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Bullish on Uncertainty

Our research uncovered a puzzle. Two highly successful investment banks were experiencing high uncertainty because globalization and industry deregulation demanded a new way of doing business. The two investment banks advised top executives of Fortune 100 companies about raising capital, taking companies public or private, and restructuring businesses. These tasks were becoming more complicated in the 1990s, however, because the environments around investment banking were changing rapidly. To assist bankers in making effective decisions amidst this turbulence, the banks designed work practices that managed uncertainty. But the two banks, "Individual Bank" and "Organization Bank," managed uncertainty in divergent ways. Individual Bank used familiar practices to *reduce* uncertainty for employees – explicit strategies and organizational structures, clear role definitions, careful feedback to bankers, and extensive training. Organization Bank, in contrast, used puzzling practices that *amplified* uncertainty, highlighting and even intentionally creating additional uncertainty for bankers. It deemphasized explicit strategies and roles, feedback was difficult to interpret, and training was full of contradiction and viewed as relatively unimportant.

THE TWO BANKS' APPROACHES

Individual Bank's approach followed traditional organizational theory. From this perspective, uncertainty is pervasive in business and, because it can impede decision making, its reduction should be a central priority for management (March and Simon, 1958; Simon, 1976). The management literature describes this priority clearly. Uncertainty reduction is viewed as a "fundamental need" for individual employees (Hogg and Mullin, 1999: 253;

Hogg and Terry, 2000), who experience uncertainty as frustrating, disorienting, and aversive (Katz, 1985; Schein, 1978). Reducing uncertainty for employees is thus crucial for organizational design and socialization (Ashford and Black, 1996; March and Simon, 1958). Companies have successfully adopted uncertainty reduction for decades (Colvin, 2006).

Run by managers with MBAs from prominent business schools, Individual Bank followed the advice of management theorists. It reduced uncertainty for its bankers by narrowing the amount of information they attended to and by providing them with guidelines – such as organizational concepts, values, goals, and standards. For example, as recommended by classic organizational theory (March and Simon, 1958; Simon, 1976), top management devised strategies that dictated the actions of bankers at lower levels, letting them know which clients to pursue, which opportunities to pass by, and how much revenue to generate. Bankers were reviewed and paid based on the goals that top management gave them. This reduced uncertainty because bankers did not need to evaluate business opportunities independently. All a banker needed to know was whether a company was on the banker's client list. Quarterly revenue goals further simplified the bankers' decision making because they did not need to attend to more complex considerations such as the longer-term implications of a particular deal or the resources they spent to get the business.

Individual Bank also cultivated "superstars." These were senior bankers with extensive experience in a given area and strong client relationships. They were celebrated for their expertise and courted publicity by commenting in the press and developing colorful public personalities. The bank developed banker expertise by repeatedly staffing superstars on deals in their areas of expertise. When a new deal came in, the bank assembled teams with the most relevant experience. This reduced the bankers' uncertainty because they were consistently confronted with familiar situations. The bankers advertised their deal-specific expertise to the client, and clients rarely made expert bankers feel insecure by challenging their knowledge.

Clients were pleased with this practice. As one client said, "We always invite at least three or four banks to pitch to us and we give the business to the bank that gives us the best banker team." Bankers from Individual Bank believed that its uncertainty-reduction strategy contributed to the bank's high performance. In response to an open-ended question about critical factors for a bank's performance, thirty-four out of thirty-eight senior Individual Bankers mentioned uncertainty reduction. They said that banks fail when bankers "are overwhelmed with the information they get or the tasks they have to do," "aren't given clear goals or directives," "do not get the training they need to know how to do their job," and "get inconsistent messages from the different HR [Human Resources] processes we have in place." The bankers also acknowledged the downside of their uncertainty-reduction approach, however. When one of its superstars left, the bank often could not fill the gap in that area of expertise, and this sometimes caused colleagues and clients to defect as well. Some of these mass exits forced the bank to abandon entire business lines – not an uncommon event in knowledge-intensive industries.

Individual Bank's uncertainty-reduction practices followed the advice of organizational scholars, the judgment of its bankers, and common sense. These practices were also successful, as indicated by the bank's leading position in the industry. Our puzzle is why Organization Bank, which faced the same challenges as Individual Bank and was just as successful, flaunted the time-honored uncertainty-reduction approach and *deliberately amplified uncertainty*. Organization Bank purposefully broadened the amount of information that its inundated bankers had to attend to, it withheld clear goals and directives, and it did not give bankers the training they needed to do their jobs. Even though outsiders admired the bank for its extraordinary profitability ("a money-making machine") and also considered the bank as "among the best managed in the industry," they derided these uncertainty-management practices as "organized chaos," "completely incomprehensible," and "defying everything we know to be true about how to manage a firm."

