# Networks Are Eating the World

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## In the age of digital networks, businesses' abilities to create and share intangible assets, such as ideas, software, and relationships that are owned by each of us—the Network—has grown exponentially.

Further, digital networks allow organizations to access assets that exist outside of their traditional boundaries. Uber is a transportation company without cars. Airbnb is a hotelier without properties. Amazon is a retailer with stores. Network orchestrators—as we call them—are eating the world as we know it, changing the very nature of industries around the world.

The key is their ability to reach and leverage each and every one of us and all our relationships, information, and assets. This access to and relationship with us and what we have (cars and homes), do (labor) and know (relationships and expertise) are critical to their success—as are the digital platforms that they use to enable us to share what we have with others. In short, where Thomas Friedman wrote the book that laid the ground for this network revolution—*The World is Flat*—

and Marc Andreessen followed on with his 2011 article—"Software is Eating the World"—it is now clear that those were the foundation for today's reality—networks are eating the world.

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#### So How Did We Get Here?

The personal computer was a quantum leap in history, because it vastly enhanced communication. And now, thanks to Steve Jobs, Mark Zuckerberg, the founders of Google, Apple, Amazon, we have the means to connect what we have and need as never before. Mobile technologies and social media have sparked a revolution of dazzling scope and speed.

The numbers speak for themselves. Around the world, more than 5.3 billion people carry mobile devices; 1.5 billion use them to connect through social media. Facebook, Twitter, LinkedIn and the other social networks like WeChat make up the most powerful technological developments since electricity, the internal combustion engine, and the Internet itself.

Today's social and commercial networks are the means by which every one of us, and the fastest growing and most powerful organizations, are now connecting and creating value. But more importantly, it is the way that all of us collectively are driving basic changes in the way business is done, and growth and value are generated. The information, ideas, and emotions spread by digital and mobile technologies in the cloud not only improve the performance of leaders, managers, and employees alike; they change the very nature of work, and who does it, including us as customer co-creators.

But few organizations really understand the power of the network and even fewer organize their firms as network orchestrators. Why is that, and how can you, as a leader of your organization, transition your firm to succeed in today's increasingly network and platform oriented world? First, understand that there are four primary business models.

#### The Numbers Tell the Story

The advantages of digital network business models are clear to us from observations we've made working with clients and investing in startups, but we knew that we needed proof beyond empirical evidence to bring these ideas to the market. For that reason, we began our multi-year, in-depth study into business models.

We undertook a wide range of qualitative and quantitative analyses, beginning with traditional metrics, including sales, research and development, return on assets and invested capital, gross margin and profits. When useful, we read analyst reports about each company and examined the words of all the leaders in their quarterly and annual reports. Finally, we examined and digested thousands of articles and research by other organizations. The results of our efforts follow.

#### 1. There are four business models

As we looked into the operations of different firms, we found that nearly all organizations could be classified into one of four different business models. This term can have many different meanings, but here we use it to mean the way that an organization creates value. The four business models that we developed are as follows:

- **Asset Builders** deliver value through the use of physical goods. These companies make, market, distribute, sell, and lease physical things.
- **Service Providers** deliver value through skilled people. These companies hire and develop workers who provide services to customers for which they charge.
- **Technology Creators** deliver value through ideas. These companies develop and sell intellectual property, such as software, analytics, pharmaceuticals, and biotechnology.
- Network Orchestrators deliver value through connectivity. These companies create a platform that participants use to interact or transact with the many other members of the network. They may sell products, build relationships, share advice, give reviews, collaborate, and more.

#### 2. Business models are based on capital allocation

Each business model is based on one of four asset types: Asset Builders focus on physical capital (things); Service Providers invest in human capital (people); Technology Creators create intellectual capital (ideas); and Network Orchestrators develop network capital (relationships). The relationships, or connections, created by a Network Orchestrator may actually provide access to any of the other asset types. For example:

- eBay and Etsy are Network Orchestrators that provide access to physical capital (i.e. "stuff you can buy").
- TaskRabbit and Upwork are Network Orchestrators that provide access to human capital (services) in the form of errand-runners and freelancers.
- Innocentive and Yelp are Network Orchestrators that provide access to intellectual capital, such as innovative ideas or restaurant reviews.
- Facebook, LinkedIn, and Match.com are Network Orchestrators that provide access to network capital, specifically social and professional relationships.

#### 3. Digital networks have many economic advantages

When we applied this business model framework to the S&P 1500 (a combination of the S&P large, mid, and small cap indices), it revealed clear and dramatic performance differentials among the four business models. Network Orchestrators, on average, grew revenues faster, generated higher profit margins, and used assets more efficiently than companies utilizing the other three business models. These advantages resulted in remarkably higher enterprise values when compared to revenue.

