Power and use of context in business management

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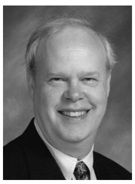

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Abstract

Purpose – *The purpose of this paper is to describe the role that context plays in managerial decision making. The paper aims to argue that managers increasingly need to take into account broader contexts of information in decision making. It seeks to define managerial context, how it is of use, and to provide a set of recommendations about how to integrate context into the daily work of management.*

Design/methodology/approach – *The paper approaches the topic of context by providing a definition of the concept, examples, and description of benefits of integrating context into daily work. It concludes with a proposed methodology for doing that.*

Findings – *The paper finds that context is an increasingly important tool for managerial decision making, particularly the more senior an executive is or the more ambiguous an issue being addressed.*

Practical implications – *The paper offers useful guidelines and approaches to the application of context into managerial work.*

Originality/value – *This paper is one of the first – if not original – discussions of the role of context in managerial decision making. It is an outgrowth of many of the findings of students of KM and managerial practices. It provides management with specific hands-on advice.*

Keywords *Decision making, Management roles*

Paper type *Viewpoint*

Understanding the makeup of the environment in which we work, and reacting to it effectively, makes and breaks careers, companies, and even lives. Without a good appreciation of the context of the issues we deal with – our environment – no manager can expect to be successful. Knowing how to understand and leverage context remains one of the most basic requirements for survival in life and in work. It is also one of the most difficult things for a person to do well.

A CEO decides that the fastest way to enhance his product line and company's capabilities is to acquire a firm that already has these. The accountants do their due diligence, quantifying the target company's financial performance; an M&A consulting firm conducts its study and recommends acquisition; a team of lawyers work on the terms and conditions; finally the two CEOs meet, like each other, and their negotiating teams work out the deal. The acquisition is announced and several years later it is declared a disaster, a waste of millions of dollars. The story is a familiar one. What happened?

The CEO had done all the right things to assess the viability of acquiring the firm, but it was not good enough. He had failed to figure out what should have made this a bad deal. It was not price, nor inappropriate strategic ''fit'', but it was something. Increasingly managers are learning that failed acquisitions occur for one of three reasons, all of which are not usually obvious at the time. First, the two corporate cultures are not a good fit, because of the rivalry that naturally occurs internally after the acquisition of resources, attention, and political power. Second, the two CEOs fail to see that technological changes as yet not fully

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understood by themselves, evident within their industry, were creating new realities. Third, the acquiring company crushes the new acquisition with beaurocracy and attention.

Some of the most prestigious companies suffer from these problems. The merger of Burroughs and Sperry Univac in the mid-1980s is an example of the first case. AT&T and some of its acquisitions in the late 1990s illustrate the second. Many of ITT's acquisitions in the 1970s and some of IBM's small initiatives in the 1980s demonstrated the third. Smart, well-trained, highly successful managers ran these firms, but something wrong happened. In each case they either did not know what were the potential pitfalls or did not take into account a wide-enough variety of issues necessary to inform their decisions.

The challenge, of course, is knowing enough of the ''right things'' to make effective decisions and to take actions in a timely manner that enhance one's personal or organizational intents. The problem is also that circumstances change, situations become unclear, and what data we have is never always exactly what we need. Why? Because things are not always as they seem. In short, there often exists a gap between what we understand and what we have to know.

Yet there is a growing body of knowledge about how to address this problem and while not yet fully codified into hard and fast rules of behavior, we know enough today to improve our judgment, better understand the subtle influences that so profoundly affect strategies and actions, and ultimately, our individual performance. We also all know subconsciously what is involved because how we learn and apply explicit and tacit knowledge, insight, or ''gut feelings'' is a natural process exercised instinctively by all people.

Effective use of context is about the acquisition and transformation of one's body of knowledge for improved decision making. In this paper we demonstrate that fundamental to this effort is the interchange of data, information and knowledge (explicit and tacit) in decision making. There is a confluence of each as part of the overall process of developing, improving, and using context in work. For our purposes, data is defined as explicit facts, such as numbers, names, and events. Information is more nuanced in that it builds on facts with such elements as reasons for an event, explanations for what numbers might mean, or provide prior or collateral information related to some data, such as the history of a relationship between two firms. Finally, knowledge is assumed to be a combination of data and information within context.

It is argued that context is a central component of knowledge management (KM) with the latter being the act of leveraging collective wisdom to increase the quality of a response or a decision. Context is highly tacit and the act of its use is largely a personal act of an individual but can be subject to emerging institutional practices of knowledge management.

The practice of management is not a perfect science

The managerial tool kit it is not equipped with the kind of mature collection of knowledge that exists, for example, for soldiering, engineering, or blacksmithing. For the past half-century, managers, professors, and consultants focused on making management an absolute science, making important strides in creating a body of best practices. As a consequence, along the way they created two generations of managers who believed that circumstances could be described in absolute terms, even quantified, and that predictions about some future business events could be devised (e.g. through scenario planning and modeling, or trend analysis). In short, too many managers gave the science of management more credit for being mature than the field deserved, based on extensive use of data and information, and not necessarily on more tacit inputs, such as context.

