The L&D value gap and how to close it

Technology, data and the internet are accomplishing truly amazing things. Software can analyse an X-ray and diagnose early-stage breast cancer better than oncologists and radiologists; self-driving cars will soon be a commercially viable product; retailers provide just-in-time electronic reminders on our smartphones to buy toilet paper and other necessary products. Well, the reminders may not be truly *amazing*, but they are certainly technology-enabled, useful for the shopper and profitable for the retailer – capabilities that provide value to consumers and providers.

Data is at the heart of these innovations. Cancer screening software is trained by scanning thousands of mammograms. Self-driving cars constantly scan the environment and process data about the road, control features, other cars, pedestrians and road hazards. I'm not sure how the retailers know when I'm out of paper.

In the business world, Human Resources (HR) is not usually the first department to benefit from valuable technology. As part of HR, Learning and Development (L&D) is also late to the game. With a few exceptions, it is nearly impossible to push a button to answer the question 'Does training really work?', whereas Finance can answer whether the business is performing in line with forecasts and Operations can report whether products are being produced within tolerances (quality) and meeting target numbers (quantity).

Despite this challenge, L&D has been evolving, and the learning industry has benefited from some valuable technologies like learning management systems, e-learning platforms and video tools to support virtual instruction. Data is embedded within many of these systems. Learning management systems (even

learning record stores) store courses and track which programmes have been completed by which learners. Activity information can be summarized to show learning hours per person and the amount of e-learning consumed. This is important information, but it is only one piece of a bigger data puzzle. Business leaders want L&D to provide leading indicators that show the effectiveness of training. This information typically comes from post-course evaluations (eg Level 1s). Additionally, business leaders want to know if training is influencing business measures (eg sales, revenue, customer satisfaction, quality, productivity, etc). Like learning activity, this information is stored in business systems.

Learning analytics is gaining traction as a viable solution in this data-rich, information-poor environment. Why? Because business leaders need to know if their investment in learning is working. They want to know if they should double-down or seek other interventions to meet business goals. Learning leaders also have information needs. In addition to understanding the effectiveness of training, they need to know which courses need improvement so they can allocate resources to revise and improve them. Minimally, they need effectiveness information (Level 1–ROI) and that is covered in Part One of this book. Ideally, they will also capture efficiency, effectiveness and outcomes data to create a complete picture of the training's impact (covered in Part Three).

Measurement is a journey with four specific stages: 1) know where you are (eg define your current state); 2) have a destination and timeframe in mind; 3) implement a plan to navigate from here to there; and 4) adjust the planned courses depending on the circumstances. The first Part of this book covers Stage 1, and it will help you figure out where your organization is on the map. It will help you answer the questions: Do you have the right leadership and governance in place? Are your tools and processes standardized? Are you leveraging technology to make the processes scalable?

How well (or poorly) you answer these questions defines how large the gap is between you and a successful measurement strategy.

Practically speaking, Chapter 1 focuses on defining the value gap and why we need learning analytics. The second stage of a journey is to have a destination in mind, and Chapters 2 and 3 will help create a vision for a possible destination for your organization. Chapter 2 defines learning analytics and how it can be used. Chapter 3 introduces the Talent Development Value Framework and how it provides a programmatic playbook for many of the challenges that L&D organizations face when implementing sustainable measurement practices.

By the end of Part One it should be clear that measurement is a journey, and there are models to help you map and navigate the landscape. Additionally, learning analytics, along with some sound business principles, is a useful guide for informing stakeholders, building trust and sure-footedly closing the information gap between L&D and the business.

01

The rise of learning analytics

In 2019 the world wide web celebrated its 30th birthday.[1] For 30 years the web has connected the world, shared information and changed economies and cultures. Where were you in 1989? What were you doing?

The things you are doing today such as surfing the net on your phone, booking a hotel via Airbnb, or getting an Uber from the airport, are not the things you were doing then. Technology has changed our world. It continues to leap forward in ways that most of us cannot foresee. If the internet is the highway that connects computers around the world and the world wide web is our on-ramp, then we (our clicking actions) are the cars driving on it at the speed of information.

Welcome to the Digital Age, also known as the Data Age or the Information Age. Many innovations brought us to this world we know today like the vacuum tube, the transistor, the silicon wafer, programming languages, algorithms and plasma displays among many other things. This new age shifted away from the Industrial Age – a time last century when manufacturing drove the economy and culture. While manufacturing has declined, it has not disappeared. In fact, companies that manufacture hardware and software are thriving in the Information Age. The shift is certainly economic, but the average person does not feel it like an economist studying macrotrends. The shift is felt culturally in the way we work and socialize and recreate.

