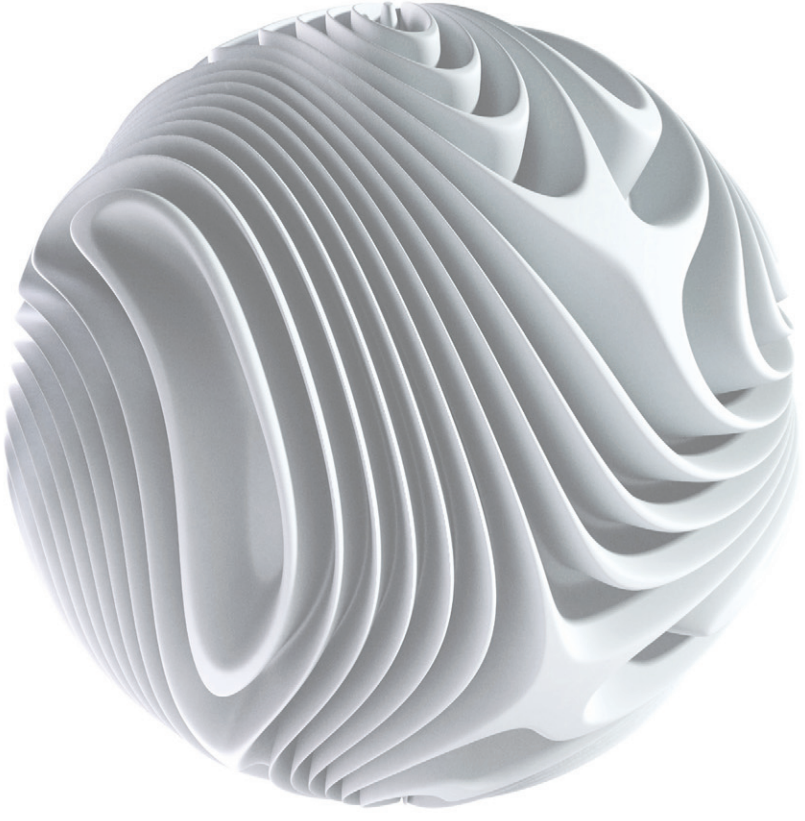
DYNAMIC FUTURE-PROOFING

Integrating Disruption in Everyday Business



ALEXANDER MANU

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Dynamic Future-proofing: Integrating Disruption in Everyday Business

BY

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INVESTOR IN PEOPLE

To Booboo, for everything, always.

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About the Collaborators

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Nenad Rava, PhD, has facilitated complex systems change and strategic development—strategy, foresight, innovation, learning, and leadership—for 20+ years. He has worked for the United Nations and across 45 countries with senior leaders in governments, public and private sectors, universities, innovation and research centers, and local communities.

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To the many organizations and individuals who have embraced my concepts and methods over the years, thanks for transforming ideas into the reality of everyday products and services and for transforming life in the festival that it deserves to be. Finally, to my wonderful family, Sophie, Sasha, and Booboo my thankfulness—their moral support and guidance allow my spirit to stay young and curious, as it should.

Toronto, August 15, 2020

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Prologue

We are not about working *on things with things*. We are about creating moments of compelling power that move us forward, toward more compelling moments. We are *carving time*, *for our own time on earth.*

The future proposed in this book has always been in us humans, as we have journeyed throughout time to achieve the technologies that will make it real.

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Introduction

Integrating Disruption in Everyday Business

Let us start by defining disruption in the context of this book: a disruption occurs when human motivation embraces a *new technology* and allows it to enhance and expand the experience of everyday life. In this definition, the *disruptor* is the technology, while *disruption* is the human being engaged in a new behavior. People's acceptance and appropriation of new technologies creates a business disruption, which changes, interrupts, and transforms our habitual way of doing things.

What does it mean to integrate disruption in everyday business? The easiest way to illustrate this is by describing how an individual integrates disruption in his/her life and understands the differences between individuals and organizations and between individual level tasks of transformative nature and organizational level tasks of the same nature.

Take the disruption we called Uber. How does an individual integrate this disruption in their everyday life, from the moment in which they first hear of the service, the technology, and the associated mobile application? The first thing an individual will do is take a look online to learn what people say about this *new thing* called Uber. An individual will seek to build a minimal AWARENESS about this novel service and broaden that with exposure to a variety of opinions and testimonials from reviews and critiques, a spectrum of opinion embracing equally the high praise bestowed on the service from people that truly enjoy it, as well as the dissenting voices, and the usual critics that complain about any new disruptor technology killing jobs and the old ways of doing things.

