31ˢᵗ Sir Purshotamdas Thakurdas Memorial Lecture

Talent Management
Mental Models and Bottom-Line Results

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Hotel Trident, BKC, Mumbai

25ᵗʰ September, 2014

Talent Management Mental Models and Bottom-Line Results

Dr. Chip Cleary[*]

I'm honored to have the opportunity to spend time with you for the 31st SPTM Lecture. As I look at the list of people who have gone before me, I'm not just honored, I am humbled. This lecture has been delivered a long history of industry notables who have shared deep insight into a broad range of issues in banking and economics.

Today, for my talk, I would like to offer something a little different. I am not an expert in banking or economics. Rather, I come from the field of talent management with a focus on learning and development. I have spent the last 20 years helping organizations increase the impact they receive from their investments in learning. What I would like to share today is a perspective from working in the realm of talent across many different industries. I hope, and believe, that the lessons I have learned will be of use to this group now as the industry faces its challenges of talent development.

The Challenge

What I see today is that organizations across industries struggle with talent development. This is not a sudden news bulletin … this has been the case for decades. What has changed has been the level of priority. Today, as other sources of competitive differentiation have diminished, the importance of talent has

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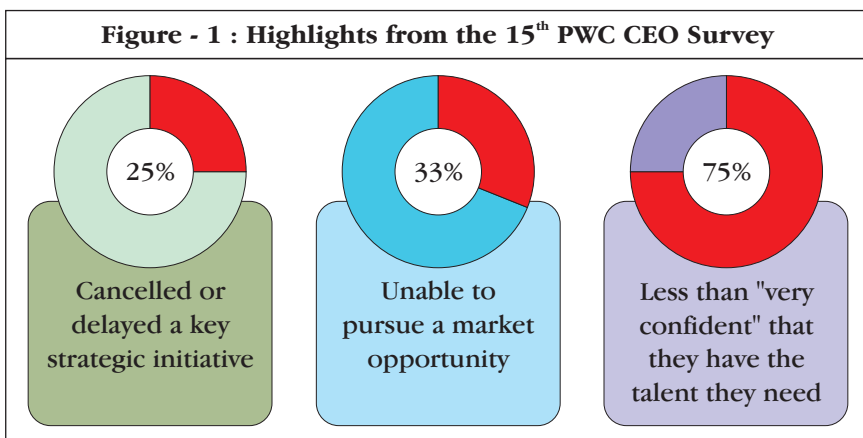* Consultant, Talent Management, U.S.A.

risen. At the same time, I also see new thinking emerging that can help organizations tackle the substantial talent issues they face. I hope to share some of the highlights of that new thinking with you today.

Yours is an industry that has squarely acknowledged the talent issues that confront you :

- Technology continues to redefine banking
- Multichannel interactions with customers
- Customers want solutions and not just products
- New offerings drives a new for high end speciality skills (e.g., risk management, financial advising, and so on).
- Turnover of 20%
- Growth of multiples of GDP growth
- Massive retirement underway in PSUs

Given the magnitude of these issues, one might wonder whether "challenge" is too modest a word and it would be more appropriate to declare a talent "crisis." It is a good time to convene a conference for talent management in banking.

At the same time, yours is not the only industry facing talent challenges. As the figure below illustrates, CEOs across industries are hampered by talent. As one CEO told me, "CEOs like to talk about talent. But now we must do more. It used to be that training was on my list of priorities. But perhaps it rated around number 40. It's moved into the top ten."

Figure - 1 : Highlights from the 15th PWC CEO Survey

25%	33%	75%
Cancelled or delayed a key strategic initiative	Unable to pursue a market opportunity	Less than "very confident" that they have the talent they need

What then, can we do to overcome these issues?

The Problem That Lies Beneath the Problem

What causes talent to be a challenge is not simply demographics and growth. Consider that as banks continue their dramatic growth, they will need other inputs as well as talent. However, most banking business leaders do not see, e.g., facilities as a critical challenge. Rather, it is simply another operational issue to be managed. What makes talent a critical challenge is that today business leaders lack confidence in their ability to manage it. When business leaders think about their need for facilities, they are confident that the need can be effectively quantified, assigned a cost, and delivered through reliable solutions. When it comes to developing talent, business leaders lack such confidence. They are unclear what investments to make, how to make them, and, when they invest, just what returns to expect and whether they receive them.

What I will describe tonight is what I believe lies at the root of this lack of confidence. Developing talent is a technical

area. But everyone has some mental model of how to do it. What I'll suggest is that the prevailing mental model that business leaders have of to develop talent prevents them from being able to manage talent investments proactively and productively. I call this prevailing model the model of "Replicating Experts". And while talent professionals should help educate business leaders, often they too share the same model and so the same blind spots that it brings. What I'll suggest is that this model leads business leaders away from productive questions they can ask to target, size, and evaluate talent investments. So, since they find themselves in a passive stance unable to materially affect the **effectiveness** of their investments, they focus on what they can, which is **cost**. The value of developing talent far exceeds the direct cost and so most business leaders find themselves only able to manage the tip of the iceberg of their investments. Small wonder that they lack confidence in their ability to manage talent investments.

What I will propose is a different mental model. This model is grounded in the domain of quality management. I call it the "Bug Swatter" model (I will describe why later). Under this model, developing talent is simply one form of quality improvement initiative. Since most business leaders have learned over time how to think of and manage quality management initiatives, this perspective allows them to bring to the table a range of perspectives that allow them to manage both **the effectiveness and the efficiency** of their investments.

This transition from managing the tip of the iceberg to managing the full iceberg is critical in making the shift from
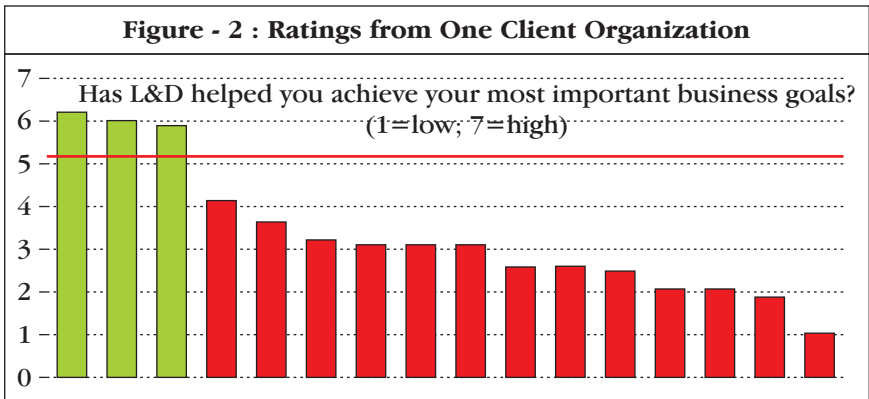
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considering the talent challenge a wicked problem without obvious solution to a daunting challenge to jump into and work through.

