

Accelerating Innovation Through Coopetition

The Innovation Learning Network Experience

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Coopetition, the simultaneous pursuit of cooperation and competition, is a growing force in the innovation landscape. For some organizations, the primary mode of innovation continues to be deeply secretive and highly competitive, but for others, a new style of shared challenges, shared purpose, and shared development has become a superior, more efficient way of working to accelerate innovation capabilities and capacity. Over the last 2 decades, the literature base devoted to coopetition has gradually expanded. However, the field is still in its infancy. The majority of coopetition research is qualitative, primarily consisting of case studies. Few studies have addressed the nonprofit sector or service industries such as health care. The authors believe that this article may offer a unique perspective on coopetition in the context of a US-based national health care learning alliance designed to accelerate innovation, the Innovation Learning Network or ILN. The mission of the ILN is to “Share the joy and pain of innovation,” accelerating innovation by sharing solutions, teaching techniques, and cultivating friendships. These 3 pillars (sharing, teaching, and cultivating) form the foundation for coopetition within the ILN. Through the lens of coopetition, we examine the experience of the ILN over the last 10 years and provide case examples that illustrate the benefits and challenges of coopetition in accelerating innovation in health care.

Key words: *coopetition, innovation, learning collaborative, networking*

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COOPETITION is a growing force in the innovation landscape. For some organizations, the primary mode of innovation continues to be deeply secretive and highly competitive, but for others, a new style of shared challenges, shared purpose, and shared development has become a superior, more efficient way of working. Coopetition is the simultaneous pursuit of cooperation and competition.¹ The sports world offers some of the best examples. For example, in cycling and running, elite athletes coordinate their movements so that each can do far better than if racing alone. Organizations can use this same strategy to accelerate their innovation capabilities and capacity.² This article describes principles and examples of coopetition strategies to improve innovation in the health care sector.

Leaders supporting innovation in health care organizations must address several challenges. These include which innovation methods to use, what kinds of creative spaces to build, and how to develop a robust innovation network.³ From a network perspective, they must ask: Which group of elites do we align with? What can we contribute for mutual benefit while maximizing the benefits to our organization? In an industry that espouses the need for patient-centered care, value-based treatments, and mission-driven organizations, the concept of coopetition resonates more strongly than in a traditional competitive landscape.^{4,5}

Through the lens of coopetition, the authors examine the experience of an international health care innovation network called the Innovation Learning Network (ILN) and provide case examples that illustrate the benefits and challenges of coopetition in accelerating innovation. This article focuses on the initial 10 years of the network experience to provide evidence of successful practices. During this period, some organizations led more, some contributed more, some connected more, and some taught more, but in the end, most fared better in their chosen unifier: innovation.

BACKGROUND

Coopetition

The field of coopetition research is slowly evolving. It is generally accepted that Ray Noorda, founder of Novell, introduced the concept of coopetition in the 1980s. At that time, the dominant doctrine of strategic management thinking was the pursuit of competitive advantage. Interest in coopetition remained dormant until the 1996 publication of the book, *Coopetition: A Revolution Mindset That Combines Competition and Cooperation*, by Brandenburger and Nalebuff.^{1,6} Over the last 2 decades, the literature base devoted to coopetition has gradually expanded. However, the field is still in its infancy.

The majority of coopetition research is qualitative, primarily consisting of case stud-

ies. A few quantitative studies, based on surveys or theoretical constructs, are reported. Recently, 5 systematic literature reviews have been published.^{1,6,9} In the aggregate, this research is very heterogeneous and fragmented, spanning a variety of industries, country contexts, and organizational maturity levels, with an emphasis on established high technology industries. In addition, studies examine the dynamics of coopetition from diverse organizational perspectives. Some analyses are within an organization, whereas others are between firms or across business alliances.

To date, only a few studies have addressed the nonprofit sector or service industries such as health care. Barretta⁴ explored coopetition across the Italian network of health care trusts, and Peng and Bourne¹⁰ analyzed the phenomenon within Taiwanese health care networks. Discussing health care in the United States, Gee⁵ highlighted the promise of coopetition in health care, stating that collaboration is integral to “health care DNA,”^(p360) in contrast to a more competitive imperative in other industries. LeTourneau¹¹ proposed coopetition strategies to strengthen the relationships between physicians and hospital executives.¹²

In summary, the work to date constitutes an important beginning. However, some findings are context-specific and therefore limited in generalizability.^{1,9} The authors believe that this article offers a unique perspective on coopetition in the context of a health care learning alliance designed to accelerate innovation, the Innovation Learning Network (ILN). Critical success factors drawn from the literature are highlighted in the discussion and case examples.