During that same half century, historians, sociologists, philosophers, and scientists learned that the future was really difficult to predict with any accuracy, and that nature operated in a chaotic manner. Scientists studying physics searched for a Universal Theory and have failed so far, while historians ran away from any suggestion that they forecast or even teach ''lessons of history''. In time some of the findings of the social and hard scientists spilled over into business. This happened in the form of total quality management (TQM), statistical

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process control, knowledge management, and in theories and studies on organizational learning. But it was never enough. Yet they relied largely on data and information.

The world remains ambiguous, normally unpredictable. Historians have long argued that societies and economies change at different speeds from time-to-time. When change accelerates – as we have seen most recently with the deployment of computers and the internet – and all through the second half of the twentieth century with the application of scientific principles to products, transportation, and communications, the world becomes less predictable, more chaotic, and, therefore, requires a manager to take into consideration factors otherwise not acknowledged. Some of the steps required involve more extensive attention to historical precedent – as would have helped AT&T in its decision to acquire NCR in the 1990s – while in other circumstances closer attention to cultural factors is necessary – as should have been the case when Disney Corporation built a theme park outside of Paris, believing it would be profitable as quickly as its American duplicate in Florida.

One perceptive observer of business practices, George Gilder, in the 1990s commented on how technological changes in telecommunications were fundamentally changing not only that industry but others as well. In his book, *Telecosm*, he cited the case of a few telecommunication firms – primarily in the telephone industry – which defied the conventional wisdom about telephone and transmission technology and, instead, came to understand how technological changes in communication infrastructure were creating new opportunities, spelling the possible death of the more traditional Ma Bell kinds of systems. Citing the cases of Qualcomm and Global Crossing he illustrated how focusing on issues different than conventional wisdom would have suggested new opportunities, indeed the possibility of creating whole new industries. In his set of examples, the key source of new emphasis and insight were technological data and information (Gilder, 2000).

What failed experiences and serendipitous business successes make clear is that management as a science is not yet fully developed. Management is still art, and there are whole bodies of information (rarely knowledge) from other fields that need to be incorporated into its practices. Historians, philosophers, economists, and scientists have much to teach managers about context as a form of applied knowledge (i.e. KM), as do business people in industries other than yours.

One recent example illustrates how new influences can help management's practices. Paco Underhill has a PhD in cultural anthropology and for three decades has worked as a cultural anthropologist running a consulting firm that focused on shoppers. Applying the tools of the cultural anthropologist he created a body of information and knowledge (largely contextual in content) about how men and women buy. As a result, retailers have acquired an array of new techniques and insights previously not available to them (Underhill, 2000). His work is a perfect example of applying skills and expertise from a field normally unfamiliar to business managers to enrich one's understanding of their context before taking some action, in this case, that of the social scientist.

The two disciplines that had long been tapped for such work are economics and psychology, rarely a humanities discipline. Turning to such disciplines, however, is a powerful strategy for creative thinking and new insights and illustrates the mental diversities at work which senior executives are increasingly seeking. As far back as 1988, Claude Singer, a vice president at Chemical Bank, opined in the *New York Times* that the need for more expertise in the humanities in management ranks was needed, even calling for ‘‘the historical mode of thought’’ (Singer, 1988). In their pursuit of operational excellence and clearer focus on opportunities, broadening the intellectual input into the collective mind of a firm's management team is becoming more important. This act is a move from just using data and information to higher orders of tacitly-based insights, in other words, to the use of context.

How do you know where to look for the important considerations that should be influencing your thinking? When can the obvious data (e.g., accounting information) be accepted at face value and be acted upon in the ways all managers are taught? When should we explore different issues, ask strange questions, or alter our mental models of how things work and change? In short, to minimize the perils that managing in uncertain, even dangerous times, puts in front of us, managers must alter some of their behavior.

Like the children's fictional character, Curious George, the best cast a wider net for their lessons, in what they read about, the topics that should concern them, bringing to bear a more organized understanding of the world that surrounds them. Navigating in this kind of a world requires a richer appreciation of the context in which we work. Context can be understood and influence us overtly. Business consultant Richard N. Foster pointed out that without a deeper understanding of the changes underway, ''most individuals do not learn how to improve their performance in complex conditions''. The essential desire of all managers in periods of change is to understand what is happening, what the future brings; but as Foster so clearly puts it, ''forecasting deteriorates in the face of rapid change'' (Foster and Kaplan, 2001).

So then, what is context?