An Unpleasant Truth

In my job, I get the opportunity to speak with a broad variety of business leaders about how to develop talent, with a focus on training. Most are deeply convinced of the importance of learning. For example, Jack Welch said "An organization's ability to learn, and translate that learning into action rapidly, is the ultimate competitive advantage."

However, in my experience, relatively few are convinced of the effectiveness of their organizations' formal approaches to talent development.

The figure below is taken from a set of interviews I conducted with business leaders in one client organization. They are typical.

Figure - 2 : Ratings from One Client Organization

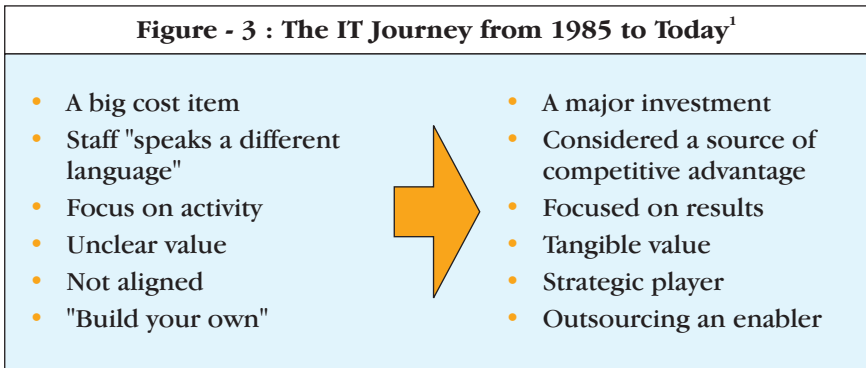Has L&D helped you achieve your most important business goals? (1=low; 7=high)

It's not just that business leaders face a crisis of talent. They face a crisis of confidence in their ability to develop talent.

Demonstrating the Possibilities

Sometimes when tackling a challenging problem, it's helpful to look around to see who else has had similar challenges and managed to handle them. For those in talent, the IT function provides a litany of productive lessons.

Consider the transformation that IT has undergone over the past twenty years (summarized below).

Figure - 3 : The IT Journey from 1985 to Today[1]	
• A big cost item	• A major investment
• Staff "speaks a different language"	• Considered a source of competitive advantage
• Focus on activity	• Focused on results
• Unclear value	• Tangible value
• Not aligned	• Strategic player
• "Build your own"	• Outsourcing an enabler

IT has gone from a difficult-to-manage function with which business leaders had difficulty interacting to a major source of competitive advantage that has learned to align to and support the business strategy. Is this not just the exact same journey that we require in talent?

In short, it's possible.

In my company, we have seen from an on-the-ground view, our ability to collaborate with organizations to make this transition happen in Learning & Development.

The talent problem is substantial … and it is also solvable.

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1. Thanks to Ed Trolley, co-author of <u>Running Training Like A Business</u> for this analogy.

A First Root Cause Analysis Provided a Starting

The root causes of the talent challenge are clear : industry growth, demographics, and external limitations of the degrees of freedom in key talent levers of recruiting, assessment, compensation, and performance management.

However, what are the root causes of business leader's lack of confidence in what is typically the most critical remaining lever: learning & development?

It doesn't appear to be technical capabilities. Those who work in the Learning & Development space have seen the technical opportunities for solutions explode over the past decades. We have e-Learning and virtual classrooms and social media and web-based performance support. We do not lack for arrows in our quiver when it comes to providing solutions.

Four years ago, I became convinced that the key barrier lay in the area of business alignment, that aligning learning and development solutions so that they direct enable business leaders to achieve their operational goals and implement their strategies. It's certainly not news that a learning leaders should align to business. In fact, they have been consistently admonished to do so in conferences and by trade articles and by their own leadership for years.

What some of my clients asked me was "just how can I do better?" I thought that would turn into a two-week research project to compile best practices. What I came to realize was that concrete guidance on "how" was missing. If I want to better align, just what do I do?

As a result of that realization, my two week research project turned into a two year project. I have since collaborated with Tom Hilgart, who was a learning leader at a US-based insurance company, to define a "how to" guide for how to systematically create alignment. Our manta has been "It's not just about "trying harder". It's about having a practical system." The result is a book we co-authored, The CEO's Talent Manifesto (Cleary & Hilgart, 2013).

The CEO's Talent Manifesto

Manage our investments in talent as methodically as we manage our other investments.

1. Pinpoint specific business requirements
2. Focus investments on priorities
3. Identify concrete business outcomes
4. State the results
5. Continually improve

In the book, we collaborate to take an approach that Tom developed when at CNA, expand upon it, and build out a methodology based on it.

Just to provide a sense of the direction of the work, some highlights of the methodology included :

● Carving out a role for a person who focuses on creating alignment and evaluating business results.

● Helping the business view their investments in talent as a portfolio and providing insight into the shape and health of that portfolio.

● Working with the business at the level of specific initiatives to focus on a specific form of results sought : business

process results (e.g., increasing success rates, accelerating cycle time, reducing errors and so on).

A Deeper Issue : The Importance of a Better Mental Model

Over the past two years, Tom & I have spent time sharing out the approach and talking with organizations about their opportunities and challenges in leveraging it.

Now, tonight we won't go into the approach in detail because I have come to believe that the methodology, while useful, has proven to be more difficult for many organizations to adopt than I had anticipated.

So although you might like nothing better than a walk of a methodology over your dinner, there is more interesting ground to cover.

What I have taken away from the past couple of years is that it's not just about having a practical system. A solid methodology is necessary but it is not sufficient. What must be in place first is a productive mental model about how learning & development can develop capabilities.