History of the Innovation Learning Network

In 2005, the VHA Health Foundation awarded a grant to Kaiser Permanente (KP) to launch a national learning network of health care organizations engaged in innovation in order to identify successful strategies and explore ways to diffuse innovation. The visionary goal of the foundation was to

nurture innovations with a high potential for creating systemic change that could be replicated by others (L. DeWolf, 2005, written communication).

Founding ILN members were drawn from 8 opinion-leading health care organizations across the country. The organizations were all large, not-for-profit care delivery systems with similar missions: to deliver high-quality care. The similarity among organizations and compatibility of needs relative to innovation was an important strategic decision for the emerging network. Within cooperative relationships, several authors have suggested that high levels of complementarity,¹³ similar cultures,¹⁴ and a common understanding of market challenges¹ enable greater knowledge sharing and innovation. The founding members were drawn from different geographic regions across the United States. They were not direct competitors within the same geographic region. However, they remained indirect competitors within the health care system on a national scale.

These 8 organizations began to explore how to accelerate their innovation practices. Two preliminary challenges confronted the nascent network. These were to determine the optimal balance between the forces of cooperation and competition within the objectives of minimizing risk and maximizing benefit and to develop a shared definition of innovation for the network.

BALANCING THE FORCES OF COOPERATION AND COMPETITION

As a blend of the forces of cooperation and competition, cooperation embodies an inherent tension. Bouncken and Kraus¹⁵ describe competition as a “double-edged sword.”^(p2060) On the one hand, the imperative of unbalanced competition would be to maximize only individual benefit. Cooperation, as an opposing force, would preferentially maximize mutual benefit. A simultaneous balance must be achieved between these forces for cooperative relationships to be successful.^{13,16}

Strategies to minimize individual risk

As the 8 organizations pondered the creation of their innovation network, mistrust of network intentions and fear of idea stealing became a central pain point. For operational leaders, risk taking can be a hard skill to embrace. While D’Alfonso et al¹⁷ suggest that risk taking and connecting beyond one’s immediate network are core behaviors of innovation leaders, these important behaviors were not yet embedded in the emerging network. To mitigate fear, the organizations developed a legal participation agreement that detailed how they would share knowledge. In effect, the agreement protected risk taking and created a safety net that detailed a process and mechanism to employ if issues emerge. Development of knowledge protection agreements and mechanisms is essential for the success and sustainability of cooperative relationships.^{1,14,18}

Strategies to maximize mutual benefit

From creation of this agreement and its safety net, the seeds of cooperation emerged. The organizations quickly found areas of innovation to explore together. They began to understand the ambiguity of the definition for “innovation.” To accelerate capabilities, members of the network would need a firm foundation. The first deliverables to emerge from these discussions were an innovation-sharing hierarchy, along with a working definition of innovation, as described later.

Uhl-Bien and Marion¹⁹ suggest that when presented with ambiguity, leaders look to build emergent structures to add order. The order embraced by representatives of the organization was to build a common understanding of innovation. An “innovation-sharing hierarchy” was created. The hierarchy was a simple, prioritized list of collaboration opportunities. The hierarchy listed in rank order (from highest to lowest) the level of comfort in collaborating on a particular innovation domain. The list remains relatively stable to date and is as follows: Innovation Methods and Capabilities (how we innovate); Processes

(workflows and experiences); Technology (devices and software); and Space (architecture). The hierarchy's purpose was to identify and prioritize potential areas of collaboration. However, a positive and unintended benefit was that it allowed individual organizations to self-assess what information could be shared, with whom, and under what conditions. This removed layers of permission seeking. As Bouncken et al¹ have articulated, undertaking such an exercise to clarify these boundary conditions is important to enable knowledge sharing and to guard against knowledge withholding and protection. Creation of this innovation-sharing hierarchy also optimized where this new network would gain traction.