Context is meaning about a world from sources around it. Context is a body of knowledge and circumstances (information) in which a specific issue, problem, opportunity, or event is known and placed. When a customer refuses to do business with you for some emotional reason that has nothing to do with the features and prices of your offering, turning to context becomes essential. Background, environment, or prior history could lead one to conclude that a salesperson's inability to close a deal could be the result of bad blood between the two firms dating back many years to a transaction gone sour, but which still infect relations between the two enterprises.

Knowing that history is context, an understanding that makes it possible for the salesperson to start looking for different ways to build a relationship, leads to knowing action. In this instance, context helps explain why best practices in the art of selling would not work. Here, context does two things:

1. provides understanding of an existing circumstance (how something is, its reality); and
2. stimulates thinking about alternative, novel approaches to solve a problem.

Is context simply an approach for gathering information at the individual level? It is an extraordinarily powerful perspective people use to satisfy the two purposes for context. Individual understanding cannot be replaced by large databases of data (facts) resident in ICT knowledge management systems. These tools help, just as do conversations with experts and colleagues, reading articles and books, and using information from the internet, radio or television, for instance, but thus need to be used as part of a broader mosaic of understanding. Creating and applying context is a highly personal activity, a function of the human brain that goes on constantly regardless of what an individual may choose to do. All decisions are made within some context.

Augmenting what the brain does naturally through proactive measures increases the usefulness of context. Indeed as awkward as it may sound, having context about the process of context improves our use of it as a form of KM in action. One way this happens is when a person voluntarily takes different types of jobs within their company or industry in order to build a body of experience that will continuously help them over the years. When a manager directing the career development of a junior employee says to him, ''we are going send you to Paris to work for two years so that you gain European experience'' she is saying, ''we are going to broaden the context of your experiences so that you will be qualified to perform other jobs in the company that require such broadness of scope and affected thinking''.

However, there is more that one can do to enhance context. A junior employee obtaining graduate education is one technique. Middle managers who begin reading on topics related to, but not directly about their area of expertise and experience, is another. Governments formalize this process through mid-career training for high-potential employees at war colleges, companies similarly by leveraging executive MBA programs. In each instance, the pool of knowledge that one can draw upon either expands consciously or subconsciously, serving as a source of conscious and subconscious use of context as a component of KM.

People who have these kinds of collections of contexts are often considered wise or experienced. It is no accident that such people are older, because they have spent many years accumulating experiences and knowledge that they blend together and apply effectively. That notion of blending both together can be leveraged (enhanced) through a variety of actions.

But, what about individuals who just seem to be so lucky? We have all known people who are said to have ''good instincts''. They somehow ''skate toward the puck'', have the ''Midis touch''. The problem with good instincts is that one cannot train people in them; you either have them or not. It is difficult to identify in potential employees, especially if they are just starting out and have not had a career long enough to document these. Instinct is just too serendipitous to be relied upon as a management practice. It is great when it exists and no management team would reject it. Jack Welch, the famed CEO of GE, was credited with this kind of capability, as just about every CEO of a successful high-tech startup company in the twentieth century.

Context, on the other hand, holds out the promise of providing a more rationale, reproducible set of practices and mental disciplines that make it possible to augment instincts or curtail bad ones by leveraging data, information, experience, and a better appreciation of the circumstances surrounding a problem or opportunity. Each activity and thinking contributes to one's body of contextual understanding of their world. Context appears in all parts of an organization and in all people. In a study of how managers sharpen their understanding of a context they need, Sharon M. McKinnon and William J. Burns, Jr, interviewed 73 managers, discovering that they needed a wide range of data and insights to do their jobs. Day-to-day numerically-intense data proved important, of course, but they also learned that sales managers, for example, also collect information about a customer's industry and economic conditions as part of their forecasting efforts (McKinnon and Burns, 1992).

Marketing managers demonstrate interest in understanding patterns of orders and demand. Strategists seek information on the economic environments in which their companies operate. All took short-term views but mixed in longer-term perspectives as well. The longer out in time one looks at situations, the more contextual information proves essential (McKinnon and Burns, 1992). When combined together, one begins to work with context.

Is context limited only to people or do organizations also leverage context? Can the use of context be institutionalized, made a way of life within an enterprise? Or, is it always undisciplined and so ambiguous that it cannot be subject to the disciplines of KM? Although the questions are difficult to answer, the short response to the first is yes, and to the second no, because one can discipline context.

> **"The challenge is knowing enough of the 'right things' to make effective decisions and to take actions in a timely manner that enhance one's personal or organizational intents."**

How managers leverage context

To be sure, at this stage of our understanding of the management of context, the process is not an easy task. Change is always threatening and unanticipated, as occurred with the dramatic and rapid play out of economic consequences from the surprise terrorist attack on the United States in September 2001, or the credit crunch of 2007-2008. If circumstances were fully predictable and controllable, operational data of a highly numeric type would be all managers needed. One would not have to anticipate possible deviations from plans. We would not have to understand the economic, political, and social context in which our companies operate. We would not have to be fearful that our own company’s view of itself and its markets were wrong, or about to be so wrong as to cause the death of the firm, or, at a minimum, radical dislocations as happened with so many American dot-coms.

