INTRODUCTION TO THE

Propelled by advances in global communication and information technologies, the nature of interactions among individuals and their environments has been changing rapidly, driving an ongoing metamorphosis of value creation in business, economy, and society. The centrality of personal and collective agency with the advent of the Web and the progression of new mobile technologies has accelerated the generation of data through interactions, the communication and exchange of information, and the democratization of value creation. Individuals—whether customers, employees, suppliers, partners, financiers, or citizens at large-are playing out their different interests from both within and outside of traditional enterprises.7 Nongovernmental and social organizations are taking increasingly assertive roles vis-à-vis corporations. Citizens and communities are engaging local and national governments in the deliberation of policies and the delivery of services. In all these cases, individuals are attempting to push through previously impervious institutional boundaries to express their various demands and expectations. In other words, individuals as active stakeholders want to be more intensively engaged in value creation than ever before.8

What is the significance of this new age of engagement? As depicted in Figure 1-1, a fundamental implication is that enterprises—whether private, public, or social sector enterprises and whether established or at the

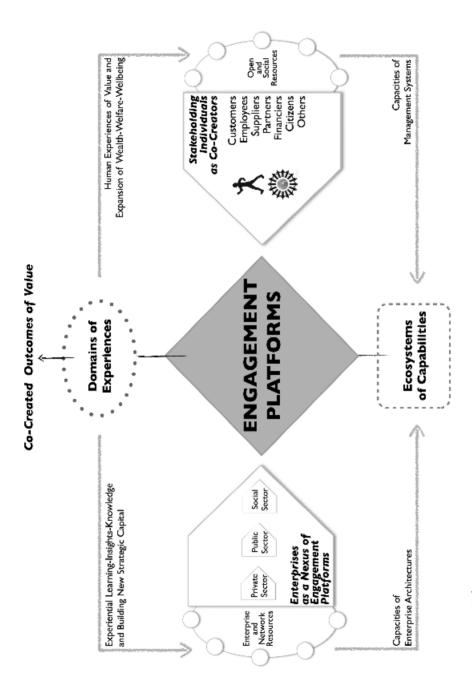


FIGURE 1-1 Value creation as co-creation

start-up stage—must be architected as a nexus of engagement platforms, organizing human agency to create value with, and for, all stakeholding individuals as co-creators.⁹

Using two examples from the private sector, an established enterprise (Nike) and a start-up (Local Motors), let us illustrate:

- how engagement platforms—assemblages of persons, processes, artifacts, and interfaces—can create value together with stakeholding individuals;
- how enterprises as a nexus of engagement platforms can connect value creation opportunities with value-creating resources in new "win more-win more" ways; and
- 3. how private, public, and social sector enterprises have the potential to converge on matters of wealth, welfare, and wellbeing, while positively transforming business, economy, and society in ways we are only beginning to grasp.¹⁰

CREATING VALUE TOGETHER THROUGH

ENGAGEMENT PLATFORMS

In 2006, Nike launched NikePlus, a running experience platform, with the communications tagline "Get connected to your running experiences."11 It consisted of a smart sensor that gathered data (e.g., steps, distance, pace) while you—the "stakeholding individual" of your running experience enjoyed your run. If you ran with the Apple iPod, then the sensor could be placed inside your shoe, with the data being wirelessly transmitted to and stored on the iPod, which also served as an interface for your runs. The combination of data and music also enabled you to pull up your personal motivating tunes, or Power Songs, just when your energy started to dip. If you didn't listen to music during your runs, then a Nike SportBand, an armband introduced by Nike in June 2009, offered a combined sensor and data storage option, while providing an interface for your running data. Either way, after your run, you could go to the NikePlus website and perform many functions related to your running experience with both your own data and with a community of runners. For example, you could chart your run; track your progress; analyze your performance; map your runs; share data with your family, friends, coaches, or trainers; and even invite and challenge other runners. You could also engage in a whole host of social interactions with other people that would not necessarily revolve around your running data, such as find running buddies, connect with running events that Nike and others organize, or engage in conversations with other runners through the NikePlus-enabled community.

