Tied in KNOTs

The right way to think about network optimization

Anyone thinking about rationalizing a network would naturally ask whether so many nodes are really necessary. Networks are a great deal more complicated than that, and managing them requires expansive strategic imagination.
The French postal system was founded in 1576. Over nearly 450 years, La Poste has built a network of 17,000 points across France, from the crowded streets of Paris to the littlest village in Limousin. Anyone considering optimizing this network would look at the many post offices and begin cutting. But that would be the wrong way of thinking about network optimization. The strategic objectives of La Poste aren’t just about delivering mail or banking services. They are also about l’animation du territoire, the “animation of the territory,” a vital function in a centrally organized nation such as France where national government might otherwise be remote. Close the tiny village post office, and before long, civil life in that place might well dry up.

Every network produces such indirect value or some purpose beyond the obvious. A department-store chain might maintain a big location on Fifth Avenue or the Champs-Élysées, for example, not because the store’s revenue per square meter is outstanding (it probably isn’t) but because the cachet of its location rubs off on the chain’s outposts in suburban malls. It produces indirect but still substantial value to the network overall.

The conventional way of looking at a network is through the direct-value lens: How much does it cost to run the network? Our experience suggests that networks are a great deal more complicated than that, and managing them—or, more fittingly, optimizing them—requires an expansive strategic imagination.

A Harmony of KNOTs

No matter what kind of network one manages—hospitality, retailing, banking, leisure, telecommunications, whatever it might be—once the network is built, it immediately begins its evolution. Even within a single local market, the network is evolving all the time. As the network goes through its life cycle, perspectives on sustaining it must change as well.

The means for doing this are distilled in A.T. Kearney’s Network Optimization Tools, or KNOTs, comprised of eight elements, each focused on a strategic element of the network (see figure 1).

---

1 Eric Bonnet of the Parisian design firm ID&CO and marketing professional Serge-Henri Saint-Michel estimate that with rents at €10,000 per square meter, only 60 percent of the stores on the Champs-Élysées are profitable. See “Les flagship stores, nouvel espace de liberté pour les marques?” in the 10 May 2012 issue of Marketing Professionnel.
The English word knots translates as les nœuds in French, or nodes. This is an apt image for thinking about the symbiosis of the local and the networked—the balance of savoir-faire métier and savoir-faire local, of the collective intelligence of the network and the specific intelligence of the individual.

Think of KNOTs not as a laundry list of best practices used to build an optimal network but as electrons—each one discrete and at the same time interacting around the nucleus. A national bank develops financial products centrally, but the local branch manager manages the relationship with customers. The national bank maintains good relations with the regulators while the branch manager cultivates the good will of the town mayor.

A sobering counterexample is the flameout of video retailer Blockbuster, which channeled its energies into adding thousands of stores and tens of thousands of employees in North America and Western Europe only to be caught off guard by competitors such as Netflix and the rapid adoption of streaming video. In hindsight, Blockbuster’s history suggests an unbalanced emphasis on its real estate network and not enough on the customer experience. The result was catastrophic.

We organize our network nomenclature into three types: production networks, service networks, and distribution networks. La Poste, for example, is a production network in that it operates like a factory producing a product: collecting and distributing mail. Taxi companies, railroads, and airlines are other good examples of production networks. The nodes in these networks are more than just infrastructure. One must own the nodes or there is no business to manage.

Closely related to the production network is the service network, typified by telecommunications and hospitality. A hotel network, for instance, cannot deliver a night’s sleep over the Internet. The consumption of its product is done at the local level even though each node in the network is supported by the expertise of the whole. The service is the network.

A distribution network is retail in all senses of the word, especially in its tailoring of products to meet the needs of local customers. Distribution networks are high touch and in certain ways are the easiest networks to think about in terms of nodes. The most familiar example, literally the most concrete, is a brick-and-mortar retail chain. Find a Wal-Mart, and its distribution center will not be very far away.
Irrepressible Brick-and-Mortar

The end of brick-and-mortar retailing has been predicted for more than 15 years now, beginning in the mid-1990s with the emergence of the Internet as a consumer technology. We are told that digital commerce is just too seductive, offering unprecedented convenience at a low price. For merchants, it promises a market of infinite size, radically lower stocking and distribution costs, lower labor and real-estate costs, and on and on.