Debating a common innovation definition

Developing a shared innovation definition was far more complicated than anticipated. What the 8 organizations realized was that innovation was both contextual and highly varied. For one organization, it is innovation through implementation of solutions; for another, it is innovation through commercialization; and for a third, it is innovation through design. While the network never formalized an official definition, the sheer act of exploration created a far more sophisticated understanding of organizational perspectives. This enabled clusters of organizations to begin working more closely together. In the end, a common definition was not necessary *across* systems. However, each participating organization clarified its internal organizational definition. This was necessary for each organization to optimize its resources and support for people, processes, and spaces. Without a definition, an organization cannot target its precious resources appropriately.

In 2009, two coauthors of this article (McCarthy and Carleton) published a definition suggested by Moss Kanter et al and Senge et al that innovation is a process that brings creativity to measurable outcomes, actions, products, or processes.^{5,20,21} This overarching definition is consonant both with those of

individual members and with the mission of the ILN.

After careful consideration of the balance of cooperation forces and the innovation definition, the ILN was launched. The process was organic, as the leaders found order in chaos, as well as comfort in ambiguity. Despite unpredictability, they built strong connections to begin cooperation activities. After the initial 15-month "pilot" period supported by the VHA grant, the founding organizations considered the experience so successful that they were unwilling to disband. They reconfigured the ILN as a membership organization. Over time, the ILN membership has grown to 45 health care and design organizations that accelerate innovation by helping one another.

The ILN's mission—Share the joy and pain of innovation—accelerates innovation by sharing solutions, teaching techniques, and cultivating friendships. Over time, these 3 pillars (sharing, teaching, and cultivating) were formally adopted to optimize the network effect and cooperation.

THREE PILLARS OF ILN INNOVATION

Pillar 1: Cocreation and sharing innovations

The essence of system-to-system innovation is to share solutions to accelerate activity in one's own organization. As Petter et al⁸ point out, knowledge sharing is one of the critical success factors characterizing successful cooperative relationships. With increasing knowledge exchange, there is greater opportunity for organizational learning and added value across the network, particularly in shared activities such as innovation.⁸ With scarce resources, the innovation functions/departments cannot afford to waste dollars on addressing challenges with solutions that have already been explored, adopted, or rejected by other organizations. Some challenges benefit from simultaneous exploration by collaborators, whereas others are ripe for a serial approach or even direct import of a solution.

Following are examples of these 3 approaches to acceleration.

Ping the network for collaborators: KP MedRite

In 2007, KP began to focus its innovation lens on medication administration. According to the Institute of Medicine report in 2000, there were 7000 deaths in the United States because of medication errors and approximately 1 error per day for every day that someone was hospitalized.²² KP's Innovation Consultancy (KPIC) already had a strong track record of solving complex problems. To accelerate this challenge, KPIC reached out to the ILN. The ILN "pinged the network," asking whether any organizations would be willing to participate in a rapid-sharing collaborative. Three organizations volunteered: Ascension Health, Partners HealthCare, and Alegen (now a part of CHI Health). The 3 organizations, plus KPIC, gathered virtually for 8 hours over a 1-month period. Each shared "the best and worst of medication administration." KPIC used that knowledge as a springboard to launch its effort and within 6 months created one of its signature innovations called KP MedRite. This is a system made up of a safety space where nurses prepare medications, a patient-centered workflow, and a do-not-disturb sash for nurses while administering medications.

KPIC made KP MedRite available to the ILN organizations first and then later to the public at large, creating a virtuous cycle of sharing. It has now been implemented across much of KP and has lowered medication errors while increasing satisfaction of both nurses and patients.²³ The solution has been celebrated by the *New York Times* and the *Harvard Business Review*.^{24,25}

Direct import: From Partners to UCLA via the ILN

Partners HealthCare (Partners), based in Boston, Massachusetts, developed and launched an innovation called e-Visits. It was created by a team at Massachusetts General Hospital (MGH) seeking to leverage telehealth

tools to help clinicians reduce administrative burden, deliver care more efficiently, and increase panel size while reducing access times. In 2012, the team highlighted the innovation at an ILN event in Coventry, England. UCLA Health System, the Los Angeles-based academic medical center, immediately began exploring its applications for its population. While hosting an ILN event a few months later, UCLA arranged for an on-site meeting, which brought together internal UCLA stakeholders and the MGH innovators. The UCLA team was so impressed that the innovation was directly imported to UCLA. Several years later, Partners e-Visits is still being used at UCLA as well as in multiple sites throughout Partners health care system.