The smart sensor was a required artifact to participate in an assemblage of other artifacts, persons, processes, and interfaces, all purposefully designed with the intent of generating running data-based outcomes of value to runners and other stakeholders both external and internal to the Nike enterprise (e.g., trainers, coaches, and individuals in managerial functions at Nike). The digitization of momentary analog data facilitates linkages between offline and online interactions, between individuals and the community of runners, and between individuals and their trainers and coaches.

The ways in which individuals could affect their running environments—before, during, and after a run—are multiplied. Various domains of human experiences unfold as a function of the involvements of individuals in the environments afforded by NikePlus, such as engaging with music or data while running (e.g., the voiceover of Olympic athletes through the Apple iPod that announces your progress and milestones achieved). In extending the intentionalities of NikePlus engagements, one can imagine Nike taking any of the environments afforded to runners and enabling connections to the environments of other stakeholders (e.g., marathon organizers or fitness instructors), as well as communities of runners in new roles.

Thus, NikePlus is enveloped in a larger ecosystem of capabilities—a meshwork of social, business, civic, and natural communities whose capabilities can be leveraged as co-creative resources to afford new value creation possibilities. Tor instance, the Nike RunReporter platform, which NikePlus links with, attempts to engage nonprofessional runners who can report live from marathon running events (like citizen journalists). These RunReporters can potentially enhance the running environment of a particular runner in a marathon run or the experience of a spectator at the marathon event. The co-creative resource networks not only generate additional value from the perspective of runners (the traditional customer base of Nike Running), but they also represent new value creation opportuni-

ties in of themselves. For instance, by looking at NikePlus from a "trainer as customer" perspective, Nike was able to imagine new environments of interactions that connect with NikePlus, such as the ability for a trainer to interact with a group of runners and coach them both individually and as a group, drawing on other resources in the Nike enterprise ecosystem. This, in turn, led Nike to leverage meshworks of running, coaching, and training communities to afford new environments of interactions and potentially new outcomes of value for all involved.

Nike has also leveraged the capabilities of partners into the Nike enterprise ecosystem. First, Nike actively collaborated with Apple in integrating runner engagement with music and data through the iPod interface. After Apple launched the iPhone in 2007, along with its App Store, through which developers in Apple's ecosystem could provide applications, Nike took advantage of the Apple iPhone's built-in accelerometer and GPS to launch its NikePlus GPS app. This app could collect your running data without the need for a separate shoe/armband sensor, provided you did not mind running with your iPhone. This, in turn, led to the development of new assemblages coming together as the NikePlus Fuelband, a wristband that can be worn throughout the day, like a watch. The extended NikePlus Fuelband keeps track of every step you take and every move you make and converts all your daily activities to a common metric called NikeFuel, which helps you set active lifestyle goals and stay motivated throughout the day. Thus, NikeFuel evolved from the NikePlus engagement platform, extending its value beyond running to other sports and making lifestyles as a whole more active.

The new task for managers and employees, as co-creators from within the Nike enterprise, is to pay attention to the embeddedness of NikePlus in the daily experiences of individuals to not only gain a deeper understanding of the involvements of people but also of their contexts of engagements, the events that give rise to their life experiences through NikePlus, and what is meaningful to them. Further, decision makers at Nike have to reflect on and use the insights gained to personally and collectively virtualize the co-creative capacities of Nike's strategic architecture—multiple, linked environments of interactions across the NikePlus extended engagement platform and the meshwork of communities enveloping it in

the ever-expanding Nike enterprise ecosystem. ¹³ Thus, the ultimate goal is to actualize new co-created outcomes that expand value for all participating individuals in *win more-win more* fashion.

Nike's engagement platforms, ultimately, enable its extended enterprise ecosystem to:

- learn directly from the interactions of its customers and other stakeholders;
- get direct input from individuals on their engagement preferences and connect with their experiences;
- build deeper relationships and trust with the communities served and whose resources it depends on;
- foster private-public-social sector partnerships;
- leverage open and social resources, and enterprise and network resources;
- generate new ideas rapidly;
- · experiment with new offerings quickly;
- engender stickier brand collateral; and
- · enhance new sources of value creation advantage.

