

Managing Knowledge-Based Organizations

A transcript of a talk at the World Bank

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Note: A video recording of the talk is available at: <http://bit.ly/TjOPgH>

The World Bank in 1968

In April 1968, Robert McNamara joined the World Bank as president and he found an organization which was a small, sleepy, boutique that financed development projects. It didn't have any lending targets. Projects were worked on and when they were eventually ready, they were brought to the Board. So he set out transforming the World Bank into a big 20th Century organization.

One of the first things he did was to ask a young professional, John Blaxall, to come to his office. John was in his twenties. He had just joined the Bank. Mr. McNamara showed him a large table. Mr. McNamara had penciled in with his scrawly left-handed writing across the top, the five previous fiscal years. Down the left-hand column, he had written the categories of things that possibly the World Bank was working on. And he asked John Blaxall, "Could you fill this in?" Apparently there hadn't been any table showing what the World Bank had been doing over a multi-year period.

So John went away and filled it in. And when he brought it back, Mr. McNamara said, "That's very good." And then he produced another table with the five future fiscal years across the top, and he sent that to the operations managers and asked them to fill it in for the next five years and told them that they had a month to do it.

Of course, there was a big explosion. The managers said that it couldn't be done, it shouldn't be done, it was impossible, it was undesirable and so on. Mr. McNamara said, "You have a month to do it!"

And it was done. But of course it was a mess, because the departments were working on different agendas and different time scales. And Mr. McNamara said, "Obviously we need to work on the same sheet of music."

So for the next thirteen years, he managed the World Bank that sheet of music, which was basically a lending program. In the process, he also did many things for knowledge. He supported economic and sector work on a large scale. He created the development economics department to do research on development. He launched the riverblindness program in West Africa. He launched a huge initiative to focus attention on the poorest forty percent of the world's population, who were not getting many of the benefits of development assistance and he committed the Bank to make a major contribution. All of these knowledge activities were launched. But when push came to shove, what really counted was getting out the lending program.

So I followed all that as a young professional and I steadily climbed up the managerial ladder.

The Knowledge Bank 1996

By 1996, I was talking with a lot of people, some of whom are in the room right now. This was at a time when knowledge management was starting to come on to the scene and organizations were getting

excited about knowledge and the World Bank obviously had a lot of knowledge. Suddenly we had this vision: we are really a knowledge organization!

So we were discussing in 1996: why don't we do this? In fact, there was a whole group of people who thought this was a great idea and there was a whole group of senior managers who thought this was the worst idea in the world. And so it was a big fight among the managers.

I remember one Wednesday afternoon in September 1996. I was sitting in the office of Jean-François Rischard, who was one of the vice-presidents who supported the idea of focusing more on knowledge. We were discussing: wouldn't it be a good idea if we could share this idea with Mr. Wolfensohn, who was the new president of the World Bank. With any luck, he might announce this at the annual meeting of the World Bank, which was only two weeks away.

We wondering how we might do that and, as it happened, just at that moment, Mr. Wolfensohn called Jean-François Rischard from his cell phone and said, "I'm in a taxi in a traffic jam in New York and I'm reading the draft annual meeting speech and there's not a single good new idea in the whole speech. Surely there's at least one good idea in the whole World Bank?"

And Jean-François Rischard said, "As a matter of fact, there is." He talked for five minutes, ten minutes, fifteen minutes. And Mr. Wolfensohn said, "Yes, that's pretty interesting!" So Mr. Wolfensohn went to dinner that night and tried out the idea on his dinner guests, which included the Librarian of the Library of Congress, and they all said it was a great idea.

So the next day, Thursday, he came into the Bank and Jean-François Rischard and I were asked to draft a speech about the Bank's role in knowledge. And the next day, Friday, Mr. Wolfensohn gave the speech to the Board of Directors about the new knowledge strategy of the World Bank. Ten days later, he was announcing this to the Finance Ministers of the World: "We are going to be the Knowledge Bank." This is the remarkable way in which things are decided in large organizations.

