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## Knowledge Collaboration: Working with Data and Web Specialists

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### Knowledge Collaboration: Working with Data and Web Specialists

#### Abstract

When resources are finite, people strive to manage resources jointly (if they do not rudely take possession of them). Organizing helps achieve—and even amplify—common purpose but often succumbs in time to organizational silos, teaming for the sake of teaming, and the obstacle course of organizational learning. The result is that organizations, be they in the form of hierarchies, markets, or networks (or, gradually more, hybrids of these), fail to create the right value for the right people at the right time. In the 21st century, most organizations are in any event lopsided and should be redesigned to serve a harmonious mix of economic, human, and social functions. In libraries as elsewhere, the three Ss of Strategy—Structure—Systems must give way to the three Ps of Purpose—Processes—People. Thence, with entrepreneurship and knowledge behaviors, data and web specialists can synergize in mutually supportive relationships of shared destiny.

#### Keywords

knowledge behavior, organizational learning, entrepreneurship, resource management

#### Comments

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# Knowledge Collaboration: Working with Data and Web Specialists

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When resources are finite, people strive to manage resources jointly (if they do not rudely take possession of them). Organizing helps achieve—and even amplify—common purpose but often succumbs in time to organizational silos, teaming for the sake of teaming, and the obstacle course of organizational learning. The result is that organizations, be they in the form of hierarchies, markets, or networks (or, gradually more, hybrids of these), fail to create the right value for the right people at the right time. In the 21st century, most organizations are in any event lopsided and should be redesigned to serve a harmonious mix of economic, human, and social functions. In libraries as elsewhere, the three Ss of Strategy—Structure—Systems must give way to the three Ps of Purpose—Processes—People. Thence, with entrepreneurship and knowledge behaviors, data and web specialists can synergize in mutually supportive relationships of shared destiny.

#### I. THAT'S NOT MY DEPARTMENT

In the beginning, an organization is social arrangement to accomplish a collective intent, pure and simple.<sup>1</sup> Later on, in consequence of original sin, lack of prevenient grace, or more believably because of temporal success disappointment not infrequently all endeavors ends: especially in hierarchical, public sector (but also not-for-profit organizations) that lack a clear "bottom line", bureaucracy rears its ugly head and the erstwhile rich, energizing corporate purpose is hijacked. The fall happens like this: in the name of efficiency, once a critical mass of operation has been reached,<sup>2</sup> organizations set up specialized departments and lower-level operating and supporting units to which they assign responsibility for pursuing objectives intermediate to the higher purpose. After a while, organizational silos<sup>3</sup> multiply, harden, and task the organization with the challenge of connecting the very subsystems it has contrived in order to bump up specific contributing functions.<sup>4</sup> (Serrat 2010) Individuals, the very glue that binds the organization, find it ever harder to derive fulfilment from being mere part of an economic entity, not a human and social institution.

#### Figure 1: A Case of Competition, Not Collaboration



Source. Darber, Freeland, and Brownen. 2002.

<sup>&</sup>lt;sup>1</sup> In hierarchies, the purpose is to realize the mission of a central executive; in markets, it is to provide a forum for transactions; in networks, it is to advance the interests of a cooperative. In the 21st century, the core operating principle of trust that is the hallmark of networks is starting to round out authority (hierarchies) and price (markets). Only rarely does one pure form of organization predominate. (Serrat 2013)

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<sup>2</sup> Obviously, this critical mass varies by (type of) organization, market, and industry. Nonetheless, the tipping point of complexity might be when an organization constructs a new headquarters to accommodate expanding staff, or when the latter spend more time talking to one another than to clients.

 <sup>&</sup>lt;sup>3</sup> "Organizational silo" is the metaphor for in-house entities—and their management teams—that lack the desire or motivation to coordinate—at worst, even communicate—with other bodies in the same organization.
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<sup>&</sup>lt;sup>4</sup> The creeping bureaucracy that spawns organizational silos rewards strict adherence to standard operating procedures via extensive written records in specified formats, this primarily to document the fact that all decisions have been taken in compliance with approved guidelines. Managers become insulated from responsibility for any organization-wide consequence of their actions (or lack thereof) and thrive within the protective walls of their silo's operating environment. Soon enough, measuring individual contributions toward the organization's raison d'être ceases to be of interest, when it is not actually frowned upon.