We all develop mental models about how the world works. So, business leaders develop mental models about how people become proficient. What I propose is that the current mental model that most business leaders rely upon represents an enormous barrier to tackling the talent challenges that organizations have today. It's not that the predominant model is flat wrong … but rather that it is unproductive. It prevents business

leaders from engaging with talent leaders in a productive way. That's what I'd like to focus on tonight.

To achieve in learning & development the kind of transformation that IT has realized, we need to change the mindsets our organizations employ about how to manage talent. Tonight, I will outline what I see as the current predominant model, illustrate the impact it has, and share what I believe to be a more productive model.

The Prevailing Model of How People Become Proficient : "Replicating Experts"

When business leaders say "we face talent challenges", what they mean is "we need people who can perform the tasks we need done in order for us to execute our business strategy." While there are many dimensions that affect performance, typically organizations struggle most with whom to recruit (so which capabilities to buy and which to build) and just how to build peoples' ability to perform critical tasks.

What we know is that if we choose people with the right aptitudes, over time they can become proficient through experience. If we were happy with the rate at which people naturally become proficient through experience (and willing to live with the consequences of their lack of proficiency), we would not need to invest in learning and development. What learning and development is for is simply to accelerate the growth of proficiency. What we want to do is help novices (like Sam below) rapidly become proficient (able to perform like Sally in the figure below).

Figure - 4 : Moving Up the Learning Curve
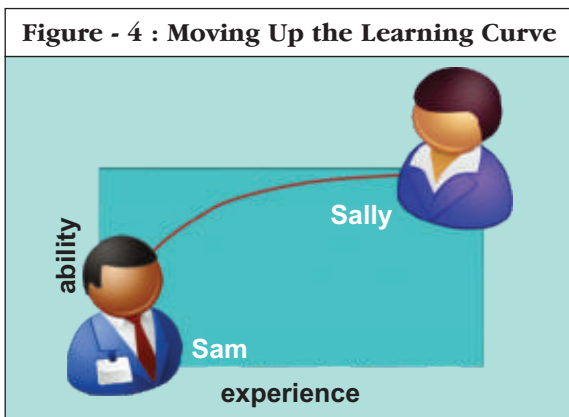
So far, so good. Now, it would be wonderful if we could simply plug Sam into Sally's head and download her capabilities to him. But only in science fiction. In the real world, we need some other way to help Sam.

Figure - 5 : If Only We Could Do This!
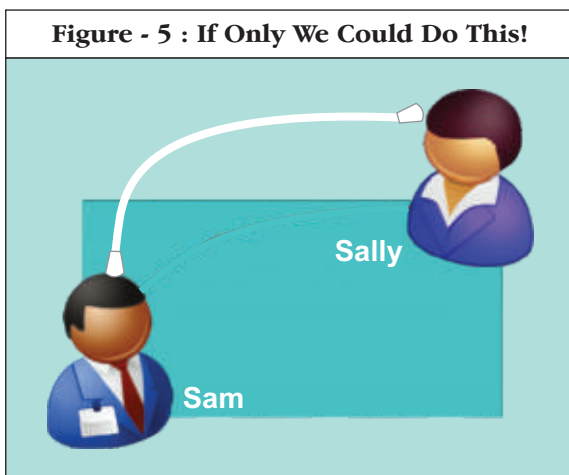
The question is "How do we figure out what to do for Sam?" In tackling this question, we are hampered by an obvious if
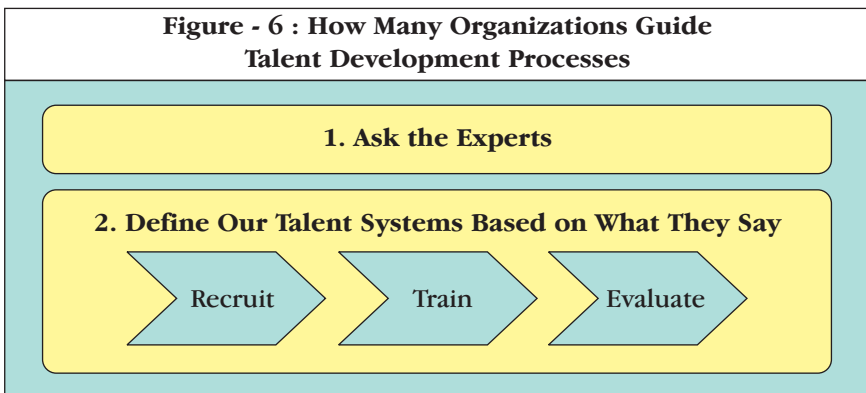
extremely troublesome limitation: we cannot just peer inside Sally's head and see what makes her proficient. That is not visible to us. In fact, in many cases, it's not clear to her. Experts often behave differently in practice than they say they do when they discuss their work.

This is where the problem lies.

To determine how to build Sam's proficiency, what learning professionals typically do is what feels intuitively sensible to most business leaders : they ask Sally to tell us what Sam needs to know. I call this approach the "Replicating Experts" model of building proficiency.

In short, learning professionals conduct what they call a "needs assessment." Typically, this assessment is based on interviews. They talk to a range of experts, they may talk to their managers, and they may talk to novices to see what help they want. They then tally up the results. And then, they gear the learning & development solution around what they hear.

Figure - 6 : How Many Organizations Guide Talent Development Processes

1. Ask the Experts

2. Define Our Talent Systems Based on What They Say
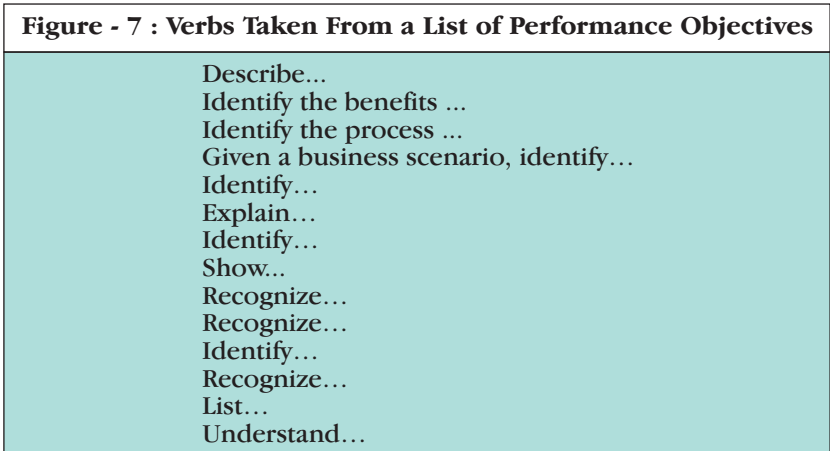
Recruit → Train → Evaluate

The problem is that experts are not actually very good at identifying what is really important for novices. Experts, by