There are other effective forms and roles for context besides personal uses in response to the unanticipated. These are institutional in nature. Context informs an organization about what its role and mission should be, what objectives it strives for, and provides empowered employees the confidence that their decisions and actions are in concert with management’s overall objectives. The fact that employees of Johnson & Johnson knew almost before their CEO that when Tylenol packets had been tampered with that they had to be pulled off the shelves around the country is an example of context at work. Employees knew what their organization’s values and intentions were – in this case that the health of their customers came before the safety of their balance sheets – gave them purpose and confidence that pulling Tylenol off the shelves was the right thing to do. Today, it is one of the most celebrated case studies business schools look at for a best practice when dealing with a disaster.

Context also causes management to understand and communicate relationships that they and their enterprises have with the outside world, be it customers, rivals, or regulators. As one commentator put it, ‘‘context provides an unambiguous framework for individual activity, aligning and bounding organizational actions without dictating what those actions should be. It leaves empowered individuals free to choose the best responses to unanticipated requests within a unifying framework of unambiguous purpose, principles, and structures.’’ (Haeckel, 1999). It is management’s responsibility to provide that context.

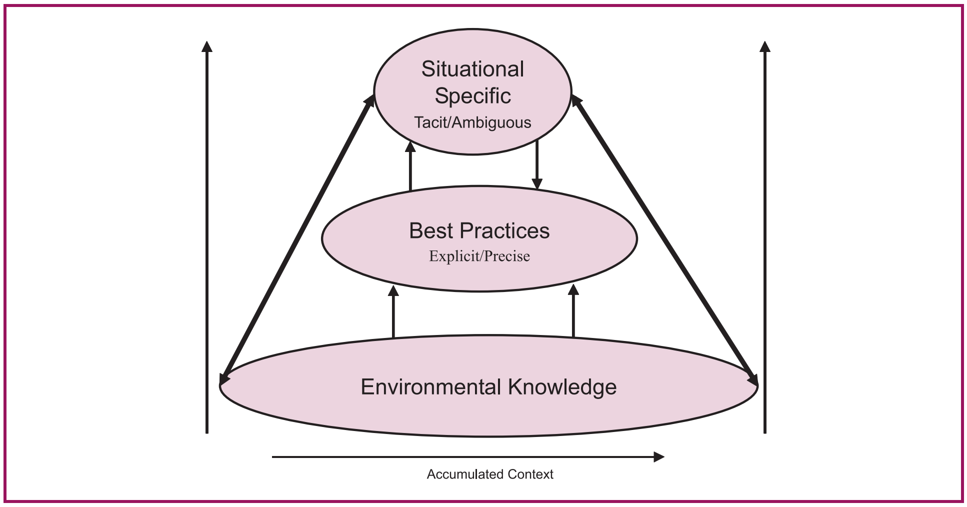
Leveraging corporate cultures to stimulate new opportunities and to keep organizations realistically grounded in market conditions has long been a tool used by executive management to steer their enterprises. Whether it is applying the Buddhist style in understanding problems and opportunities, as happens at Kao, or the more traditional market analysis approach used by IBM, management creates the style that he or she thinks will give an organization an edge over others. That style is the product of experience, training, one’s own handed-down values, and a corporation’s own culture, in short, context. How information is shared is a crucial decision management always makes and is ‘‘input’’, a subset of context-affected behavior. The use of intellectual capital systems, open work spaces, collective decision making, reliance on consultants and other subject matter experts, and creation of communities of practice are all well-known techniques managers use to create corporate style within the context of their vision of what they want to accomplish (Ghoshal and Bartlett, 1996; Whitaker, 1996).

A framework for understanding and using context

While context is a great concept one cannot touch it, feel it, buy it at a store, let alone get as explicit with the idea as we can with so many ‘‘practical’’ management topics, such as ‘‘hard’’ financials or tangible inventory. But, if there is more to understanding the reality of any circumstance, hence, the environment in which tangible, tactical decisions are made and consequences enjoyed or suffered, then context is more than just important, it is real. It is possible to put some tangible structure around the notion of context, and to do so in terms that make sense to management. Begin by examining what constitutes context.

Figure 1 illustrates the three basic elements that make up any context. First, there is a situation, a problem, an opportunity, an issue a manager faces that creates the initial interest in something. Normally a topic has no highly defined parameters or borders. Considerations

Figure 1 Spheres of context



with it are whatever an individual wishes to include. This act of determining what is to be included in the topic can range from how to penetrate a new market to how to reduce operating costs, to the implementation of a new program, sales initiative, or reengineering project, or to respond to a disaster, but normally framed as a problem to solve. It is the issue of the moment. Call it a specific situation. Put in psychological (or thinking terms), it is a circumstance that is situationally specific. In short, every problem or opportunity is unique and depends on data original to that issue.

