

SMR International

10 Park Avenue (Suite 4-F) New York NY 10016 USA 212.683.6285

Building the Knowledge Culture

SMR SPECIAL REPORT
APRIL 2014

KNOWLEDGE STRATEGY:

YOUR LEADERSHIP ADVANTAGE

Guy St. Clair

This paper is prepared as a background document for a presentation at the AIIM Conference in Orlando FL April 1-3, 2014. Anne Kershaw and I are the presenters.

Our subject is "Knowledge Strategy: Your Leadership Advantage," relating to the conference theme ("Information Opportunity and Information Chaos") through three conference tracks: Engage, Process, and Control.

Significantly, these three tracks are also recognized as fundamental goals for a corporate knowledge strategy, supporting business objectives and, when successfully implemented, playing a strong role in reducing costs and legal risks. The presentation links knowledge strategy to these goals and with this paper, seeks to demonstrate how an effective knowledge strategy serves an organization's effectiveness and mission-specific success while at the same time helping to reduce legal risks such as e-discovery and privacy breach. The leadership and management roles of corporate knowledge strategists – senior employees with expertise in information and knowledge strategy – are critical to the success of the company's approach to managing corporate or organizational capital.

Introduction

During the last decade – and in some cases stretching out over another prior decade or so – corporate and organizational leaders have come to recognize the benefits of high-quality information and knowledge management. It has been a phenomenal realization, this sea change in organizational management, and it affects every information and knowledge exchange that takes place in every functional unit of every company or organization (indeed, some make the case that this move toward high-quality information and knowledge sharing is taking place in society at large). Thus it is no surprise that with all the talk about "big data" and "drowning in information," companies and organizations have devised new approaches to information and knowledge management. What we are witnessing is nothing less than a cutting-edge opening for innovative thinking, as enterprise leaders give attention to their company's intellectual capital and about how critical it is to manage that knowledge carefully.

It wasn't always like this. For many years, people who needed information or knowledge for their work just figured out how to get it, sometimes doing a good job of it and at other times costing the firm or the company great deals of money because the needed information was so hard to come by. But by the 1980s or so, certain signs were leading us to think seriously about the management of information and knowledge. For one thing, increased computer power had put us all on guard that something important was happening. While some of the runes were misread (such as the prediction about the "paperless office" – remember that one?), there was no doubt but that the new field of information management and information science would enable sophisticated information capture and retrieval. Lynne Brindley, the former Chief Executive of The British Library, has described what happened:

The concept of the information strategy was emerging, whereby information and libraries were seen as important knowledge resources to be harnessed and increasingly treated as a strategic asset – to underpin teaching and learning, research and knowledge transfer activities – which needed to be valued and managed.

Information strategies emerged in the 1990s in universities, with more or less enthusiasm, and beyond universities the focus was on the discipline of knowledge management, the concept of knowledge exploitation for competitive edge. There was recognition of the increasing economic value of information – of knowledge, both tacit (in people's heads) and explicit (more formal), as a key element of the corporate assets of the business.¹

Brindley went on to note that a strong proponent in this recognition of the emerging knowledge-based economy was Thomas Stewart, who had defined intellectual capital as "intellectual material that is put to use to create wealth." In doing so, Stewart introduced the concept of KM (although it was not called "KM" at the time): "Intellectual capital," he said, "is the sum of everything everybody in a company knows that gives it a competitive edge." ²

So the movement toward "knowledge management" now began to make sense, and KM began to gain attention among leaders in the management community. And as management began to connect the electronic capture of KM elements with knowledge sharing, performance, and strategic learning, the advantages of KM began to fall into place (and, importantly, to be recognized as *corporate* advantages). These advantages, in turn, began to make even more sense when senior managers started to recognize the futility of speaking about "managing" knowledge and put their interest in knowledge development and knowledge sharing in more practical terms.

By the late 1990s, we were speaking about *knowledge services*, the management and service-delivery methodology – a way to work – that combines information management, KM, and strategic learning into a single over-arching operational function. As a management methodology, knowledge services recognizes that the most critical asset of any group or environment is what its people know, and this knowledge – this intellectual capital – is the organization's most competitive asset. Moving to knowledge services provides the organization with the tools its people require for ensuring that the organization's intellectual assets are captured, organized, analyzed, interpreted,

¹ Brindley, Dame Lynne (2009). "<u>Challenges for great libraries in the age of the digital native</u>." National Federation of Advanced Information Services (NFAIS). Conrad Lecture, 2009.