Most significantly, Nike's extended enterprise ecosystem is a multiway learning engine, facilitating dialogue with and among stakeholder communities. Nike can continuously identify and act upon new growth opportunities with its enhanced global capability ecosystem. It can enable the combining of consented individual private data, social community data, open public data, and other data sources. For instance, if you were an urban NikePlus user with atmospheric sensitivities—for example, allergic to pollen—you would be able to share fitness and sensor data with others, combine that with open environmental data from your city, and through real-time analytics be able to co-create a running course that did not include high–pollen count areas. This opens up new avenues for innovation in the NikePlus ecosystem.

Besides attracting new adherents to the Nike brand through the largest community of individuals it has ever assembled, the NikePlus ecosystem

boosts product sales and enhances returns through the increased motivation and involvement of individuals. By the end of 2007, Nike had sold over 1.3 million NikePlus iPod Sport Kits (at \$29 apiece) and over 500,000 NikePlus SportBands (at \$59 apiece) and had captured 57 percent of the \$3.6 billion U.S. running shoe market, compared with 47 percent in 2006. More than 600,000 runners from more than 170 countries used the NikePlus website in just a year, with over 40 million miles run. Seeing the growth potential, Charlie Denson, president of the Nike brand, set a stretch goal in 2007 of having 15 percent of the world's estimated 100 million runners participate in the NikePlus ecosystem. 14 The subsequent growth was relentless. By the end of 2008, runners had logged 100 million miles on NikePlus. By August 2009, despite a sluggish economy, over 150 million miles had been uploaded by more than 1.3 million runners, burning more than 14 billion calories. By mid-2009, Nike's share of the U.S. running shoe market had increased to 61 percent. By mid-2013, more than 7 million runners were participating in NikePlus, with over 900 million miles run.

With NikePlus, the company shifted its spending away from traditional media like TV networks. Trevor Edwards, Nike's marketing director, remarked, "We're not in the business of keeping the media companies alive. We're in the business of connecting with consumers. NikePlus is a very different way to connect with consumers. People are coming into it on average three times a week. So we're not having to go to them."15 Instead, Nike began making investments in extending the NikePlus platform further and enhancing its social media capabilities to enable runners to connect with one another and with Nike in new ways. By 2007, Nike's nonmedia spending of \$457.9 million surpassed its traditional media spending of \$220.5 million. For Nike, the benefits of NikePlus included reducing the cost of marketing through the positive word-of-mouth created, sharing the risk of product-service development with partners by getting them to coinvest and participate, and mitigating the risk of capital investment through enlightened experimentation because it could now pilot major investments through its extended ecosystem.

Hence, through NikePlus, Nike's managers and employees have coevolved their learning environments with customers and other platform

participants. In early 2013, Jayme Martin, vice president of Global Category Running, noted, "The NikePlus Running experience is one of the most personalized and motivational ways we serve the runner. We're introducing a new chapter that will take the running experience to a new level in terms of connectivity, community, social sharing, and data-driven insights."16 Further, as Stefan Olander, Nike's global director of consumer connections, remarked, "The more we can open up NikePlus, the better. The only reason to close it out is because you actually don't believe that you have a strong enough product for others to want to take it and do good things with it."17 Indeed, in early 2013, Nike blazed new paths of transformative engagement by opening up the application programming interfaces of the NikePlus platform to other developers to expand the value frontier through new potential applications designed around the data generated through NikePlus. Simultaneously, together with TechStars, Nike also launched a start-up Accelerator program, with the intent of bringing together ten start-ups for an "immersive, mentor-driven" experience through a network of resources that aims to foster innovation and build offerings that "inspire and assist people to live more active, healthy lifestyles." 18