Organizational silos do not suddenly come to light because "something" was done calculatedly:<sup>5</sup> they come about, often imperceptibly, because "something" was left undone; that "something" is the continuous nurturing of a compelling motive, means, and opportunity for personnel to come together at corporate and sundry intermediate levels. The idea, then, should not be to tear down those walls, but to replace mindless competition with radical collaboration. Collaboration is born of an attitude that James Tamm and Ronald Luyet have described as being in the Green Zone. (Tamm and Luyet 2005) (Without a doubt, organizational silos are Red Zone environments ruled by fear and defensiveness.) To enjoy Green Zone environments, individuals need to hone five skills: (i) collaborative intention, (ii) truthfulness, (ii) self-accountability, (iv) self-awareness and awareness of others, and (v) problem-solving and negotiating. So far, so good. But, in order not to pass the buck—that being of the essence of organizational silos, what role should the parent organization play? Usefully, Patrick Lencioni has proposed a model for combating organizational silos at the corporate level, against which actions to build capacity, capability, connection, communication, coordination, and collaboration can be framed: (Lencioni 2006)

- Establish a Thematic Goal. A thematic goal is a single, qualitative, and time-bound focus that is espoused by an entire organization irrespective of area of interest, expertise, gender, or title. It is a call for personnel to pool resources for the common good; it is not a long-term vision or a measurable objective.
- Articulate Defining Objectives for the Thematic Goal. The defining objectives provide actionable context so that personnel knows what must be done to achieve the thematic goal; they too must be qualitative, time-bound, and shared.
- Specify a Set of Ongoing Standard Operating Objectives. The thematic goal and defining objectives exist for a specified period. On the other hand, standard operating objectives cannot change, no matter what the emphasis may be in the short term; they may include client satisfaction, productivity, quality, etc. Naturally, they must tally with the thematic goal.
- Select Metrics. Metrics are picked after the thematic goal has been established, the defining objectives for the goal have been articulated, and the standard operating objectives have been specified. Metrics are needed to monitor and manage accomplishments. (Parenthetically, six parameters are always given weight in methodologies for managing performance: they pertain to actions, cost, human resources, quality, scope, and time.)

#### II. WHY SHOULD I TEAM UP WITH YOU?

Fragmentation of purpose caused by organizational silos prevents personnel from singing the same tune. (Organization and teamwork do not always rhyme.) But, what of the smaller teams that—here, there, and everywhere—are instinctively relied upon as the best way to get things done?<sup>6</sup> Undeniably, collaborative work by a team can yield spectacular outcomes from wider knowledge, broader understanding, greater diversity of problem-solving styles and skills, and assembled commitment: so, how can we move from the realm of the possible to the realm of practice when many of us are apprehensive about teamwork, prefer to do business with individuals, or are happier still on our own?<sup>7</sup>

Premonitions about teams always stem from misgivings about their operations or, indeed, the very basis for their formation.<sup>8</sup> Teams *per se* are no panacea; we must at the outset grasp when they are truly wanted. (Serrat 2009a) Fundamentally, teams should only be set up when a problem is relatively complex,

<sup>&</sup>lt;sup>5</sup> Most organizations being pragmatic, organizational silos are the unwanted upshot of earnest attempts to recognize the right business issues, isolate the right underlying obstacles, formulate the right design characteristics, and deliver improvements the right way.

<sup>&</sup>lt;sup>6</sup> Teams that range from two persons to many offer people the opportunity to work together on tasks and develop more complex and larger-scale activities, aka projects.

<sup>&</sup>lt;sup>7</sup> There are many reasons for this: for one, the socialization that teams foster can constrict or even oppress members; teams can also exacerbate interpersonal conflict, for happenstance when one individual dominates or tries to "score points"; in addition, the boundaries that are drawn around teams can ostracize others and spark intergroup conflict; what is more, belonging to a group tends to distort the judgments of members—pressure to conform can lead to "groupthink", aka poor decision making. Commonplace shortcomings of teams include diffusion of responsibility; irreconcilable views, goals, and loyalty; and a proclivity to "solve" (but not analyze) problems.

 <sup>&</sup>lt;sup>8</sup> Specifically, this may pertain variously to their relevance, efficiency, effectiveness, impact, and—if required sustainability.

uncertain, and holds potential for conflict; necessitates intergroup collaboration; and has important organizational consequences.<sup>9</sup> Any other justification for the formation of a team means it will be superfluous or even detrimental. But, if they are truly needed, teams will sail smoothly through the stages of growth that lead from simple membership to shared responsibility, at which point individual uniqueness and collective effort are both valued equally high.