² Stewart, Thomas A. (1997). *Intellectual capital: the new wealth of organizations*. New York: Doubleday.

and customized for maximum return to the institution, a direction this author asserted when writing about knowledge services.³

But these efforts were not enough. Why? Because managers, corporate executives, and even leaders in organizations and institutions that were not necessarily business-focused required a unified approach. For efficiency and for effectiveness, they needed an enterprise-wide knowledge strategy that applied to all strategic knowledge and would enable the enterprise to access and deliver any content connecting to any part of the organization and, not to be dismissed, to its success.

They wanted a practical approach to managing information, knowledge, and strategic learning across the enterprise. Management leaders had already learned that enterprise-wide knowledge development, knowledge sharing, and knowledge utilization (what we think of as "KD/KS/KU") could not take place through the outputs of discrete functional entities. While these many functional units (records management departments, for example, or specialized research libraries, corporate archives, staff training and learning units, information technology departments, database design units, or web development units, to name a few) were being created and put into place as individual and separate operational entities, no one was looking after *enterprise-wide* KD/KS/KU. No thought was given to an institutional or organizational knowledge culture, one that would engage not only the usual knowledge-focused units of the organization, but all functional units (since all units must develop, share, and use knowledge). The entire organization needed a practical way to deal with knowledge, to establish some sort of efficiency in each section and be of benefit to the larger enterprise.

Enter knowledge strategy. And the knowledge strategists to do the job.

The development of knowledge strategy – like the development of any business or management strategy – is nothing more than an attempt to decide upon a group of actions or activities that will produce an agreed-upon goal. Managers strategize all the time, and most managers are happy to do so. Developing strategy (regardless of the organization's subject matter, the workplace focus, or even the management structure of the institutions or firms that employ the managers) is all based on the idea that with a strategy in place, the company can accomplish what it has chosen to accomplish. And an added benefit of developing strategy is that the very act forces managers and their staffs to give thought to whatever organizational vision, mission, and values are in place. Basically they are developing a road map for action, including (built in to every strategy) a framework for monitoring what is accomplished and assessing the results.

As it happens – and it's the beauty of knowledge strategy – all activities, at every level, require KD/KS/KU. The principles of whatever line of work for which knowledge is developed and shared can be applied to the management of *all* of the company's intellectual capital and, at the same time, ensure that knowledge services – as a management and service-delivery tool – rises to the highest levels knowledge services can achieve.

³ St. Clair, Guy (2001). "Knowledge services: your company's key to performance excellence." *Information Outlook* 5 (6), June 2001.

The Knowledge Strategist

As an emerging management methodology, there are not yet a great many jobs with the exact title of "knowledge strategist," but we can expect to see them listed in the future. Employers today are seeking knowledge professionals for a wide range of responsibilities in knowledge work, and they all incorporate much – if not all – of the elements built into information and knowledge strategy as a discipline. Examples can be found in the topics taught in Columbia University's M.S. in Information and Knowledge Strategy program (currently the only global graduate program focusing exclusively on information and knowledge strategy), and it is easy to see how more general subjects, when pointed in the direction of information- and knowledge-related organizational needs, can support the work of the knowledge strategist. These knowledge executives and junior executives must have expertise in such areas as knowledge-focused project management, business analytics and strategic intelligence, information policy and regulatory issues, and the organization of and access to information and knowledge. It is this expertise that establishes the value of the knowledge strategists (however their jobs are designated) to the companies and organizations that employ them.

Those who work (or will work) as knowledge strategists reflect many different prior professional experiences, and many people moving into this work, it seems, are mid-career job changers seeking to take their work to a different level. As for their backgrounds, many knowledge strategists (perhaps most, at the present time) seem to migrate to information- and knowledge-focused work through their earlier experiences as subject-matter experts in the field in which they are employed. At the same time, there are certain working professionals who are naturally positioned for success as knowledge strategists. Pamela Tripp-Melby, Director, Knowledge Utilization Division, NCEERAA at the [U.S.] National Library of Education, points to the value of the contributions different kinds of knowledge professionals can make as knowledge strategists, particularly to the challenges of ediscovery.