Second, rattling around in the brains of managers and employees involved in the situation is a heritage of best practices learned as eager young students in some MBA program, acquired on the job over many years, training, or as the result of recommendations from business consultants and colleagues. Whatever the sources, people at all levels of the enterprise rely on them for ''rules of the road'', to help reduce risk, and to provide guidance until they conclude that the circumstance is so unique that novel alternatives become compelling options. Situations influence one's views of what constitute best practices, while best practices inform managers about what to do with a situation.

But, then there is a large, ill-defined huge body of acquired life-time skills, experiences, even irrelevant (yet influential) facts, information, knowledge, and so forth, stored in one's mind, which psychologists point out influence profoundly one's perspectives and reactions to events. It is a lifetime of experiences. Lest one think this is a male phenomenon, girls who learn to build consensus better than little boys bring that impulse to the process of deciding how best to resolve an issue at work, a crisis, or in launching a marketing campaign, for example.

What we want initially most often is specific data, facts – in short information – about a situation: names of the players, issue or complaints, potential threats, opportunities, and so forth. Typically that component of context – specific facts – is generated by the people dealing with details of that situation. Second, often best practices are considered (normally expert's advice on what actions to take), along with other reasonable managerial mantras, to place the situation into a broader context, such as how ''we dealt with this problem before'', or how other industries and firms do so. Because of the proximity and relevance of the situation to best practices, the former influences the latter, but the latter also equally affects the composure of the former. This is the notion that you affect a situation and the situation affects you.

But lurking behind the immediate drama of the day is a vast body of influences and knowledge. It is why, for example, people interpret circumstances differently even though they may have had the same career paths in the same firm and know almost the same facts about a situation. Indeed in practice, as well as good practice, we welcome and acknowledge that intellectual diversity by hiring people from outside our firms, or who grew up in different parts of the organization and bring together a diversity of opinions. That diversity is usually seen as a good thing (Davenport and Prusak, 1998, 2001). This murky, as yet rarely recognized, body of influence can range from a bad day in the in school at the age of 13, to a tough year in serving in the army in Iraq, to a six month stint as an understudy to some senior executive. But all of these extraneous experiences and accumulated values and notions influence directly what one considers to be best practices and ultimately how to deal effectively with a situation.

Managers, trained to cherish the explicit, find the situational the most comfortable because it is tangible, immediate, and lends itself to direct action. Talk about the tacit and the ambiguous makes them uncomfortable, even nervous. It seems only those with many years of confident performance, or who have a wide diversity of experience and values, appear comfortable with the lack of clarity of such a large pool of influential data, sense of things as they are, and ability to accept these realities. As David Mahoney, chairman of the Charles A. Dana Foundation once described the issue, ''If somebody has not been knocked around by life, I get concerned, not only about his judgment but about his resiliency.''

Fear of failure and faulty decisions seems to wane over time. There are many senior executives, for example, who accept these notions:

- ''When looking back, usually I'm more sorry for the things I didn't do than for the things I shouldn't have done'' (Malcolm Forbes, former publisher, *Forbes* magazine).
- ''The trouble in America is not that we are making too many mistakes, but that we are making too few'' (Phil Knight, founder and chairman, Nike).
- ''We can afford almost any mistake once'' (Lewis Lehr, president, 3M Company).

Knowledge about our environment has a profound influence on how one reacts to a situation and to our concept of best practices. Therefore, to ignore that murky bottom of Figure 1 is to defy the reality of how the brain works.

Understanding the components of these three interrelated levels of knowledge that supply us with the context we use at work is crucial. Figure 2 collects together some of these attributes. While this table is simple, knowing its elements can begin to make conscious what to look for as one tries to apply the benefits of contextual analysis to work. Perhaps the most visible, easily understood, and in wide use is the collection and reaction to the specific facts of a situation. When done well, as often in the case of reporters and researches, one acquires more information than the absolute specifics of a situation. Perhaps the one body of data not collected routinely, but which is of great help, is biographical information about participants: schooling, prior positions, attitudes and policies in their current job, any known attitudes toward us, and then obviously, their specific role in the situation at hand.

Understanding current economic and budgetary issues in play around the situation is often also overlooked, although senior management tends to be better at understanding these issues, as demonstrated in the Mosaic study done by McKinnon and Bruns. Middle managers, police officers, and lawyers have also learned the value of building chronologies of events as a way of cataloging issues that make it easier to understand what happened and identify what influenced subsequent events.