Then after he had announced that, I became the director of knowledge management and we had wonderful people who are here in the room, who got some marvelous knowledge activities under way, to begin implementing the idea of "the Knowledge Bank." It wasn't that the Bank stopped lending; rather the "knowledge" strategy was grafted on top of "lending".

1998: "Fight poverty"

In 1998, I saw that the World Bank had issued a mission statement. It said that the mission of the World Bank was to "fight poverty". I was happy to see that "knowledge" was on the same level as "financial resources" as the two main means of "fighting poverty". So that was a good thing. But I also wondered about all the things going on in the Bank that didn't seem to have any direct connection with fighting poverty. Were we meant to stop doing those things? I was told: no. Actually, we were keep on doing what we were doing and try to do a little bit more on poverty. But basically we were to keep going as we were.

Again, "fighting poverty" was grafted on top of "lending" and "knowledge", without being integrated in any clear way. It was like Verizon putting out a mission statement saying, "Our mission is to delight our customers," but without any substantive changes within Verizon to make the mission statement a reality. It was more in the nature of a PR statement than an operational strategy.

So we kept on implementing our knowledge activities, and some of them became quite well known outside the Bank. In fact, the Bank was repeatedly benchmarked as one of the world's leading

knowledge organizations at the time by APQC and Telios. The communities of practice known as thematic groups in particular and their capacity to connect people who needed to know something with people who did know about that were greatly admired by other organizations. Of course, things have moved on a lot since then. But at the time, the World Bank was seen, rightly or wrongly, to be at the cutting edge of what organizations were doing to manage knowledge.

A return to the World Bank after 12 years

So I left the World Bank in 2000 and started wandering around the world, actually dealing with many of the world's legendary organizations in both the public and the private sector and helping them launch change programs.

During this period, I lost track of what was happening in the World Bank. Then six months ago, Julius Gwyer called me up and asked me, "Why don't you come in the Fall and give a talk to the World Bank about knowledge?"

So I said, "Well, when I left the World Bank in 2000, the situation was that we had these three different strategies. We had a lending strategy. We had a strategy to fight poverty. And we had a strategy to share knowledge. And the three strategies were only partly compatible and they were really a bit of a muddle. So I don't really have anything useful to say on knowledge if there is no advance on that situation."

So Julius said, "Why don't you come and give a talk about that? Why don't you tell us what you think we should do to sort out these big strategic issues?"

I said, "O.k.". This was long before the Bank had a new president. Then in due course, Julius told me, "Well, actually, we're getting a new president." And then, "Now we have a new president." And then, "The new president is very excited about knowledge." And then moreover: "He's also excited about the big strategic issues that you were talking about."

Then on Tuesday this week, Julius informed me that the president had unveiled a kind of resolution of big strategic issues. He said that the World Bank would become the One-World Development Solutions Bank, for both eradicating poverty and boosting shared prosperity, with knowledge as the core value proposition for achieving development outcomes.

So I told Julius, "In that case, I don't need to come and give my talk now because the president seems to be sorting out all the big strategic issues."

Julius said, "Well, why don't you come anyway and tell us how to go about implementing the president's new strategy?"

Staff reactions to the Town Hall meeting of October 2, 2012

So I will say a few things about what other organizations have learned about implementing the kind of strategy that was unveiled by President Kim on Tuesday.

To prepare for this talk, I talked to people in the Bank and asking them: "What did you get out of the Tuesday town hall meeting with the President Kim?" I got some quite different answers.

One viewpoint, which I thought was very astute, was: "This is wonderful! This is great! This is a huge change, a shift from an organization focused on outputs to one driven by outcomes and the impact that we are actually having. If we make that shift, then whether it's lending or knowledge, it becomes subsidiary to the question: what's the best way to contribute to the outcome?"

