Transforming learning and development into a strategic, value-adding business solution:

A conceptual and business-minded framework

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DECLARATION BY CANDIDATE

"I hereby declare that this thesis submitted for the degree PhD in Business Management at the North-West University (NWU) School of Business and Governance, is my original work and has not previously been submitted to any other academic institution, and that quotes are duly indicated and acknowledged by means of a comprehensive bibliography".

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ABSTRACT

The purpose of this PhD research study was to measure the strategic impact and value of Learning and Development (L&D) practices. The objectives of the research study were fourfold, namely: #1. To determine the current strategic levels of L&D impact (maturity); #2. To determine the priority factors driving strategic L&D, the current state of L&D readiness to deliver these strategic factors and determine the differential, that is, the capability gap index; #3. To construct an internationally-relevant and multi-disciplinary applicable, Strategic Business Management-aligned, Learning and Development measurement tool (Scorecard) and #4. To develop a conceptual framework and business-valued processes to transform and re-position the L&D function to become a strategic learning partner.

Using a detailed literature review, ten factors of Strategic L&D were identified. These factors formed the basis for a 175-item questionnaire that was developed, as the primary data collection method, for measuring the strategic impact and value of L&D practices. By means of a comprehensive cross-industry analysis, involving a sample of 463 global respondents, various descriptive and intergroup comparative statistical measures were utilised to measure the current L&D practices.

The research study findings revealed below average (low) levels of the strategic impact and value of L&D (maturity and readiness) practices and identified serious shortcomings in the majority of the ten factors of strategic L&D. The researcher computed the Strategic L&D Capability Gap Index, that is, the differential between the perceived importance and compliance. Despite the apparent drive towards becoming a strategic learning partner, L&D practices still tend to be more transactional (level 2) and not strategic (level 4). Based on the research findings, the researcher developed a 74-item, weighted Strategic Learning and Development Scorecard that organisations can utilise for diagnostic and analytical purposes. This research study concluded by making recommendations to the effect of strategically re-positioning and enhancing L&D practices, to actualise to become a strategic learning partner.

Key words: Strategic Learning and Development; Strategic Learning Partner; Learning and Development Capability Gap Index; Learning and Development Scorecard

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LIST OF ABBREVIATIONS

AgriSETA:	Agriculture Sector Education and Training Authority
ANOVA:	Analysis of variance
ATD:	Association of Talent Development
BBS:	Balanced Business Scorecard
CATHSSETA:	Culture, Arts, Tourism, Hospitality, Sports Sector Education and Training Authority
CEOs:	Chief Executive Officers
CETA:	Construction Sector Education and Training Authority
CHIETA:	Chemical Industries Education and Training Authority
CIPD:	Chartered Institute of Personnel and Development
CIRT:	Centre for Innovation in Research and Teaching
CoE:	Centres of Excellence
EVP:	Employee value proposition
EWSETA:	Energy and Water Sector Education and Training Authority
FASSET:	Finance and Accounting Services Sector Education and Training Authority
FOODBEVSETA:	Food and Beverage Sector Education and Training Authority
FPM:	Fibre Processing and Manufacturing
HCM:	Human Capital Management
HRBP:	Human Resources Business Partner
HRM:	Human Resources Management
HWSETA:	Health and Welfare Sector Education and Training Authority
INSETA:	Insurance Sector Education and Training Authority
IRB:	Institutional Review Boards
JIT:	Just-in-time
KPA:	Key performance area
KPI:	Key performance indicator
KMO:	Kaiser-Meyer-Olkin
KPMG:	Klynveld Peat Marwick Goerdeler
L&D:	Learning and Development
LGSETA:	Local Government Sector Education and Training Authority

