

# technologyforecast

A quarterly journal

2012  
Issue 3

06  
The game-based redesign  
of mainstream business

30  
Improving the customer  
and employee experience  
with gaming technology

48  
Getting past the hype of  
gamification

## Solving business problems with game-based design

**Ari Lightman**  
Director of the CIO Institute at  
Carnegie Mellon University



**pwc**

# Allowing employees to see the business through a CEO's eyes

Milt Riseman describes how business simulation at Advanta Mortgage Services was effective, even before the web.

Interview conducted by Alan Morrison



**Milt Riseman**

From 1994 to 1998, Milt Riseman was president of Advanta Mortgage Services, a subprime mortgage lender.

**PwC: Can you tell us a bit about the company and where it stood when you became president?**

**MR:** I took over a company that was failing. We turned it around and built it into what at that time was one of the leaders in the industry.

We originated mortgages and then securitized them and sold them into the market. We serviced those loans, and we also acted as a third party to service loans for organizations that didn't have the wherewithal to service loans themselves.

I looked at some old numbers to give you some context. In today's environment they're not very large. In the four-year period between 1994 and 1997, the assets we serviced rose from \$1.2 billion to about \$15 billion. The assets under management—what we securitized and then originated—went from \$1.1 billion to about \$7.5 billion. And our monthly loan production went from about \$40 million to about \$500 million. So there was quite a bit of growth within that period. About 1,200 people worked for us at that time.

**PwC: Back then, subprime mortgages were a pretty edgy business and required a lot of delicacy to manage them sustainably.**

**MR:** The foundation we put in place had three legs. Control—from a risk and operating perspective. We had to demonstrate our understanding of every part of our business, through the quality of our forecasts. Profitability—we did not continue growing any of our businesses until we achieved sustainable profitability. Growth—once we had achieved control and profitability, we

### Mortgage growth in the 1990s

\$1.2B

“In the four-year period between 1994 and 1997, the assets we serviced rose from \$1.2 billion to about \$15 billion.”

\$15B

felt we could take advantage of the growth opportunities that were available to us.

**PwC: This was in the mid-1990s, well before the crisis in the late 2000s. If you were trying to do the same kind of business today, would it still be feasible?**

**MR:** Applying the strategies of control, growth, and profitability would certainly apply today. Subprime mortgages are an entirely different business now. Credit criteria are specified by three agencies. The only subprime mortgages are ones that the FHA [Federal Housing Administration] will insure. Fannie and Freddie are still buying and insuring mortgages originated by banks. Any financial institution originating mortgages today do so in accordance with the specification articulated by these three entities.

And the business continues to go along. Some are doing very well. I recently spoke with a person who has his own mortgage company and is making a lot of money just doing FHA business. He collects the fees and has no risk. He understands what his situation is. He's not going to try to get into other types of business.

### **Bridging organizational silos**

**PwC: What was the main challenge you confronted that business simulation could help with?**

**MR:** The challenge I had—and one of the reasons I began to speak to Jeff Lefebvre at PriSim [PriSim Business War Games, which offers simulation-based training]—was that we were organized into separate departments and business

units. We had salespeople. We had operations people servicing our loans. We had people servicing third-party loans. There were a variety of functions.

Most people, including many in middle management, did not understand how we made money. They knew what their responsibilities were. They knew what they had to do, and they were good at what they did. But they didn't understand the fundamentals of the larger business and the decisions we made on issues such as volume, price, risk, and costs.

**PwC: The challenge was how to balance those tradeoffs, wasn't it?**

**MR:** Yes it was. I wanted folks to understand how we made those tradeoffs and the implications of making the tradeoffs. It struck me that we could develop a simulation of our business and then put people in an environment where we created teams and let the teams compete with each other.

Jeff Lefebvre and the others at PriSim would be able to change the economic and other variables that could affect the business. And our people would begin to understand what the business was about and what the tradeoffs were.

**PwC: Were there four or five metrics that summed up to whether you made a profit or loss?**

**MR:** Sales, revenue, operating costs, servicing costs as well as the cost to originate. And finally the credit risk—what it cost to manage that risk and to manage the losses. Our forecasts had to capture all these dimensions.

Now, one challenge back then was not credit risk as much as it was prepayment risk. Because housing values were growing so rapidly, people could refinance their mortgages very, very quickly because the equity in their houses was also growing rapidly. So you really had to bake in the cost of the prepayment risk in our profitability forecasts.

