HEALTH IT CULTURE

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When Worlds Collide

The Cultural Side of Health IT Failure

In his book, *Why Things Bite Back*, Edward Tenner thoughtfully articulates what he calls the "revenge effects"—the unintended consequences that so often arise as we continue our relentless information technology adoption. Tenner is a sociologist by training—not a technologist, per se—therefore, eminently qualified to weigh in on the messy things that happen when people and technology collide.

Few of us would disagree that cultures are a major factor in challenged health IT projects. Much is written about managing health IT change by considering and accommodating these cultural issues. Typically, the literature describes how IT leaders and project managers work to overcome the cultural barriers between clinicians (physicians and nurses) and administrators (executives and managers) in a healthcare delivery organization.

Perhaps another set of cultures creates challenges—conflicting cultures *among* those responsible for health IT implementations.

Health IT projects typically involve multidisciplinary teams with a breadth of knowledge and experience. For example, most organizations use some form of formal *project management* in their health IT implementations. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* is the best known. A similar skill set comes from those experienced in *information technology management* as exemplified by various System Development Lifecycle (SDLC) models. More recently, these organizations also employ approaches to *change management*, sometimes formalized, sometimes not. We have never observed tight integration of these three disciplines in an health IT implementation. The people responsible for each area may work independently from each other and at times at cross-purposes, possibly due to distinct and divergent cultures among members of each group—values and beliefs that may well conflict with the values and beliefs of the other two.

Change Management Culture. Change management culture is about how individuals and groups feel. This is psychology, the human side, involving factors not easily observable. For example, this culture addresses human interactions, how people feel individually and together, whether they feel heard during the decision-making process and whether there is mutual trust. Change managers are holistic, attending to all emotions as a key to understanding how we interact with each other.

Project Management Culture. Project management culture is a systematic approach to scoping, scheduling and budgeting. Project managers view success in mathematical, logical terms (e.g., percent of schedule complete and budget remaining, number of defects, number of people trained). This view dovetails with the "hard" sciences: define a task, a resource, a timeframe, the specifications and then execute the task within those constraints—very black and white. The tools project managers find most useful illustrate these quantitative values and beliefs—Gantt charts, work-breakdown structures, risk analyses. Project management training usually involves learning to apply components of a widely accepted, industry standard like that developed by the Project Management Institute (PMI), breaking project components into finite, discrete and repeatable components that occur in a specific lifecycle.

IT Management Culture. IT management culture revolves around the creation, delivery and maintenance of applications and the physical infrastructure supporting them. Technologists tend to reduce most problems and relationships to an underlying set of binary instructions (i.e., on or off). Many in technology prefer their assignments slipped under the door and returns them the same way. Infatuated with the details, they often fail to see the big picture, including specific plans, deadlines and frequent feedback in groups to review and ensure success. This also often includes difficulty in communicating ideas or answers to a non-technical audience. People acculturated in IT tend to see the world as just the technology. The people—"users"—are often a secondary consideration.

A recent experience with a tribal nation illustrates this cultural conflict. An ambulatory EHR implementation in a rural setting for a relatively small organization ran into a number of issues challenging the implementation, some technical, but one set of challenges stood out. It involved cultural differences among those responsible for implementing the EHR, not the usual suspects—clinicians, administrators and IT professionals.

A definite lack of cultural understanding plagued this tribal nation's ambulatory care

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EHR implementation. The EHR project was a failure largely due to this key factor. The Project Manager complained to the CIO that during help desk calls, IT insisted reported problems were simply not possible. However, when witnessing the problem first hand, IT found these problems were indeed occurring as reported. Only then could IT solve these problems. This failure to communicate continued despite ongoing complaints. In fact, the CIO felt his staff "did a great job."

The Chief Medical Officer (CMO) received only 30 minutes of one-on-one training and thought that this was sufficient for his needs. He and the Project Manager agreed this same training would suffice for others—so to correct schedule delay and minimize cost and clinician time away from patients, they mandated a 30-minute limit on all clinician training. The Change Manager told the Project Manager that this training was insufficient but met with resistance. The limited training resulted in physician difficulty using the EHR and reduced length and number of patient visits. Not unexpectedly, the volume of technical support calls increased, as did clinician frustration with IT's lack of understanding.

In short, each culture in this drama fully believed their issues were real and significant—and that the issues of the other cultures were irrelevant or even flat-out wrong. This experience illustrates the well-worn adage "culture eats planning for lunch."

It is fair to say that those of us who work in health IT have increasingly come to understand culture as one of the most challenging – and perhaps least appreciated – aspects of implementing health IT. If you have not experienced some form of culture-driven failure in an health IT project, just wait. Your time will come.

In an insightful essay[1] Chuck Friedman, a physicist and educator, described his growing interest in the "soft side" of informatics. He observed that solid code and reliable systems were often insufficient to successfully adopting health IT in clinical environments. Even with the best of technologies, "people" got in the way—and understanding these "people" issues in health IT required examining culture.

Wikipedia defines culture as "...that which distinguishes life in one group from life in another group, including language, beliefs, customs, institutions, and physical objects, among other qualities."[2] Members of a particular culture become a part of that culture through a process of socialization "...through a series of experiences that collectively shape what they know, what they believe to be important, and their sense of right and wrong." Friedman adds to that definition arguing that a culture's very nature makes it highly stable: "Culturally ingrained beliefs, and the practices that derive from these beliefs, are enormously resistant to change." This resistance flies in the face of what should be obvious. He notes that cultures "...bring consistent and predictable viewpoints to planning and decision making in information technology." Further, these viewpoints arise from culturally ingrained beliefs that are "... rooted in individual cultures [and] often transcend logic and usually cannot be influenced by evidence."

There is some research on the cultural difference among those responsible for health IT implementations. Lynn Crawford and her colleagues3 discuss some of the ways in which project management and change management differ. They state that project management is in essence an engineering domain with a focus on planning and control. Change management, on the other hand, is an offshoot of the discipline of organizational development. Different parent domains logically lead to distinct bodies of knowledge. The *PMBOK® Guide* is a clearly developed standard. Change management, conversely, has far fewer defined practice standards. As a result, managers from each discipline likely have corresponding strengths and weaknesses. Change managers emphasize qualitative

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attributes in their work, compared to project managers who focus on the quantitative.

Experience shows that cultural differences often prevent these three key players from working well together on a day-to-day basis. They each have different ways of measuring success, communicating and solving problems. When you add the additional stress and responsibility of defining and achieving common objectives for health IT project success, it is no wonder they often fail to address clinician and administration cultural challenges.

Further, simply including change management in the equation presents a dilemma. Excluding change management presents significant risks to project success, and almost guarantees failure. However, including change management without understanding and accommodating its cultural differences from project and IT management results in equal or greater risks of project failure.

Awareness of the issue is only the beginning of the solution. Organizations need to work to bring attention to and honor the differences between each of these cultures in order to understand how they can work together effectively and successfully. Part of that work is finding ways to demonstrate that they do in fact share a common goal—to provide services to each other and then to their clients or customers to improve the likelihood of health IT success. Only by changing the way we change can we increase the likelihood of real project success.

Most of us have directly experienced the ways in which these disparate values and beliefs come into conflict. How might we overcome these conflicts? Friedman proposes we become "culture weavers." "Successful leadership may be seen as an exercise in weaving representatives of...diverse cultures into a cohesive team, and dealing creatively and constructively with conflicts that inevitably arise as a consequence of cultural coexistence." We believe that through such "culture weaving," health care organizations can create a truly multidisciplinary approach to health IT success. **JHIM**

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