What an individual will seek is an INFORMED OPINION leading to ACTION and the agility to ACT.

After a couple of hours of research and an equal amount of time thinking about it, the individual would download the application on their mobile phone and would register for the service. Given sufficient positive information, individuals are compelled to act from an intrinsic desire to experience what others are experiencing, and what others are conversing about. Individuals feel compelled to act in order to gain faster belonging status in their larger social group. From the moment the application is downloaded to the first moment of disruption—the first time the individual experiences the Uber service and its benefits—time is

suspended in the expectation of magic, and once in use, the application delivers that magic through the responsive interface, communicating the status of the journey's constituent components at all times: the driver, the car, the route, the traffic on route, the expected arrival time, and so forth—all part of the new magic of urban transportation and all absent in the previous services offered by the incumbent taxicab industry.

With courtesy and in comfort, the individual will be delivered at the desired destination, while the financial transaction will be silent and brokered directly between the mobile phone and the Uber application. This first positive experience with a transformative disruption permanently alters the individual behavior in all things concerned with city transit, as that notion and its participants will now be different forever. The first engagement with this disruptor did not have to disrupt any other segment of their life; one simply had to accept the new variable—Uber—as a significant and convenient participant in a new transportation ecosystem.

Integrating disruption in one's everyday life is most of all *a question of will*. And when dealing with the subject of will, we are dealing with the *freedom* to engage one's c*uriosity*, a pursuit an individual might have an abundance of, and one that organizations typically discourage.

It is important to note that when an individual integrates disruption in their own life, they are at the same time integrating disruption in everyday business, because when one is subcontracting their transportation to a private, independent gig driver, they are not subcontracting it to the taxicab industry or the city's transportation sector. The individual's acceptance of the disruption as an outward benefit, and their willingness to engage with this benefit on a regular basis, integrates that disruption through immediate amplification, significantly and negatively impacting the business of other transportation companies providing the same service. How should incumbents respond to disruption, and how should the taxi industry have responded to the arrival of Uber?

Ignore, Fight, or Integrate?

There are three courses of action for incumbents when confronting a disruptor: first one is *ignoring it*, second one is *fighting it*, and the third is to *integrate it*.

Ignoring Netflix did not quite work out for Blockbuster—at its apex a corporation employing over 80,000 people—and eventually, by 2004, they recognized Netflix as a competitor and started closely mirroring everything the upstart was doing, from DVDs by mail to early content streaming trials. The record industry's first reaction to Napster and with the introduction of peer-to-peer file exchanges in the late 1990s was to fight both the startup and the users engaged in the activity. This did not work. While Napster lost its battle in the courts, it won the public relations war many times over.

The intrinsic pleasure of subverting the system was a new dimension of engagement, which proved too powerful an attractor for the users of Napster. And it feels the same way with Uber: a dimension of subversion of the system was at play with the early adopters of the service, a new dimension of engaging with

technology which also allows the individual to effectively engage in the creation of new social norms. This is the real power of this disruption and the reason the taxi industry should have immediately become part of a competing service, using the same technology as Uber, transforming their fleet of cars into a more modern fleet, to keep up with the same quality of vehicles the pool of Uber drivers had at their disposal, or should have joined the pool of Uber drivers from day one. If selecting the latter, their profits would' have taken a plunge, but the industry as a whole would have had a chance of continuance by becoming part of the disruption and incorporating within.

Industries and organizations that do not integrate disruption immediately fail to understand the process by which disruption evolves, trending toward and eventually integrating into the mainstream. A disruption such as Uber first amplifies from one city to the next, and from that to the next, and then from one country to the next country, and from one continent to another, while maintaining at all times its character as a disruption, as every new territory Uber entered in was equally unprepared for its impact. Uber was a disruption in New York as well as it was a disruption in Toronto, Paris, Berlin, or Mexico City. The more vertical a business is, the more dangerous disruption becomes, as there is nothing to fall back on—the taxicab industry being a perfect example of this.

Once a disruption is amplified, its impact starts to be felt outside the industry it originally targeted and disrupted, and in the case of Uber, the impact started to be intensified in all areas of the economic system connected to transportation at the city level, impacting public transportation, impacting parking spaces, impacting insurance companies, gas stations, and all those involved in any part of the supply chain connected to the impacted entities.

