



### From the Author:

A mere 10 years ago, mentoring and coaching e-systems were ideas on paper. The need was and is compelling. Even now, only a handful of actual online systems operate. The author begins by examining key concepts – first the paradigms of more traditional face-to-face coaching and mentoring. The author outlines the challenges of constructing each of these relationships especially online to ensure success of learning experiences. Throughout, the author examines how these relationships impact people / organizational development, different methods for assessing the quality of web-based knowledge transfer, mentoring and coaching and the legacies that can be left behind. Finally, the paper concludes with a review of some lessons learned.

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## Introduction

### The intersecting paradigms

Traditional face-to-face mentoring and coaching are enablers. For some twenty years I understood this through direct experience prior to our company taking these processes online. I was convinced that technically one day it would be possible and that people would come to accept e-relationships as an option. This was the early 1990s before we fully understood some of the challenges and some of the as yet undiscovered benefits of online programs.

At the outset, let's make it clear: coaching isn't the same as mentoring. While some imagine the words "mentoring" and "coaching" are the same concept, the two are decidedly different. Coaching is "*a sequenced process for specific skill building and information-sharing*". Coaching is only one of many activities that a mentor may or may not undertake depending on the immediate goals of the learner. The mentoring process is a collection of roles or functions needed to transfer the knowledge, insights and skills to the learner. Mentoring is one of the most flexible of processes imaginable – no wonder people become confused over what it is! To add to the complexity of the concept, it is both a process and a relationship.

Both coaching and mentoring are, amongst other things, meant to help the learner transition from one state to another. Thus help can be provided before, during and after the transition. In the coaching role, mentors are expected to teach (a) concepts, measurable skills and attitudes the learner needs to make this transition and then perform (b) creative problem-solving strategies that experts employ as well as how to reframe one's way of viewing events (paradigm-shifting) so learner growth can turn in quite different directions. But more of how this translates to online practices later. Let us turn instead to the story of why and how people even saw a need to go online for that story reveals much about excellence, success, and the many challenges of human behaviour.

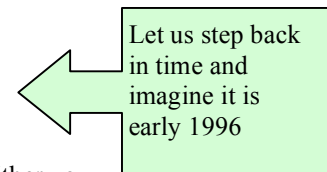
### Why the need for web-based?

Let us step back in time and imagine it is early 1996 and you are my client. Though neither you nor I know it yet, in one year my company will take brave first steps to develop an online mentoring and coaching system. In the meantime, your organization will use our paper and pencil tools to manually match participants so knowledge transfer can occur. To this point in time, we have a track record from 1978 in program R&D so why would we, or our clients, move from a very successful approach to uncharted waters?

Obviously, since mentoring and coaching are complex, there will be many tasks you (client) and I (service provider) will have to jointly or singly carry out manually over months in order to ensure success.

Once I have helped you design and plan a program that is appropriate and will meet the goals and objectives, we have in front of us a project to be managed. Jointly, we select a date to launch the program so partners can meet formally face to face for a training and orientation session. Before this can happen, one of the sub-tasks will be the challenge of making good, unbiased matches -- for this lies at the heart of good knowledge transfer.

To manually match people, a number of tasks are carried out. For instance, I (a) mail three or four different types of paper and pencil tools to the Program Coordinator, who then has the job of (b) relaying these to each participant who then has to (c) fill each out by hand, and (d) return them completed to the Coordinator. The Coordinator hopes



that all tools will be completely filled out on time, will not be lost or mislaid, and that they can be read (in the event the participant has changed answers). If any of these mishaps happen, the Coordinator will have to phone each person and “fix the problem” or it will be virtually impossible to move on. Next, the Coordinator (and any others on a Program Task Force) will need on average some three to five hours to manually match a single pair. This is due to the fact several documents are involved and a number of factors will be considered – location of participants, expertise available, protégé needs, and so forth. Clearly, as my client, once you have suffered through this manual process, you should be able to understand the multiple advantages to going online -- the ability to improve tracking, do away with shuttling documents back and forth, keep track of where users are located, give users the ability to change responses electronically, reduce costs and reduce “busywork” for all.

What is being pointed out here, and this is important, is even though there were no online models to follow (so far as we knew) we had a strong sense one could and should be developed. We pondered technically how to develop an online system to replicate much of what we were doing manually.