their very nature, know quite a lot. They are proud of what they know and they are usually happy to share it. But they typically have also largely forgotten what it is like to be a novice. They have difficulty separating what is important for a novice to learn right away versus what is nuance that can be saved for later. They are keen to share all of their knowledge whether it is relevant to 90% of cases or only 5%. They tend to focus quite a lot of what one should "know" versus what one should "know how to do." And, in some cases, they actually behave differently in practice than they say they behave.

Since learning professionals target learning and development solutions based what they hear from experts and since this is failure prone, they end up with learning solutions that cost too much and produce too little result.

To illustrate, consider the figure below. This figure is from a document we were given by a client for an actual training project stating the performance objectives the project should support. I have deleted the specific content.

Figure - 7 : Verbs Taken From a List of Performance Objectives
Describe... Identify the benefits ... Identify the process ... Given a business scenario, identify… Identify… Explain… Identify… Show... Recognize… Recognize… Identify… Recognize… List… Understand…

A couple of interesting observations come from this figure.

● This project, as specified, would not really enable a participant to do anything new that the participant could not do before the training began. These verbs indicate that the participant should understand a mass of conceptual content. Note, while the example is extreme in this regard, it is not wholly unusual in direction.

● The project, as specified, would be large as the list is extensive. When one performs this kind of needs assessment, one hears many things from experts. Since the whole model is based on asking the expert to relate what is in their head, it is difficult to eliminate something from the list. After all, the expert said it was important.

In short, such a list is common and it suffers from three critical flaws :

● **It is too much :** We routinely find that much of what experts say is important is not actually relevant to novices as they climb the early - and steep - part of the learning curve.

● **It identifies the wrong kind of content :** As noted, such lists of focus much too heavily on "knows" and not enough on "can do."

● **Some of the items are inaccurate :** When we learn things, we often do so at a level which is not directly accessible to us later on introspection. So, we have theories about how we behave that can differ from how we actually

behave. Good interviewing techniques, like the Critical Incident Methodology, can help address this flaw but it remains a common issue (Flanagan, 1954).

When learning professionals rely on expert reports to charter learning investments, they start from a weak position.

Now, let's step back from the role of learning professional back to our business leaders. If your model is that experts are the best source of guidance for how to accelerate novices to proficiency and you recognize that interviewing experts is a difficult task, well then you find yourself unable to contribute to the chartering of a learning solution. In short, chartering becomes a black box.

Figure - 10 : The "Replicating Experts" Mental Model Prevents Business Leaders from Effectively Managing Talent Development
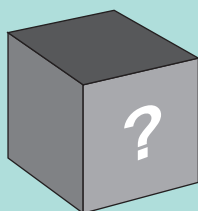
Effectiveness :
How do I know what
is in the expert's head?!?!

Efficiency :
I know how to
manage activities!

A business leader who attempts to "Replicate Experts" will naturally not try to participate in driving effectiveness of learning solutions. So, training remains a black art where effectiveness cannot be effectively managed. At the same time, most business leaders are comfortable

managing activities. They can comfortably ask for usage levels and course completion rates and the cost of learning solutions. To the extent that business leaders examine training, they will end up managing **training activities** instead of **training results**.
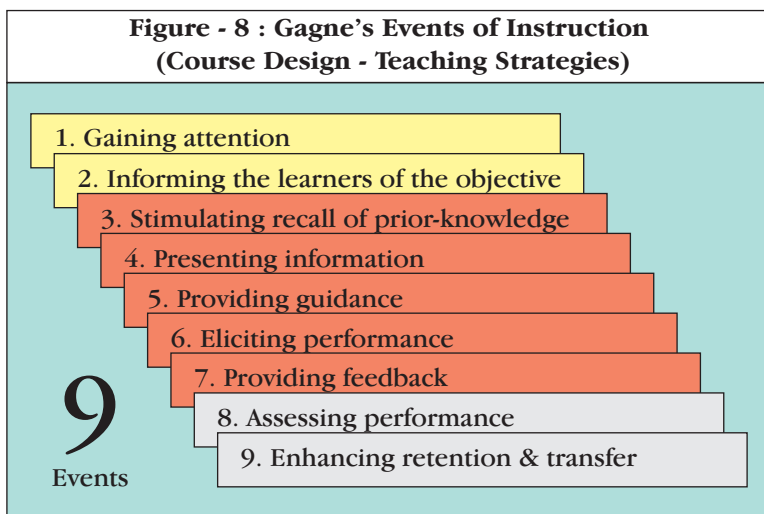
Scant wonder, then, that there is often a lack of concrete alignment between business and learning. Business leaders tend to believe that they cannot meaningfully contribute. As we will see, such belief is drastically misguided. The technical specialists in learning need concrete input and guidance from business leaders. Without it, it's not surprising to see a result like that shown in Figure 2.

From the Frying Pan to the Fire

Before moving on, let's take one more step down the path after the learning solution is scoped. As it turns out, there is another mental model that again interferes with solutions. This time, the model is one used by instructional designers.

In short, instructional designers typically want to provide an **easy step-by-step journey for learners**. This means additional waste.

Back in the 1960's, Robert Gagne identified nine "events" of instruction (Gagne, 1985). His notion was that when novices learn from instruction, they go through a repeatable journey. We can create better instruction by guiding novices through this journey. Each step of the journey calls for its own approach.