The impact of an *amplified* and *intensified* disruption—discussed in detail in Chapter 1.2—transforms fundamentally the foundations of a society in the course of time, as more and more individuals start to understand the benefits offered by the disruptor over the status quo, embracing the disruptor and thus becoming the disruption, now a part of the mainstream of their life. This is the real meaning of integrating disruption in everyday business, the fact that it cannot be ignored: it transforms society and its artifacts the way Netflix, Prime Video, YouTube, and Apple TV have transformed the entertainment industry over the past years.

The final phase of a disruption is the phase of *market maximization*, and this is where we encounter its real transformative power in terms of technology and behavior. Maximizing the market for the Uber disruption means introducing the concept in any domain of human activity where a transactional function can take place on the same principles as the Uber transportation transaction. The principles are simple: willing driver takes willing passenger on board, toward a desired destination for a declared fee. The human activity is the human economy: You have a car; I need a ride. You have coffee; I need coffee. Uber EVERYTHING is the market maximization potential of the concept. The key here is that each one of the parties involved intrinsically wants what the other has. This can be the case with food delivery—as it happened—and with any other service in which one party desires what the other one has and possesses the means to connect via mobile digital technology.

Ledership: Awareness, Intelligent Informed Opinion, and Rapid Action

In a time of change, it is vital that companies drive the transformation of their businesses and brands by understanding how individuals experience technology, assess the impact, and use that knowledge to improve the consumer experience. Simply put, the ability to achieve business goals by incorporating disruptive technologies and their driving forces (behaviors) is critical to an organization's survival.

The speed with which disruption amplifies in consumer markets that embraced the digital era has resulted in many industries being completely devastated by emerging players committed to digital innovation. What can organizations learn from the individual's attitude to disruption discussed earlier in this section?

Sensing: develop sensing and awareness mechanisms and processes for incorporating new knowledge in the organization and get frequent reports of fresh data points from early adopters.

Transformation: understand the behavior transformation implied by disruptions, encourage and financially support your employees in becoming early adopters, and have a first-hand experience of the disruption from within.

Curiosity: become curious about everything connected to the inception phases of the disruption, its nature, its technology, and its champions.

Open mind: be open to learn without judging what people think about this disruption and how is it perceived as a transformer of the status quo.

Intelligence: be prepared for disruption at all times by making sure your leadership team has frequent access to intelligence about disruptive events and make *intelligence sharing* a leadership function, embedded in the culture of the organization.

Define a new ambition: when encountering a disruption, be quick to react by defining a new strategic ambition for your organization, ambition that incorporates the disruption in all aspects of your business and maximizes it to its full potential.

It can be difficult for business leaders to imagine what a particular conceptual transformation looks like in practice, which is why methodologies that allow for the testing of these concepts need to be embraced and frequently practiced with the aim of achieving transformative change as the ultimate way to create positive disruption. User scenarios, consumer experience journeys, and design sprints are just a few of the means corporations must now employ in order to incorporate permanent disruptions into their business models.

Future-proofing Organizations For Disruption

Creating an environment in which permanent learning is anchored in a growth approach that is connected to every aspect of the company can change human dynamics in any organization. This is why future-proofing strategies that address executive training, coaching, and mentoring, and are in line with the broader goals of integrating disruption through transformation, should be *board-level*

initiatives. This reduces the pressure on current management to introduce and integrate new technologies, new behaviors, and new market spaces to the company and creates a top-down adoption imperative which translates in curiosity, discovery, and risk-taking at the lower levels of the organization.

Corporate boards, CEOs, COOs, and all operational leadership must align in supporting their employees in any action directed at making the most out of disruptor technologies. To be future-proof, leaders must demonstrate their ability to adapt to changing dynamics, with creativity and complex thinking as the key to ensuring that they learn and innovate at the same time. Tactical agility in future-proofing enables employees at all levels to innovate and take intelligent risks, while pursuing a clear strategy. Strategic agility in future-proofing enables the organization as a whole to *identify and evaluate* important trends and changes in the business environment and empowers individuals to adapt dynamically to the new reality.