Michelle Evans provides a convincing argument that information is the new currency and that information is vast.[2] Simple clicks on the internet describe what people are reading, watching, communicating, creating, posting, buying, selling and in general doing. Those actions have value to marketers who want access to a community of buyers. Those actions are valuable to a guru who wants to build a following, or a sales professional who wants to sell a new product to someone who bought a gateway product.

Knowledge itself has value, but it has its limits. Experts hoard knowledge and have mastered a domain of content and skills. In many ways, knowledge is less valuable now because of Google, which can provide facts on almost any topic. Skills, wisdom and insight on the other hand are still valuable. The value of knowledge is transient and may be replaced by someone or something that facilitates connections. Mavens are valuable because they have deep knowledge of a domain. Connectors are valuable, not because they know the domain, but because they know many people who know many domains.[3] Research from Gartner has found that the most effective managers are not the ones who micro-manage; they are not mavens. They are the ones who connect their direct reports to others who can help them do their jobs.[4]

Amid the technological changes flooding the market, a watershed moment occurred when *Harvard Business Review* dedicated an entire edition to big data in October 2013.[5] Through various articles, authors defined big data, shared how it was gathered and how it would create competitive advantage for organizations. During the ensuing 18–24 months, technology vendors created new big data products and services to capture the market. Time eventually highlighted that very few companies actually played in the big data space. The real players included Walmart and its massive volumes of daily global in-store transactions; telecom companies that host calls and internet traffic; Amazon's online transactions; Netflix, Hulu, Apple Music and other streaming services that transfer content across the internet; Google responding to millions of enquiries per second; Facebook and LinkedIn sharing information across personal and professional networks; Salesforce.com hosting a platform for tracking and reporting sales leads from tens of thousands of companies and untold users around the world. The big data focus brought attention to the need for analytics in general, which eventually rolled to HR analytics and learning analytics.

While many companies realized that they did not have truly big data, two things remained important – essential – for decision-making with data: security and quality. In the past few years, we have seen massive data breaches including Yahoo (3 billion people in 2013), Marriott/Starwood Hotels (500 million in 2018) and Equifax (146 million in 2017).[6] When customer information is lost to breaches, trust is lost and business suffers as customers leave for competitors, or worse, file lawsuits.

Quality is essential for mining the data for insights. If the inputs are wrong, if information is incomplete or if the sources are spurious, the analysis

conducted and the conclusions drawn could be wildly off-base or simply wrong. In such cases, big data is bad data and is no more valuable than fool's gold.

Because business leaders understand that value is locked inside their data, they are pushing their business units to analyse what is available and provide insights. Marketing has changed substantially in the past decade. Marketers not so long ago would say tongue-in-cheek: 'We know that 50 per cent of advertising works. We just don't know which 50 per cent.' Today, because of their ability to post content, track views, clicks, time on page, bounce rates and desired outcomes (eg online purchases), they are much better equipped to say: 'We know which 5 per cent works, and we going to reinvest to drive more sales with our advertising dollars. Expect an uplift of 2–4 per cent this quarter.'

The term Internet of Things (IoT) is a label used to describe the wide variety of technology innovations that are now available and shape our daily lives. Features include things like onboard diagnostic tools in vehicles that monitor engine performance and phone apps that turn on and off lights, security systems, HVACs and other household items. Similar tools allow businesses to monitor and manage operations such as power consumed, output produced, efficiency in manufacturing, scrap, pressure, temperature and other critical measures.

As you might expect, IoT advances and business advances also find their way into HR and learning and development (L&D). New systems are coming to market, but new tech is not the only thing changing the way employees learn. Corporate learning is changing in response to two major forces: new technology systems and the learners themselves. New systems include learning records stores, learner experience platforms and content curation systems. Learners are forcing changes because they are digital natives and readily seek information from digital tools. As we will see later, they are impatient, networked and empowered, meaning they learn in the workflow from content resources. When they can't find what they need, they reach out to others.

In the analytics space, technology continues to get better with iterations. Among the dominant players, Microsoft continues to upgrade Excel and Power BI is gaining traction as a useful analytics and graphing tool. Since IBM bought the Statistical Package for Social Sciences (SPSS), they continue to add new features to make complex inferential analysis easier; likewise, SAS, a major competitor to SPSS, continues to innovate. Then there are the

upstarts who are gaining traction because of cool and capable products. Tableau has a legion of devotees who flock to conferences to learn how to leverage this tool with features that facilitate data cleaning, group comparisons and crisp visual displays. R, the analytics software, continues to gain users because it is free and readily integrates with other coding languages to accomplish real-time analysis and machine learning as data flows in.