### Insights from benchmarking

Despite a lack of any online system models in 1997, we proceeded with development of a web-based mentoring software application and quickly had early adopters. However, we wanted to find out what others around the world were doing (if anything). If such systems existed, what shape did these take?

My preliminary internet searches for a survey still uncovered virtually nothing. To start, we benchmarked program implementation practices. Program Coordinators were asked: What is a program “must-do task”? How difficult is this task? How long does it take to carry out? How satisfied are you with the results?

To this point in time, all we had were guesstimates. Further, we knew by experience that programs required much time (as noted previously) doing “busywork” instead of deploying the time saved to vital tasks such as: ensuring participants get their questions answered, finding matches for challenging situations, monitoring the status of the pairings, and so forth.

Between September 2000 and early 2001, the Benchmark study specifically probed 13 program practices such as: selection of participants, matching, monitoring the program, evaluating benefits, and determining ROI. Responses came from 36 Coordinators (of one or more programs) in Canada, the USA, Japan, Mexico, Australia, and United Kingdom. A wide range of organizations responded, for instance: a government treasury agency, teacher-training department, insurance company, an environmental agency, the military, a healthcare provider, a manufacturer, a software firm, an energy company.

What did we discover? Not surprisingly, Coordinators claimed each of the 13 tasks was “*important or very important*” eating up an estimated 131 to 158 hours in total. That represents something in the order of 21 workdays. If we go back to the challenge of matching, this was rated 8.1 on a 9-point scale as a “*very important task*”. Almost 30% of Coordinators rated it “*difficult to do*”. Only one program of the 36 claimed to be “*satisfied*” with the results of the matches made. Add to this, more than half the programs called in 3-11 people to accomplish this task. Given the responses, it was clear to me that web-based mentoring could help reduce time, and increase satisfaction on important items. What sort of response would it get on my next study?



“telementoring”, “online mentoring”, “virtual mentoring”, “mentoring e-bulletin boards”, and “*mentoring e-document vaults*”.

How these programs operated fell into one of five patterns:

1. online text screens for program enrollment; extensive text has to be read by both applicant and Coordinator/Task Force Committee members; little or no interactivity; few dropdowns, radio buttons or filters; text material open to subjective interpretation;
2. 24/7 call centres dedicated to answering nothing other than technical questions about technical courses; often lacking user groups and chat rooms so user has no sense of belonging;
3. threaded discussions belonging to a particular organization; if a question (need) arises, users depend on whether they are given answers (or not); quality of answers vary; some users are advocates for people unable to participate in discussion so help is third hand;
4. user posts (name and need/request) in a web chat room; often no search function so user must read through many posts for information that may or may not be posted;
5. document bins (often unmonitored) filled with thousands or hundreds of thousands of documents (from recipes to first aid instructions to checklists of “desirable mentor qualities”.

At the time, I noted: “*Technology isn’t going to go away. Nor are client expectations and demands. But we should not be fooled into assuming that simply because it has the letter “e” or words such as “electronic” attached to it, that it will save time. My assessment is that unfortunately too many of the current approaches don’t take advantage of all that technology and research on user-technology interface has to offer.*”

Another mentoring trend was that of self-directedness, that is, people wishing to find a mentoring and coaching partner, using online means to do so. This trend is even stronger today. Self-directed mentoring programs typically operate, even today, using the two most basic means of matching: demographics (location, field of work, gender, etc.) and up to a dozen broad topics for discussion. Often such programs are open to anyone and everyone in a company whether it is a manager, new hire, someone in mid-career, or company president. The same holds true with some university programs. Here are at least six issues to consider. Without careful design:

1. it is difficult to assess what and how much knowledge has been transferred
2. it is difficult to ensure this knowledge (if transferred) has been put into practice
3. there may be an emphasis on discussion and a downplaying of competency development
4. there may be no assurance the expert (mentor) is an expert in that area
5. there is no control over those areas of need (skill gaps and competencies) the learner must fill
6. with no other tools at hand, the learning and working styles of each partner are not taken into account.

This phenomenon of self-directedness appeared to stem from staff (or students) having an expectation they would engage in lifelong learning with no clearly marked career ladders or guidance or an ever-changing work landscape. Or they were expected to engage in lifelong learning. The problem is such expectations take a toll on people. In response, increasing numbers lobbied for mentoring and coaching programs. Coordinators found they could no longer oversee such numbers. Organizations either directly told me or posted on their websites that they had opted

different responses to the demand: “*we run very exclusive programs for small numbers of people at the top echelons*” or “*bigger is better plus self-directed is popular*”. Thus was born the self-directed mentoring program.