It's important to recognize the contributions different kinds of information and knowledge professionals can make to the challenges of e-discovery. In my work, I frequently come across special librarians, records managers, archivists, and enterprise metadata specialists – among others – who have important skills to contribute to the larger knowledge strategy development process and, in particular, to the implementation of the organization's knowledge strategy once is has been agreed upon. These knowledge workers are already "ahead of the game" and can be especially valuable for companies moving seriously into, for example, e-discovery. (Pamela Tripp-Melby, personal communication with the author, August 27, 2012)

Taking this idea one step further, the author, speaking at the Annual Conference of the Special Libraries Association in July, 2012 encouraged specialist librarians – those library and information professionals employed in libraries and research centers designed for specialized research – to consider moving to careers in knowledge strategy.⁴

So in these early days of knowledge strategy, jobs being advertised do not, generally speaking, make reference to the need for a "knowledge strategist." At the present time these jobs require the expertise, education, and management and leadership skills identified by corporate management

⁴ St. Clair, Guy (2012). <u>SMR Special Report (July 2012) – The *New* Knowledge Services: Next Steps for Career Professionals – Specialist Librarians as Knowledge Strategists New York, SMR.</u>

for people who will perform what are – under a variety of descriptions – tasks and responsibilities leading to the development and implementation of solid knowledge strategy. Marni Baker-Stein has noticed the amazingly wide variety in people drawn to knowledge strategy. Dr. Baker-Stein, formerly Senior Associate Dean for Curriculum and Planning at the Columbia University School of Continuing Education where the graduate program in information and knowledge strategy, noted above, is offered, puts it this way: "Students coming into the program," Dr. Baker-Stein says, "are coming from 18 or 19 different industries. Once they graduate from our program, they are expecting to become leaders in these emerging fields relating to information and knowledge strategy, working in these same industries."

Coming from this broad range of industries and professions, knowledge strategists are found to be working under many job titles ("knowledge consultant," "knowledge architect," "content records manager," "knowledge analyst," "knowledge process engineer," "knowledge specialist," "collaboration specialist," and "KM systems manager" are a few). As these are just the beginning stages of this important new line of work, most of us involved in knowledge strategy feel safe in predicting that in the not-too-distant future there will be senior executive positions at the C-suite level, beyond the current CIOs, CTOs, CKOs, and CLOs, with titles like the "Chief Knowledge Strategist" or "Chief Research Management Strategist."

With specific reference to e-discovery and the legal profession, the workplace efforts of knowledge workers with knowledge strategy skills can be seen in a variety of activities and responsibilities. Anne Kershaw has identified several:

The advent of knowledge strategy disciplines and workers in the corporate environment represents a whole new way of thinking about how we manage discovery for litigation and investigation. In short, knowledge strategy has the potential to eliminate huge costs and issues associated with e-discovery. If we know what we know and know where to find it – which is what knowledge strategy is all about – we can better satisfy our legal discovery obligations efficiently and quickly for all purposes. (Anne Kershaw, personal communication with the author, September 16, 2012)

Shannon Spangler, too, identifies roles and responsibilities for knowledge strategists, not only in law, but in other fields as well. Spangler has this to say about the advantages of learning about knowledge strategy in the workplace:

One of the advantages of learning about information and knowledge strategy in today's work environment is the wide variety of applications we come across. We give plenty of attention to how knowledge strategy is used in e-discovery and the legal profession. Beyond that, though, we match knowledge strategy with business analytics and strategic intelligence, with project management, and with the role of social media in the workplace. And these are just a few of the many areas that connect with knowledge strategy. There is an amazingly wide range of opportunities for applying the principles of information and knowledge strategy in a variety of settings. (Shannon L. Spangler, personal communication with the author, September 2, 2012)

5

⁵ Baker-Stein, Marni (2012). Interviewed in Columbia University M.S. in Information and Knowledge Strategy. (film).

All of these types of work come together in two defining workplace roles for the knowledge strategists. To be successful, knowledge strategists must be prepared to manage, and – built into that management role – knowledge strategists must lead.

The Management Role

Experienced managers must be multi-talented, of course. Yet when we speak with managers about their work, most of the talk seems to be about dealing with finances and cost situations or (perhaps "and/or") working with others in the company who are not necessarily information- or knowledge-focused but who have a solid understanding of the company's business needs.