Pass the baton: A serial approach to innovation

Group Health Cooperative (GHC) is a nonprofit health care system based in Seattle, Washington (officially acquired by KP on February 1, 2017). Seeking inspiration and thought partnership, GHC reached out to the ILN. The ILN connected the GHC team to KPIC to explore prototyping opportunities based on KPIC's theoretical framework developed during its 6-month research project, called Project Redwood. Redwood's purpose was to explore the social challenges of the frail elderly. This research project of "at-risk" seniors yielded powerful insights into and 5 social dimensions for healthy aging: Purpose, Interactions, Family/Friends, Planning, and Finances.

The 5 dimensions produced by KPIC provided a sturdy approach to assessing risk. The GHC team adapted the 5 dimensions from Redwood into a prototype called Contour and integrated it into its electronic medical record. A pilot with 30 patients demonstrated positive results, and the team continues to refine this prototype.

Pillar 2: Teaching innovation to build competency

With multisystem connections, the pool of talent increases, so there is an increased

chance of discovering a skill an organization needs to breakthrough and accelerate innovation. Whereas Pillar 1 is focused on sharing innovations, the pillar 2 focus is on skill building.

Build it together: A skill collaboration

The Center for Care Innovations (CCI) is an innovation hub for safety net organizations. It wanted to launch a more substantial design thinking program for the safety net, realizing that traditional training programs were not effective. KPIC had been evolving its “introduction to design thinking” class for several years. In 2006, an 8-hour curriculum was designed for KP’s middle managers. They too began pondering whether there might be a different approach.

Via the ILN, CCI and KPIC were connected to explore their similar skill-building needs. They decided to jointly build and administer a new program and reached out to a third ILN partner, Gravitytank (now Salesforce), to bolster the training and approach. The result was a program called WeAreCatalysts.org where dozens of safety net organizations and KP medical centers not only learned design thinking but also actively applied it to project work with coaching. The materials and approach were later made available to all organizations of the ILN.

One-to-One skill transfer: Cultural probes at HopeLab

HopeLab is a nonprofit foundation working to improve the health and well-being of children and young adults by translating behavioral research into real-world digital solutions. At the May 2016 ILN meeting, HopeLab participated in a breakout session led by KPIC. The breakout called “Get Probed!” explored the power of cultural probes as a research tool. The team described its experience using the probe kit activities as catalysts for difficult conversations. The HopeLab team decided to try using the probe kit with the young cancer patients it was working to support. The HopeLab team designed and deployed its ver-

sion of the probe kit, called the Interview Prep Kit.

Through the ILN, HopeLab discovered a new technique for collecting user-centered insights and transported it directly into its research methodologies. The insights uncovered during the interview processes helped inform the technology-based programs currently being prototyped at cancer centers across the United States.

One to many skill transfers: CIMIT’s the art of commercialization

The Consortia for Improving Medicine with Innovation & Technology (CIMIT) comprises world-class academic and medical institutions that have partnered with industry and government to foster collaboration and accelerate innovation. CIMIT offers a health care commercialization course, the Commercialization Results Accelerator to Advance Solutions in Healthcare (CRAASH), to facilitate the acceleration of health care innovations from the academic laboratory through commercialization. The course is designed to deliver learnings outside of the laboratory through firsthand experiences with patients, clinicians, payers, regulators, and funders. This is all done under the mentorship of successful health care entrepreneurs.

In 2016, 2 ILN teams participated in the course. One was from Northwestern Medicine, whereas the other came from Carolinas Healthcare System. KP also participated as a guest faculty. Northwestern Medicine encouraged a young team from BOLD Diagnostics, a Chicago-based company focused on redefining blood pressure monitoring, to apply for the CRAASH course. After completing the course, the team placed fourth in the 2016 RICE Business Plan Competition. A BOLD Diagnostics cofounder and course participant later observed that

The weekly CRAASH questions helped us during the question and answer periods of each round and helped us think through each aspect of our company, from the value proposition to the business model. Thanks to our participation, we were well

prepared and demonstrated our ability to execute on our proposed business strategy.