However, despite the benefits of the Network Orchestrator business model, it was still clear to us that few leaders of small, mid-size, and even large organizations could make the leap to Network Hyperspace and Speed. So why? The answer was in leader's thinking.

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#### Traditional Beliefs and Actions Get in the Way

Traditionally, companies have tried to gain competitive advantage by guarding their secrets and their customers, as if they were proprietary and controllable. Now digital technologies enable information to be shared, sometimes even information that we believe is secure, and details that were once secrets are now common knowledge. Many far-sighted companies share processes and techniques with their employees, suppliers, customers, and sometimes even their competitors, so that the broadest possible network can begin refining and improving them to everyone's benefit. For example, Tesla Motors has opened all of its patents for use by anyone who wishes to use the technology they create.

To take advantage of this new, digitally networked society, a wave of new companies is speeding in to benefit from this frictionless playing field. As Nobel Prize-winning economist Ronald Coase pointed out years ago, the high costs involved in finding and working with new partners formerly pushed companies to try to do everything themselves. Today, creating digital networks—whether with peers, competitors, or customers—has made partnering (and unpartnering and repartnering) easier, faster, and far less expensive. Thus, many businesses are looking outside their borders (including their people and processes), to find and build digital networks and insure near- and long-term survival. Put simply, all of today's value winners, whether billion-dollar startups or innovative established firms, partner with networks of people and organizations, many of them interlaced and overlapping. They are redefining the basic definition of a corporation.

The implications are extensive. Just as James Champy and Michael Hammer saw the reengineered corporation as the sum of its processes, which helped leaders and managers perceive and close performance gaps through their processes and people, today's digital network corporations are using external people, capabilities, and assets, to reach a new level of performance. This requires expanding leaders' mental models (usually focused on operations and execution) to encompass motivation and incentives for external resources.

Today's reinvented organization must transform all its operations to center on networks of people. To get there, its leaders and managers must identify, activate, and partner with the networks that exist in and around the organization to create new sources of value—value which can be shared by the organization and its network.

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Digital technology will have to be a key component of successful network business models. With these technologies, such as social, mobile, and cloud, we can be more persistently and deeply linked to more people than ever before. In today's world, all leaders and all teams in fact, all companies in all industries—are already a part of a web of interconnected technologies, but few are truly capitalizing on the possibilities.

But this new approach to value creation is in contrast to what most managers have been taught—to focus on tangible, physical assets that are owned and managed by the organization. But that mental model evolved long before the digital revolution permanently changed our ways of organization and creating value... and for those that have not or cannot adapt, it is destructive.

Established leaders are frequently resistant to change. The strategy that worked twenty years ago should still work today, right? Of course not. And with the current rate of change, small, incremental action will only leave a wider and wider gap between your organization and its more innovative competitors. Companies that want to be players in the digital network world are moving quickly to establish beachheads of talent, tools, and networks within their existing organizations.

Over the next decade, the most successful companies will be those that start out, or reinvent themselves, as a digitally-enabled network of things, ideas, and people. We are already completely rethinking our concepts of company and industry. This future can be overwhelming, so we recommend that organizations start by creating a small-scale investment with a network business model, but one with the potential to grow.

Doing this requires new talent, investment, and technology, so it isn't a task that can be delegated to managers and then to front-line employees. It demands the attention of leaders and their boards, and will require them to develop new mental models about value creation. The Network Imperative demands new mental models and new business models, and it also offers new levels of value creation. It takes extraordinary leadership and managerial skills, discipline, and resoluteness.

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#### It's Time To Transform What you Think and Do

How does digital network reinvention of a company actually work? What do digital network organizations look like and how does an organization get there? And where and how do you get started on Monday?

The bottom line: It starts with you and creating a new mental model that puts networks, as opposed to products and services, at the center of what you do and think about everyday. To help you get started on this journey, we created a 5 steps process called PIVOT.

The five steps of PIVOT are:

- 1. Pinpoint your current business and mental models.
- 2. Identify all your 'assets' (both tangible and intangible).
- 3. Visualize your future network business model.
- 4. Operate your new network business.
- 5. Track your progress and performance.

To obtain real value from these new approaches, however, an organization (regardless of its size) and all its people (especially its leaders) must rewire how it thinks about value, how it allocates its time, money, and talent, and how it measures its results. If you are able to open your mind to a new way of being and operating, then you can reorganize your thinking and actions to create a new business model that insures your future success in the digital world. So, let's get started...

#### **PINPOINT Your Current Business and Mental Models**

The goal of PINPOINT is to identify your current business model as well as your current mental model; the preferences, biases, and decisions that got you where you are and keep you there. You must fully accept and appreciate your starting place, in order to make a decision about how you will join today's digitally networked world and how you can get there. Once you understand your current state, and your business model, you will be able to create a new, more valuable network vision for your future.