LMS:	Learning Management System
MERSETA:	Manufacturing Engineering and Related Sector Education and Training Authority
MICT:	Media, Information and Communication Technologies Sector Education and Training Authority
MOOCs:	Massive open online courses
MQA:	Mining Qualifications Authority
NGO:	Non-government organisation
NWU:	North West University
OD:	Organisational Development
PMS:	Performance Management System
PhD:	Doctor of Philosophy
PSETA:	Public Service Sector Education and Training Authority
PwC:	PricewaterhouseCoopers
SABPP:	South African Board for People Practises
SASSETA:	Safety and Security Sector Education and Training Authority
SETA:	Sector Education and Training Authority
SLA's:	Service Level Agreements
SPSS:	Statistical Package for the Social Sciences
STD.:	Standard deviation
ROI:	Return on Investment
TETA:	Transport Education and Training Authority
VUCA:	Volatile, uncertain, complex and ambiguous
W&RSETA:	Wholesale and Retail Sector Education and Training Authority

CHAPTER ONE: INTRODUCTION AND OBJECTIVE STATEMENT

1.1 INTRODUCTION AND BACKGROUND

1.1.1 Overview of the impact and value of Learning and Development (L&D)

Despite earlier research by Greer (2001) and Phillips (2005), citing the critics of the Human Resources Management (HRM) function, who demanded more measurement, accountability and demonstrable strategic value, the typical HRM response and reaction to this mounting business pressure over the past decade and half, has been unimpressive and unconvincing. According to Miller (2014), the Learning and Development (L&D) function is still severely criticised for being too disconnected and disengaged from business realities and for their retarded evolutionary transition towards strategic business partnering.

HRM leaders are confronted by a crisis of credibility amongst their senior business peers (KPMG, 2015). This view is supported by the data provided by LinkedIn Learning Solutions (2017), who conclude that L&D professionals need to garner business executive support and to enhance and expand their credibility. This is evidenced by the fact that only 60 percent of respondents stated that their L&D management team have an influential voice at boardroom level (LinkedIn Learning Solutions, 2017). A global KPMG study (2015) of 375 executives found that 21 percent of these executives do not perceive that the HRM function delivers business valued solutions and addresses key business problems and needs. Furthermore, this study found that 55 percent of respondents indicated that evidenced-based HRM would not make a significant contribution to the value proposition of the HRM function. The KPMG (2015) survey respondents called for, "a new-breed of HRM practitioner" - one that is "more numerically proficient" and able to integrate "analytical acumen" with "always-crucial human insight". However, of alarming concern, is that the study found that only a small minority currently harness advanced analytics and

big data approaches within their respective HRM practices and functions (KPMG, 2015).

These views are supported by the findings from the Chartered Institute of Personnel and Development (CIPD) Learning and Development surveys (2012-2014), where it is confirmed that the most common change is for L&D professionals to become more business-focused. According to PWC Global survey (2015), the business reality dictates that organisations will have to invest in talent development when sourcing and recruiting that talent aren't feasible. If skills shortages are seen as a serious threat to business growth and expansion, business leadership will revert to L&D managers for a strategic response. Undoubtedly, addressing and remedying the burning issue of skills shortages is a major priority for CEOs. This is evidenced by the fact that 33 percent of these CEOs are cognisant that innovation of the company's products and/or services can be constrained if there is a shortage of talent possessing key skills. This view is supported by Deloitte's Global Human Capital Trends report (2016), that found that 84 percent of executives' regard learning as a strategic lever of business performance as well as a McKinsey global survey (2014), that found that 50 percent of the respondents regard organisational skills development and capability building as one of their key strategic business priorities.

According to Deloitte (2013), talent development was predominantly harnessed through corporate universities and life-long learning programmes to spearhead internal L&D. However, in the overall architecture of talent management, L&D has often been relegated and other HRM functions like recruitment, compensation and performance management, have ascended to importance. According to Deloitte (2013), an identified talent management trend, is that the HRM pendulum has swung from recruitment to L&D. The Deloitte study (2013), emphasises that organisations have generated renewed impetus on capacity building and downscaling recruitment, as these organisations wrestle with the stark reality of filling key positions at multiple levels and as the pressures of leadership development and succession planning intensify. The "*war for talent*" is shifting and is becoming the "*war to develop talent*" (Deloitte, 2013).