Yet contrary to the predictions, brick-and-mortar networks are resisting digital transformation. Consider this: In the United States, 92 percent of retail sales occur in a shop, and fewer than 2 percent of U.S. grocery products are bought online.² Our own A.T. Kearney study suggests that 19 percent of Internet shoppers who buy computers online do so after evaluating them in a retail store, while conversely, 20 percent of shoppers who buy a computer in a retail store do so after searching for it on the Web (see figure 2). Not surprisingly, then, big-box retailers are pursuing multichannel platforms that pivot on their local networks.

Figure 2

How shoppers shop

A shopper, for example, may visit a clothing store to examine a jacket that interests her—to assess its color, to rub her fingers over its fabric—and then go home to order it online later in the evening. Indeed, a fairly recent phenomenon is the commitment of floor space in large stores to products that are displayed but not sold.³

These are reverse examples of a local node supporting the whole network, including click-and-collect systems, which allow the network to support a sale made through a local node.

What about the more basic question of whether or not to own the network’s physical presence? If the choice is no, what are the other options? One alternative is the path followed by Empire Company, the holding company for Canada’s Sobey’s supermarket network. Empire created

² These figures are from 2011. Sources: ComScore, Inc. and the U.S. Department of Commerce
³ Cf. Bonnet and Saint-Michel, above
a publicly traded real-estate investment trust with Sobey’s stores as its core holding. This indirect ownership assures professional management of individual locations while allowing Empire access to the capital created by its holdings.4

The managers of a distribution network like Sobey’s know that a grocery store commonly requires as long as two years to take root in a community. Given the time investment, it makes sense to assure control of an archipelago of stores. A burger chain could make the same decision, but for a different reason. For example, if McDonald’s has a prime location on Boulevard Saint-Germain, it might choose direct ownership of that location to preempt the possibility that one day Quick might open in that choice spot.

What if investors in a distribution network expect the core business to be asset-light? Then direct ownership of real estate will be a tough sell. Similarly, a network with an expectation of dynamism—a consumer electronics retailer, for example—might not want the burden of owning properties. Both kinds of organizations might view real-estate optimization as a choice to hold a minimalist property portfolio. Yet another option is franchising, which—if done right—can be a good way for retailers to grow without huge capital investments (see sidebar: Getting Franchising Right).

**Getting Franchising Right**

The companies in our retail distribution discussion may one day turn to a franchising model as a tool for sustaining growth with less capital investment. And franchising certainly has many virtues. Viewed in terms of network optimization, franchising gives local nodes access to the collective procurement power of the entire network.5 It spreads the risk of entering a new region or customer segment while creating the circumstances for each node to enjoy the benefits of size. And although often known for imposing uniformity across the network, franchising has many examples of being a channel of innovation—from the grass roots to the network at large. Take the fast-food industry. Mergers and acquisitions (M&A) data suggests that U.S. public fast-food franchises have better economic value added (EVA) and market value added (MVA) than non-franchised competitors. Research on M&A deals performed over a decade shows companies that use franchising are sold at a better EBITDA than their non-franchising peers.6

Getting franchising right, however, depends on a fully integrated understanding of KNOTs and of how value is created. Introducing a franchising model changes the value proposition, especially for established networks deep into their life cycles. It may raise pointed questions about how well an organization has developed its thinking about the brand. Failure to properly animate the franchisee network can kill indirect value. For this reason, any discussion of network optimization must include a perspective on risk management.

A dozen or so years ago, banks in Australia, Europe, and North America made unexpected and innovative forays into franchising.7 It was as if they all saw at once that their costly branch networks could be converted into value creators if they were reconceived as franchise outposts. Britain’s Abbey National began experimenting with making some branch managers autonomous “owners,” paying them based on their location’s sales of financial products. Belgium’s Fortis tried something similar years before its absorption into BNP Paribas and saw a jump in revenues. At about the same time, Australia’s Colonial State Bank tried it too but with less fruitful results. Revenues increased, but so did customer complaints. Dozens of branches were ultimately closed.

---

4 Empire offers a lucid description of its real estate investment trust (REIT) strategy in its 2011 shareholder letter.
5 See “Are You Focused on the Perfect over the Optimal?” by Sauvage, Sutter, Bost et al. in our January 2012 Executive Agenda.
7 See “Beautifying Branches” in the 22 March 2001 issue of *The Economist*. 
Interactive KNOTs

Network optimization tools are interactive by nature. The cooperation of one KNOT with another is perhaps easiest to understand in a retail distribution network. The optimal customer experience, for example, is directly connected to optimal talent management (the human face of the organization) and to optimal IT that delivers real convenience (via the smooth payment system at checkout).

