

## Week 1 – Risk Management

Peter Hao, project risk management is something that we are seeing a lot more focus on these days. Can you tell us how Toyota manages risk in its projects?

Hao Yes, we, indeed, are very involved in project risk management. This is one of the weakest areas that I have observed in our organization, and therefore we've put a lot more emphasis on managing that. Basically, the process we have is quite simple. In the project management to-do list, we have one item called 'risk identification/risk mitigation'. For any project that we have, we normally have a brainstorming session that involves most of the stakeholders including the people who are very close to the subject. They usually use half a day or a day brainstorming about what might happen with this project if we go the way we are planning to go. And then there will be a whole bunch of identification, things identified on the list, and then we go through a process, where we call it "validation" – what are the risks? Then we rank them – high, medium, low - in terms of the probability of happening and what would be the impact to the company when it actually happens. Then we will assign people or groups of risks to certain people ask them to investigate a little bit more about the probability, and also ask them to watch out for those. So they are accountable for the risks. And then on a regular basis they will need to report back on two things: whether the risks have happened and whether the project manager has a plan ready to go. So those are the two things we look for on a regular basis. Very often, a new environment happens, new policies happen, new risks have occurred or old risks are eliminated. That process is being covered by the steering committee as well. We put aside 10 – 15 minutes to talk about what the new risks that have been seen or heard of. Then we add to it and take away.

Now, when certain risks reach a certain level; when the risk of happening is high and the impact is critical, we have an escalation process that takes it right to the executive committee. That's where we feel it is important for the company to know what is going on and that we have put all the resources into managing these aspects of it. So, we bypass all the discussion on a lower level when those items happen or about to happen. So, it depends on the risk profiles of each of those. Once in a while, we have a certain thing like that identified and sometimes it happens.

Peter Thank you. Bruce, what do you do to manage risk?

Bruce Well, there's a whole whack of steps we take to try to address risks, but I'll just put it into three groupings and I'm not sure if I will cover everything but there's a contracting risk that we take on. So, I'll just pick a \$100 million dollar project, so 80% of that job will approximately be sub-

contracted. So if we pick the wrong person, the wrong company, and they don't survive, that risk gets borne back by us so we have a means of dealing with that and we actually rate all of our sub-contractors – we have an ongoing procedure to do that, and it has been very effective for us, actually. So it's a rating that is done in advance of the contracts and it's an ongoing thing aside from projects, specifically. Then you've got the technical risks of the project. So how do you assess those? And much like Hao was suggesting, you can step back from a physical project. I'll give you an example, we did a couple subway jobs on the Sheppard Line or the extensions of the Spadina Line in Toronto and we did the bridge component over the East Don River and there were a whole bunch of risks that we had to take on in this project. That doesn't mean they all happened but we had the possibility of flooding at certain times, the possibility of wet ground and the possibility of, well, certain things happening, the deflection risk in the poured concrete – varied amount of detail. We tried to list out those things, we did in that case and we assess the probability of them happening and what the corrective measure would be in that instance – that's a total. And so you add that all up but the probably isn't 100% but those are the numbers you carry. And then you have a contingency plan built into that risk planning, in that instance. So that's the technical risk, and then there's catastrophic risk. To go to an extreme, say the whole place burns down. Pretty catastrophic. And so you have to have outside risk management for that, so that's insurances so we're covered in that way.

Peter      Thank you, and to you Helen.

Helen      We do a little bit of both what Bruce and Hao were talking about, let me just give you a little bit of a different flavor also. We actually incorporate the risk right into our business case. So when we create our business case we identify a variety of different risks that both Hao and Bruce have been talking about. But in addition to what we call 'legal risk' (what Bruce was calling 'contract risk') we have operational risk, strategic risk, but we also have reputational risk. So we rank that very high – what would happen to CIBC Mellon's reputation should this go awry? So, because of the kind of business that we're in (financial services) where we are servicing the assets of our clients it's a very high risk for us – we want to ensure that our reputation is considered to be pristine. So reputational risk ranks very highly. So we do that at the business case. We put a ranking for each one of these so we understand what the risk is going into the project. Through all the different mechanisms that we've talked about already we continue to monitor those risks much as Hao was talking about. And the only other thing that I'd like to add that maybe hasn't been said is that we actually include, as one of our stakeholders, one of the risk managers that we have in our organization. So we have an entire risk department that's comprised as a number of risk managers. We actually make them one of

the stakeholders, especially on the larger projects that could have a potential to have higher risk. They're there looking out for the corporate risk and not necessarily for the project risk but they're there to ensure that corporate risk is being looked after. So, it gives everybody a bit of comfort that they're there and clearly a good balance project risk and corporate risk. So, that's a little extra piece that we add as a stakeholder is that we include a risk manager in our group.