**Figure - 8 : Gagne's Events of Instruction
(Course Design - Teaching Strategies)**

1. Gaining attention
2. Informing the learners of the objective
3. Stimulating recall of prior-knowledge
4. Presenting information
5. Providing guidance
6. Eliciting performance
7. Providing feedback
8. Assessing performance
9. Enhancing retention & transfer

9
Events

When instructional designers create learning solutions, they find it easy to use models like this in unhelpful ways. Instructional designers usually want to make learning easy (which, by the way, it's often not). They take a model like this and try to create a complete journey for each thing they want to cover. The result is that training courses become very full. The first order effect is simply wasted time. Of course not every student needs every step. So, training courses become stuffed with material than learners don't actually require. The second order effect is that learners become disenchanted. This all feels like a lot of ground to cover to get to the nuggets. The third order effect is that courses become less effective. Because time is a precious resource, training time is limited. When courses take on too many objectives and then cover them using too broad a model, what happens is that the most critical elements do not get the dedicated focus they require. Almost always, those critical

elements are practice and feedback. By cutting back on those, instructional designers accidentally cut out what really matters most.

A few years back, the lead of design in my company reflected on how student time was allocated on average across the many, many course reviews he had done of client training courses. The figure below summarizes the results.

Figure - 9 : An Informal Assessment of How Training Time Is Allocated
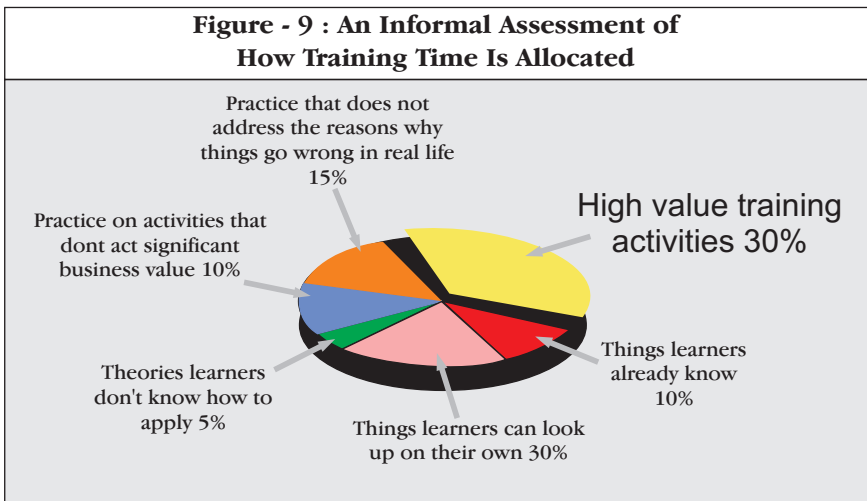
What the chart shows is that for many courses, roughly speaking, 70% of time is allocated to low-value activities while only 30% is allocated to high value activities.

To sum, the "Replicating Experts" mental model contains the two planks we have just explored :

● To determine what capabilities novices should develop, ask experts (after all, only they know what is in their heads).

- To develop those capabilities, provide novices with comprehensive learning journeys that comfortably guide them by the hand.

The Impact of the "Replicating Experts" Model on Total Cost of Ownership

To capture a complete picture of the costs of training, we consider what we call the "Total Cost of Ownership" of training.

Figure - 11 : The Total Cost of Ownership of Training

Direct Costs — 1X

Indirect Costs — ~2-4X

Quality Costs — ~10X+
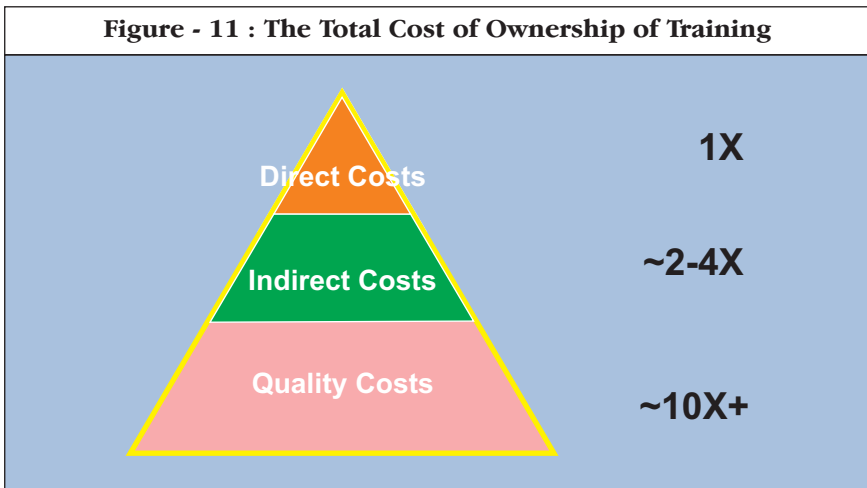
The Total Cost of Ownership contains three elements :

- The **direct cost** of developing or purchasing courseware, providing instructors, providing facilities and so on.

- The **indirect cost** to the organization of consuming training. Typically, this is primarily the lost productivity of participant time off the job. When businesses use "adjunct" staff from the business to instruct or coach during training, it also includes this time.

- The **cost of quality** which consists of ineffective training (the training does not achieve its objectives) and poorly scoped training (when something that is important to the business is not included).

What is interesting about these numbers is that direct costs represent, by far, the smallest portion of them.

As we saw earlier, when business leaders proceed from the "Replicating Experts" mental model, they limit themselves to managing efficiency not effectiveness. What that means is that they focus on managing the direct cost of training. However, that is only the tip of the iceberg. What is really important is **reducing the cost of quality**. The mental model prevents business leaders from actively participating in doing so.

Some Highlights from the Cognitive Science of How People Learn

> I hear, I forget;
> I see, I remember.
> I do, I understand.
> — Confucius

To adopt a better mental model, it is useful to explore how people actually learn new skills. Luckily, we do not need to explore very deeply. A quick summary will guide us towards a better mental model of how to develop proficiency.

In Figure 4, we described the notion of a "learning curve." Now, that figure shows a nicely smooth curve that grows over time while gradually flattening out. This is a helpful abstraction in many ways. However, this is learning when seen from a distance. However, simply accumulating hours does not mean that one necessarily accumulates useful experience. If I am a

bank teller and today all that I do is simply repeat just the same things I did yesterday in just the same way and nothing new happens, then I am not likely to be a better teller tomorrow.

To see what happens in learning, it's helpful to conceptually put the learning curve under a microscope.