Another causal factor for self-directed programs was the apparent low cost and ease of set-up: no/few guidelines, little or no monitoring, no evaluation. Associated was the notion technology-can-do-it-all. We had gone in a few short years from ignorance about the role technology could play to an expectation that it could and would do everything and anything with little planning, effort and experience.

For some, it was a way to break down departmental silos; for others, it was a way to service far-flung global staff, or support current HR development on a wide scale. For us, it was not uncommon to be told stories of urgent gaps in global organizations. One petroleum association told us why they wanted online mentoring: “*We have engineers all around the world who don't have anyone locally with the expertise. They may have a supervisor but a boss isn't supposed to be the mentor. They can't wait for help to magically appear.*”

As I noted at the time: “*Using technology requires a complete rethinking of people-to-people interactions, the labour-intensive nature of mentoring and marry that condition to the ways in which technology can and will support programs.*” I believe that still.

## E-coaching: some background

To paraphrase Allison Rossett in her book *Beyond the Podium* (2002), leaders appear to arrive at e-learning from two different directions. Some are pushed by rising expectations for training and development because of the magnitude of the challenges they face, along with new products and alliances, and global operations. Others perceive new opportunities, ideas and approaches. Compelled by the economic benefits presented by web training, they are also lured to the plentiful resources learning portals promise, and are eager to capture and nurture organizational smarts through knowledge repositories and online conversations. Online coaching would seem to be ideal for any of these and because it is less complex than mentoring, easier to measure, is more bound by the order of the steps involved and is (as already noted) is but one of the many roles a mentor may need to take when working with a protégé. However, there is a temptation to employ it mistakenly thinking that it can replace mentoring. It can but only if that is appropriate.

Conceptually, coaching is of quite recent vintage. We ought to credit Joyce & Showers as the teacher-trainers who carefully analyzed and described the process in 1980 at about the same time that formal mentoring programs were first being tried and written about. They defined coaching as: “*modeling practice under simulated conditions*”. Prior to this, the word “*coaching*” (used in connection with sports from the late 1800s onward) was a task done without much thought being given to researching how and why it worked or how to refine it. So it is Joyce and Showers who usually get the credit for doing so and handing on to us the notion of a step-by-step sequence (see following chart). The order of the steps should not alter – an important differentiation between it and mentoring whose varied roles, activities and sequence are as individual as the partners working together.

From education, coaching spread to other settings – such as corporations – which operate by a different paradigm. In the educational setting, by and large it is not uncommon to take the position that the process has to be tested over

time while the business view is that the bottom line and quick results are vital. No matter which view of the world, traditional coaching requires face-to-face interactions and the specific sequence.

Coaching can take at least two forms. In the sports arena, it is “*short-term technical instruction*” to improve an observable skill for a group of people who all have the same goal. For example, three hours may be spent one week in a swim team practice to start, improve or refine several skills such as increasing the power of the kick or breathing. The next week, it may be one hour on those same skills with two hours on other skills. In corporations, this approach has been tailored to accommodate what is called “*group coaching*”.

In high-level training, coaching can be a one-to-one activity in which the person being coached selects a specific skill to be observed by the coach with the intention that, in several short sessions, proficiency is improved. As well, the learner chooses the method of evaluation, the type of feedback, even the location. The coach demonstrates before or after the observation so there is a model for comparison.

To understand how this matters once we move from traditional settings to attempting the same thing electronically, let’s review coaching steps by which the teacher passes on a specific skill to a novice. Descriptions of the process break it down into five broader steps, or from seven to nine smaller steps. What is important to notice is not only the order in which the steps occur but also the degree to which the learner can be in control of the learning. Of this learner-centeredness Ackoff (1996) notes ... *understanding depends on engagement in practice. We acquire understanding from observation of, and participation in, many different situations and activities. The depth of this understanding depends, in turn, on the depth of our engagement. Understanding is different from knowledge, which is how to make a system or process work efficiently for an intended outcome. In this sense, the coach’s role is to promote not just knowledge but also understanding, and out of that, engagement.*