We developed the simulation, implemented it, and it was a great success. People really got excited about it and enjoyed it. We culminated with a big off-site in San Diego where we put practically all of our managers through the program.

### **Giving employees a view of the business through the CEO's eyes**

**PwC: These people essentially got to play your role in the organization. Is that right? During the simulation exercise, they could see things through your eyes?**

**MR:** That was the whole point. That was what we were trying to create. They really did have that understanding and some sense of what that business was about. They were basically given the numbers in the business and time to understand them. And then we tried to teach them how their decisions could influence what was happening. We conducted a couple of iterations so we could reinforce the learning, and they could understand their mistakes and get some feedback.

**PwC: Once the training was done, you brought some aspects of this training environment back to the operational business itself. Correct?**

**MR:** Yes, because the training mirrored the business. We went through a lot of effort to make that possible. PriSim worked with our chief financial officer and some operating people to really simulate what Advanta Mortgage was, and we called the simulation Deep Pockets.<sup>1</sup> When people went back to their normal roles, they could recognize where their business was within the context of what the company was trying to do. Quarterly, I shared with our managers how we were doing. And they could understand and see what the numbers were and how they were playing out.

**PwC: What were some of the specific operational benefits?**

**MR:** The business generally was going very well. The training reinforced what was excellent morale within the company. People really, really identified with what we were doing and how we were doing it. And it made a big difference to them. It was a soft benefit, but at that time it was very real.

The company ran into some problems after I left, and it was sold. But people remember being part of Advanta Mortgage. They really loved it, and this training was part of the environment that we created at that time.

**PwC: Did you provide some sort of software tool they used in the classroom environment?**

**MR:** We gave them the tools to use as part of the Deep Pockets simulation. They were similar to the tools we would use in each one of the functions. For example, one of the trainees might be a sales manager who might be looking at various risk characteristics. But when he went back to work, he wouldn't be doing risk management. After the training, he understood the tradeoffs in making decisions regarding volume and risk and what kind of credit score we were willing to accept. But that would not have been on his desktop. Remember, this example goes back into a historic period.

**PwC: What's intriguing is that you developed this simulation on the basis of very limited technology—what was available in the 1990s. But what you're describing is really expanding the understanding of people in these organizational silos.**

**MR:** Exactly. They were in silos because that's the way we managed the business. But I felt it was important, if we were going to take the next steps in building our business, they needed to understand what each part of the organization was doing and how they could contribute to what was happening at that time. And I think that worked. Plus, there was a lot of team building that went on within that context as well.

---

<sup>1</sup> See the Deep Pockets video for more on this simulation example at <http://www.prisim.com/News/media.htm>.

*“Most people, including many in middle management, did not understand how we made money. They knew what their responsibilities were. They knew what they had to do, and they were good at what they did. But they didn’t understand the fundamentals of the larger business and the decisions we made on issues such as volume, price, risk, and costs.”*

*“It struck me that we could develop a simulation of our business and then put people in an environment where we created teams and let the teams compete with each other.”*

***Managing the issue of volume and capacity***

***PwC: Jeff Lefebvre said you did a really good job tying together the different pieces. Were a lot of parts more effectively managed as a result of this exercise?***

**MR:** I think so. The issue here is every business has conflict. And if you can start to provide people with information regarding how and why people are coming at something from a different perspective, you’re going to make a lot of progress.

For example, the salespeople might not have understood what the risk people were trying to accomplish, or what the volume tradeoffs were and how to understand the issue of capacity. Just laying the volume on if you didn’t have the right level of capacity to handle it could be a real problem.

If you read the papers about what went on in the mortgage business in the last decade, many people didn’t care about being able to handle volume or risk. All of that stuff faded into the background. People just focused on volume and did not worry about the riskiness of the loans they were originating. The losses were astronomical and basically destroyed the subprime mortgage business.

It’s hard to say what we would have done at that time. We had safeguards that might have prevented serious problems, or at least would’ve caused us to look at it more carefully.

I used to say, “I want you to understand how we make money and what our tradeoffs are. You’re in sales or operations and you’re managing credit losses or what have you, but this is all part of something bigger. You should understand what the pieces are. You don’t have to be experts in them. But understand how they can interact with each other.”