Why is all of this important?

The simple answer is this: HR can (and should) help business leaders achieve business goals. The C-suite should expect HR to provide insights about the people (individuals, groups and people-related factors) that make the business better. The special business case where a Fortune 500 company created a unique, value-creating HR function should no longer be special. Now, even small to medium-sized businesses can improve HR operations to drive business success because systems and tools are available to support analytics.

HR is a functional part of most businesses, but it could be a more influential driver of business success. In an information-based, talent-driven economy, the war for talent becomes increasingly important. The companies with the best people will have competitive advantage. HR is critical to identifying, hiring, engaging, developing and retaining that talent.

For decades HR has received a pass from business leaders with regards to measurement. HR claimed that people could not be measured like widgets and that the number of talented graduates capable of measuring people was inadequate. HR can no longer make either claim. University programmes around the world are graduating students with expertise in measurement with degrees in human factors, industrial/organizational psychology, sociology, behavioural assessment, cognitive psychology and educational measurement. The theory and the practice of measurement are mature. There are myriad ways to measure people, and the talent to measure talent is available. Now HR has to take the same responsibility that other business units embrace and learn how to measure, monitor and manage itself (and report to the C-suite) as well as measure the workforce to help achieve business goals.

By all merits, now is a great time to be managing talent and working in human resources. The convergence of three factors – data availability, technology changing the way talent analytics work gets done, and novel insights into employee behaviour – makes the workforce a rich area for further analysis and within bounds to be optimized alongside other business inputs.

Standards are coming

The pressure to improve metrics reporting and analytics is not just coming from internal sources like the C-suite. Investors recognize that human capital has become a differentiator and want more visibility into how companies invest in their people. New standards for reporting key measures related to the HR function have been released which will lead to more consistent measurement and analytics to serve both of these audiences.

At the time of writing this book, the International Organization for Standardization (ISO) Technical Committee 260 had published 12 ISO standards and has an additional 14 under development.[7] The committee's charter is to establish international standards related to a comprehensive set of human capital reporting standards and metrics definitions related to core areas of HR. ISO standards provide a consistent framework in a variety of disciplines, such as quality (ISO 9000), information security (ISO 27001), and safety (ISO 45001). When organizations adopt ISO standards, it shows that they are committed to excellence in a specific discipline. For example, being certified as 'ISO 9000 compliant' is evidence that a supplier has implemented specific quality standards that should, in theory, produce more consistent and higher quality than competitors that are not ISO 9000 compliant.

One standard that is particularly notable to HR is ISO 30414, Human Resource Management – Guidelines for Internal and External Human Capital Reporting. The purpose of this standard is 'To consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce.'[8] The standard outlines 23 metrics to be reported externally and another 36 to be reported internally. The external measures are grouped into nine categories:[9]

- ethics – the number and type of employee grievances filed; number and type of concluded disciplinary actions; percentage of employees who have completed training on compliance and ethics;
- costs – the total workforce costs;
- workforce diversity – with respect to age, gender, disability and 'other indicators of diversity'; and diversity of leadership team;
- leadership – 'leadership trust', to be determined by employee surveys;
- organizational safety, health and well-being – lost time for injury; number of occupational accidents; number of people killed during work;

- productivity – EBIT/revenue/turnover/profit per employee; human capital ROI, or the ratio of income or revenue to human capital;
- recruitment, mobility and turnover – average time to fill vacant positions; average time to fill critical business positions; percentage of positions filled internally; percentage of critical business positions filled internally; turnover rate;
- skills and capabilities – total development and training costs;
- workforce availability – number of employees; full-time equivalents.

Adoption of the new standards will likely be voluntary in most countries. However, it's likely that many publicly traded companies will consider adopting the standards in order to demonstrate corporate citizenship and differentiate themselves from competitors in the eyes of investors. In 2017 the US Securities and Exchange Commission agreed to review a petition to require public companies to disclose more information about their human capital management.[10] The petition was submitted by the Human Capital Management Coalition, which represents over 26 large institutional investors. These investors want additional insight into how companies are managing their people, because they expect that better people management is a leading indicator of company performance.

The bottom line is that investors are getting more direct about demanding insight into how companies manage their human capital. Now international standards exist to allow such reporting in a consistent manner from company to company. The first step toward compliance will be simply gathering the numbers to report. The next step will be active management of the inputs that influence each reported metric. Then investor analysts will begin comparing how effective different companies are at attracting, developing and retaining their talent. HR analytics will play a central role in these activities.