About This Book

This book prepares executives for the challenge of creating a culture of exploration and discovery and for shaping strategic transformation in times of profound disruption. Within the framework of a value creating enterprise, the significance of a dynamic future-proofing strategy lies in bridging the gap between business competence and the creation of new wealth. This is a book about leadership, awareness, intelligent informed opinion, and rapid action in a time of change. The ability to achieve business goals by incorporating disruptive technologies and their driving forces is critical to an organization's survival, and recognizing disruptions in the early stages of amplification can convert potentially existential threats into transformative opportunities.

Future-proofing is not about predicting the future, it is about creating it. It is about realizing the immensity of being human in an age of rapid technological advancements and setting new goals from this understanding, leading to a new destination. New goals open up new timelines, and new timelines lead to transformative change in organizations.

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Part 1
Frameworks and Methods

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Chapter 1.1

Conceptual Frameworks for a New Story

Human life expressed as civilization is the reflection of the Tools available and the sum of the Shells, Networks, and Settlements these tools have allowed us to build. We are both constrained and expanded by our Tools. Tools define Networks and Settlements.

Tools, Shells, Networks, and Settlements (TSNS) exist because humanity needs to exist—they are not merely extensions of ourselves, they are ourselves, they are the way we exist, and the means by which we exist and by which we protect ourselves, propagate our knowledge, and organize our groups, in order to leave a mark for others like us.

Dynamic Future-Proofing, 3–10

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The TSNS Framework

Human life revolves around the tangibles that we have created as well as the one we have inherited. The tangibles of our manifest presence form the culture of our civilizations; they are both a burden and a purpose, as humans are destined to create and to maintain civilizations in order to survive. In the course of our history we have created *Tools*, *Shells*, and *Networks*, each of which is a reflection of the technological accomplishments of the times in which they were produced, as well as of the dreams of the people that created them. All summed up in the *Settlements* that contain our organized and purposeful social groups (Fig. 1).

In the context of this framework, I have designated as *Tools* (*T*) all implements designed for the purpose of enabling or making possible the activity by which humans transform matter in purposeful and meaningful artifacts, with the intention of improving and nurturing the well-being of their society. I have designated as *Shells* (*S*) all systems that contain a human activity performed with or on tools, as well as housing, clothing, community structures, shops and markets, civic and business facilities, and large or small storage structures; and designated as *Networks (N)* all physical layouts, communication systems, sewage and drainage, transportation systems, food chains, and alike. Tools, Shells, Networks, and Settlements exist because humanity needs to exist—they are not merely extensions of ourselves, they are ourselves, they are the way we exist, and the means by which we exist and by which we protect ourselves, propagate our knowledge, and organize our groups, in order to leave a mark for others like us.

Human life expressed as civilization is the reflection of the Tools available and the sum of the Shells, Networks, and Settlements these tools have allowed us to build. We are both constrained and expanded by our Tools. Tools *define* Networks and Settlements. In the past, these Networks were in close proximity, as were Settlements, due to practical reasons like natural resource availability—water—effort

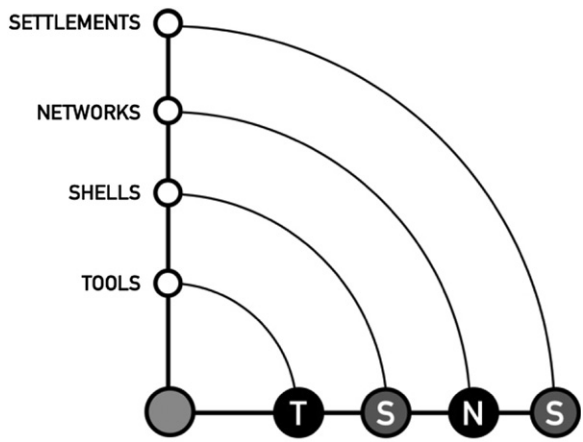

Fig. 1. The TSNS Framework.

conservation, and so on. With the advent of the digital Network, digital data as a material and the tools it creates allows for the creation of Settlements unbound by physical proximity, bound only by social identity, scope and preferences.

Why Are Frameworks Important

Frameworks are important in the context of transformation because it is at the level of frameworks that transformation first begins. Our very structure is a deterministic construct in which the mind organizes reality, but frameworks organize the mind, and without altering the framework, transformation is all but impossible. Once frameworks are transformed, language also needs to be transformed—and Chapter 5.1, *The Future of Knowing*, deals with some of these aspects—because language is used to describe and assign meaning to both the sections and modules of the framework, as well as the interactions within.