During PINPOINT, you will examine your allocation of time, talent, and capital, the characteristics of your organization, and your economic performance in order to determine which of the four business models is your firm's primary business model.

Again, these are:

- **Asset Builders deliver value through physical goods.** These companies make, market, distribute, sell, and lease things. Examples include Ford, Wal-Mart, and American Airlines.
- Service Providers deliver value through people. These companies hire skilled workers who provide services to customers for which they charge. Examples include United Healthcare, Accenture, and JPMorgan Chase.
- **Technology Creators deliver value through ideas.** These companies develop and sell intellectual property such as software, analytics, pharmaceuticals, and biotechnology. Examples include Microsoft, Oracle, and Amgen.
- **Network Orchestrators deliver value through connectivity.** These companies create a platform where participants interact or transact with the many other members of the network. They may sell products, build relationships, share advice, give reviews, collaborate, and more. Examples include eBay, Red Hat, and Visa.

You will also investigate your mental model, and how it reinforces your business model. Your core beliefs about what creates value in business and in the world influences how you allocate funds, what risks you manage carefully, what you measure and and how you measure it. (You can begin these assessments using the tools at OpenMatters.com/openspace)

Perhaps it sounds simple, but our experience is that most business leaders are not able to be honest with themselves about either business or mental model. Investing the time to do this step right is essential to make forward progress. PINPOINT gives you your starting point—let's consider it a launching pad. As we keep going with PIVOT, we will get more and more practical about what you are launching towards, and how you are going to get there.

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#### INVENTORY All Your Assets (Tangible and Intangible)

The goal of INVENTORY is to create a complete inventory of the assets within your business, considering each of the four asset types—physical capital, human capital, intellectual capital, and network capital. We will focus particularly on those intangible assets that have not historically been carefully assessed or managed. Since today's highly scalable network business models usually utilize today's digital technologies, you will also assess your firm's capability with digital technology.

A complete inventory is usually a month-long endeavor where a task force, trained on the four business models and asset types, visits each part of your organization to catalog assets with thorough descriptions and, when possible, estimated values. The most important assets to catalog properly are networks.

Most organizations have never specifically investigated their networks. There will be some that you manage quite closely, and some that you barely interact with at all.

Consider the following categories, but note that there may be multiple, unique networks within each category.

- Customers •
- Alumni •

•

- Integrators •
- Investors •
- Peers

•

Competitors

Prospects • Employees

•

- Suppliers • Distributors
- Communities •

For each network, you will note the network's affinity with the organization, and what value each party (the company and the network) receives out of their relationship. Going one step further, you will also think about the potential value for each party that could be achieved with the relationship.

Developing and expanding network capital is the foundation of Network Orchestration. Most network assets go woefully under-recognized and under-utilized. Networks store a vast array of talents, skills, and assets... but are rarely activated to share value with companies. By cataloging the networks that already exist in and around your firm, you are preparing for the next step: creating a new network-centered business model.

#### VISUALIZE Your New Network Business Model

The goal of VISUALIZE is to design an inspiring network-based business that will begin to help your company PIVOT at least a portion of its capital, time, and talent into Network Orchestration, and start to generate the increased value that this business model has to offer. Although we recommend starting small, you should aim to find something that could, one day, grow into a significant portion of your business.

In this step, you will actually design a new business initiative using the Network Orchestration business model. In order to do so, you will identify one network to activate, determine what value the network, and your organization, will give and receive, and decide what platform and technology are necessary to make it happen.

In short, this is like visualizing a new investment portfolio.

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#### The Network Orchestrator Business Model

When designing a network business, there are two parties to think about. In Network Orchestration there is a value cycle for the company, and a value cycle for the network, which intersect on a digital platform. The network, the company, and the platform are the key components that we will focus on in VISUALIZE.

Filling in these blanks is an iterative process; so don't expect to get it right the first time. Begin by thinking about the networks. What you are looking for are occasions where the network could actually serve its own needs and wants, if properly enabled. As a business model, Network Orchestration is so highly differentiated because it is the only model where the company enables and allows the network to serve itself (participants serving other participants), instead of the company trying to serve all of the network's needs on its own.

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Once you have an idea, start filling in the gaps, starting with the digital platform that will support it all.

#### **OPERATE** Your New Network Businesses

The goal of OPERATE is to get your new network business up and running with the components and processes that will help your company, and the network, achieve success.

During this step, you will address the funding, talent, and technology needs of your new network business, and you will create strategies for successfully managing the business within your broader organization and for managing the external network.