In effect, the whole debate between lending and knowledge would largely disappear. It's like Google or Microsoft asking: are we a hardware firm or a software firm? The better question is: how can we improve the outcome for a customer? If hardware is the best way to do it, do it. If software can do it better, fine. It's all a question of: what will produce the best outcome for customers?

I also got some other feedback in some quite different discussions. In those discussions, people said things like, "There's nothing new in what was said on Tuesday. People are talking on and on about it and after a while it becomes empty rhetoric if it's not backed up with action. This is really a waste of time. Yada, yada, yada. We don't really want to hear anything more about the concept of outcomes!" This was obviously at the other end of the spectrum of reactions.

I pursued the discussion with these people and it transpired that there was a difference in terminology here. When we were talking about "outcomes", we were talking about two very different things. They were referring to "outcomes as perceived by the Bank", and often supported by a hugely intellectualized multi-year analysis as to whether the activity had had the effect that we in the Bank thought it should have had.

But there was another sense of "outcomes" in terms of outcomes perceived by the client. This is apparently referred to in the current Bank jargon as "impact".

Those are two very different senses of "outcomes". In the private sector, huge progress has been made in measuring outcomes as perceived by the client. It can be done very, very simply and very, very quickly and very, very powerfully.

I asked: "So you are fed up with talking about outcomes. Are you systematically measuring client-perceived outcomes? The answer was: "No, we're not measuring outcomes, in the sense of outcomes as perceived by the client."

So then I asked: "So is client-perceived outcomes the basis for the Bank's budget and the basis for the way the organization is managed?" And the answer was: "No, it's not."

This is an important discovery in the sense that the big difference between old-fashioned hierarchical bureaucracies of the 20th Century and cutting-edge knowledge organizations of today is exactly that. These new cutting-edge knowledge organizations are run and managed on the basis of outcomes as perceived by the client. That's what drives the organization. It's what drives innovation. The organization, and everyone in it, is continuously striving to delight the client. It is trying to continuously provide more value to the client and deliver that sooner. So the shift from outputs to outcomes is a kind of Rubicon, the essential differentiator in these kinds of organizations. And as the first astute observer pointed out, a shift from outputs to outcomes is a very fundamental shift.

Where do we find cutting-edge knowledge organizations?

Where do we find these cutting-edge knowledge organizations?

We can look for them in the *military*, and there is some ongoing discussion about that. In fact, the military has made great advances in managing knowledge on the battlefield. This evolution has been going on for at least 150 years, because bureaucracies don't do very well on the battlefield. But paradoxically, at headquarters, the military is about the worst in the world in terms of managing knowledge, of being agile, of dealing with a fast changing world, and of being efficient. So it's a dramatic contrast between the best and the worst. What they have learnt on managing knowledge on the

battlefield is very relevant to what happens on the front lines of the Bank. But certainly the Bank should not try to emulate what happens in the military at headquarters.

Universities are sometimes talked about as cutting-edge knowledge organizations. And indeed, they are strong on pushing forward the frontiers of knowledge. But they also often have unclear goals. They often work in very strict, impermeable knowledge silos. And they have radically accelerating, even atrociously accelerating, costs. So there are some things to learn from universities and some particular institutions within the university sector that might have lessons for us. But the whole university sector is not a model for the Bank.

Universities themselves are undergoing serious disruption, owing to the growth in the costs and the possibilities of technology. Students are asking: "Why should I listen a lecture from the third-rate prof at my university when I can hear the best lecture in the world on the Web?" That kind of question is disrupting universities all around the world.

Should we look at **consulting firms**? They are great on simplifying advice, marketing and client responsiveness, but often quite dogmatic in the way that they deal with their clients, and sometimes quite weak in terms of supporting implementation of their advice. Again, not a perfect model for the Bank.

The **health** sector has been under discussion here quite a lot. It is excellent at turning young men and women into doctors, in acculturating doctors, so that they have the attitudes and values of doctors. They have also made a lot of progress on evidence-based medicine. But they are also quite poor in terms of agile learning and using what has been learnt. Cost control is also a very major problem.

