

Chapter 3

Converging Technologies and Business Models That Will Transform the Healthcare Sector Exponentially

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ABSTRACT

“Any company designed for success in the 20th century is doomed to failure in the 21st,” says David S. Roe. In a rapidly changing world of converging technologies and business models morphing into ecosystems, there is a need for agility to deal with exponential change in healthcare and life sciences. The world used to manage scarcity of resources, capabilities, technologies, and sciences, but now we manage an abundance of the same to harness capabilities for betterment of humankind in the next decade and beyond. The purpose of this chapter is to highlight the emerging business model options enabled by exponential converging technologies over the next decade.

A WORLD CHANGING AT THE SPEED OF THOUGHT

Some of the most rapid changes and the introduction of volatility, uncertainty, complexity and ambiguity have been ushered in over the past decade. The next decade will see even more exponential change and one of the ways to manage this change, and harness new capabilities is through innovative business model design.

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We are seeing a rapid convergence of technologies, sciences and business models to form ecosystems of inter-connectedness that far surpasses business models over the past 100 years.

The next decade will see business models that morph on their own, with distributed autonomous organisations interacting with each other, based upon technologies such as artificial intelligence to augment human capability and blockchain to form the backbone of transactions and operations globally. This is a fundamental move away from the historically, largely stable business models that improved with variations of existing business models and limited technologies.

Although these types of business models are still emerging, their potential to exponentially change the way humanity operates is significant. With all of these exponential technologies, business model designs and sciences converging, the network effects of inter-connectedness are even more pronounced. Network effects need not rely solely on humans, but on the connectedness of an ecosystem of humans, devices, customers, healthcare providers, buyers, sellers, autonomous artificial intelligence entities and the like.

The advent of “if you can think it, you can do it” becomes a reality, as the most successful healthcare and life sciences organisations will not be the ones who create the best technologies, but rather ask the best questions that an A.I. and a variety of technologies can help answer.

AN ABUNDANCE MINDSET TO CHANGE THE FUTURE OF HUMANITY

“Never doubt that a small group of thoughtful, committed citizens can change the world: indeed, it’s the only thing that ever has.” – Margaret Mead.

One’s mindset is of significant importance. It affects everything, from business model design, the communities built around it, citizen engagement, where investment takes place and overall well-being of employees, stakeholders and customer engagement. More so in the domain of healthcare and life sciences, as the businesses need to be based upon human-centred design.

It may be difficult to think of a world of abundance in an environment filled with pandemic and economic woes. Understanding the how exponential technologies impact the world opens up a world of abundance, due to far easier access to technologies such as computational power, artificial intelligence, 3D printing, the internet of things, robotics and intelligent automation.

A decade ago, only large corporate and government institutions had the resources and workforce to access and harness these technologies – the phenomena of scarcity.

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