Before beginning a journey toward a richly augmented future, we need to understand the attributes of each section of the TSNS framework. Let us look at a few definitions:

Tools: *a piece of equipment that you use with your hands to make or repair something; something that helps you to do a particular activity (Cambridge Dictionary)*.[1]

Shells: *the basic outer structure of a building or vehicle, especially when the parts inside have been destroyed or taken or have not yet been made (Cambridge Dictionary)*.[2]

Networks: *a large system consisting of many similar parts that are connected together to allow movement or communication between or along the parts, or between the parts and a control center (Cambridge Dictionary)*.[3]

Settlements: *a place where people come to live or the process of settling in such a place (Cambridge Dictionary)*.[4]

The definitions above place the sections of the framework in the context of language and the meaning these words have in the Cambridge Dictionary. What is important in our context is not the linguistic definition of the words but *defining the nature of the attributes they measure and represent.*

What we seek to know is in what measure the nature of one section's attributes determines the nature of another section's attributes, what are the dependencies, and how they cooperate with one another in the construction of the framework. One more definition is now necessary: what is an "attribute"? The Dutch philosopher Spinoza defines the term "attribute" as "*what the intellect perceives of substance as constituting its essence*."[5] Spinoza makes a very important point about the dependencies of attributes to one another—although one attribute may be conceived

[1]Retrieved from https://dictionary.cambridge.org/dictionary/english/tool.
[2]Retrieved from https://dictionary.cambridge.org/dictionary/english/shell.
[3]Retrieved from https://dictionary.cambridge.org/dictionary/english/network.
[4]Retrieved from https://dictionary.cambridge.org/dictionary/english/settlement.
[5]Spinoza's Theory of Attributes (Stanford Encyclopedia of Philosophy). Retrieved from https://plato.stanford.edu/entries/spinoza-attributes/.

without the aid of the other—Tools can be conceived without the aid of Settlements—we still cannot infer from that that they constitute two beings. Spinoza here is explaining something about the relationship among attributes—conceiving attributes independently is not evidence of the existence of independent attributes. While Tools can be independently conceived, they will eventually define themselves around the purpose they serve in creating, or being a part, of Shells, Networks, and Settlements. The attributes function as a whole, and so does the TSNS framework. Let us now look at how the intellect perceives the quintessence of Tools, Shells, Networks, and Settlements.

Tools

The *nature of the Tool* means its intrinsic capability to address materials, understanding that tools are material specific, and thus they have a limited opportunity to tackle a variety of materials. A knife can cut only something softer than the material it is built from. A turning wheel for clay can only produce round plates and cylindrical containers. A *Tool* is anything that has the capability of creating a new extension to our way of life, and that extension is contained in what I designated in this framework to be a *Shell*.

Tools create behaviors and the combination of tools and behaviors creates a disruption of the status quo. When this disruption is amplified—as exemplified in the chapter that follows—it creates further Shells which are containers of facts, ideas, methodologies, impressions, ways of doing things, all the results of the actions performed at the intersection of the tools which represent technology, and the behavior that has embraced them. Tools create other tools; a chair by itself has no meaning and no value if it is not designed for the purpose of allowing an individual to sit at a table, either to write or to eat. What gives value to both the table and the chair is the fact that both exist.

To make the table usable we create containers—*Shells*—in which the life necessities can be stored and transported, necessities such as water, grain, or even shallower shells that allow us to place food on them so we can eat. To complete all possible tasks that a particular tool can afford us, other tools are necessary: using a table for dining necessitates knives, forks, spoons, plates, and so forth.

The fundamental premise of the TSNS framework is that communities of people, and society and civilization in general, advance around the development of Tools. Tools create conditions for transforming nature into a habitable environment for humans, as well as conditions for creating storage vessels of various kinds.

Shells

A house is a shell that contains the life of an individual and his or her family. Clothing also falls in the category of shells, as it contains within it an individual's physical body, its characteristics, and his or her well-being. In the age of digital technology when data becomes a material, shells do not have to be physical constructs in order to contain something within. Any container is obviously a