**Figure - 12 :
The Learning Curve
Under a Microscope**
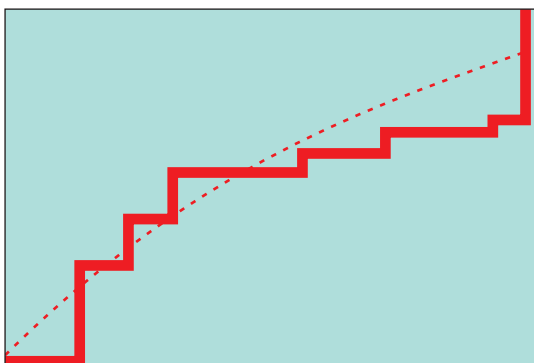
A polished granite block seems like a continuous smooth surface but really consists of a large number of small atoms. Similarly, the learning curve really is not a smooth curve at all. Rather, it really consists of a large number of specific and concrete learning episodes. Some of these represent large and important learnings and other represent smaller learnings. What are these learnings? For our hypothetical bank teller, they might include :

- I forgot to validate a customer's identity and divulged inappropriate information (an important learning).

- I didn't know the answer to a question about interest rates … but went and found it (a smaller learning).

- I use the wrong identifier in the account management screen … and realized that the system would take it at first

then give me an inexplicable error later (a smaller learning … but one that consumed a long time to learn).

- I failed to explain why I needed additional background information from a customer … but the customer happily gave it and explained to me why I probably needed it (a learning where something worked better than expected.)

Now, to see how learning a skill works, consider the common pattern across these episodes. The teller was trying to do something. She started with a goal. She then ran into a surprise along the way. She then paused, reflected, and learned. In short, the process is :

- Pursue a goal.
- Get surprised.
- Diagnose what is different about what actually happened from what you expected to happen and reflect on which of your expectations you should adjust.
- Continue onward,

In short, learning is the process of adjusting our mental models of the world based on surprises that show where they go wrong.

Note : We often talk about this in the context of failures that prevent us from achieving our goals. And, usually, surprises are failures that prevent us from achieving our goals. However, they can also be when something works unexpectedly better. The key characteristic is that something happened differently than we expected. In short, we all have mental models and in each case, the teller's mental model was inaccurate.[2]

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2. For more information, see Dynamic Memory by Roger Schank. (Schank, 1982)

A More Productive Mental Model – "Swatting Bugs"

We have seen that the "Replicating Experts" mental model blocks business leaders from having productive engagements with learning professionals. After all, business leaders know they have no special insight into what makes experts tick. As a result, business leaders lack confidence in their ability to drive and assess learning investments. And without productive engagement, learning professionals in fact are not able to target learning investments as well as they would like.

If to tackle the talent challenge, we need to improve how business and learning align and if the "Replicating Experts" mental model is a barrier to doing so, well then we need a better mental model.

A Point of Light

We have seen that surprises trigger learning. To help us down the path towards a better mental model, let's consider an approach to learning that is so effective I personally have found it not just surprising but downright shocking.

IKEA is a global retailer of "flatpack" furniture. This is furniture that comes in a flat box which one then assembles at home. IKEA operates in over 40 countries and sells over 12,000 products. They have over 500,000 visitors per year. In short, the business depends on build enough proficiency in about half a million customers to enable them to assemble one or more of thousands of different items. These customers speak dozens of different languages.

Does this business model seem an impossibility? How can one train so many different people to not only successfully take up

this challenge but to do so voluntarily? How much must the training system required to do so cost to run?

In fact, there is no training system. What IKEA offers instead is remarkably simple. Inside each flatpack furniture kit is a small wrench you will need to assemble it, some bolts and screws, and a funny looking black-and-white cartoon. The figure below shows an excerpt from one such cartoon.

Figure - 13 : Excerpt from an IKEA Assembly Guide
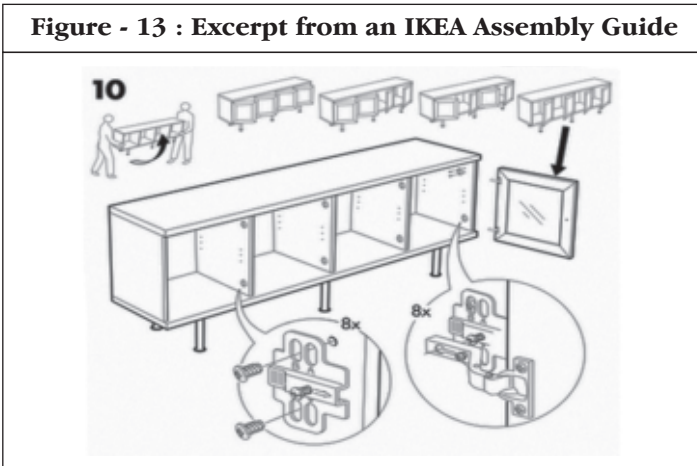
What IKEA has done here is remarkable. They have taken a complex procedure and created a simple guide that allows customers to succeed. They have taken what would end up with perhaps an hours-long training course in many organizations and condensed it to a cartoon. And they have done this so well that customers keep coming back and they keep growing? What is the secret?

It's simple : quality management. IKEA has worked with real people as they try to assemble those flatpack kits. They study where those people actually make mistakes. Then, they

separate the wheat from the chaff. They don't worry about every little mistake because many mistakes are easy for customers to repair. Take a piece off and put it back on the right way. Rather, IKEA focuses on the mistakes that really lead people down the wrong path. They then determine specifically which details to include in their drawings to warn people off of making those mistakes. And when a mistake is really damaging (because it would mean backing up many steps and would take a long time to remediate or because it might damage the furniture), IKEA reengineer the furniture itself to prevent the mistake (e.g., by putting connections slightly off center so that you physically cannot put the left leg on the right side).

> In short, what IKEA has done is take what presents itself as a learning problem and addressed it as a quality management problem.
>
> They have taken the goal of "swatting bugs" from the task of assembling flatpack furniture.

IKEA has tackled what seems an almost intractable proficiency issue with a remarkably inexpensive yet effective approach. This example drives to the heart of what we view as a better mental model. Rather than viewing learning as a way "replicate experts," it is more productive to view it as a way to "Swat Bugs" in a business process. In short, it is one tool in the overall quality improvement toolbox. Learning = "Swatting Bugs."