One of the most important steps in OPERATE is selecting the person who will lead your new network endeavor. A successful Network Leader will be someone that the leadership team trusts, because they will need the freedom to make decisions independently and rapidly. The Network Leader also needs to be excited by the opportunity to cultivate a network business, and should already know the target network intimately.

Once the Network Leader is chosen and starts designing an operating plan, your organization can start to fill in the rest. You will begin by creating the platform. Depending on the vision that you created in VISUALIZE, this can look many different ways. However, we have found that simple, sometimes even off-the-shelf, solutions will work for most organizations at startup. As you learn more, you can always build out a more robust and customized solution.

You will also have to carefully set up the team working on this new initiative for success. Innovation within a large firm is extremely difficult because of corporate politics, competition for resources, and organizational inertia, just to name a few. The leadership team must carefully insulate/incubate the initiative, and set the time up for success with a supportive reporting structure and appropriate timelines and performance targets. Finally, the organization needs to think about how it will measure, grow, and care for its network. Most successful Network Orchestrators reward their network for participation, incentivize growth and referrals, reinforce loyalty, and carefully share the rewards.

If you care for your network, it will care for you, too. And, as we have seen, the reverse is also true.

### **TRACK** Your Progress and Performance

The goal of TRACK is to determine what metrics and what frequency of reporting are needed to best support the development of your new network business. You will create metrics to track the health of the three key components of your network business: the network, the platform, and the internal team. Additionally, you will determine the cadence and timeliness required for this data. Finally, you will begin to think about the experimentation process.

The key elements of Network Orchestration are the network, the company, and the platform where they interact. Each of these components should be carefully measured and tracked by your company. This information is essential for you to judge the health and progress of your endeavor, and also to design experiments that will help you adapt and grow.

Begin again by focusing on the external network. There are many, many items that can be measured to assess network, but here are a few themes that are mandatory, such as size, growth, activity, and sentiment. How exactly you measure each of these dimensions will depend on the specifics of your network business. You will also need to keep a close eye on your platform since it is the hub for network activity. Keep an eye on uptime, interactions, total users, and even ease-of-use. Finally, manage your internal team by tracking on-time and on-budget projects and also by their interactions and intimacy with the network.

Once you are able to measure and track the status of your network, platform, and internal team, you can also take specific steps to try and improve those key measures. After all, the whole purpose of measurement isn't just knowledge, but also creating strategic action based on that knowledge.

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#### Welcome to the Network World

The market has changed. As the research has shown, 30 years ago, 80 percent of market value was created by physical things. Today, that number has dropped to below 20% as companies have evolved the technology and mental models to leverage non-things such as insights, access, and relationships.

Because this massive change has occurred in a remarkably short period of time, our infrastructure is now out of date. Education, business belief systems, forms of leadership, governments, and governance don't lend support to or benefit from the new reality. When the infrastructure finally catches up, the acceleration of the market and our lives will be extraordinary.

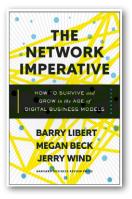
But many of us are already beginning to lead network lives. Digital networks give us a chance to reconnect with our most human needs: to connect to each other; to be part of something larger; to bridge the divides that physical distance has put between us.

So our final message is a personal one. The transformation of your organization into a digital network is dependent upon the transformation of the people inside the firm—and more specifically, you. Organizational change must begin with the action of a single, motivated individual. After all, networks are made up of individuals.

Recognize that your different roles in life—as spouse, parent, leader, customer, investor, owner are actually intertwined and dependent on each other to bring your network to life, and for you to fulfill your full potential. Bring your whole self to work, and back home, each day; that is how the rest of the world will view you anyway. And then bring that same attitude to your organization. The walls are coming down, and it is an opportunity to pivot to a more fulfilled self.

It's time for organizational actions to reflect today's reality—that we are deeply intertwined with the networks that surround us, and we all have a lot to offer each other. Those of us that reach out to the network will find that we, and our organizations, can give and receive more value—and that doing so is greatly fulfilling.

### Info



**BUY THE BOOK** | Get more details or buy a copy of <u>The Network Imperative</u>.

**ABOUT THE AUTHORS** | **Barry Libert** is the CEO of OpenMatters and a Senior Fellow at the SEI Center at Wharton. Barry has spent the last 20 years researching business models. In addition, he is an active angel investor in social, mobile, and big data technology companies. **Megan Beck** is a digital consultant at OpenMatters, an SEI researcher, and former management consultant at Bain & Company. **Jerry Wind** is the Lauder Professor and Professor of Marketing at Wharton and Director of the Wharton "think tank," the SEI Center for Advanced Studies in Management. He has co-authored multiple books, including *The Network Challenge, Competing in a Flat World*, and *The Power of Impossible Thinking*.

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