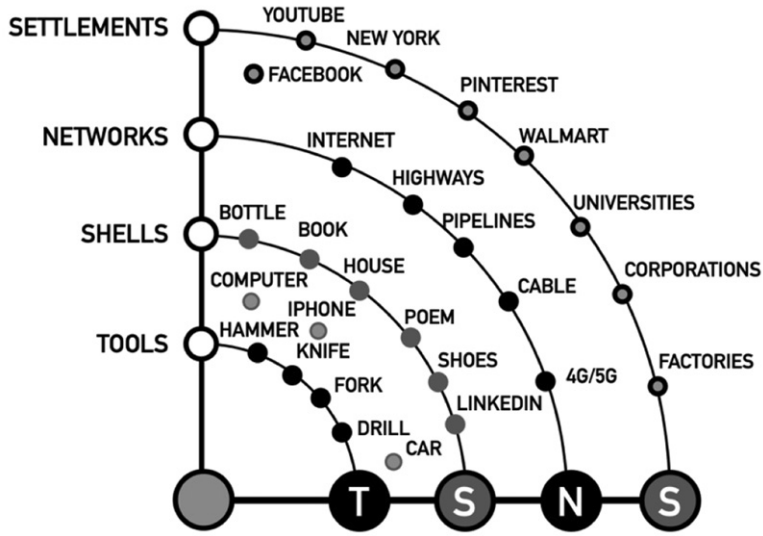

Fig. 2. The TSNS Framework Detailed.

shell but less obvious is the fact that one's LinkedIn page is also shell, as it contains all the relevant information about that individual for others to see. In the same way, a Facebook page is also a shell which contains the aspirations as well as the achievements of that individual and his or her hopes and dreams. In both these examples, we can see that some human artifacts are hybrids in this framework, being at the same time part of more than one category of attributes. As illustrated in Fig. 2, quite a few modern artifacts are hybrids containing multiple attributes: a mobile phone is both a tool and a shell, an automobile the same, while a large department store is both a shell and a settlement.

Networks

To bring all the goods to the table, we need to create networks, the roads for which we have to build transportation devices—which qualify as both Tools and Shells—and also we need the infrastructure, which is the electrical lines, the sewage, the gas pipelines, the water pipelines, and the means by which the materials and substances that we need for survival and comfort get transported from one location to another.

For Shells to become part of a Settlement, we need Networks. Settlements are made alongside networks or nodes connecting to networks. Alongside a network means the villages built alongside a river or cities built as nodes of communication along the seashore. As we discussed before in the case of tools, the nature of the network determines the nature of the settlement. A settlement built alongside the river is very likely to be populated by people involved in the exploitation of

the river—involved in either fishing or commerce—as would be the case with a settlement built using the sea as the network.

Settlements

Once the networks are in place, we now are ready to construct settlements, places where human life can evolve in the safety and comfort of a communal group, united by the same purpose.[6] After we are settled, we create more tools, which in turn create more shells, which in turn make more networks necessary, and so forth. It follows that any settlement using the Internet as the network will have as its primary attractor the power of the network to simultaneously and instantly connect multiple users, giving them the same access to the same tools for participation and empowerment. The nature of the network that has created the settlement called Facebook is precisely described above: *simultaneously and instantly connecting multiple users on the same platform.*

As soon as settled on Facebook individuals will start creating more tools to increase the number of activities they can perform, and once these tools are created, they demand more shells, more places where we can store the new data that we just created—shells like Instagram and WhatsApp.

The TSNS Framework in the Digital Era

In the past 20 years, a large number of tools have become digital, losing their physical attributes and being referred to as immaterial. Consequently, the TSNS framework now includes a variety of immaterial Tools, immaterial Shells, immaterial Networks (virtual), and immaterial Settlements. One's Facebook Page is an immaterial Shell, while Facebook as a platform is an immaterial Settlement.

Once becoming digital and data-driven, these components of the framework do not need inputs from users or even a user's physical presence in order to activate and function. The framework itself can now activate and function by itself, in a fully autonomous fashion. Fully autonomous Tools can augment themselves via artificial intelligence and machine learning and create in turn fully autonomous and augmented Shells, augmented to reinterpret reality through multiple layers of experience from which they can learn. These new layers of experience are now exemplified by products like Microsoft's HoloLens and Facebook's Oculus Rift, both redefining the notion of space which is so much at the core of the concept of Settlements.

The consequences of this augmentation and automation are connected to the disruptive potential of a framework being redefined at the philosophical level of what it really is and what it represents in people's lives, in the construct we call society. I mentioned in the introduction to this book that disruption challenges

[6]A settlement is a maximized series of shells which can now operate as groups based on affinities, because they have networks allowing them to independently survive and communicate. Without networks, we will all live in the same very large location/city/commune.