Introducing change in an established network is never easy. The predisposition toward stasis is strong.

A clothing retailer, for example, with a mature distribution network may temper store expansion plans to focus on improving profitability. Here, technology, specifically IT, interacts with tools that support real estate decisions. Perhaps geomarketing tools are used to determine the profitability of network nodes and to sort them into micro and macro geographic regions or to compare existing shops against the potential of hypothetical shops.

“Big data” analytics are useful in capturing networked intelligence—harvesting the countless but at first glance unrelated bits of digital data generated in the course of local customer interactions. Big data is not only about capturing more information but also about using it more effectively (see figure 3). A focus on the customer creates a virtuous loop back to IT, enabling a richer concept of user experience even to the level of individual stock-keeping units.8

Figure 3
Big data is about volume and use of information

Sources: IDC, Forrester, Gartner; A.T. Kearney analysis

8 For an uncommon case of linking data mining and the user experience in the retail wine industry, see “Big Data for the Rest of Us” by Chris Taylor in the 29 May 2012 Harvard Business Review Blog Network.
The Constancy of Change

All network optimization tools are subject to review as a network ages and the operating environment changes, which it does relentlessly. Indeed, operational decisions made opportunistically rather than with the dynamic health of the network in mind provide some of the most painful (and illuminating) instances of poor network optimization. Again, Blockbuster comes to mind.

In the life of every network, there are decisive moments—times for development, times for expansion, and times for rationalization. Each decision has different objectives and different levers, and at any given moment, the measure of “optimal” is a moving target. Where the stress falls depends on the age and type of the network.

Introducing change in an established network is never easy. The predisposition toward stasis is strong, especially in networked organizations with a record of success. But breaking the problem into its interconnected KNOTs keeps the focus on optimizing the asset value of networks and the logic of their evolution.

Authors

Eric Sauvage, partner, Paris
Charles-Etienne Bost, principal, Paris
Eric Gervet, partner, Paris
Kevin McDermott, Collective Intelligence, New York

The authors wish to thank Martin Yoann for his valuable contributions in writing this article.
A.T. Kearney is a global team of forward-thinking, collaborative partners that delivers immediate, meaningful results and long-term transformative advantage to clients. Since 1926, we have been trusted advisors on CEO-agenda issues to the world’s leading organizations across all major industries and sectors. A.T. Kearney’s offices are located in major business centers in 39 countries.

<table>
<thead>
<tr>
<th>Americas</th>
<th>Detroit</th>
<th>Houston</th>
<th>Mexico City</th>
<th>New York</th>
<th>San Francisco</th>
<th>São Paulo</th>
<th>Toronto</th>
<th>Washington, D.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calgary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dallas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Europe</th>
<th>Istanbul</th>
<th>Kiev</th>
<th>Lisbon</th>
<th>Ljubljana</th>
<th>London</th>
<th>Madrid</th>
<th>Milan</th>
<th>Moscow</th>
<th>Viena</th>
<th>Oslo</th>
<th>Paris</th>
<th>Prague</th>
<th>Rome</th>
<th>Stockholm</th>
<th>Stuttgart</th>
<th>Vienna</th>
<th>Zurich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berlin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brussels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucharest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budapest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copenhagen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Düsseldorf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frankfurt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helsinki</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asia Pacific</th>
<th>Melbourne</th>
<th>Mumbai</th>
<th>New Delhi</th>
<th>Seoul</th>
<th>Shanghai</th>
<th>Singapore</th>
<th>Sydney</th>
<th>Tokyo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beijing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jakarta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle East and Africa</th>
<th>Abu Dhabi</th>
<th>Johannesburg</th>
<th>Riyadh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubai</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, permission to reprint or translate this work, and all other correspondence, please email: insight@atkearney.com.

Publishing Advisor: Wayne Boley
Editor: Patricia Sibo
A.T. Kearney Korea LLC is a separate and independent legal entity operating under the A.T. Kearney name in Korea.
© 2013, A.T. Kearney, Inc. All rights reserved.

The signature of our namesake and founder, Andrew Thomas Kearney, on the cover of this document represents our pledge to live the values he instilled in our firm and uphold his commitment to ensuring “essential rightness” in all that we do.