Not just at corporate level but at that of teams too, it is elemental to combine motive, means, and opportunity. A motive is the reason for doing something; a means is the instrument (or condition) to that end; and an opportunity is the encouraging juncture of circumstances toward that. Teamwork can sublimate when the trinity of motive, means, and opportunity finds congruence. On such memorable occasions, teams are seen to tap the experience, interests, knowledge, and skills of members; generate more creative responses to dilemmas than individuals; catalyze fresh ideas for new products and services, better business processes, or profitable strategies; hone the leadership abilities of members; carry out the mission with dedication, efficiency, and energy; provoke feelings of pride and satisfaction among members; and channel conflict into productive directions. Everything else is detail.





#### **III. ARE THESE THE ONLY OBSTACLES TO LEARNING TOGETHER?**

Unquestionably, working in teams involves learning with, from, and about one another. Organizational learning is collective learning by individuals and the basic phenomena of individual learning apply. However, organizational learning has distinctive characteristics concerning what is learned, how it is learned, and the adjustments needed to enhance the experience: differences owe to the fact that an organization is, by definition, a collective whose individual constituents are meant to work in concert to achieve a common goal from discrete (and sometimes antagonistic) operating and supporting units. Crucially, separate entities bring different perspectives to bear on any matter and shape data, information, and knowledge stocks and flows. Given that, to understand more comprehensively what obstacles to joint learning can exist in a composite organization that navigates a complex milieu, one must circumscribe the problem space and create enabling circumstances for more positive futures.<sup>10</sup> Defining the challenges to organizational learning, however numerous they may be, is half the victory over them—it can make them part of the solution. (Serrat 2009b)

<sup>&</sup>lt;sup>9</sup> An upshot of this is that there must also be tight (but not burning) deadlines, widespread acknowledgment that a challenge (or prospect) has materialized, and commitment to look into it.

<sup>&</sup>lt;sup>10</sup> Complexity thinking suggests such environments would facilitate self-organization, exploration of the space of possibilities, generative feedback, emergence, and coevolution.

Figure 3: 17 Challenges to Collective Learning



Source: Serrat 2009b.

#### IV. FROM STRATEGY, STRUCTURE, AND SYSTEMS TO PURPOSE, PROCESSES, AND PEOPLE

In the quickening course of globalization, ours has become a society of large, machine-like, organizations. In the early 1900s, Taylorism<sup>11</sup> (aka scientific management) entered the stage; thereafter, it guided the development of industrial and commercial organizations. In the 1920s, Alfred Sloan amplified its precepts to configure General Motors, *de facto* the first modern, diversified corporation. (He introduced a divisional structure supported by tightly designed information, planning, and control systems.) Today, most organizations are constructed as bureaucracies in which formal authority and the responsibility it theoretically embodies are arranged hierarchically. Since Alfred Sloan, managers have rationalized their tasks by formulating strategy, elaborating a structure to uphold it, and cementing the two in place with systems. In a slow-moving environment, Taylorism organized performance.

But, the world of the 21st century, born of the 1990s, is not the same: it is a world of technological convergence in globalizing markets; competition never relents and failure to innovate can humble the mightiest champion, at times overnight. Whether the world is "flat" or "spiky",<sup>12</sup> systems of command and control cannot turn out well when the most vital resource is no longer finance but the expertise of knowledge workers who think, as opposed to labor, for a living. And so, interest is turning to alternative organizational designs and their implications. (Serrat 2013)

Many organizations are economic entities, for sure; but, they must justify their existence by contributing to society. The joint, primarily social, purpose for which a group exists should be the springboard of everything its members do: the long-forgotten idea is to organize in ways that best suit that unswerving purpose, considering the constant transformations in the external environment. Today, to respond to the 21st century's pervading complexity, high-performance organizations lean on the three Ps of Purpose—Processes—People, not the three Ss of Strategy—Structure—Systems.<sup>13</sup> Such organizations recognize

<sup>&</sup>lt;sup>11</sup> A precedent to industrial engineering, the scientific management of Frederick Winslow Taylor sought to optimize workflow processes, thereby raising labor productivity. Contemporary management thinking censures Taylorism for deskilling and dehumanizing personnel.