Pillar 3: Cultivating friendships and trust

Over the years, the ILN learned that the single most important pillar of system-to-system innovation is the cultivation of innovation friendships. This learning is validated by multiple coepetition researchers who have repeatedly described the critical importance of trust in creating and sustaining successful coepetitive relationships. Trust is the bedrock for collaboration. Not only does trust enhance the probability of cooperative behavior but it also reduces the potential for misunderstanding and conflict.^{8,14,26}

With a foundation built on friendship, the ILN short-circuits issues that learning networks often struggle with: commitment, motivation, value, and follow-up. This peer-to-peer connection has proven to be a superior alternative to the traditional hub-and-spoke model of many networks because these decay when the hub is removed. When a connection deteriorates, the network of friends patch it up and keep going. It is this pillar that made it easy to ask for help and compelled others to give it.

It is all about the face: In-person gatherings

Every 6 months, approximately 120 innovators and leaders from across the ILN gather for 3 days to exchange ideas, learn skills, and participate in strategic socialization. These meetings are intense experiences, and face-to-face is the only way that these on-the-fly encounters can occur. It is the face-to-face experience that adds the complexity, warmth, and fuel for these relationships to remain strong.

Over time, many members have begun to view these meeting as rejuvenation and decompression events. Innovation is hard work. Every day, health care innovators are patching together resources and weaving compelling visions to keep the big thinking of innovation alive and thriving. The ILN meetings provide moments where innovators are among peers

who understand the struggles, joy, and meaning of innovative work and where they can learn new skills and share ideas freely without judgment.

Dinner with strangers

The ILN intentionally sparks random encounters. These semirandom collisions bring together strangers from diverse backgrounds in a casual and fun environment. In his book, *The Necessity of Strangers: The Intriguing Truth About Insight, Innovation, and Success*, Alan Gregerman asserts, “Innovation is all about connecting with, learning from, collaborating with, and empowering strangers.”^{27(p77)}

Dinner With Strangers is a hallmark experience of the ILN in-person meeting. Imported from Mayo Clinic’s Transform Conference, this technique invites several random attendees of an event to dine together at local restaurants. While this is entirely optional, the vast majority choose to attend. These dinners are successful because they remove the burden of ownership and eliminate the discomfort of forced interactions. What remains is an evening of intrigue, excitement, and engineered serendipity.

Strong subcommunities: The Network Weavers

The role of cohorts in fostering and maintaining learning communities has been well documented, especially in relation to advanced education. As Randee Lipson Lawrence observes, “A group of individuals with a common goal does not automatically constitute a community. Communities develop over time and with intention.”²⁸ This is how one of the ILN’s cohorts, the Network Weavers, quickly became one of the strongest and most active groups of the ILN.

The Network Weavers cohort comprises key individuals from across the ILN. Each person is a representative of his or her respective ILN organization. While Weavers may differ in demographics and professional background, they are united by a focus on innovation

and design in health care. They are the primary vehicle for knowledge transfer within the ILN. These Weavers lend their expertise to the ILN community and extract inspiration and insights from the network to inform their home organizations.

The ILN convenes quarterly calls with Network Weavers. These calls combine elements of speed dating, organizational spotlights, group consults, and other professional and personal updates. The calls are enlightening, engaging, and fun. They serve to strengthen cross-organizational relationships. The result is a cohort of innovation friends.

CONCLUSION

Although competition is a traditional force for improvement and innovation, coopetition is emerging as the way to tackle complex-

ity, social good, and collective wisdom. Networks of organizations, such as the ILN, that have chosen to accelerate innovation through more direct, open approaches are finding that innovation is accelerated. In addition, a host of other positive effects, including cross-pollination, expanded access to knowledge, speedy problem solving, sense of place and community, and participation in a movement, have emerged from these approaches.

Organizations are, at the very least, *indirectly* networked. They read about each other, share embedded friends and colleagues, and “bump” into each other at conferences. However, those that *directly* network with one another are advantaged by a superhighway of knowledge exchange that is continual and just in time. The result of coopetition is speeding the benefits of innovation to the people who need it most—the patients.

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