The act of applying best practices is not simply about calling on our prior experience or an organization's policies and practices in order to frame a situation or issue. To be sure, we do this because the enterprise requires, and humans always rely on, prior experience consciously and instinctively. From the perspective of context, best practices is also a formal business process whereby one routinely seeks data, facts, and information about how others have dealt with similar circumstances, and what evidence and insights they relied upon. It is a continuous process. This is such a wide-spread approach for improving managerial behavior that it almost seems too obvious to point out. However, rarely do managers face a circumstance unique to them, either in the past or currently. Odds are others have faced and dealt with it, or, are currently experiencing it, or something perceived as similar. Dialogue

Figure 2 Content of spheres of context

Situational Specific	Best Practices	Environmental Knowledge
Role & biographies of involved players & decision makers	Proven results	Corporate & national histories
Firm specific financial, marketing, organizational data	Known approaches	Political & economic background
Chronologies of events	Fits well with one's corporate culture	Prior personal & firm-level experiences
Immediate history	Specific, well documented	Anthropological, psychological, and technical
Legal, marketing, regulatory issues	Based on multiple examples that are assumed to be similar to one's own circumstance	Religious, social, cultural, handed-down values

with others in that situation often contribute to enriched insight and, more importantly, to a more effective response to the circumstance. Obvious examples include personnel situations, marketing circumstances, accounting practices, and change management.

The one general sphere of relevant (hence useful) insights that eludes most managers is the third column in Figure 2. Environmental knowledge does not always seem directly linked to a specific situation, problem, or opportunity. However, a growing understanding of each of the elements listed in the column is important because these increasingly influence all managers during the course of their careers. The value of this information is not always obvious. Yet, as one moves from a pure tactical and operational concern early in a career into strategy, setting direction, and dealing with others outside the enterprise as a representative of the organization, these considerations become increasingly valuable, indeed essential.

Underhill's work on how we shop can help a marketing vice president to device new strategies, programs, and pricing practices. Earlier in that executive's career, he or she would not have had the authority to do this, merely the opportunity to execute someone else's ideas. But now that vice president may have to take into account how men versus women shop, cultural peculiarities of employees and customers in Paris versus in New York, and remember that Muslims do not shop on Friday, nor the French after 7 p.m., or American Christians on Sunday morning, and so forth. Understanding the thinking patterns in one culture versus another is often an essential use of environmental knowledge. A French executive, trained at one of France's great politechnical institutes will think in Cartesian terms while his counterpart in the United States, trained at a state university, will not. The list of possible examples is endless, and often not obvious.

There is the famous case of the Cuban Missile Crisis of 1962, in which the president of the United States, at the height of the crisis, spent considerable time trying to understand how Soviet premier Nikita Khrushchev thought and reacted to situations. As his understanding increased, John F. Kennedy came closer to appreciating the risks and opportunities that various options for action presented to the United States. That kind of deep background proved essential to ''getting it right''. In this instance, it was about understanding the key involved participants, thereby avoiding the start of World War III (Neustadt and May, 1986).

A CEO wondering if he or she can work as the vice-chairman in a newly created firm in which the executive merged with another organization would do well to ponder biographical and psychological issues. Companies from multiple cultures face this problem all the time. The merger of Chrysler (a USA automaker) with Daimler (a German automotive manufacturer) in the late 1990s presented many public examples of the difficulties of cultural differences. These proved far more severe to deal with than, say, those of two American firms that merged at about the same time, Exxon and Mobil. Corporate cultures, national handed-down values, and work styles are very important in assessing how to develop or promote relations among enterprises, not simply between people. In short, this kind of content, while it may appear ambiguous, is terribly relevant.

In our model of the spheres of context, each of the three types of information that make up, or at least contribute to useful context varies in their features (see Figure 3). proposes a typology of those features because one great attribute about the use of context is being aware of what potential context can be. Knowing, for example, how we think in specific situations versus how people need to react to environmental realities makes it a lot easier for

Figure 3 Features of spheres of context

Situational Specific	Best Practices	Environmental Knowledge
Explicit	Result of surveys, studies, organized analysis, well documented	Eclectic, not business specific
Often quantitative	Learned through training, reading, certification	Result of diversity of individual experiences
Immediate/recent event data	Realm of subject matter experts	Culturally value-laden
Highly focused	Measurable performance	Influenced by handed-down values and individual personality traits
Limited to one or few situations	Rules of thumb	Tacit, difficult to pinpoint
Acquired by experiencing the situation	Deductively derived conclusions	Unconsciously influential
Consciously applied	Tends to be explicit	Inductively arrived at conclusions
	Uses capital management and other KM systems	
	Usually consciously and partially subconsciously applied	

an individual to answer the question ''How do I build up my environmental knowledge and exploit it?'' Relevant environmental knowledge is not necessarily acquired by accident, rather, it can be by conscious effort. So, knowing the features of a sphere of context makes it a great deal easier for people to decide what to learn, what questions to ask, and how best to apply that insight. Several of the features in Figure 3, however, are not intuitively clear and require some explanation.