<sup>&</sup>lt;sup>12</sup> Ten years ago, Thomas Friedman's book, *The World is Flat*, argued that surprising and lightning-quick convergence of technologies has leveled the playing field, in terms of commerce, by breaking down geographic, political, and other impediments to collaboration, information flow, and international trade. (Friedman 2005) The same year, Richard Florida countered that the world is not flat but spiky: most economic activity is concentrated in relatively few areas, most notably cities, to which creative talent migrates and syndicates. (Florida 2005)

<sup>&</sup>lt;sup>13</sup> Strategy is the long-term direction and scope of an organization; structure is its basic configuration, e.g., its areas of expertise, departments, reporting lines, and responsibilities; and systems are the formal and informal procedures that govern everyday activity. Strategy—Structure—Systems are parameters that lie for the most part within an organization's boundaries, hence their intuitive appeal to managers. Instead of detail-designing strategy, which cuts no ice when the future is no longer predictable from the past, organizations should make better sense of the environment they inhabit. Structure is pertinent, of course, but only explains an organization's anatomy: it is not a solution to the problems of an organization trying to renew itself. Systems, meaning, the set of procedures that bureaucracies devise to monitor activities and align them to decisions, dishearten entrepreneurial initiative.

that human creativity and individual initiative are the most important sources of sustainable advantage. (Bartlett and Ghoshal 1997)<sup>14</sup>

- **Purpose.** Purpose is about providing a guiding vision for the organization: it goes beyond strategy in that it is about why an organization exists, not just what it exists for. Purpose is defined in terms of how, organically, an organization will create value for people; it is not about the pathological pursuit of profit or power. The greatest, unremitting undertaking is to create, through organizational conversations (and less brainstorming or corporate communication),<sup>15</sup> meaning that personnel can identify with, share pride in, and commit itself to individually and collectively.
- **Processes.** Processes are the vital link between purpose and people: they look to integrate operating and supporting units and accelerate the flow of information, transfer of ideas, and good practices. It is shortsighted, if understandable, to consider structure the chief organizing tool of organizations: this leads to the design of vertically-driven, (usually) financially-oriented, and authority-based processes; instead, organizations should be made out for what they are, that is, portfolios of horizontal processes *per se.* Core processes are those that stimulate entrepreneurship, build competence across organizational boundaries, and promote continuous renewal of the ideas and strategies that drive an organization: the effect is to shape and invigorate behaviors, not structure tasks.
- **People.** People cannot be owned: the more unique their knowledge, skills, experience, and interests the more value they can deliver if management engages them. People demand much more than set priorities, to be monitored through detail-oriented information, planning, and control systems. More and more, they are considered a self-regulating, adaptive, and self-renewing resource; to tap that most vital resource an organization should groom and deploy people; develop and integrate internalized behaviors; and foster organizational conversations with those who—not content with knowing what and knowing how—also know who and know why.

#### Figure 4: Changing the Role of Top Management



<sup>&</sup>lt;sup>14</sup> A few years later, Henry Mintzberg, Robert Simons, and Kunal Basu identified five mutually-reinforcing fabrications they claimed had driven a series of disruptive wedges into the socioeconomic fabric: (i) we are all, in essence, Economic Man; (ii) corporations exist to maximize shareholder value; (iii) corporations require heroic leaders; (iv) the effective organization is lean and mean; and (v) a rising tide of prosperity lifts all boats. (Mintzberg, Simons, and Basu 2002)

<sup>&</sup>lt;sup>15</sup> Conversation is the lifeblood of society: it provides a medium through which we reveal why we are—our values, beliefs, attitudes, experiences, and what is important to us. It is, for instance, through organizational conversation that connections are made; organizational silos are bridged; trust and relationships are built; insights transpire; knowledge flows; learning takes place; creativity and innovation are quickened; and motivation, engagement, commitment, and accountability are secured. In a word, conversation nurtures sense making, leading to better decisions. Organizational conversations, especially in informal settings, should permeate corporate lives; knowledge workers, its principal agents, are—in a nutshell—people whose primary occupation consists in having interesting conversations, for example by means of such tools, methods, and approaches such as Future Search, Knowledge (or World) Cafés, communities of practice, etc.

#### Figure 5: Libraries—Elements of a Variable Geometry of Good to Great

From Strategy to Purpose	Size or Value Corporate Goals or Organizational Conversations Strategies or Tactics Organization-Centric or Inside– Out Visitors (or Patrons) or Users (or Clients) Local or Global Access More Resources or Synergies Sense–Categorize–Respond or Probe–Sense–Respond	From Structure to Processes	Library Boards or Committees Vertical or Horizontal Processes Job Streams or Teamwork Templates or In-The-Making Routines or Projects Stocks or Flows of Knowledge Ready-Made Solutions or Emergent Designs Sense–Categorize–Respond or Probe–Sense–Respond	From Systems to People	Information, Planning and Control Systems or Open Paradigms and Models Weaknesses and Threats or Strengths and Opportunities Monolythic or Change-Ready Conscientious or Mindful Risk-Averse or Risk-Taking Employees or Knowledge Workers Terms of Reference or Knowledge Behaviors Sense-Categorize-Respond Probe-Sense-Respond
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Source: Author.