Three types of evidence based medicine

In evidence-based medicine, there is something that I think is very central to what you are groping with here now. They distinguish between three types of evidence-based medicine.

- One is what is called **precision medicine** or precision knowledge. This is where you have a very precise diagnosis of the disease. You have a very precise treatment. If you apply the treatment to that disease, bingo! The disease is gone. Cured. Guaranteed. Case closed. That kind of knowledge is wonderful when you have it. In the health sector, over the years, more and more diseases have moved into this category of precision medicine. So a number of diseases that used to have uncertain treatments have been moved into precision medicine. The bacterial diseases are examples of those.

In development, there is hardly anything where there is precision knowledge. You might see the West Africa Riverblindness Program as an example: putting an insecticide in the river and eventually coming up with a drug eradicated that disease. It was a precise solution to that problem. Bingo! The disease is gone. Case closed. But that's a really rare exception in development. Most development issues are in the second category of intuitive knowledge.

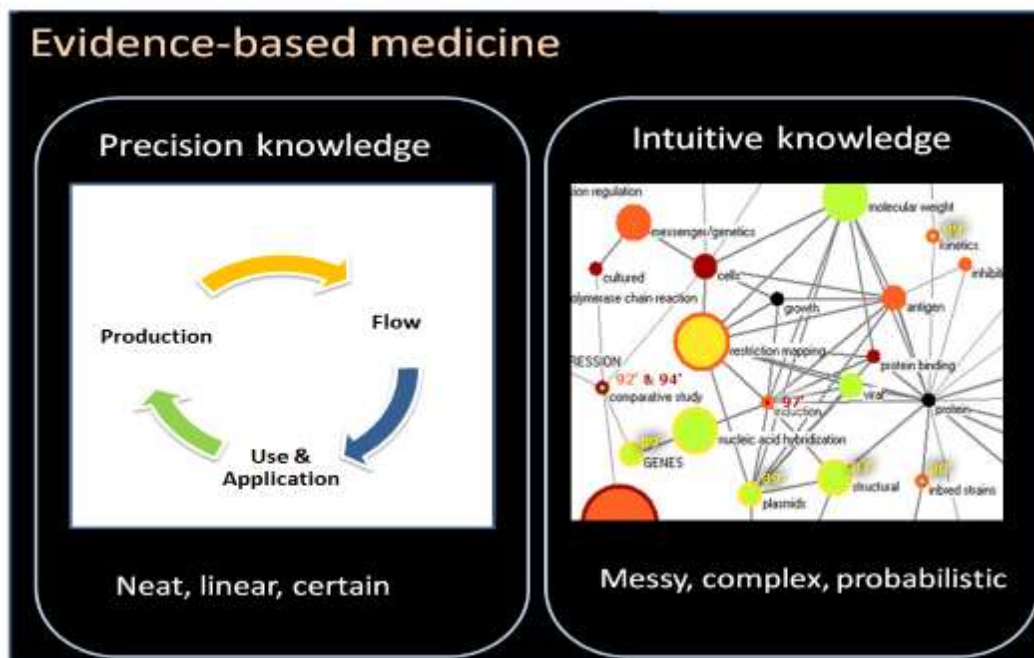
- **Intuitive knowledge** or intuitive medicine: Here you have an array of symptoms. You have a set of possible diseases that might be causing those symptoms. You have a set of possible treatments for those diseases and a set of possible outcomes for those treatments. Here you are making probabilistic judgments about whether the case in front of you fits which particular set of previous examples. And: what are the probabilities of this kind of treatment getting that kind of outcome? You are using a great deal of judgment and intuition. You are using pattern

recognition. You are learning as you try out a treatment. You try something and it doesn't work. You try something else. That whole process is very intuitive. Over time, you develop more refined judgements as to the probabilities of success of particular treatments. Many of the diseases of the health sector still have to be treated in that mode, such as cancer and asthma.