Data availability

Without question, organizations are investing in data as a source of information. Leaders understand the value proposition that talent transforms the business and talent leads to competitive advantage. As such, they want a more precise understanding of their talent that has already been hired and will be hired in the near future. Not surprisingly, CEOs and boards today are focused on the new opportunities talent creates. They know that talent matters. As one example of the link between talent and organizational

performance, a study across 203 businesses showed that organizations with strong leadership benches have doubled their profit and revenue growth compared to those with weak benches.[11] Sixty per cent of top-performing companies, as measured against a peer benchmark across a three-year period, report that their boards have a strong understanding of talent issues, as opposed to just 30 per cent of bottom-performing companies. Not surprisingly, given the tie to business results, CEOs want to know more about the talent in their organizations.

PricewaterhouseCoopers' (PwC) *15th Annual Global CEO Survey* showed nearly 100 per cent of CEOs report that the following talent issues are important: staff productivity, employees' views and needs, labour costs, assessments of internal advancement, costs of employee turnover and overall ROI on human capital.[12] However, the average number of CEOs who believe the information they receive in these areas is comprehensive is just 25 per cent. Fundamentally, the data that organizations have today on human capital is not meeting leaders' needs. In a more recent publication, PwC's *22nd Annual Global CEO Survey*, results show that CEOs plan to:

> confront the cracks in their own capabilities, especially the information and skills gaps… Organizations struggle to corral data into useable and actionable intelligence… One of the more striking findings in this year's survey is the fact that the 'information gap' – the gap between the data CEOs need and what they get – has not closed in the 10 years since we last asked them these questions.[13]

Changing the way talent analytics work gets done

HR departments the world over are increasing their HR analytics capabilities. In part this is a reaction to the distrust CEOs maintain regarding the quality and comprehensiveness of HR data. In a 2013 HR analytics survey, a full 95 per cent of senior HR leaders said that they would increase investments in HR data and analytics in the following two years.[14] Interestingly, the early results from these investments are disappointing. In 2013, only 15 per cent of senior business leaders agreed with the statement 'HR analytics has led me to change a business decision in the past year', and only 8 per cent of HR leaders said they believed they were getting significant returns on analytics investments.[15,16] As one HR vice president in a mining company said: 'There is a lot of data out there but not a lot of information.'[17] Business leaders and HR executives are both asking: How can we get more from our HR analytics investments?

The demand for better, more precise talent analytics is growing, and the first stop for leaders is the vendors who supply systems for managing talent. Vendors continue to improve the features and benefits of their systems, yet HR leaders are frustrated by four common characteristics of most data-driven HR and talent solutions:

1   **Lack of scientific foundation:** In many cases, talent management solutions are not proven to drive business outcomes or even improvements in the metrics that the business is looking for.

2   **Lack of specificity:** Most talent management solutions are generic, off-the-shelf, one-size-fits-all solutions, failing to take into account the context in which the challenge is being felt, whether that be business context, financial context or resource and organizational capability.

3   **Lack of actionability:** Most talent data is not sufficiently prescriptive as to recommended action steps, providing just data alone with little real insight.

4   **Lack of innovation:** Many talent management solutions are not innovative; firms and individuals must work extensively to ensure the solutions apply to the modern work life and many of these solutions have been rolled out exactly the same way for hundreds of other organizations and their leaders.

The business models from many talent management providers do not allow talent leaders to correct for these inefficiencies. Organizational inertia (eg 'we've always done it this way') seems to be a common driver for lacklustre innovation. Margin requirements and scalable opportunities mean that technical execution is paramount, and because these organizations lack the patience to reinvent, they continue to use HR interventions like stale talent programmes that they have used for decades. Sadly, these old techniques are insufficient to achieve business goals now and will grow more obsolete within the next five years.

The challenge of creating meaningful talent analytics is amplified by the reality that, despite many factors supporting a new potential impact for HR, the modern work environment also poses significant challenges as HR tries to get the job done. Walking the increasingly virtual halls of organizations now, compared to a decade ago, employees and managers experience fundamentally new dynamics. The workforce has globalized. Even in small organizations, parts of work – whether internally or externally managed – invariably happen

in locations well outside the headquarters' city and often the headquarters' country. The workforce is more diverse than ever: millennials now comprise more than 34 per cent of the workforce and people of diverse backgrounds are critical drivers of success.[18] Multigenerational trends have created urgent needs for changes in strategy and focus across many HR processes. For example, the knowledge transfer from retiring workers is essential to prevent critical information walking out the door. Additionally, multinational corporations are shifting from expat-centric management to local talent investments. The way work happens has changed as well, making management of these new dynamics more difficult. In the new work environment, managers spend significantly less time directly with their teams; spans of control have doubled, and most managers manage staff in locations other than where they reside, further reducing manager intimacy with team and individual work.