In an unpublished paper, prepared as his graduate thesis at Columbia University, Audie O. Cruz Garcia provides a valuable and probably fairly typical example of the former:

Reducing cost for e-discovery has always been challenge and there are two ways to approach it. There is a preventive approach and a reactive. The preventive approach uses a records management program that will organize the information within the organization as it is acquired and make it more easily searchable. The reactive approach will use all available tools to find the information once there is a legal request to produce it. However records management can only do so much. Even a large amount of organized information can only be reduced efficiently if the right tools are available. Consequently, organizations look for the best tool to search information. Vendors face the challenge of dealing with the increasing amount of information that needs to be searched and providing the best service for their clients.⁶

It is this kind of financial challenge – and especially from a "big-picture" strategic planning point of view – that the knowledge strategist as manager must deal with. When is the best time to decide whether the overall records management approach will be preventive? Is it better to wait until there is a need – as is the case in some large organizations – and go "back" to the preventive as the KD/KS/KU planning team is attempting to deal with the "reactive"? These are not easy questions to answer, and they put knowledge strategists to the test frequently as they perform management responsibilities.

In a similar test described by Dotti Gosper, Global Systems & Effectiveness Manager, Mars, Incorporated, the knowledge strategist as a manager has a very specific responsibility to take the KD/KS/KU message out to the larger organization, particularly in guiding the legal team in understanding that information- and knowledge-related success depends on a solid infrastructure. It's a management duty that seems to call for the unique qualifications of the knowledge strategist.

For people working with knowledge strategy, one of their most important responsibilities is communication. These knowledge specialists must be able to convey to company leaders the realities and limitations of what can be done within the framework of the company's technical infrastructure. These often pose challenges that require collaboration and ongoing communication, and knowledge strategists must have expert skills in these areas. (Dotti Gosper, in a personal communication with the author, September 4, 2012)

 $^{^6}$ Cruz Garcia, Audie O (2011). Finding Responsive Information: The State of Current Search Methods Used by E-Discovery Vendors. New York: Columbia University.

There are other characteristics, too, that strongly support the knowledge strategist's work as the knowledge authority – the "go-to" executive, perhaps – in the enterprise. Cynthia A. Montgomery, who specializes in connecting leadership with business management, finds three connected pursuits for business strategists, and I would argue that they are particularly appropriate for the knowledge strategist. In a recent article, Montgomery builds on the thesis of her book, *The Strategist: Be the Leader Your Business Needs*⁷ and describes the strategist as a meaning maker for companies, as a voice of reason, and as an operator.

With respect to the strategist as meaning maker, Montgomery describes how "...it is the leader – the strategist as meaning maker – who must make vital choices that determine a company's very identity." Surely this is a management determination that, in the case of the knowledge strategist, can be argued to take on a critical place in the establishment of company or organization as a knowledge culture, an assignment that – it is becoming clear – senior management and enterprise leadership is expecting of the knowledge strategist.

And the knowledge strategist as a voice of reason? Absolutely. If there is any one function that the organization's stakeholders must learn to understand, it is the on-going quest for success with KD/KS/KU. Yet most people – even people who self-identify as "knowledge workers" – don't think about knowledge development, knowledge sharing, and knowledge utilization. It is just "something we do." Or not, as is often the case, which is why the knowledge strategist not only must assume responsibility for ensuring that KD/KS/KU is embraced as a "normal" part of the working life of the firm's employees and clients. When called upon (as happens often, or which *should* happen often), the knowledge strategist must also lead the way in setting up – or working with the people who set up – the company's change management processes and activities. This, as much as anything connected with knowledge strategy, is a continuing challenge. The knowledge strategist – as the organization's voice of reason in matters having to do with the management of the company's intellectual capital – has an obligation and the opportunity to see that KD/KS/KU succeeds, and if change is required – as it will be – to ensure that change management principles are followed and that the change management function is undertaken for implementing the identified and required changes.

In the third role of the general strategist, Montgomery also makes a strong case for the knowledge strategist when she writes of the strategist as an operator:

A great strategy, in short, is not a dream or a lofty idea, but rather the bridge between the economics of a market, the ideas at the core of a business, and action. To be sound, that bridge must rest on a foundation of clarity and realism, and it also needs a real operating sensibility.