Most development issues are of this kind. They have to be treated by intuitive knowledge. There is no precision knowledge yet available. It's a set of probabilistic tests, treatments, learning and tentative conclusions as to what works and what doesn't.

- The third category is **behavior change knowledge**. This is where you have conclusions from intuitive medicine that the medical staff have recommended to the patient, but it involves behavior change on the part of the patient. So in diseases like obesity and diabetes, the treatment requires a lifestyle change in terms of diet and exercise. Just telling the patient what to do usually doesn't result in the needed behavior change. Instead, community groups and networks are needed to support the patient, so that the patient can develop relationships with other patients in the same situation, learn from them, and monitor their own progress. Again, it's a very messy and imprecise business in terms of getting results. Knowing what to do is only a small part of the story. A huge part is getting the patient to actually do it.

Most knowledge in development is not precision knowledge. It's intuitive knowledge or behavior change knowledge. So I was rather worried when I saw this graphic in the presentation on Tuesday. It's a picture of the knowledge cycle, with simple flow of production-flow-application. That simple, precise, clear, neat cycle is very relevant to precision knowledge. But a more appropriate picture of the knowledge cycle for development knowledge is more like the picture on the right. It's messy. It's complex. It's messy.



Knowledge collections: The conclusion that most knowledge in development, and in management generally, is intuitive knowledge, not precision knowledge, is one of the hard lessons learnt by knowledge management professionals over the last twenty years. Imagining that you could have a

scientific knowledge collection that would solve all your problems has turned out to be an illusion. With intuitive knowledge, the knowledge base can contain a lot of inputs into the eventual decision, but the actual decision involves a huge element of judgment and intuition. So thinking that you can have a collection of scientific actionable knowledge is only true when you are dealing with precision knowledge. And in development, precision knowledge generally doesn't exist.

Slow implementation of discoveries in the health sector: The other important thing we need to know about the health sector is that the time that it takes for the great conclusions and discoveries of scientific medicine to actually trickle down into implementation at the level of the doctor or the clinic is really terribly long. The time for major medical discoveries to reach even half of the patients in this country is more than fifteen years—a very striking conclusion. Understanding why this is so is key to understanding what we can learn from the health sector about implementing knowledge.

Software organizations

An area that deserves attention—it probably doesn't get much attention here but deserves to—where huge gains have been made is in ***software development***. Over the last twenty five years, this sector has made major discoveries in how you get continuous innovation with disciplined execution. It doesn't work everywhere because it also involves a deep culture shift. But huge discoveries have been made in software development about managing innovation.

Getting the necessary culture shift

How do you make the fundamental culture shift from outputs to outcomes that President Kim is talking about? What does this kind of culture shift actually look like? What I am suggesting is that none of these sectors has a sector-wide recipe for success. You really need to get down to the level of individual organizations before you can come to a practical solution to the problems now faced by an organization like the World Bank.

Lessons from Mr. McNamara's Bank

One such example is the World Bank itself. The lessons of the organizational culture transformation that Mr. McNamara accomplished back in the 1970s could be applicable to the kinds of things that you are grappling with right now in today's World Bank.

In particular, there are ***two things that Mr. McNamara didn't do***, which I think were quite smart. He didn't begin by reorganizing and moving all the organizational boxes around. He didn't begin by reshuffling the matrix. He worked with the structures that he had, which were not particularly appropriate to his vision. But he worked with them, and after four years, he had finally figured out how the place functioned. And then he had an idea of how the boxes should look. He didn't rush into it. He got the vision right. He got the culture right. And only then did he change the organization to fit the culture. He didn't waste a lot of energy on a big reorganization.

He also didn't change a lot of managers or bring in his own team. He took the managers who were there and said: "Here's my vision. If you work with me, we can get great things done." Launching a reorganization or changing all the managers were two mistakes that Mr. McNamara didn't make.