Organization Bankers did not, for example, receive client lists or goals. Instead, every few days they were given comprehensive information about the consequences of their actions – the amount of time they had spent on various types of projects, deals that were done by other teams, and the cost of the resources they used, including the time of other bankers and support staff and even the cost of their color copies. The bankers were supposed to use this information to determine which business opportunities to pursue and with which combination of resources. Strategies emerged only retrospectively, when many bankers had noticed and seized the same market opportunity. The absence of lists, goals, and strategic direction amplified uncertainty because bankers had to attend to more information, as compared to the Individual Bankers, and because they received few guidelines to assist them in making decisions. As one vice president commented, "The sheer demands on your attention and concentration are just mind-boggling. Not to mention the frustration that comes when you are trying to make sense of this mess of contradictory trends and information."

Another puzzling practice at Organization Bank involved the assignment of bankers to projects. Like Individual Bank, Organization Bank hired graduates with diverse educational backgrounds, including degrees in music, poetry, and the social sciences. Knowledge of finance was not a prerequisite. Unlike Individual Bank, however, it put these graduates to work on complicated deals immediately, asking them to produce leveraged buy-out analyses, common stock comparisons, and other products that most new bankers had never heard of. Newcomers often had to deliver these products overnight for deals in which billions of dollars, the careers of client employees, and sometimes the fate of an entire industry were at stake. Not surprisingly, the newcomers experienced uncertainty and extremely high anxiety. As one new associate said: "This is really difficult for me. I have always been the best at everything I took on. Now I am constantly in situations in which I feel completely helpless and incompetent."

The bank's puzzling practices ensured that even relatively senior bankers experienced persistent uncertainty. Unlike Individual Bankers, Organization Bankers were not assigned to projects based on relevant expert knowledge, but solely based on availability. When one Organization Banker went on vacation or was overloaded, other bankers seamlessly substituted on projects. One Organization Bank vice president said about this practice: "Even at my level I am still regularly confronted with deals about which I know relatively little." This was "unthinkable" at Individual Bank, as a senior Individual Banker noted: "It just doesn't work that way. You can't replicate what your colleague knows at the drop of a hat."

As a result of its unusual staffing practices, Organization Bank clients were presented with teams that included relatively junior and inexperienced bankers – and they often complained vigorously. As one potential client CEO said:

> What is this? The high school science project team? I have a granddaughter who is older than you are . . . . My ass is on the line here and this is the best that you can come up with? You know what this is? [pointing to a stack of business cards in front of him]. These are business cards from other bankers I am dealing with. [Reading off the name of the bank and the bankers' title] . . . head of investment banking, . . . head of sales and trading, . . . head of global corporate finance. These banks send in their superstars, their most experienced bankers. I want the same kind of attention from Organization Bank.

The Organization Bankers routinely declined such requests, responding: "We are fungible. We all do the same thing. We all draw on the resources of the organization."

Despite the fact that some clients were initially displeased, Organization Bank was at least as successful as Individual Bank. On some dimensions of performance, it was more successful. Both banks had comparable league table standings. (League tables are important performance indicators in investment banking. They rank banks according to how many deals they have done in a given area and according to the size of the deals.) Even though both banks were profitable, Organization Bank was relatively more profitable and had been so for a long period of time. In fact, industry observers often remarked on Organization Bank's profitability as the "envy" of the industry.

Organization Bank has also consistently adjusted to unanticipated market changes more successfully than Individual Bank. Like most of its peers, Individual Bank was known for being "one step behind the market," as an Individual Bank director noted:

> Look at the example of our [name of group]. We used to be number one in the industry. After the market [for that group] tanked, we became so nervous that we overreacted. We let go of 90 percent of our senior bankers, leaving a bunch of analysts, associates, VPs to work for two senior people. But that was at a time when Organization Bank was already ramping up its business [in this area] because it correctly anticipated that the market slump would be over soon. By the time it had dawned on us that this market was going strong again, we were way behind the curve in hiring. We couldn't get any business during that time because, with only a few senior bankers, clients questioned our commitment to the market, and they were right. And then, of course, we swung too far in the other direction as a result and overhired. By the time we had a big team together, ready to go, the market was heading south again and a new round of headcount reductions started.

Organization Bank was known as an innovator that noticed changing conditions early and also created important market changes, such as new types of products that other banks subsequently copied. For example, commenting on a draft of this book, one Individual Banker said about Organization Bank:

> One example that supports your theory is our industry's turn toward [a particular type of service offering]. While most of us are stuck with the typical investment banking products, at least for now, Organization

> Bank has reinvented itself and now is a completely different type of animal than it was only a few years ago, and it is raking in unheard-of profits.