Shifting the Mental Model

Let's now consider what when a business leader adopts the mental model of "Swatting Bugs." The task of managing investments in learning which before seemed difficult-to-

manage and risky now becomes a known entity. Business leaders know how to manage for quality. So, by bringing this experience to bear, they naturally tend to manage learning investments for effectiveness as well as efficiency. In short, business leaders who adopt the "Swatting Bugs" mental model, naturally manage the whole iceberg and not just the tip.

To see how this works, let's consider learning from the point of view of quality management. The figure below represents a simple version of a quality management cycle (there are many variations on this, e.g., the OODA loop, PDCA, DMAIC, and so on).

Figure - 14 : A Simple Quality Management Cycle

When a business leader thinks of learning as quality management, what happens when a need for learning arises? Let's consider a simple example, one with which most of us have had direct experience: car salespeople. Imagine that we are training car salespeople to perform better. Under the old model, we might interview our best performing car salespeople, write down what they tell us that car salespeople

need to know, and create a long course from it. What happens under the new "Swatting Bugs" perspective?

Identify Goals

Under the "Swatting Bugs" perspective, the first question becomes "What is our specific goal … what counts as improved quality?"

Business leaders know that "quality" means a process meets expected performance. A quality issue is a gap between actual and expected results. More specifically, a gap is a difference between the actual and desired performance of some specific business process along some specific dimension. For car sales, that could be that the making a sale takes too many person-hours or does not produce a high enough rate of conversions or cannot be run at high enough volume or is too erratic in conversions or so on. Right from the start, when a business leader adopts the "Bug Swatting" perspective, it requires the business leader to ask a set of questions that simply did not come up under the "Replicating Experts" model : **What is the process that we want to improve and what specific business process measure about that process is the focus?** And only the business leader can provide the answers. Productive engagement has begun.

Now, this question seems straightforward but in my experience, when business leaders sponsor learning solutions, they typically do not define success in such a productive way. And even when they do, it's typically not in a way that helps practically scope the project. Because of the focus on replicating experts, most often success is defined in terms of customer satisfaction ("Did the participants feel like

they learned relevant material?"), cost ("Did it take 2 days or less?") and activity metrics ("Did we roll it out to everybody in under a month?"). These are helpful goals but they are not about the desired business result. The quality perspective helps business leaders to take control of the business results they seek from investments in learning.

When Tom Hilgart and I wrote The CEO's Talent Manifesto, we recognized that a major issue in talent development is how talent solutions are chartered. Too often, they either start with too vague a definition of results (e.g., "Increase revenue by 10%") or jump to too specific a statement (e.g., "Enable salespeople to explain product features"). In the book, we provide a step ladder that lays out the causal chain through which a talent solution drives business results. We urged talent professionals to focus on defining success in terms of business process measures.

Figure - 15 : The Ability to Execute Framework
(Cleary & Hilgart, 2013)

What I have seen over the past two years is that for some people (both business and talent professionals) this perspective seems natural and intuitive and for others, it seems like a foreign concept. However, when one first positions a learning initiative under the quality management perspective, the approach "clicks in" with the expectations most people naturally have about how to manage quality.

As we move forward with our investigation, let's assume that the business leader has the goal to improve the conversion rate of the in-dealership sales process.

Target Breakdowns

The next step under a "Swatting Bugs" perspective is to identify the specific breakdowns that prevent successful process performance and perform a root cause analysis upon them. Note, at this stage if we were to work under the "Replicating Experts" model, we would be asking experts what novices need to know and be able to do. We are now starting in a different place with what happens in actual practice. In particular, we have a specific lens: what goes wrong in actual practice. We have therefore already eliminated a major source of waste : we will not be including any items in our needs assessment that are not directly relevant to improving process performance.

The first output of this approach to needs assessment is a list of typical failures. The figure below shows examples from one such actual analysis that NIIT conducted (for a different sales process … this is for selling digital cameras in a department store).

Figure - 16 : Example Failure Points in an Example Real-Life Sales Process
Expressing personal distaste
Judging by appearance
Failing to get answer
Providing incorrect answer
Ignoring 2nd customer
Shifting attention from customers
Ignoring the customer
Using inappropriate terminology
Failing to ask for sale

Now, as a business leader, consider your level of comfort with targeting these failures in a learning solution compared to what you might hear from an expert (e.g., novices must "follow the sales process" and "address objections" and "anticipate customer desires" and so forth). Which are easier tasks for your learning team to tackle? Which are you more confident will produce results?One quite compelling feature of such lists is how very concrete they are.

Prioritize Breakdowns

Another central principle in quality management is that while any process has many sources of variation and failure, not all sources are equal. If one wants to make wise investments in quality, one focuses hard on the few most important quality issues rather than trying to do a little work on many issues. In other words, one "swats bugs" just as IKEA has. Pick your targets and hit them hard.

The same holds when bringing the "Swatting Bugs" mental model to learning solutions. By prioritizing the mistakes identified, one can create less expensive solutions that

produce significant business impact. Think back to the IKEA example.

At NIIT, we have developed a specific approach to doing this for talent solutions. We call the approach "Critical Mistake Analysis". What we have come to learn is that we have simply reinvented an approach that is common in the quality management field in the learning field, namely, Failure Mode and Effects Analysis (Forrest, 2010).

The figure below shows an actual Critical Mistake Analysis from the digital camera project mentioned above.