Within Best Practices, deductively derived conclusions essentially calls attention to thinking behavior in which an individual takes a collection of data and draws conclusions based on it. For example, temperature data for 365 days in northern Wisconsin would probably lead an individual to conclude that this region experiences four seasons, one of which is hot and another very cold. That person might also conclude, therefore, that, he or she would need a minimum of two types of wardrobes to live comfortably in the region. A check with residents in the state would confirm the validity of that conclusion and lead to specific insights and knowledge about what kinds of clothes work best in Wisconsin, a best practice at work.

Most organizations that have embraced best practices and knowledge management systems tend to collect large bodies of data, often housed in computer-based systems, which employees all over the firm can use. Prior experiences with individual crises and circumstances are also collected under the heading of knowledge management (KM) or best practices, although less frequently or in satisfactory forms. Yet both provide crude forms of context. However, that contextual information is not necessarily specific to the situation that compelled someone to log on to a KM system, nor is it so general about economic or social situations as to make it obvious that it would be useful in a particular circumstance. Diagnostic tools also fit into this kind of a contextual system. Major automotive manufactures, for example, have such online tools which mechanics across the nation access, entering into the system symptoms they observed (or measured) on a particular car. The online system suggests actions to take while simultaneously integrating this latest input from the mechanic into its overall database to enrich future diagnostic efforts.

Special case of environmental knowledge

Managers operate in a business culture that values quick decisions and actions, and rewards focus and short-term achievements – exactly the kinds of activities and behavior that one would think cannot be helped by environmental knowledge. But if speed in decision making is essential, if one has to act without all the facts, if circumstances are changing or radically different, then of the three sets of contextual features of information and knowledge, the most important is environmental. It is also the most illusive. Its ambiguous nature is compounded by the fact that its relevance and form vary from one person to another, as does what gets applied in any particular situation. Therefore, how is one to be prescriptive and methodical about environmental knowledge?

The answer begins by understanding its features, because one then can either recognize this kind of knowledge when it exists or can seek it out by type of feature. American presidents have long enjoyed reading biographies of their predecessors; Winston Churchill was famous for studying British history; some senior American and European executives enjoy a good business history book. What they all have in common is a sense that a various eclectic collection of information about past practices and events informs their own work. The enormous body of literature on leadership is yet another example of trying to extract lessons from non-business sources. The many books by Howard Gardner on leadership are based on this strategy (Gardner, 1983, 1995, 2007).

Prior experiences make up a very large proportion of one's total environmental knowledge. These experiences are not limited to our professional jobs, but also to what occurs in our private lives, or in prior roles. There has long been a debate about the ''pros'' and ''cons'' of experience and memory, in which those who defend their value argue that the mind can instantly recall many facts and impressions from prior events while critics counter that often memories are faulty or worse, prior experience is no longer relevant if the situation has changed. One recent critic of pure reliance on experience and existing mental models came from Foster and Kaplan. In their recent book, *Creative Destruction*, he demonstrates that the rate of change companies have been experiencing in recent years is actually greater than in prior decades, implying that previous experiences might not be good guides to future actions (Foster and Kaplan, 2001).

While that may or may not be the case, experience is relevant; nobody would want to hire a senior vice president of a company who had never worked for a commercial enterprise! Would you want a vice president of sales who had never been a salesperson or a sales manager? A question one might reasonably ask is, ''Would you want to work for a manager who had not walked in your shoes?'' Most would normally answer no. So, experience is valued, but it is tactical to a large extent, particularly if the experience came from a different time, industry, and country.

Increasingly over the past two decades, business professors, consultants, psychologists, and cultural anthropologists have called attention to the fact that corporations have distinctive cultures, as differentiated as those of military organizations and universities (Deal and Kennedy, 1982). These cultures affect one's world view, types of experiences, and scope of thinking about options. As Foster and Kaplan argued, these world views can be deadly for a company if its executives' mental models are not an accurate reflection of the current economic environment in which they must function (Foster and Kaplan, 2001). What would be difficult to overstate is the critical importance of corporate culture. As Laurence Prusak, the well-known expert on knowledge management likes to say, ''corporate culture trumps everything''. What he is saying is that how organizations operate and are organized, and how people succeed and fail within them is profoundly influenced by a large collection of eclectic, ill-defined, hard-to-point out bodies of information, knowledge, and beliefs which all bear on every decision and opinion we hold in our professional lives (Davenport and Prusak, 1998).

Handed-down values are those beliefs one overtly or through unintended behavior display that originate either in corporate culture or, more frequently, in the society in which one was raised and learned within a family. These encompass various types of work ethics, moral principles, values learned in a prior profession, emerged from having been raised in a different country, an alternative way of thinking and filtering information, and speaking another language, which itself can bring all that about.

When human resource professionals and knowledge management experts speak about the value of having a diverse work force, they are typically referring to the notion that people with different backgrounds will apply a multiplicity of prior experiences and beliefs to a situation. The underlying assumption is that a variety of handed-down values and experiences enriches the context in which a problem or opportunity is addressed. Add individual personality traits, ranging from hard charging ''A'' type personalities to reflective employees and one begins to understand what a large body of environmental knowledge is brought to a situation.