Chart 1: Coaching steps

Step 1.	Discovery: Check to see if Learner needs motivation. If so, how much and what type of motivation is needed? This is the point to develop initial rapport.
Step 2.	Conference: Hold brief meeting prior to observation session. Partners jointly set appropriate learning objectives based on Learner's goals and current skill level. Objectives should be very specific and clear. Learner sets out what s/he ultimately wants to accomplish in the lessons. If Coach wishes, s/he can offer suggestions or ask questions to clarify what is to be observed. Coach and Learner can decide if and when to proceed to step three.
Step 3.	As necessary, Coach describes, lectures, and/or explains the skill to be observed.
Step 4.	Coach demonstrates, models, shows examples of the skill to be learned. Since this is individualized, learning style should be taken into consideration.
Step 5.	Coach checks Learner's understanding of what has been demonstrated /taught with each session. The aim is for Learner to gain incrementally with each demonstration if appropriate consideration of learning style has been made.
Step 6.	Learner practices with feedback. Feedback can be done in a variety of ways - film, words, diagrams, checklists, etc.

Step 7.	Learner applies skill through independent practice. Ideally this is done with third parties for feedback and on own.
Step 8.	Evaluate performance. Different methods can be used. Partners should reflect on future applications and current success level with a comparison being made to the desired level of success.
Step 9.	Debrief. Jointly decide if there is a need to recycle through steps. If recycling is needed, what is to be done, when, how, etc.

## The shift to e-coaching

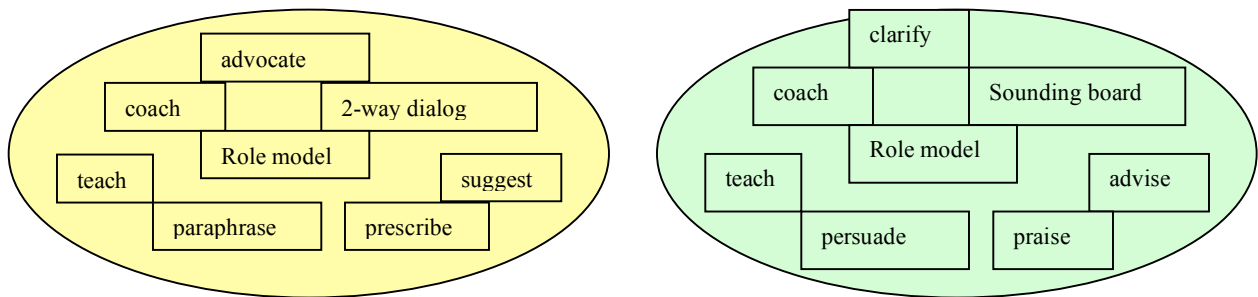
First and most obviously is the fact that once online, “face-to-face” is a relative term. If the coaching steps are examined, a number can indeed be carried out online as suggested following:

1. Motivation check – email, phone conversation, online / web system screens (e.g., drop down lists, text fields, radio buttons)
2. Objectives conference: as in step one, there are a number of means possible.
3. Explanation: webinars, blogs, video clips, simulations can be employed with the latter two being most satisfactory in terms of consistency.
4. Demonstration: The valuable thing about having a video clip of the coach performing the skill or a simulation is that it can be viewed over and over. Cost has an up and downside for it often costs nothing for the coach to do the live demonstration but his/her time is limited. The associated commentary must be first class for there is nothing more frustrating for viewers than poor sound quality and sloppy sub-titles.
5. Check for understanding: A combination of approaches work.
6. Practice with feedback: One of the more challenging steps to carry out online.
7. Independent practice: Our experience is that (much of the time) this occurs offline and utilizes friends, other staff or students, family members. Online, peer-to-peer technologies like blogs, social networking, communities of practice, and podcasting may help. Simulations, where possible, can be ideal for certain types of repetition where there is a “right way” and a “wrong way” – for instance, if the learner is trying to hone a specific medical skill such as giving an injection, a good simulation can record the angle of the needle, the time take to complete the task, etc.
8. Evaluate performance: This is the one time the mentors legitimately do this. Ordinarily, mentors are cautioned to not evaluate because evaluation can destroy the open trust necessary to the relationship. As to the online activity, the optimal choice would be a teleconference session.
9. Debrief. As with step six, a web conference will work.

Now let us consider some of the challenges the mentoring paradigm poses online.