An analogue for President Kim

And what Mr. McNamara did do for lending, as I explained at the outset of the talk, might also offer a lesson for today. You could imagine President Kim doing something similar for knowledge and development outcomes. He might decide not to do this, but he could for instance ask managers to describe what they have accomplished over the past few years in terms of client-perceive outcomes.

And then he could ask them to put on the table their plans for the future in terms of client-perceived outcomes, for the next year, for the next three years, and even for the longer term.

And of course there would be a big explosion among the managers. People would say, just as they said back in 1968: “It can’t be done!” And: “It shouldn’t be done!” And even: “It’s very unwise to attempt to do it!” And: “It will never happen.”

Yet if President Kim pursues that approach relentlessly over a period of years, maybe it could happen and have the same cultural impact as Mr. McNamara’s initiative had back in 1968. It’s a possibility. I am not saying that it is necessarily the right way to go, but it is one-way in which an organization—this organization—made a fundamental culture change that was catalyzed by strong vision and leadership from the top.

Steve Jobs at Apple 1999-2011

Another example is Apple. In 1997, Apple was basically bankrupt, having become a big, bumbling hierarchical bureaucracy. Steve Jobs was brought back to try to rescue the firm. He looked around and saw around 4,000 middle managers who were, in his view, not doing anything useful. They were shuffling papers up and down the hierarchy.

So he said: “Those positions no longer exist. If you want a job in Apple, then you need to be working on the front-lines, doing something that adds value to customers.” He said the same thing to the people in the R&D department. He closed it down and said, “We will have the best people in the world in the organization and they will access the best knowledge in the world.”

And he proved it in 2007, when Apple was able to launch a state-of-the-art mobile phone from scratch in just 18 months. This was an organization that had never done anything in cell phones before that. Knowledge has now become to some extent a commodity. Most of it is outside the organization. If you have deep expertise in the organization, you can attract it and access it. There was a huge emphasis at Apple in having the very best people in the world, people who could access the best expertise in the world.

Analogues for us from Apple are:

- Total focus on delighting customers, and having that drive everything that happens in the organization. Money and outputs were secondary. The only thing that mattered: are we delighting the customer?
- Radically simplifying and streamlining offerings that the organization made.
- Transforming most middle management, controller, reviewer & research positions into client-value-adding positions.
- Doing all work in small multi-disciplinary teams.
- Recruiting the very best people in the world.
- Accessing the best expertise outside the firm.

As President Kim often emphasizes, most of the most valuable knowledge is actually outside the World Bank. The key issue is: how to access it and make it available?

HCL Technologies in 2005

Another example that might be relevant to look at is HCL Technologies. It has been successful although not as successful as Apple. It’s a software services company, headquartered in India. It has about 50,000 employees. Vineet Nayar became CEO in 2005 and his mission was to move HCL from a second tier firm

to a top tier firm that could compete with the best firms in the world. At the time, Nayar sounded a bit like President Kim sounds today. He came in saying, “We have great people! We are a knowledge organization! We are going to be customer-focused! We are going to make all this change happen!”

The reaction that he got from the best staff—not the worst staff: from the best staff—was: “This will never happen! We have heard this before! This is so much *&^^! Yada, yada, yada! It’s never going to happen!”

He also had some discouraging exchanges with HCL’s clients. They said things like, “You, the managers, are the problem in HCL. The people who add value are the people on the front lines working with us. You, the managers, just get in the way. They are the ones delivering value for us.”

Nayar suddenly realized that the “value zone of the organization”, as he called it, was on the front lines, the people doing the work. The cadre of 8,000 middle managers was really the problem. Now he didn’t have the power to do what Steve Jobs did, namely, abolish those positions. So he tried to work around them and over them. He tried to make the organization radically more transparent. He tried to create incentives for adding value to clients faster. He made personnel evaluation a bottom-up phenomenon. He put in place mechanisms by which any staff could get their problems resolved. He made the planning and budgeting process a bottom-up affair. These measures did improve the organization. HCL has started to compete effectively with the top-tier firms. The transition is still in process. It’s a much better organization than it was. But my take is that it hasn’t transformed the organization. It is still largely grinding along as a hierarchical bureaucracy. It’s more agile than it was, but not nearly as agile as the cutting-edge knowledge firms like Apple or the example that I will discuss next.