This new work environment is one in which performance at all levels depends on the ability to capture the value of information and resources outside one's traditional domain. Benchmarks revealed that leaders who work as 'enterprise leaders', working with and through others, have double the impact on the business than leaders who do not.[19] More and more this is an area where companies are assessing leaders' competencies and driving development. This network-based approach to learning and performance is key to enabling an organization to leverage its collective people assets. These first two changes (workforce diversity and work environment) are deeply affected by talent shortages and emerging skill scarcities, especially in areas like STEM and cross-functional roles, creating urgency for HR to evolve its insight into current and future labour markets.

Lastly, HR is challenged by new demands coming from business leaders and managers. Managers are more involved than ever in talent decisions, feeling even more urgency around the criticality of talent to their business outcomes. This means HR is increasingly called upon to provide better data and reporting, especially as other functions have evolved their reporting capability. The traditional HR reports, which offer a retrospective on process and activities without linkages to business metrics and priorities, are seen as woefully outdated. 'Why can't HR analytics look more like sales analytics or operations analytics?' is a constant refrain. As one senior vice president in a large manufacturing company put it: 'When we make our finance decisions, we use data and spreadsheets. When we make decisions about our most important asset, our people, we don't have the same tools.'[20]
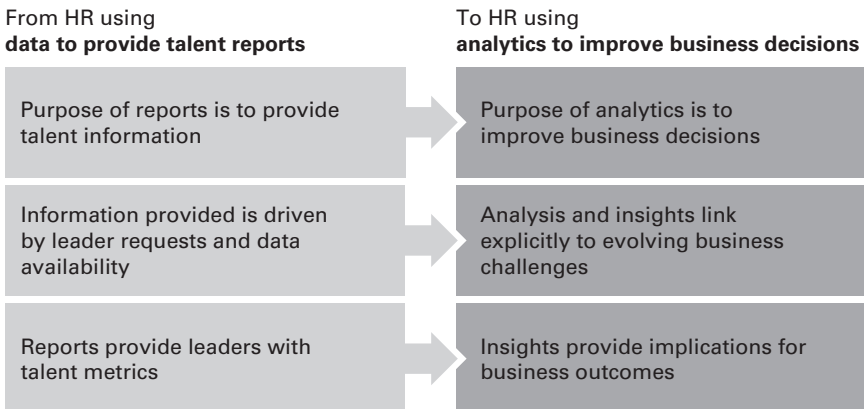
Providing unique insight into employee behaviour

HR analytics will continue to gain strategic importance among business leaders. What the business shares with human resources is a vision for improved analytics insights about people. But not just any insights. Business leaders are calling upon HR to move from reporting to analytics; from using data to provide talent reports to using analytics to improve business decisions. The transitions that comprise the shift are covered in Figure 1.1.[21]

Gartner defines 'talent analytics' as the 'discovery and communication of meaningful patterns in talent data'. Let's dig into a few important terms in this definition:

1 Discovery – key to analytics is the pursuit of new insight or understanding previously unknown. Data collection for the sole purpose of confirming assumptions is not analytics.

2 Communication – just as the tree falling in the forest unheard may not exist, analyses that are not understood by a target audience do not have impact. Communication is critical to seeing analytics take root in driving business outcomes.

3 Meaningful patterns – analytics must produce patterns that are meaningful to the business, addressing important questions upon which action depends.

4 Talent data – as you will see throughout this book, there are many sources of data that will be relevant to understanding the larger talent capabilities in the organization. It will be critical for all leaders to prioritize which data is most important to the business questions at hand and ensure high-quality

FIGURE 1.1 Transitioning from reports to analytics for HR

From HR using
data to provide talent reports

To HR using
analytics to improve business decisions

From HR using data to provide talent reports	To HR using analytics to improve business decisions
Purpose of reports is to provide talent information	Purpose of analytics is to improve business decisions
Information provided is driven by leader requests and data availability	Analysis and insights link explicitly to evolving business challenges
Reports provide leaders with talent metrics	Insights provide implications for business outcomes

data in those areas. It is not necessary to have extensive data collection systems in place to do effective analytics – what matters most to effective analytics is the quality not the quantity of data against the question to be answered.