Figure - 17 : An Example Critical Mistake Analysis					
	Value Drivers			Projected Value	
Critical Mistake	Frequency (K Per Year)	Cost Per Occurrence ($ Per Time)	Ability to Reduce (% Reduction)	Total ($K Per Year)	Percentage of Total (%)
Provide wrong answer to a question	859	1.54	67%	880	22%
Suggest film camera if no computer	740	1.20	67%	590	14%
Not reserving an Out Of Stock item	714	1.58	33%	376	9%
Let customer handle non-functional camera	939	1.16	33%	363	9%
Ignore a browsing customer	793	1.16	33%	307	8%
Criticize the merchandise	555	1.62	33%	299	7%
Show only one digital camera	740	1.09	33%	268	7%
Show a camera before diagnosing need	873	0.89	33%	258	6%
Greet with a closed question	780	0.67	33%	175	4%
Ignore one customer while handling another	767	1.26	17%	161	4%
Not suggesting add-ons	886	0.26	67%	154	4%
Bother a customer who wants to browse	357	0.84	33%	100	2%
Ask about add-ons instead of suggesting	1,018	0.20	33%	67	2%
Leave the department for over 30 seconds	357	0.81	17%	48	1%
Hand off customer with a question	952	0.20	17%	31	1%
Total	11,331			4,079	100%

The notion behind the analysis is straightforward : calculate the "cost of quality" for each mistake and then focus effort on the highest value mistakes. The analysis considers how often the mistake happens, how much it costs when it happens, and how much we can reduce the mistake through a learning

solution. In short, the calculation provides a projection, on a mistake-by-mistake level, of the value that a learning solution can be expected to generate.

An important feature of such dockets of critical mistakes is how value is spread across mistakes. We find that this is a Pareto phenomenon, that is, 80% of the value typically comes from perhaps 20% of the mistakes. The philosophy of "pick the big targets and hit them hard" shines through.

Now, as a business leader, how comfortable will you be with such a docket as specifying the impact from a learning investment? What we find is that such dockets lead to more productive and contentful conversations between the business leader and the talent leader. For example, the time required for training is often a point of concern for business leaders. One can imagine (and we have actually experienced) conversations like these.

Discussion of Training Time Under …	
The "Replicate Experts" Mental Model	**The "Swat Bugs" Mental Model**
Business : We must ensure that the training takes no more than half a day.	**Business :** We must ensure that the training takes no more than half a day.
Talent : You can see there is much ground to cover. I'm not sure we can cover it effectively in that time.	**Talent :** Here is the list of critical mistakes. We were planning to propose a session that would take about a day and would cover this part from the top of the list.
Business : Well, it all seems important. Do the best you can. Maybe you cover them quickly. Maybe introduce the topics and people will figure out how to apply them in the field.	**Business :** What if we cut it back to half a day?
	Talent : Roughly, we would limit our scope to the top half of those mistakes. Looking at the numbers, that means that we would cover perhaps 70% of the value we were planning to propose.
	Business : I see. Let me think about this.

The critical mistake docket provides business leaders with a much more concrete tool to manage the expected outcomes and the scope of the solutions they "buy" from talent.

Implement the Minimal Solution

As indicated by Figure 8 above, talent professionals who follow the "Replicate Experts" model tend to create comprehensive learning journeys that take the time and effort to walk participants through a step-by-step learning journey. When one views this from the perspective of "Swatting Bugs", the thought that leaps out in response to such an approach is "Waste!"

Another core tool of quality management is process mapping. Process mapping focuses on laying out the steps in a process and separating those that add value to those that do not. The underlying notion, naturally, is to modify processes to eliminate or reduce steps that do not add value. "Comprehensive" is not the goal. "Desired output efficiently" is. In short, one should avoid providing a comprehensive journey when one can instead eliminate steps and more rapidly achieve the desired outcome.

The example of IKEA given above shows the extreme conclusion of this chain of thought where, in fact, the whole of the training process has been eliminated in favor of simply letting consumers assemble their furniture with the help of a very simple (albeit exquisitely crafted) job aid.

Now, this is not to say that the goal should be to eliminate training. One would not want to fly in a plane piloted by a novice pilot with the help of a job aid regardless of how good

that job aid is. Rather, it is simply to say that training should focus on the specific steps required to enable performance. In most cases, what that means is enabling learners to practice in a safe environment and providing them feedback.

Figure - 18 : Example Guided Simulation

In short, in most cases, that means providing some form of guided simulation. What the figure shows is really only an implementation using modern technology of the age-old approach of mentored apprenticeship.

Now, from the business leader's perspective, the definition of what constitutes a minimal solution will remain the purview of the technical specialist, i.e., the talent professional. This is just as the selection of an application framework for an IT project

would remain the purview of a technical IT specialist. However, whereas designing the activity may be a technical role, the business leader who employs the "Bug Swatter" mental model brings two simple but useful questions to the approach : 1) To what extent did it eliminate the mistakes we chartered it to remediate?; and 2) How much does it cost (considering both direct and indirect costs)? In short, the business leader is fully engaged with the business inputs and outputs of the solution but no longer concerned with the activity itself.

Stepping Back

We have now come full journey. As the PWC CEO Survey shows, talent has become pivotal in many industries. In the banking industry here, it is critical challenge.

What causes talent to be a challenge is not simply demographics and growth. Banks will need other inputs as well as talent. However, banking CEOs do not see facilities as a critical challenge but rather simply another operational issue to be managed. What makes talent a critical challenge is that today business leaders lack confidence in their ability to manage talent. They are unclear what investments to make, how to make them, and, when they invest, just what returns to expect and whether they receive them.

What I have tried to convey is that what lies at the root of this lack of confidence is the mental model that many business leaders have of how talent investments work, that is, how we grow proficiency. The prevailing model, "Replicating Experts", leads business leaders to adopt a passive stance in which they

assume that they are unable to materially affect the **effectiveness** of their investments. So, they manage what they can, which to manage **efficiency**. Since the Total Cost of Ownership of talent solutions primarily lies in the cost of poor quality, this means that most business leaders find themselves only able to manage the tip of the iceberg of their investments.

In contrast, when business leaders adopt the "Bug Swatter" mental model of talent development and see it as simply one type of quality improvement tool, they bring to the table a set of perspectives that allow them to manage both **effectiveness** and **efficiency**. They realize that the onus is on them to start at the start and clarify not only the business process to be improved but also what specific measure is important for them as they seek to execute their strategies. They understand that while "expertise" may be difficult to pin down, what does rise to the surface quite visibly are breakdowns and by identifying and prioritizing breakdowns, talent specialists can provide quite specific and detailed charters for how talent solutions will achieve the desired business process results. And they learn what questions to ask of talent professionals to help evaluate whether their solutions perform as needed and where they need to be refined.

What I hope to have conveyed is that by adopting this "Bug Swatter" mental model, the business leaders here can hope to move the needle from having talent be considered a critical challenge to an approachable problem that can be addressed through clearly targeted investments that achieve defined results.

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