#### V. DATA AND WEB SPECIALISTS—WORKING IN TANDEM

gorize-Respond or e–Respond

In the digital age, libraries<sup>16</sup> must fess up to the internet so they may meet with variegated products and services the changing needs of users. However, many of their systems and agents are characterized by interconnection and interdependence and solutions here can engender problems somewhere else; for relevance, efficiency, effectiveness, impact, and sustainability, libraries must assimilate and leverage the functionalities of the internet across the gamut of their functions, traditional or not, e.g., cataloguing and access, collection development, user services, library as place, etc.;<sup>17</sup> unnervingly, those that do may be forced to reconsider who their audiences are might be, even as digitization of physical resources opens entirely new areas of operation. Benchmarking, the process of comparing one's business processes and performance metrics with the "best" practices of others in the same field, is a customary initial step toward this;<sup>18</sup> (Basefsky 2008) however, in the digital age, each library must individually consider what organization—organizing is a better word— is now required that was not on the agenda yesterday.

Michael Buckland's clairvoyant manifesto of 1992 on the redesign of library services remains relevant and merits extensive restatement (Buckland 1992). Regarding organization, he cautioned that implementation of any scheme for services to users that libraries might design is unlikely to be (or remain) successful unless the libraries are properly set up and governed, with implications for authority, allocation of resources, and accountability. Firstly, this is because organization and governance are situational: they must be compatible with the culture and traditions of the parent organization (or the community the library serves), even if this does not guarantee the best design. Secondly, flexibility and adaptability are important: the characteristics of digital libraries are sufficiently different from those of traditional libraries to warrant unalike organization; what is more, the digital library will in turn have functionalities that should intimate corresponding changes in the organization and management of traditional libraries. Thirdly, the organization and governance of a library should actually be the last aspects considered: this is not to belittle their importance; it is, rather, a sensible, tactical consideration. The crucial point is that form should follow function, not vice versa, something that many libraries endowed with time-honored

<sup>&</sup>lt;sup>16</sup> The International Federation of Library Associations and Institutions classifies a dozen different types of library. More prosaic typologies refer to academic libraries, public libraries, school libraries, and special libraries. Special libraries offer specialized information resources and services on particular subjects to specialized clienteles in academic, business, finance, government, law, and non-profit organizations and institutions. They exist to advance the purpose of their parent organization (or sponsor) and therefore take on assignments that other types of library would not, including conducting research and helping managers draft speeches. Special libraries are not usually open to the general public.

<sup>&</sup>lt;sup>17</sup> More systematically, perhaps, opportunities for application of information and communications technology crisscross the selection, acquisition, synthesis, navigation, dissemination, interpretation, understanding, use, and archiving of information.

<sup>&</sup>lt;sup>18</sup> But, comparing with others may be counterproductive if the exemplar is not a good fit (or faces the same predicament). Benchmarks and good practices are best treated as a creative mechanism for asking effective questions: following others is not tantamount to leading.

organizational designs still struggle with. Even so, organization and governance cannot be suspended *ad vitam aeternam*: accordingly, important recommendations are that:

- Any organizational design should be both compatible with and acceptable to the parent organization.
- Responsibility should be accompanied by formal authority, defined as the power to give orders or make decisions, that being fuelled by requisite allocation of resources.
- Authority should be balanced by accountability, the obligation (or willingness) to accept responsibility or to account for one's actions.
- Accountability should be powered by efficient dissemination of information and effective mechanisms for decision making.
- Cooperative and exchange arrangements should be reciprocally beneficial.
- Flexibility to adapt should be granted to enable a library to evolve.

To illustrate the newfound difficulty of group work to organize and present information more successfully, a case in point is that of the indispensable collaboration between data and web (services) specialists. Willy-nilly to begin but with more enthusiasm since, libraries have entrusted the creation, development, and maintenance of their digital presence to web specialists.<sup>19</sup> A library's website is now integral part of its identity.<sup>20</sup> Nevertheless, pace early (and relatively straightforward) accomplishments, the organizational nous needed to integrate complementary expertise and adjust operations has matured more slowly. This should not cause surprise: getting to grips with a technology that may well transform the very nature of libraries is more than a rite of passage to the 21st century, as the narrow, all too often add-on and insufficiently collaborative terms of reference for web specialists testify. Appropriate and agreeable, valueadding, and flexible organizational models framed by responsibility, authority, and accountability are of the essence: without them, how, for the sake of argument, might a housebound data specialist<sup>21</sup> engaged full-time in managing research data collaborate with a web specialist bent on, say, designing systems to allow nomadic users to retrieve information from distant desktops? Conversely, how might a web specialist help a data specialist investigate change while sustaining a library's traditional functions, which forces the latter to take on far more diffuse roles that often involve the generation and sharing, not just preservation, of knowledge?