## E-mentoring: some background

Mentoring as defined by the Dictionary of Occupational Titles is “*the most complex of all human interactions*”. It cannot be boiled down to a series of ordered steps, as in coaching. Early on, I underscored its dual nature: both as a role and a process. To help explain it, I often use different diagrams such as steps, eggs, and pyramids to show audiences how wonderfully varied it is. Over time, as the needs of the protégé shift with growing competence, roles are added, left behind or recycled. A number of researchers have counted the many possible roles mentors play in the lives of their protégés, by some accounts, above 20 roles. The following EggRole© illustrates what the shift in roles might look like over time with early on represented on the left and several weeks or months later on the right:



## The shift to e-mentoring

Some aspects have remained the same. For example, it still remains vital to plan the program with the client prior to launch. Some terminology has changed. We now use the term “Mentoring Pool” to signify any virtual community of practice (CoP) who will go online and use a specific combination of tools for a set length of time. How this happens will vary. One government client had six different Mentoring Pools running at the same time: one just for social workers, another just for attorneys, another just for forestry workers, and so on. Yet another client, a military agency, had Mentoring Pools -- all the same size (100 participants) and with the same tools -- duplicated to operate in 36 different locations.

On or offline, our tools operate on a time continuum; that is, the logic of the Mentoring Process requires some tools be used before others. A Mentoring Agreement (to work together under certain conditions) cannot be used unless partners are already matched. Evaluation cannot take place until partners have worked on an Action Plan and provide something to evaluate. Online, to complement this, there is a visual continuum on the Home Page: a series of horizontally-linked buttons guiding participants step by step from the start of the program to the end. Once a tool/task is completed, the current button changes colour. This streamlining moves users in a process that can utilize up to nine tools some of which may be used concurrently.

If we refer back to the beginning of this paper and the difficulties with some aspects of “the old way”, clients accustomed to a paper and pencil version of our Mentoring Style Indicator, for example, could now have participants log in, answer the tool, have the system score results, print out results and bring them to a face-to-face training session. Total time? Roughly 20 minutes instead of hours, days and weeks.

On and offline our goal is to keep reading and text entry to an absolute minimum partly because mentors are in-demand, busy experts. One matching tool, a 66-item Mentoring Compatibility Indicator that has three subscales was pared down to 44 items. To reduce time spent filling in personal information, we made it possible to pre-fill fields when participants move from one Pool to another.

A quality mentoring programs is not a one-size-fits-all approach. We decided it was important to be able to match in a variety of ways depending on the program objectives and participant goals (see chart below). We considered eight options each with its own pros and cons.

Out of a seemingly small change like this can come valuable capacity. Using demographics to match is an excellent example. Some demographics are: gender, ethnicity, location, years of experience in the field, etc. Some clients use demographics to match and internally track whether larger organizational objectives are being met. For example, a mentoring and coaching program designed to promote diversity for hundreds of staff can collect demographics such as gender and ethnicity to track how many of African American females (a) enroll, (b) complete Action Plans (c) finish the mentoring program itself (d) are later promoted (e) join another Mentoring Pool the next year in a different role and the like. These results can then be compared to results for Asian males, Black African males, Caucasian females and so on.

## Assessing the impacts and the quality

Clearly, to understand the impact of the web for us requires some means of subjectively and objectively assessing the quality of the relationships and the program. Over time, we tried out interview protocols, surveys, checklists, feedback forums and the like and finally settled on evaluation formats and content that will be outlined shortly.

When we sit down with a client (or even before then when talking to interested parties about e-mentoring and e-coaching), assessment questions are front and centre. In our view, assessment ideally becomes “realized value” -- clients and participants understand its worth and so are willing to spend the time on it. We do our level best to advocate on behalf of measuring, evaluating, and tracking.

## The legacies

Since it is not our role or intention to run a program, we are hired to teach others (Coordinators) to run the program in our place. This we see as more than a paid job; it is a legacy we can leave. The message must be loud and clear: “*It is your program, not ours.*” While we are experts in the field, some of this expertise must be passed along to others.

The shift to web-based mentoring has forced us to learn how to prepare Coordinators who often are neither teachers nor trainers. Their tasks online are to (a) monitor the Mentoring Pool using system screens (b) interpret reports generated by the system (c) match participants using the system.