Now, let us turn to the shoe itself—the traditional artifact designed, developed, and offered by Nike through its conventional chain of enterprise activities. Through another engagement platform, NikeID, the Nike enterprise has now opened up the creative design of the shoe to customers and enthusiasts. Online, you can start with a design from the community at large, one of Nike's in-house shoe designers, or your own, and play with colors and shapes. Offline, at the NikeID Studio Live (e.g., in New York and London), selected athletes can engage with physical materials in crafting unique shoe designs. Nike provides some of the tools it uses internally in its own product design and testing labs. Further, Nike attempts to connect better with NikeID platform users' experiences of personalization, continuously learning about what matters to them-for example, color matching. Its NikeID iPhone app now enables you to take a picture of an object in your favorite color and use the picture rather than the color wheel to specify colors. In April 2013, in partnership with Instagram, Nike launched PHOTOiD, which enables you to take the captured moments of your life and commemorate them on your feet by applying colors from the image to your favorite Nike Air Max shoe. You can then share your design through Facebook, Twitter, Tumblr, Pinterest, Google+, and back to Instagram, or purchase your personalized shoe to arrive within four weeks. The opening up of shoe design enhances the experience and accessibility not only to individuals but also to collectives like a school soccer team designing with a particular set of team colors. In the latter case, the team-locker interface allows individuals to generate and share designs, invite others to comment on them, and facilitate the emergence of a unique shoe design for the team.

Thus, NikeID is a *product design platform* involving not only users of shoes but design consultants, influencers, and decision supporters, as well as people with product design responsibilities within Nike and partners such as R/GA, a digital advertising agency. While NikeID engages a circle of stakeholders distinct from NikePlus, both entail particular states of stakeholder relations, ideation, decision making, and offerings. For instance, the NikeID design engagement platform entails:

- community relations with customers, enthusiasts, and designers (amateurs and professionals alike);
- collecting, sharing, and spreading of design ideas;
- product personalization decisions individually and consensus building decisions collectively (to design a team shoe); and
- product design concepts and custom artifacts such as a NikeID card and the Nike customized shoe itself as offerings.

JOINT VALUE CREATION BASED ON STAKEHOLDER EXPERIENCES

While Nike has innovated impressively in the ecosystem in which it participates, its engagement platforms could be enhanced further to co-create better outcomes. Consider Nike's wear-testing platform. Nike has long involved runners in testing its products. Nike brings runners into its laboratories, where it assesses the functional performance of shoes. These labs test friction, wear, and fatigue on the shoes, and they experiment with new materials, involving runners as in-house testers. While lab tests are important for assessing technical performance, Nike recognizes that

they provide only limited data on what really counts: the actual experiences afforded by interactions between the runner's body, the running environment, and the shoe. The generation of such highly contextualized information on interactions requires having access to the flesh, blood, and perspiration of real people who are running in real weather and under real road/trail conditions.

So Nike also sends shoes to a subset of self-selecting runners, who are asked to wear the shoes, test them in the natural environment in which they run, and send back their comments. The feedback is given through a website that creates a direct line of communication between the testers and Nike's shoe designers. This interaction has great value for both Nike and the testers, as evidenced by the high demand to become a Nike product tester (visible in many comments on the Web). "Wear testing," as this real-world testing is called, removes the "lab rat" aspect of product testing, allowing Nike to capture customers' experiences with its shoes. Yet, these interactions between Nike and product testers have rarely been co-creative.

Wear testers have traditionally been viewed as passive sources of data to be analyzed by the "shoe experts"—product development teams consisting of analysts, designers, product managers, and manufacturing associates who evaluate features and determine their additional value to the final product. Comments posted on websites and online forums that provide unsolicited feedback on new shoes hitting the market suggest that wear testers have very different opinions from those of shoe experts. Many wear testers do want to help Nike, and their passion for Nike can be infectious. Nike can encourage richer, more meaningful dialogue with individual testers and potentially among a community of testers. Envision wear testers working as a community with Nike's in-house designers, exchanging impressions as a group and codesigning the shoe with a considerably richer and broader set of inputs. The dialogue would be decentered across space and time, with issues originating from the community, centered on the human experiences of individual testers. Such a dialogue would have significant strategic value, with experiential learning, realtime insights, and rapidly created knowledge generating additional enterprise and stakeholder value-internally for Nike analysts and designers and externally for customers.