Data is the new oil and the future belongs to whoever can turn that into new products and services that meet pressing unmet needs. Data and web specialists should be joined at the hip through mutual trust

<sup>&</sup>lt;sup>19</sup> The typical responsibilities of a web specialist are to (i) design, manage, and evaluate a library's public website and intranet; (ii) design intuitive and effective interfaces for the discovery of content through search options, metadata, and related resources; (iii) field questions and identify solutions to speed access to and retrieval of content from the website; (iv) oversee and guide the creation, organization, and maintenance of content; (v) coordinate with authors to ensure that the content is relevant, accurate, up-to-date, user-centered, and accessible; (vi) collaborate in the design, implementation, and management of a content creation, organization, and maintenance; (viii) develop and recommend policies, workflows, and authoring guidelines for content creation, organization, and maintenance; (viii) extend training in content creation by means of the content management system; (ix) assess and promote awareness of existing services; (x) troubleshoot issues with library applications as reported by library staff; (xi) participate in the design, implementation, and analysis of user research and usability studies; (xii) undertake analytics to identify opportunities for improvement; and (xiii) help evaluate library technologies.

<sup>&</sup>lt;sup>20</sup> Today, it is possible to conduct research without ever stepping into a library. People can ask questions, search databases, receive articles, and place interlibrary loan requests electronically. Libraries also use their websites for marketing and research.

<sup>&</sup>lt;sup>21</sup> Data specialists support institutional initiatives and researchers in areas such as: (i) data management, e.g., data management planning; issues of copyright, intellectual property, licensing of data, embargoes, ethics and reuse, and privacy; storage and management of data during research projects; data retention and disposal, including storage of data in archives upon completion of research projects; open access and publishing of data; policies affecting data; etc. (ii) metadata management, e.g., creating and maintaining metadata; developing and applying metadata standards; etc.; and (iii) data use, e.g., discovering or obtaining data for reuse; citing data; data analysis tools and support services; data literacy; etc. ("Data specialist" is a passe-partout appellation: with the advent of Big Data, the family of data specialists is separating out to specialize, here and there, as (i) data analysts, who focus on business and scientific analytics and statistics by means of data analysis packages such as R, SAS and Excel; (ii) data engineers, who focus on coding, programming, software development, and tools; (iii) data journalists, who focus on telling news and stories; (iv) data librarians, who focus on advocacy, informatics, and research data management; and (v) data stewards, who focus on archives, data centers, long-term digital preservation, and repositories.)

and respect—which managers cannot mandate,<sup>22</sup> not locked in relationships ranging from antagonistic to merely cooperative, this to fructify the synergistic nature of their roles. Working in harmony, for returns far beyond conservative expectations of effective organization and presentation of information, data and web specialists can, among others, help generate new knowledge; represent knowledge in databases, documents, software, etc.; ease access to knowledge by users, both internal and external; embed knowledge in processes, products, and services; convey knowledge around a library; bring knowledge to decision making; facilitate knowledge growth through incentives; and gauge the value of knowledge assets and the impact of knowledge management.

And yet, operating within the constraints of proprietary systems they cannot change or the web environments of larger systems they often operate in, web specialists spend their days managing smaller websites and systems, torn by conflicting opinions about how the latter should work, rarely if ever interacting with actual end users. Data specialists, who together with web specialists could become the eyes and ears of a library if, with ethnographic research,<sup>23</sup> they also contribute a deep understanding of users based on qualitative research, simply complain about the inefficiencies if not downright ugliness of the said websites and systems. When they do not just ignore one another these estranged siblings can clash, each clamoring for respect. The answer is to develop a team that shares goals and is imbued with an attitude that lends itself to collaboration and learning.

In the 21st century, the central purpose of most types of library is no longer to provide access to information but to energize connection and creation. In light of this, data and web specialists are the right people to turn libraries into knowledge services centers<sup>24</sup> but they need new orientations, skills, and what might be termed knowledge behaviors.<sup>25</sup> Despite the fact that data and web management teams rarely comprise more than one person, the disproportionate value they can bring to libraries demands that they rally together. Collaborating in daily practice, they can for instance, singly, together, but always in tandem:

- Act as detectives who investigate where to find convincing evidence of the need for data and web management.
- Serve as consultants who interview library staff about practices and workflows to identify where improvements can be made.