During many unanticipated market changes, Organization Bank was among the few industry participants that either were buffered from losses or even profited as other competitors suffered substantial losses. This consistently superior performance in the face of uncertainty led competitors and outside evaluators to conclude that Organization Bank's repeated successes were extraordinary and "defied logic."

Even when very senior and experienced bankers left the bank, Organization Bank did not suffer knowledge gaps or additional attrition. Clients stayed with the bank because they believed that the expertise they were buying resided in the organization as a whole, not in a particular banker. Commenting on the lack of a superstar culture at Organization Bank, one client said: "The advantage of having drones working on your account is that they bring in the knowledge of the whole hive." For similar reasons, other employees did not defect when senior bankers left. They were confident that the loss of one knowledgeable colleague would not mean that their group was doomed to collapse, as was sometimes the case at Individual Bank.

THE PUZZLE

The Organization Bank puzzle is this: A knowledge-based organization usually sells the expert knowledge of particular employees and reduces uncertainty so those employees can implement their expertise. How can a knowledge-based organization be consistently effective in situations where its participants do not have the requisite knowledge? Why would an organization deliberately structure itself so that its employees regularly confront unfamiliar situations and persistently face uncertainty?

Even though organizational theory and common sense would find these practices puzzling, uncertainty amplification is increasingly practiced by other successful organizations. Examples include Apple Computer's R&D unit that exploits employees' uncertainty for innovation (Walker, 2003), Google's "chaos by design" (Lashinsky, 2006: 86), U.S. Army officer combat training that creates "ambiguity and uncertainty" (Wong, 2004: 17), and John Seely Brown's former job as Xerox's "chief of confusion." Moreover, anthropological studies suggest that uncertainty reduction is a cultural choice – rather than a human imperative or a fundamental need –

and that other responses are possible. Levy (2001), for example, describes how certain Nepalese communities continuously place adolescents into new situations and deliberately create high levels of uncertainty for them.

Organization Bank had an unusual but effective view of what causes high performance. As already noted, Individual Bankers believed that banks fail when bankers are overwhelmed with information or do not get clear and consistent directives. In contrast, Organization Bankers believed that banks fail when "people think of themselves as experts and don't realize that their knowledge doesn't apply to a new situation," when "bankers develop these recipes for how to do things and forget that each situation is different," when "people put too much faith into what they think to be true," and when "bankers rely too much on what they think they know and too little on the organization's resources." Out of forty-two senior Organization Bankers interviewed, thirty-seven made similar references to uncertainty amplification. Not one Organization Banker mentioned uncertainty reduction. They said that banks succeed when they "continuously remind people of how little they know" and "create the 'insecure overachiever', someone who compulsively doubts what they know all the time." One managing director said: "Our most catastrophic problems came about because people thought they were the experts. They thought they knew what was going on even though the market had changed . . . . What we do around here has to do with dispelling these illusions."

The two banks thus managed uncertainty differently. Individual Bank sold the knowledge of its *individual* superstars. Because individuals have limited information processing abilities, Individual Bank's work practices reduced the amount of information that bankers had to cope with, thus allowing its bankers to function competently. The bank's reliance on individual experts is typical for contemporary professional service firms coping with environmental uncertainty and complexity. This departs from the approach taken by traditional industrial companies, which typically face more stable business environments and can rely on the resources and procedures of a whole organization. They could, for example, script individuals on how to conduct activities. Standardized procedures, however, do not work in investment banks where each client problem is different and where markets change rapidly. Contemporary banks therefore rely on the flexible judgment of highly educated and trained professionals to devise appropriate solutions in each situation (Nanda, 2005). As one Individual Bank director said, "When the environment is that complex, you cannot rely on an organization. Organizations are simply not agile enough. You need to rely on really smart, brilliant individual minds.''

Organization Bank approached uncertainty from a third and less common perspective. Instead of providing rigid scripts like traditional industrial companies, and instead of depending on individual experts like Individual Bank, it spread cognitive demands across a higher-capacity *organizational system*. Because they had the resources of the entire organization at their disposal, bankers did not have to rely on their own judgment to make sense of difficult situations. This organizational system avoided the rigidity of traditional organizations because it did not consist of standardized procedures. Bankers were not scripted on what to do, but instead relied on interaction with the organization's resources to devise the best solution. For example, an inexperienced banker who was staffed on a healthcare sell-side merger assignment could speak to experts in the healthcare market, rely on project templates from previous sell-side transactions, and get feedback from other bankers. Organization Bankers did not rely heavily on their personal expertise, because they were consistently confronted with situations for which they had not developed much prior knowledge. They were forced to treat each client problem as unique and to devise appropriate solutions from the bottom up, driven by the situation's requirements instead of the banker's preconceived notions. The Individual Bankers, of course, also depended on the resources of the bank, but not to the same extent. Individual Bankers would not, for example, ask peers to comment on their client solutions because this was seen as a sign of incompetence.