In this context, high-quality data enables talent analytics to be business-led and actionable. As we will discuss further in Chapter 13, research on talent analytics shows that the businesses that value and utilize analytics are characterized not by sophisticated data/information systems, nor by the sophistication in statistical approaches. Rather, analytics that are used and valued are distinguished by: 1) the degree to which the workforce analytics prioritize talent areas most important to the business by engaging with key stakeholders to identify where to apply analytics; and 2) the degree to which the workforce analytics utilize a variety of techniques that inform business decisions and provide actionable guidance. In short, business alignment and actionable guidance trump sophistication when it comes to driving value through talent analytics.

Yet, to attain these hallmarks of successful analytics, most organizations face a steep climb. Only 17 per cent of business leaders surveyed report that they believe HR analytics focuses on the right business outcomes and only 18 per cent trust the data they receive from HR.[22] HR needs a way to close the gap on the 3Cs:

- criticality of the metrics measured;
- capability of HR staff doing and delivering the analysis;
- credibility of HR data as a business-driving tool.

Chapter 13 digs deeper into this issue and provides case study examples. Fewer than 25 per cent of business leaders surveyed said they use HR data to source talent, improve employee performance, select high potentials, design the organization or manage succession.[23] As many in HR pursue additional resources to support evolving talent priorities, the function struggles to demonstrate its relevance and ongoing impact on the business.

Learning analytics rises

The origins of 'learning analytics' are soundly rooted in training evaluation and the models developed by Don Kirkpatrick (Four Levels of Evaluation) and Jack Phillips (ROI Methodology). More information about evaluation

models is provided briefly in Chapter 2. For now, learning analytics strives to demonstrate that training has an influence on outcomes that are much more important than satisfaction; the intent is to connect training events to important measures such as application of learning, performance improvement and achievement of business goals. Learning analytics includes the use of technology tools to gather, analyse and report information so that multiple stakeholders can gain insights and take action on the results. Learning analytics is not constrained by evaluation models and actively incorporates analytics principles like logic modelling, data visualization and inferential statistics to provide insights. (See Chapter 2 for a complete definition).

Perhaps the HR domain in which the challenge to demonstrate impact is clearest is in the learning function where L&D leaders are feeling the heat from stakeholders. Some 64 per cent of CEOs cite 'building a skilled workforce' as a top priority, and 77 per cent of heads of L&D report an increase in demands from the business to demonstrate business impact.[24] Unfortunately, the current report card on the learning function is not encouraging. Only 33 per cent of business leaders think that the L&D function impacts business outcomes, and fewer consider the function to be relevant or timely.[25] On the positive side, business leaders do feel compelled to take ownership: 67 per cent of business leaders report they are held more accountable for providing talent development opportunities to their teams.[26]

Demand for insights from business leaders is the main driver of learning analytics. They want to know whether their investments in learning and development are building competencies among the workforce that will enable the business to achieve business goals. As analytic capabilities advance in other areas of the business and other business unit leaders provide insights about operations, growth and risk, the C-suite often asks: 'Why can't L&D provide similar information?'

L&D professionals also contribute to the demand for learning analytics. They want to answer the questions from business leaders as well as gain insights about the quality of the products they develop. Learning managers need to know whether training programmes are working. They also need insight about which programmes are not successful and how they can be improved. The best L&D units are measuring, monitoring and managing key performance indicators (KPIs) to continuously improve the products and services that help achieve business goals.

Coincident with this rising need is the availability of systems and tools for analytics. Some technologies are getting better in the analytics space such as SPSS, SAS, R and Excel BI. All of these have both descriptive and

inferential statistical capabilities, and as the demand for analytics increases, stakeholders will not be satisfied with simple descriptive analysis, but will want insights provided by examining and testing for relationships and group differences. Other tools are relatively new to the market including Tableau, learning record stores (and similar xAPI-based tools), machine learning and natural language processing, virtual reality (VR) tools and others.

Learners are also contributing to the need for learning analytics. Organizations of all types are reporting that learning itself has evolved in both how much is learned and how it is learned. With the changing work environment and the constant availability of information and knowledge at their fingertips, employees are seeking information much more frequently and through many more channels. As you see in Table 1.1, these new approaches are changing employees' expectations for learning.[27] Measurement is essential here. Unless L&D measures and monitors the changing nature of learning, how will learning leaders know what to adjust to meet learner's demands?