<sup>&</sup>lt;sup>22</sup> You only want as much structure as you must have: managers can, however, kindle and watch over trusting and respectful relationships. (Serrat 2009c)

 <sup>&</sup>lt;sup>23</sup> Libraries are designed by experts who assume they know how users obtain, evaluate, and use information. Ethnographic methods can capture in-depth information about users' information behavior. Specifically, they provide a way to enrich anecdotal evidence by examining the context in which activities occur, normally by having a researcher work with participants as they go about their daily lives. If the participant is a student, for instance, ethnographic methods could scrutinize the entire research experience, from topic selection to completed paper. For a web specialist, such analysis of user behavior is priceless.
<sup>24</sup> In the 21st century, the word "library" does not connote with high-tech, game-changing, or even innovative

<sup>&</sup>lt;sup>24</sup> In the 21st century, the word "library" does not connote with high-tech, game-changing, or even innovative services. Hence, there is an unnecessary gap between what libraries might provide and what clients, audiences, and partners expect them to. Librarians who try to overcome this obstacle generally refer to themselves as "information specialists". But, it is a fact that when the Special Libraries Association held a vote in 2009 to decide on whether the name of the association should be changed to Association for Strategic Knowledge Professionals 50% of eligible members participated in the referendum with 2,071 (or 39%) voting yes and 3,225 (61%) voting no. (The referendum concluded an intensive two-year research effort aimed at understanding the value of the information and knowledge professional in today's marketplace and how to best communicate that value.) Does this mean that strategic knowledge work is not that of a "true" library?

<sup>&</sup>lt;sup>25</sup> From desirable habits of mind that that attend to value, inclination, sensitivity, capability, and commitment, a practical, multi-agent operating model would see them consciously ask, learn, and share before, during, and after an activity. A high-end inventory of knowledge behaviors—that together would nourish a knowledge culture—reads as follows: (i) Ask—asking questions; checking first to see what already exists; questioning accepted wisdom; (ii) Learn—contextualizing learning; and (iii) Share—conveying personal details, roles, and skills; imparting experience, evidence, and feedback; communicating achievements, outcomes, and pride. Libraries should perhaps recruit personnel who already display knowledge behaviors: surely, considering person–environment fit to ensure congruence of individual and organizational values and goals is the easiest way to facilitate knowledge sharing among personnel. Evidently, an organization that values knowledge sharing and selects personnel who swear by this value will equip itself with staff who are positive about sharing to start with; investments elsewhere may no longer be so urgent because the likelihood that the organization's human resource management practices fulfill needs will accordingly be higher. (Serrat 2012)

- Become personal information trainers to key individuals deemed essential to the success of a client institution. Their roles would be to keep these executives and their offices up to date on the latest resources useful for productivity and creativity, and to provide training as necessary.<sup>26</sup> (Basefsky 2007)
- Turn into entrepreneurs who operate effectually in unavoidably political environments; extract results from research and web analytics and distill powerful messages from that—perhaps even drafting policy themselves; bring negotiation skills to bear on managers; build coalitions to work productively with all stakeholders; and handle with ease long-term programs that pull all these together.<sup>27</sup>
- Harness digitization to help address and answer questions such as (i) What are the expressed and latent needs of clients, audiences, and partners (not forgetting relationships and behaviors)? (ii) How does one build products and services to better meet these needs? (iii) How does one integrate these products and services into a digital strategy? (Conversely, how might a digital strategy conduce new, value-adding products and services?); and (iv) What are the organizational, directional, processbased, and information technology-related changes required to make the transition happen?<sup>28</sup>
- Help other specialists become "data-aware" and "data-savvy".
- Adapt their existing skills to the ever-changing requirements of data and web management.<sup>29</sup>



#### Figure 6: Fuelling Knowledge Behaviors

Source: Serrat 2012.

<sup>&</sup>lt;sup>26</sup> This can augment the library's value proposition and facilitate also its recruitment and retention of top talent. Vitally, it would wed egalitarianism (excellent service for all) to exclusivity (excellent service for a few) and signify that libraries too mean business.