We use web conferences to provide just-in-time Coordinator training so that the details associated with each phase of system use are covered several days prior to that event and that person is provided with what we call a Practice

Pool so they can try out online what they have been taught by us and see the results on screen. We chunk training into: Program Launch / User Registration, Matching and Post-Matching sessions. Once the program is launched, important tasks (that, if done, will ensure success and quality of outcomes) cannot be delayed or simply left undone. Launch is the busiest, and most “visible” stage. We work continuously to refine this process.

People often ask: “Do you do the mentoring?” No, our legacy is to mentor the organization’s staff and guide the health of the mentoring /coaching initiative. The actual applied competencies are what the mentors and coaches supply – whether it is how to conduct good staff meetings in a particular university department, how to supervise technical staff in a manufacturing facility, how to balance work and home life when one is an aspiring leader, and so forth. Each Pool has its own unique set of competencies.

While we do not supply course content in the usual sense, our role is to provide the process by which the desired knowledge and skills are passed on. We develop the materials and activities to teach people when, why and how to use processes to best effect and feel comfortable quickly in working together and sharing. Our research indicated excellence comes only when all parties are involved in this – both mentors and protégés taught the same thing together at the same time. We do not train each group separately. One of our mottoes is: “*The protégés of today are the mentors of tomorrow.*” Unless the next generation of mentors (the protégés) are co-equals in the process, the process is far weaker and open to question. We do not believe they should be shut out of the training process. Thus the learners see legacies in the making and sense how valuable it is to share. The mentors, especially those in professions, already know how generously their predecessors and others in the community of practice (CoP) have given and now it is the turn of the mentors to “give back”. So the mentoring cycle continues as it has for millennia.

Until the 1990s, there was little research as to the statistics of leaving a legacy. In 1990, Georgiann McKenna, traced significant correlations on some 20 forms legacy-leaving takes whether it be

- gains by the protégé through tangible knowledge transfer and information sharing
- personal emotional satisfaction for the mentor in giving to others
- professional contributions as part of the ethos in the mentor’s community of practice (CoP)
- maintenance of organizations.

It was this legacy-making that originally prompted our own work in the field. Indeed, leaving a legacy is front and centre to many North American programs as hordes of aging baby boomers leave the workplace. It is they who have “written the books” in science, corporations, and government. However mentoring and coaching, as we all recognize, are not limited to one continent and deserve to be carried out with excellence no matter where.

## Conclusion:

### Some lessons learned

1. Although technically it is possible to do many new things online, we continually ask the important questions: “*Programmatically, is it a good idea? What will be the impact on the participants?*” If the answers are “no” and “negative impact”, we do not proceed. For this reason, it is absolutely essential to have someone with real life, in-the-trenches mentoring and coaching program experience associated with the online system development.

2. It is vital always to keep in mind the goal of delivering what is appropriate and what will work. To find out, we ask: *“Who will benefit most from the help? Who wants help the most? Who will most readily adopt this online approach?”*
3. Creating a quality online system is far more costly and time consuming than can be imagined. The temptation for some is to settle for lesser e-mail only relationships or to opt for simplistic approaches. Yet there is much greater quality and higher rewards to be gained through a richer, more complex system.

## Our e-Future

One of the biggest driving forces for those of us in North America is the need to transfer knowledge from the large numbers of older workers to the small number of those who are and will be the labour force. Coupled with this is a need to bolster this dwindling workforce with immigrants who either must be certified, retrained or trained. Looking beyond our continental borders, we also recognize the need and desire in other parts of the globe for staff and students to be trained. Mentoring and coaching, as we know, are ideal enablers.

E-learning moves the learning experience from the traditional classroom environment into the learner’s world and provides learning without geography or time zone barriers. The internet provides access to learning materials, web-based portals and interaction with experts and other learners. It has been noted by a variety of authors that critical success factors virtual Communities of Practice (CoP) will include: usability of technology; trust in, and acceptance of information communications technologies (ICTs); a sense of belonging among members; paying attention to cross-national and cross-cultural dimensions of the Community; shared understandings; a common sense of purpose; use of netiquette and user-friendly language and longevity. While space and time unfortunately does not permit discussion of all these factors, each is of importance in the work we do.

Nowadays, technological advantages are short-lived, and a networked world means sheltered markets are open to and from all corners of the world. As more organizations and people have more equal access to knowledge, and the pace of change has accelerated, the primary source of an organization’s value has shifted from tangible to intangible assets: improved processes, access to information, and, most importantly, people. Herein lies our future.

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