTOMER
/USER
JOURNEY**



**DETERMINE
BUSINESS
CAPABILITIES**



**REDESIGN
BUSINESS
PROCESSES**



**RESKILL
AND
UPSKILL
PEOPLE**



**DESIGN
AND BUILD
DIGITAL
SOLUTIONS**



Architecture of a digital enterprise ?



Thank You
kwongyw@scs.org.sg