<sup>&</sup>lt;sup>27</sup> An entrepreneur is someone who organizes and manages any enterprise, usually with considerable initiative and risk. Libraries tend to be viewed as "cost centers" and the problem that libraries confront each day is to have their value to the parent organization acknowledged and embraced. First and last, therefore, data and web specialists must "sell" the utility of their services to decision makers; having the right skills or talents is not enough. Sometimes, however, the best springboard for a discussion is to show off one's abilities in a well-conceived demonstration project: such a project should be targeted to a particular decision maker's interests (and if at all possible almost guaranteed to succeed).

<sup>&</sup>lt;sup>28</sup> In early 2014, the information and communications technology landscape mutated: smart phones and tablets finally topped desktops to become the first screen people rely on to communicate, research, and share. Mobile devices are always at hand: with the opportunity for anytime, anyplace, anywhere connection, they are revolutionizing digital engagement. To become digital, organizations must understand where the new frontiers of value are and reexamine their entire way of doing business.

<sup>&</sup>lt;sup>29</sup> In 2012, a survey of 22 leading research libraries in the United Kingdom and Ireland identified nine areas as having potentially the most significant skills gap in the next 2–5 years. In descending order of importance, the skills gaps relate to (i) ability to advise on preserving research outputs; (ii) knowledge to advise on data management and curation, counting ingestion, discovery, access, dissemination, preservation, and portability; (iii) knowledge to support researchers in complying with the various mandates of funders, including open access requirements; (iv) knowledge to advise on potential data manipulation tools used in the discipline or subject; (v) knowledge to advise on data mining; (vi) knowledge to advocate, and advise on, the use of metadata; (vii) ability to advise on the preservation of project records e.g. correspondence; (viii) knowledge of sources of research funding to assist researchers to identify potential funders; and (ix) skills to develop metadata schema, and advise on discipline or subject standards and practices, for individual research projects. (Auckland 2012)

The views expressed in this article are those of the author and do not necessarily reflect the views and policies of the Asian Development Bank, or its Board of Governors or the governments they represent.

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#### References

- Auckland, Mary. 2012. Re-Skilling for Research. Research Libraries UK.
- Barber, Felix, G. Freeland, and D. Brownell. 2002 A Survivor's Guide to Organization Redesign. In Boston Consulting Group. 2006. *The Boston Consulting Group on Strategy: Classic Concepts and New Perspectives*. Eds. Stern, C. and M. Deimler. John Wiley & Sons.
- Basefsky, Stuart. 2007. *The Personal Information Trainer*. Cornell University School of Industrial and Labor Relations. Articles and Chapters. digitalcommons.ilr.cornell.edu/articles/126/
- —. 2008. Leadership and the Role of Information: Making the Creatively Informed Questioner. Cornell University School of Industrial and Labor Relations. Working Papers. digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1176&context=workingpapers
- Buckland, Michael.1992. *Redesigning Library Services: A Manifesto*. American Library Association.
- Florida, Richard. 2005. The World Is Spiky. The Atlantic Monthly. October.
- Friedman, Thomas. 2005. The World Is Flat: A Brief History of the Twenty-First Century. Farrar, Straus and Giroux.
- Ghoshal, Sumantra, and C. Bartlett. 1997. *The Individualized Corporation: A Fundamentally New Approach to Management*. HarperBusiness.
- Lencioni, Patrick. 2006. Silos, Politics and Turf Wars: A Leadership Fable About Destroying the Barriers That Turn Colleagues Into Competitors. Jossey-Bass.
- Mintzberg, Henry, R. Simons, and K. Basu. 2002. Beyond Selfishness. *MIT Sloan Management Review*. Fall.
- Serrat, Olivier. 2009a. Working in Teams. Manila. www.adb.org/publications/working-teams
- —. 2009b. Overcoming Roadblocks to Learning. Manila. www.adb.org/publications/overcomingroadblocks-learning
- \_\_\_\_. 2009c. *Building Trust in the Workplace*. Manila. www.adb.org/publications/building-trust-workplace
- \_\_\_\_. 2010. *Bridging Organizational Silos*. Manila. www.adb.org/publications/bridging-organizational-silos
- \_\_\_\_. 2012. On Knowledge Behaviors. Manila. www.adb.org/publications/knowledge-behaviors
- \_\_\_\_. 2013. On Networked Organizations. Manila. digitalcommons.ilr.cornell.edu/intl/268/
- \_\_\_\_. 2014. *Managing Knowledge: What, How, When, Where, and Who Follow Why*. Manila. www.slideshare.net/celcius233/managing-kowledge-what-how-when-where-and-who-follow-why
- Tamm, James and Ronald Luyet. 2005. Radical Collaboration: Five Essential Skills to Overcome Defensiveness and Build Successful Relationships. HarperCollins Publishers.

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