A critical task of the knowledge strategist is to ensure that the practical, everyday realities of KM and knowledge services are designed into any knowledge strategy being developed. Whether the strategy is expected to provide guidelines for an enterprise-wide knowledge activity, or whether the focus is on a narrower and immediate short-term quick win, the knowledge strategist as operator continually keeps in mind the "distance" (it might be called) between theory and application. In its simplest and perhaps most reasonable framework, the whole purpose of knowledge development and knowledge sharing is to establish a connection between what is

7

⁷ Montgomery, Cynthia A. (2012). *The Strategist: Be the Leader Your Business Needs.* New York, NY: HarperCollins.

⁸ Montgomery, Cynthia A. (2012). "How Strategists Lead." *McKinsey Quarterly*. July, 2012.

developed and shared and how it is applied in the workplace. That application can, of course be rooted (and often is rooted) in the mundane day-to-day work that we just have to get done, and with a strong KD/KS/KU structure, all stakeholders are able to perform those tasks as well as they can be performed. At the same time, though, there is the great goal of seeking and accelerating innovation, getting beyond the mundane, and it is in this role that the knowledge strategist as operator flourishes.

The Leadership Role

As a manager, the knowledge strategist has a critical function in the organization, and going further, the manager-as-leader construct could almost have been designed with the knowledge strategist in mind. Not only does Montgomery focus on the leadership role of managers (as do many others), this claim can even be strengthened from our background in the study of leadership. Peter F. Drucker, for example, seemed to be emphasizing throughout his long career the "higher" role of the leader/manager, and his advice about integrity in leadership ("...it is character through which leadership is exercised; it is character that sets the example and is imitated."9) makes sense for the knowledge strategist. In dealing with information- and knowledge-related activities, the leader-manager's work is two-fold, to manage the successful deployment of knowledge strategy to ensure the continuing success of the company's KD/KS/KU process, and to maintain (or to establish, if it is not already in place) the organization as a knowledge culture. It is in this latter role that the knowledge strategist excels (and in which Drucker's direction comes to its highest fruition), working with all the elements of the organization to ensure that beliefs and values build on and connect with an understanding of the organization of information, knowledge, and strategic learning, and that those disciplines converge for the benefit of the company.

When there is a corporate knowledge culture, the knowledge strategist is positioned to move information- and knowledge-related programs forward. Nishan DeSilva, Director, Information and General Management Compliance, Microsoft Legal Operations Group, describes how – in looking at the overall environmental ambiance for success with KD/KS/KU – the company's culture plays an influential role in the success of the knowledge strategist's work.

In almost every company or organization, there are wide variations in awareness about the value and the importance of the knowledge-sharing function. At the same time, the company's structure as a knowledge culture has great influence in policy development, and when the knowledge strategist is experienced in such activities as conducting the knowledge audit or working with the knowledge strategy development team, that influence comes into play. (Nishan DeSilva, personal communication with the author, September 4, 2012)

In many situations in the knowledge strategist's work, leadership principles from other types of work or industries can transition very usefully into the knowledge domain. Lee Igel, for example, has identified six leadership principles. He put them forward in an important paper published in the May/June 2012 issue of *Physician Executive Journal*. Dr. Igel's "Six Core Principles for Creating Strong Physician Leaders" are, in my opinion, appropriate for any manager/leader¹⁰ (I made use of Dr. Igel's six principles, together with examples of how these principles can be applied in the work

⁹ Drucker, Peter F. (1973). *Management: Tasks, Responsibilities, Practices*. New York, NY: Harper & Row Publishers. 462-463.

¹⁰ Igel, Lee (2012). "Six Core Principles for Creating Strong Physician Leaders," in *Physician Executive Journal*, May/June 2012.

of knowledge strategists, in the presentation for specialist librarians referred to earlier). Following on from what has been said about the work of the knowledge strategist, doesn't it make sense that these principles provide the knowledge strategist with a strong framework for taking charge of the company's enterprise-wide information, knowledge, and strategic learning function?

Dr. Igel's leadership "action principles" (we might call them) can be listed here. They work as well for knowledge strategists as they do for physician executives and, indeed, might even be characterized as essential attributes for knowledge strategists who lead KD/KS/KU success in their employing organizations:

- 1. Focus on what needs to be done
- 2. Focus on values as the dominant chord
- 3. Identify and respond to your professional "defining moment"
- 4. Emphasize learning over metrics
- 5. Embrace continuous learning and how it mobilizes multiple knowledges
- 6. Conserve what works and abandon what doesn't.