1.1.2 L&D context and environment

According to the CIPD (2015), it is apparent that the business environment in which organisations are increasingly expected to manage is one that is typified by volatility, uncertainty, complexity and ambiguity (VUCA). L&D professionals have a unique role to play and a set of responsibilities to fulfil in supporting organisations. However, a critical success factor is that they should be equipped and empowered to operate in the very same VUCA business environment (CIPD, 2015). L&D professionals need to understand this dynamic business environment; need to be more agile in their response and think beyond the traditional and typical, "*training course*" mentality. According to this CIPD study, to prosper and to be in a heightened state of readiness in this challenging business environment, organisations need to be nimble, business-smart, flexible and vigilant (CIPD, 2015). These views are supported by LinkedIn Learning Solutions (2017), that emphasise the complex nature of the L&D industry and cite that disruption is paramount and pivotal to business processes, technologies, structures and priorities. This complexity is exacerbated by the divergent and disparate needs and interests of key stakeholders; the development of more sophisticated skills and the acceleration of innovative learning methods (LinkedIn Learning Solutions, 2017).

According to Accenture Consulting (2017) research, at South Africa's current rate of learning, it will shift to 'running-with-the-machine' activities (those that require more human-like skills) slower than other developed countries. However, by reallocating skills and doubling the pace at which its workforce acquires relevant skills, South Africa can reshape work and activities such that the share of jobs at risk of being fully automated reduce from 35 percent (5.7 million jobs) to 14 percent (2.5 million jobs) by 2025 (Accenture Consulting, 2017).

Similar views are expressed by Deloitte Consulting LLP & Bersin by Deloitte (2016), who state that the pressure on organisations to upgrade L&D skills, capabilities and the work experience of their teams continues to exponentially intensify. This pressure is fuelled by technological advances, demographic shifts and the constant competitive imperative to upgrade employee skills. Furthermore, Deloitte (2016)

state that HRM is under mounting pressure from business managers to be a catalytic driver of cutting-edge talent solutions, integration and alignment with business initiatives and priorities and to convert data into actionable insights and business intelligence. These views are supported by a McKinsey global survey (2014), that concluded that business managers are escalating their efforts to measure the value and impact of L&D practices on business performance.

According to a global PWC (2017) study, CEOs stated that the finding of the skills they need has become the biggest threat to their business. The specific skills that these CEOs are searching for are problem-solving, adaptability, collaboration, leadership, creativity and innovation. A preceding PWC study (2015) indicated that 73 percent of CEOs identify skills shortages as a crucial threat to their business, relative to 46 percent in 2009. Additionally, 81 percent of CEOs state that they require a broader and more diversified mix of skills than they have had access to over the past decade. Digital literacy and tech-savvy skills top the agenda of required skills. Furthermore, CEOs acknowledge that they need to focus on their organisation's ability to learn, adapt and innovate, in a complex business environment (PWC, 2015).

According to LinkedIn Learning Solutions (2017), the vast majority (80 percent of L&D practitioners acknowledge that L&D is a strategic business priority. Furthermore, this LinkedIn Learning Solutions (2017) study revealed that L&D practitioners are confronted by a wealth of challenges, for example:

- Low yield L&D ROI;
- Rapidly declining training budgets and
- Rationalised L&D teams.

In addressing this multitude of challenges, L&D professionals must unequivocally demonstrate meaningful business impact or face the wrath of continued declining training budgets and additional headcounts (LinkedIn Learning Solutions, 2017).

1.2 THE RESEARCH PROBLEM STATEMENT

At an organisational level, L&D professionals and managers have been made more accountable for the vast sums of money invested in learning and development programmes. These expenditures need to be justified and a business case built to demonstrate, firstly, a return on investment (ROI) and, secondly, that L&D actively contributes to the achievement of organisational strategic goals and objectives.