Salesforce in 2006

Salesforce is one of the best knowledge organizations in the world. The CEO, Marc Benioff, was named by Forbes in 2011 as the most valuable manager on the planet. Salesforce is a software services organization. They proceeded in 2006 by applying an approach to management that has been around for 25 years. It has become a huge thing in software development: Salesforce is one of the very best exponents.

Instead of each department having a plan and a budget for the year, you take all of the things that you are trying to accomplish. Then you prioritize and you ask: what’s the most important thing? Once you’ve figured that out, then you ask: who are the five to seven best people in the entire firm to work on this most important thing? In a bureaucracy, what would happen is that managers would say: “You can’t have those people because they are my very best people and they are already assigned to do other things.” So then you say: “Is this the most important thing in the firm or not?” If it is the most important thing, then you pull those people out from whatever they are doing and you ask them: suppose you work on this task full-time, how much can you get done in a month? The people get together and say what they think they could accomplish, and the firm says: “Right! Go away for a month and deliver at least that. More if you can. We won’t interrupt you. If there is anything you need, let us know. Remember: this is the most important thing in the whole firm!”

Then you say: “Now what’s the next most important thing?” And you basically work down the most important things that the firm has to do and getting the best people working full-time on the most important tasks. In this world, replies like, “I’m a manager: I don’t do that kind of work any more,” are unacceptable. If you want to work here, you have to be ready to work on the most important things, whatever they are. Nor is it acceptable to say, “I’m busy doing something else.” This is after all the most important thing.

And at the end of the month, you assess what's been accomplished from the client perspective and you evaluate what's been learned and you begin again.

What happens of course in the process is that a lot of the management roles disappear in the process and you have a very agile organization that learns very rapidly. It doesn't take you a year or two to discover that some big project isn't going anywhere. You find it out in the first month or two. It can be more challenging. A smaller number of managers have to be decisive on priorities and on removing impediments to getting the work done. And what the workers produce each month is visible to everyone. Unlike a bureaucracy, there is nowhere for managers or workers to hide. So it's a much more challenging environment for both managers and workers than a hierarchical bureaucracy.

This is really a change in an ecosystem—from an ecosystem of bureaucracy, internally focused and grinding along with the production of outputs, to an ecosystem that is agile and very externally focused on client-perceived outcomes. If you want to understand these organizations, go and visit them! They are very, very different from a 20th Century hierarchical bureaucracy.

Other questions

A few quick questions that are floating around and that will need to be addressed.

1. Can the Bank become demand-driven?
2. Can the Bank act with a new sense of urgency?
3. What is the business model underlying the strategy?
4. How will risk be addressed, at the institutional level, at the unit level and at the individual level?
5. Will sharing knowledge across boundaries be a problem?
6. Does the deep expertise in all the relevant areas?

Overarching lessons

So the over-arching lessons implicit in what I have said are:

1. Strong leadership at the top is vital: If you don't have someone at the top that is relentlessly driving this change, it will never happen.
2. Make the shift from outputs to client-perceived outcomes—this is the most important change to make.
3. Don't over-intellectualize the issues: you can turn these issues into multi-year studies, but getting a "good enough" answer very quickly can solve many of the problems you are facing.
4. Act with a radically enhanced sense of urgency.
5. Don't put too much faith in knowledge collections: instead focus on connecting people who need to know with those who do know.
6. Go and visit cutting-edge knowledge organizations and see how they function.

I hope that is stimulating and gives you some idea of what's going on in this exciting world of cutting edge-knowledge organizations that is opening up in front of us.

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