Knowledge Strategist = Knowledge Thought Leader

As it turns out, in those organizations and companies where the knowledge strategist's position and accomplishments are recognized as contributing to organizational effectiveness – as Pamela Tripp-Melby has pointed out – the larger enterprise gets double benefits. It is not only a situation in which the knowledge strategist influences the success of the company in how it does business. Simply with the authority and the responsibility for managing strategy as it relates to the company's pursuit of excellence in KD/KS/KU, the knowledge strategist also ensures that information and knowledge are better organized for e-discovery when e-discovery is required. (Pamela Tripp-Melby, personal communication to the author, September 4, 2012)

When these knowledge strategy-focused activities are initiated and when the benefits accrue, the knowledge strategist has attained a place in the organizational culture (not just the organization as a knowledge culture) that many knowledge workers aspire to but few achieve: adding value because of the identified and recognized output of the excellence of the KD/KS/KU process.

Getting to that KD/KS/KU excellence is a goal Tim Powell recognizes. As someone who works with companies as they pursue knowledge value, Powell has frequent opportunities to observe what works and what doesn't. His focus on the Knowledge Value Chain® helps knowledge strategists relate to how companies work with knowledge value.

Powell's work sets up an almost-perfect scenario for describing how the knowledge strategist performs, when knowledge value comes into the picture:

'Value creation' is the fundamental keystone of our competitive economy – and one of the genuine Mysteries of the Universe. For me one of the best things about business school was the opportunity to think and talk about value for two intense years – both in an abstract theoretical sense, and in very applied sense as it relates to creating value in live casebook situations.

You learn not to take value for granted, even to have a certain *reverence* for it – that it's transient, not to be treated carelessly – it can come and go. Much like other living

organisms, products, business models, companies, even whole industries have life cycles – they're born, they grow, they thrive, they ebb, they die.¹¹

For the knowledge strategist, knowledge value then becomes the vehicle – the structure, if you will – through which the knowledge strategist serves as the enterprise-wide knowledge authority. In doing so, this KD/KS/KU manager-leader takes on one of the most respected roles in all of KM and knowledge services, becoming the knowledge thought leader for the entire company, firm, or organization. With all staff – at all management and functional levels – referring to the knowledge strategist for guidance in all matters having to do with the organization as a knowledge culture, knowledge development and knowledge sharing succeed and thrive, and the corporation's intellectual capital results in organizational effectiveness, for the benefit of all stakeholders.

Presenters

Guy St. Clair is Lecturer and Subject Matter Expert for Columbia University's M.S. in Information and Knowledge Strategy program, a graduate program for professionals in knowledge management and related fields seeking to move into careers as knowledge leaders and executives. He is also the President and Consulting Specialist for Knowledge Services at SMR International, a New York-based consulting practice focused on change and its impact on people, organizational effectiveness, and the management of intellectual capital within the larger enterprise. He serves as a consulting specialist for strategic learning for Soutron Global, the leading provider of information management and educational services for librarians, and he is on the Advisory Board of the Corporate e-Discovery Forum - Knowledge Strategy (CEDF-KS).

Anne Kershaw is Co-owner and Managing Director of Knowledge Strategy Solutions™ LLC, Anne Kershaw continues and further builds upon the substantial consulting practice she developed under A. Kershaw, PC//Attorneys & Consultants, particularly in the areas of legacy data management and disposition and the development of sensible, cost-effective business records management programs that actually work. As an attorney and a nationally recognized data, litigation, and business records consultant, Anne provides independent analysis and innovative recommendations for the management and e-discovery of legacy and active data. In addition to serving as a Faculty Member of Columbia University's M.S. in Information and Knowledge Strategy program, Anne is an Advisory Board Member of the Georgetown University Law Center's Advanced E-Discovery Institute. She is the author of numerous articles, a member of The Sedona Conference®, and has taught workshops on e-discovery at the Federal Judicial Center's 2010 and 2011 Conferences for Magistrate Judges.

The presenters also wish to acknowledge the contribution of Shannon Spangler, also Co-Owner and Managing Director of Knowledge Strategy Solutions™ LLC and a 2013 graduate of the Columbia University M.S. in Information and Knowledge Strategy program in the preparation of the presentation.

¹¹ Powell, Tim (2012). "Value for Dummeze" *Competing in the Knowledge Economy*. [Blog post, August 5, 2012] New York: The Knowledge Agency.