Organization Bank did not tell or encourage its bankers to use the bank's resources. It *forced* them. In the following chapters, we describe in detail how incoming bankers at both banks initially preferred to rely on their own resources. They wanted to work as independently as possible to prove how competent they were. Other businesses that depend on knowledge professionals often experience this independence in the form of ''silo effects,'' which keep professionals from interacting with and cross-selling the services of other departments, or the ''not-invented-here syndrome,'' in which professionals do not utilize solutions that have been discovered outside their immediate group. As one of our informants, an industry expert, remarked: ''The most important – and the most difficult – thing that banks have to do is get their people to talk to one another.'' Organization Bank counteracted its bankers' tendency toward self-reliance by repeatedly placing them in situations for which their own knowledge was insufficient. It believed that bankers only made effective use of the bank's resources when they were uncertain about the applicability of their own knowledge. Only by drawing on others could bankers who were lacking personal expertise deliver high-quality products under extreme time pressure.

It makes sense for a firm to want its employees to make good use of organizational resources. But was Organization Bank going too far? How could it expect inexperienced bankers to deliver complex products the next day when they did not understand basic things about the type of deal they were working on? This book answers these questions in two parts. Part One describes the two banks' approaches in more detail, explaining why the banks managed uncertainty in contrasting ways. It explores how and why Organization Bank made its unconventional choices, comparing these to Individual Bank's more familiar practices. We argue that Organization Bank's practices seem counterintuitive partly because of familiar cultural notions about what it means for individuals to be knowledgeable. We tend to think that individuals are knowledgeable to the extent that they *possess* concepts and skills that they apply to new situations. In this view, if a person does not have relevant concepts and skills he or she will not be able to complete a task. Organization Bank took a different approach to problem solving in which individuals *suspend* their concepts and skills to seek out the best combination of resources in a given situation. This approach is based on the view that the knowledge of one person does not matter because whatever the person does not know can be supplied by a different resource.

The second part of the book describes how junior bankers were transformed by their work in these two different contexts. It describes how newcomers at both banks learned to use cognitive resources in different ways – psychological resources, such as identity, cognition, emotion, and motivation, as well as social resources, which include other people, data, objects, and technology. We show how Individual Bank's practices caused bankers to internalize knowledge and guidelines such that bankers thought, felt, and acted in terms of concepts that they brought to a situation. Organization Bank, in contrast, intentionally withheld guidelines and forced bankers to think, feel, and act with respect to the details of particular situations. Organization Bankers became highly sensitized to the unique aspects of each problem, noticing changes in the environment and rapidly marshalling organizational resources to assemble unique solutions. We describe how the Organization Bankers did more than learn a different way of solving problems. They also were fundamentally transformed as persons. In addition to describing this transformation, the second part of the book describes how the banks' divergent practices yielded different performance consequences. We suggest that Organization Bank's less common approach is valuable because of beneficial consequences for both the participants and the organization, but we also acknowledge the costs and limits of this approach.

WHY STUDY INVESTMENT BANKS?

Investment banks are excellent places to study uncertainty-management practices, problem solving, and socialization for several reasons. First, these banks work in extremely dynamic, complex, and competitive business environments. They must innovate constantly, adopting new technologies, routines, and procedures often long before similar practices find their way into more traditional organizations. As bankers work in these rapidly changing environments, their basic psychological processes – such as cognition, emotion, motivation, and identity – can take new forms. Study of investment banks can thus illuminate the interdependence of psychological processes and organizational contexts, as well as the plasticity of basic psychological processes. We can also observe psychological processes in investment banks that may soon appear in other contexts as other sectors adopt practices from trailblazing organizations such as these.

Second, investment banks are prototypical knowledge-based organizations, a type of organization on which Western societies increasingly rely. Investment banks and other knowledge-based organizations use knowledge as a primary input, in the form of employees' expertise, and as the principal output, as, for example, advice to clients. Observations about our "technological society" (Berger et al., 1974), "information society" (Lyotard, 1984), or "knowledge society" (Drucker, 1993) describe how the West is increasingly governed by knowledge and expertise. Our research suggests that the idea of expertise as the property of an individual, which is prevalent in Western societies, is only one way in which expertise can be understood and enacted. Our comparison of the two banks' work practices shows that organizations differ in how they define what it means to be knowledgeable. The book articulates an alternative, distributed model of expertise that is not yet well understood, and we explain its consequences for knowledge-based organizations, their employees, and their clients.

Third, responding to uncertain environmental conditions, investment banks have developed unusually adaptive work practices that are increasingly used by more traditional organizations (Eccles and Crane, 1988;