A 2014 benchmark revealed employees spending an average of 39 per cent of their time in any given month learning.[28] Unfortunately, learning is not always productive. When performance gains are mapped against the amount of time spent learning, employees are shown to be learning past the point of performance improvement, with potentially 11 per cent of employee time wasted on learning that does not result in better performance (Figure 1.2). That lost time comes at a cost of millions of dollars.[29]

It is not unusual for the largest companies to provide thousands of development programmes across their workforce. Even small organizations can be saturated by internal and external development opportunities. Research indicates that overall learning activity in the organization has increased: 64 per cent more organizations are participating in more formal learning than two years ago,[30] and the percentage of employees actively learning from peers rose from 51 per cent to 69 per cent from 2012 to 2014.[31, 32]

TABLE 1.1 Key trends driving changes in expectations

57% of employees expect learning to be more 'just in time' than three years ago.	
Only 37% of employees expect the organization to actively drive their development.	
Only 21% of employees expect most of their learning to happen in a classroom.	

FIGURE 1.2 Percentage of employee work time spent learning skills and processing
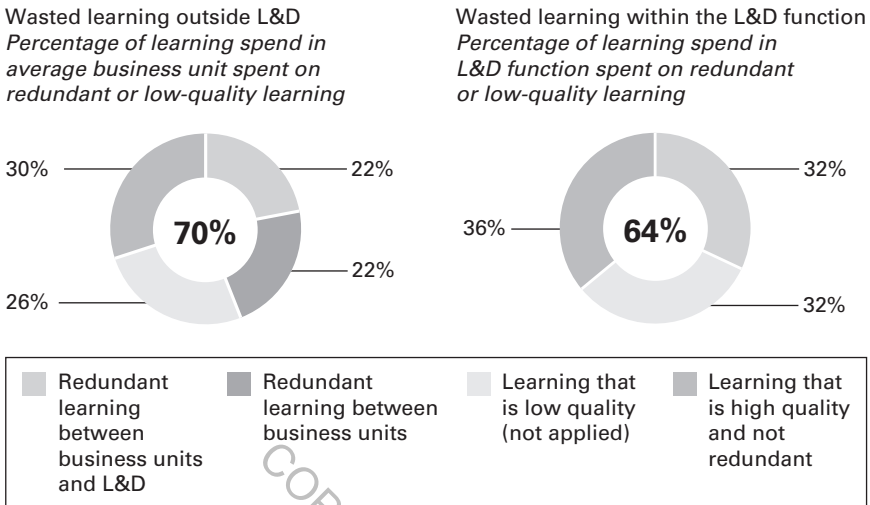information

Time spent learning new skills or processing new information related to job tasks
(includes formal and informal learning)
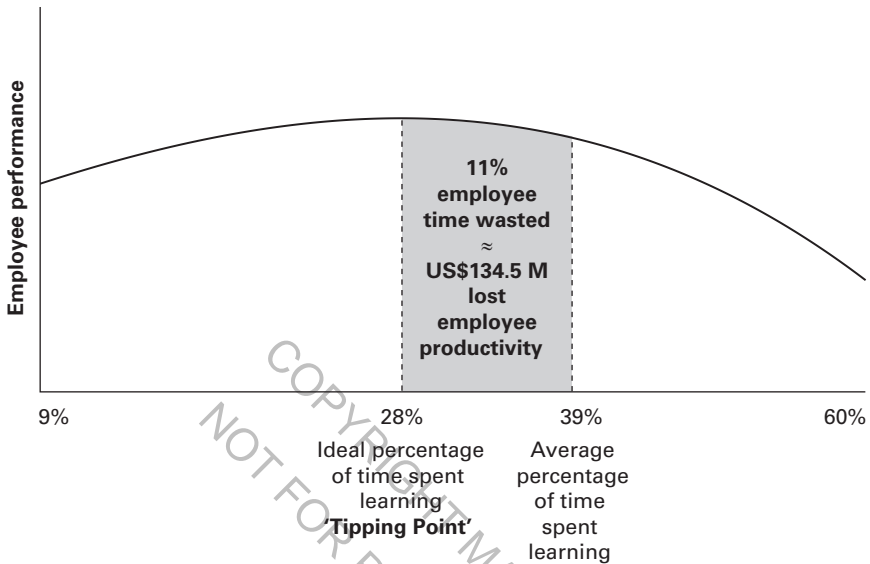
But what are these activities really worth in terms of their benefit to the
bottom-line results?