The differences can be massive, and examples abound. A Lutheran graduate from the University of Wisconsin is quite different in many ways from an Italo-American graduate from New York University, each of whom brings a different mindset to the table. Add in the fact that in all enterprises there are multiple generations at work, ranging from Vietnam War veterans to Generation X managers, and one can realize the rich diversity of views, skills, values, and experiences that can sit around a table.

To be explicit about the massive amounts of ''think power'' brought to such a table, there is always a vast inventory of prior experiences and knowledge at play. A human brain has about 20 billion neurons. These connect, via synaptic junctions, where memory is housed. Current estimates suggest there are about 100 trillion synapses in a human cerebral cortex. Translated into more practical terms, a brain can hold at least 12.5 trillion bytes (think of this as words). To put all of that into perspective, a human brain has the potential of holding as much information as the entire collection of printed materials at the US Library of Congress and those of a really fine research university library. Now imagine having a quick meeting around a conference table with five colleagues, for a total of six people, each of them with the

> “There is often a gap between what we understand and what we have to know.”

potential of walking around with that much information. The potential amount of information that is brought to the room, regardless of our ability to access or process it, is potentially enormous, but at a minimum varied. The point is, humans bring a lot to the table that is diverse, complex, and potentially useful.

Another feature of environmental knowledge is its lack of specificity. It is tacit, that is to say, difficult to codify, accumulated over long periods of time, and hard to differentiate from how an individual performs. How does one describe the capabilities of an artist, or the instinct Jack Welch had for acquiring or disposing of lines of business? As Davenport and Prusak pointed out, ‘‘If it were possible to extract knowledge from the knower... it would radically change our compensation and education policies’’ (Davenport and Prusak, 2001). Such knowledge suffers from the fact that we cannot bottle it, put it in a database, or teach it in a classroom. That is why the most effective way to leverage tactic knowledge is to:

- recognize that it exists;
- identify types that individuals have (e.g., Welch for running a corporation, Peter Drucker for guiding managers); and
- have that person involved in situations where such knowledge might prove effective.

Tacit knowledge is also unconsciously influential, that is to say, it is always being applied to all circumstances whether we want to do so or not. It is the way the human brain operates. That is why some conclusions or opinions are arrived at inductively, even based on a hunch as opposed to by some logical, empirically based approach. Effective use of the tactic begins by respecting it.

How to use context

So far, we have argued in favor of several points:

1. that context exists, is real, and that people use it to make decisions, both consciously and subconsciously;
2. that context can be defined more precisely, does not always have to be enigmatic or ambiguous, but a conscious body of useful knowledge, hence a component of knowledge management;
3. that management ought to leverage this context to improve the quality of their work at all levels of the enterprise; and
4. that the tools of the social scientists and of the humanists can help to harness the power of context.

It is this last point that suggests several general actions all managers can take. As a general course of action, what the influence of context suggests is a simple strategy for all managers, a response that does, however, call for what for many is radically altered behavior.

First, think about and observe the environment and actions around you as possible components of the world in which we operate. Make this exercise a conscious way of thinking at all levels of the enterprise, not simply done by the strategist, the restless intellectual, or the senior executive. In the classic spirit of sense and respond, it is taking into account more than the obvious, more than the immediate, as we go about our work. It is all about learning to connect the dots, the act of linking together disparate pieces of information to give sense to the environment in which we work and the decisions required of us.

> “ **Effective use of context is about the acquisition and transformation of one’s body of knowledge for improved decision making.** ”

Second, mimic the practices of a good journalist in asking who, what, when, where, and why questions of not only specific situations, but in general of their markets, economy, and culture, because these too influence profoundly the specifics of any situation. Being curious, learning about things immediately outside our scope of duties and responsibilities is an essential requirement, particularly if a manager senses or believes his or her business environment is changing. While it may seem that the world ahead and what needs to be done is clear to a first line manager and a blank unknown to some poor executive about to be made CEO of her firm, context generates confidence and a framework in which to operate.

Third, management can create a corporate culture in which others do the same, by fostering intellectual and experiential diversity, cultivating the use of various sources of information in decision making, and in supplying time and resources for thinking, for reading, for communicating with others inside and outside the firm.

Fourth, be a student of history of many types. Managers and leaders have recognized for centuries the value of historical narrative and insight in providing rich context. Today, in addition to good national, political, and economic histories, much is being published on the history of specific industries, firms, technologies, and managerial and operational practices. Read those first relevant to your industry, next those devoted to your firm’s past and that of your customers’, and then about your specific profession. Google for lists of books or search library websites for relevant articles and books.

There is so much data, facts, information and insightful commentaries available today prepared by experts to arm any manager with tacit knowledge so needed to enjoy a competitive edge and that help decision makers avoid obvious, fatal errors, while identifying new trends and opportunities before everyone else.

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