As one would expect, results are mixed. Some talent development
programmes have outsized impact and others have little to no impact. What
is even more concerning than the variable levels of impact is the fact that most
companies have no way to track and report whether these opportunities influ-
ence business outcomes. Commonly reported metrics on talent development
programmes are 'the degree to which instructor met the expectations for the
course' and 'participant satisfaction', both of which are collected immediately
after training. Only rarely do organizations determine whether the develop-
ment programmes accomplished the desired changes in behaviour and
capabilities. Worse yet, the application of desired behaviours and capabilities
on the job is evaluated even less often. As we will discuss later in this book,
benchmarks show that on average, 45 per cent of the programme content is
not applied back on the job.[33] If 45 per cent of training is wasted as 'scrap
learning', the cost of development immediately goes up. Scrap learning is
rightly keeping CFOs up at night.

FIGURE 1.3   Wasted learning inside and outside the L&D function

Wasted learning outside L&D
Percentage of learning spend in
average business unit spent on
redundant or low-quality learning

Wasted learning within the L&D function
Percentage of learning spend in
L&D function spent on redundant
or low-quality learning

30% — — 22%
70%
26% — — 22%

36% — **64%** — 32%
— 32%

| Redundant learning between business units and L&D | Redundant learning between business units | Learning that is low quality (not applied) | Learning that is high quality and not redundant |

n = 1,519.

NOTE   Totals may not equal 100 per cent due to rounding

SOURCE   CEB 2015 L&D Functional Effectiveness Survey

What explains this wasted learning? Data is revealing here. Learning is often redundant and, even worse, low quality. On average, only 32 per cent of the spend by the L&D function was considered high quality and not redundant in 2014 (Figure 1.3).[34]

To understand this better, picture an average employee. This employee may be mid-career and facing a wide variety of skill-building options from external executive education programmes offered by their manager to free online resources. If this employee's experience maps to the data above, one-third of what he or she receives will be low quality. Plus, the content within these separate learning experiences is also likely to overlap, providing redundant and wasted learning. Similarly, learning done outside the formal L&D function is nearly as bad, with 25 per cent of the spend going unapplied and another 20 per cent being redundant. To avoid these costs, learning analytics must also evolve, just as learning has evolved.

In this book, we will seek to guide you and your organization through some recent evolutions. In Chapter 1, we have explored research about how learning is changing within organizations.

Just to recap: what is driving the rise of learning analytics? The surging need for information, the advent of new tools, the availability of educated analysts and the ever-changing learner – these four factors provide the perfect business environment for learning analytics to grow. Some day (hopefully soon), analysts will use virtual reality to visualize data sets and analytic tools to uncover patterns in the numbers. Think of John F Nash Jr, the brilliant mathematician and economists featured in the film *A Beautiful Mind*, and how he saw patterns in news articles and post-it notes and other papers pinned to his wall. It's not so hard to imagine future data scientists doing something similar – without the paranoia and schizophrenia.

The rest of this chapter provides a preview of the remainder of this book and how it provides deeper insight into learning analytics.

In Chapter 2 we define learning analytics and share what makes it valuable to the business. Chapter 3 explores the value-centred learning organization – one that focuses on providing and measuring the value L&D delivers, rather than the volume deployed. Five organizational capabilities critical to becoming value-centred will be introduced.

Another new paradigm for framing L&D's value to the C-suite, the Portfolio Evaluation Model, will be shared in Chapter 4. Chapter 5 focuses on business impact, in particular, what methods should be used to quantify the influence of development programmes on business measures. Chapter 6 investigates leading indicators of success including scrap learning, net promoter score, estimated performance improvement and manager support. Chapter 7 shows how to build a sustainable reporting strategy. Chapter 8 addresses the role of technology in the evaluation process – how it makes learning analytics more efficient and effective. Chapter 9 highlights the usefulness of benchmarks and where they can be found.

Chapter 10 addresses how L&D leaders can effectively engage business leaders by first aligning with the business strategy, then clarifying L&D's commitments. Chapter 11 shares how to communicate performance against the goals set during the strategic planning process through executive reporting. Chapter 12 dives into measuring informal learning outcomes. Finally, Chapter 13 provides an update on measurement in HR beyond L&D with a scope to measure the employee journey from hire to retire.

It is an exciting time to be in HR, particularly as at last we can begin to measure and manage HR's impact on the business with precision. As you will see in the case examples throughout the book, when analytics provide leaders with the type of business-oriented and actionable insight they are looking for, Human Resources can support the business and drive it forward

in important and dramatic ways – if only we take the time to measure and improve our impact.

Learning analytics is driving the improvement of talent development programmes and business results. The rest of this book explains why and how.

Notes

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