In light of the above-mentioned, the PhD research problem statement can be formulated as follows:

> ***"Learning and Development (L&D) practices exhibit the inability to actively contribute to business performance at a strategic level"***

1.3 THE RESEARCH QUESTION

This PhD research study investigated the current levels of execution of the above-mentioned roles, that is, measured the strategic value and impact of L&D interventions and made recommendations to the effect of how to re-position the role and function of strategic L&D. Against the backdrop of this research problem statement, the research question for this PhD thesis reads as follows:

> ***"How can the strategic value and business impact of L&D practices be optimised?"***

1.4 RESEARCH OBJECTIVES

The PhD research aspires to achieve the following four (4) research objectives:

1.4.1 #1: To determine the current strategic levels of L&D impact (maturity);

1.4.2 #2: To determine the priority factors driving strategic L&D; the current state of L&D readiness to deliver these strategic factors and determine the differential that is, the capability gap index;

1.4.3 #3: To construct an internationally-relevant and multi-disciplinary applicable, Strategic Business Management-aligned, Learning and Development measurement tool (scorecard) and

1.4.4 #4: To develop a conceptual framework and business-valued processes to transform and re-position the L&D function to become a strategic learning partner.

1.5 THE SIGNIFICANCE OF THE RESEARCH

According to Deloitte (2016), L&D opportunities are not merely a method of skills development, but rather an integral component of the organisation's employee value proposition (EVP). However, according to Cotter (2010), a minimal number of organisations are measuring the effectiveness of L&D practices, performance and programmes. This author is of the belief that L&D managers are being held accountable for the ROI as demonstrating the quantifiable strategic impact and value of L&D on the overall business performance. Therefore, it is in their best interest to build a solid business case to firstly, justify their right of existence and, secondly, to disengage from low yield L&D practices (Cotter, 2010). These views are supported by Deloitte (2016), who found that 60 percent of business executives believe that they are holding HRM accountable for talent and business results. Reassuringly, this trend represents higher proportions than 2015 (Deloitte, 2016). The benefits of L&D serve as the backdrop to this PhD research study because they serve the following benefits:

- Shedding light on current levels of business performance;
- Guiding and informing decision-making to improve the *status quo* and

- Assisting with recommendations that can enhance the effectiveness of current L&D practices.

1.6 EXPECTED OUTCOMES

The PhD researcher will conduct an exploratory study to ascertain the strategic value and impact of current L&D practices, those being maturity and readiness. Furthermore, the researcher will construct a strategically-relevant, L&D scorecard and will develop a conceptual framework, business intelligence and recommendations on how to transform and re-position the L&D function to become a strategic learning partner.

1.7 THESIS STRUCTURE

1.7.1 Conceptual overview and focus

The following conceptual focal points are applicable for the PhD thesis:

- Overview of current L&D processes and practices;
- Determining the factors and related sub-factors of strategic L&D;
- Business management requirements of L&D;
- Measuring the current strategic business impact and value of L&D;
- Identifying the strategic gaps of current L&D;
- Constructing a conceptual model/framework
- Developing a L&D Scorecard and
- Recommendations on how to re-position current L&D practices to transform to a strategic learning partner and solutions-provider.

1.7.2 Chapter layout

The following Chapter layout was followed for the PhD thesis:

- Chapter one included an introduction and objective statement;
- Chapter two focused on a comprehensive literature study;
- Chapter three the research methodology and process were outlined;
- Chapter four discussed the research findings and interpretation and

- Chapter five contained the research conclusions and recommendations.

1.8 SUMMARY OF CHAPTER ONE

This chapter provided a synoptic overview of the contextual background, research problem, research objectives, research question, significance of the research, expected research outcomes and concluded with a chapter layout of the research study.

CHAPTER TWO: STATUS QUO OF STRATEGIC LEARNING AND DEVELOPMENT - LITERATURE REVIEW

2.1 INTRODUCTION: DEFINING STRATEGIC LEARNING AND DEVELOPMENT (L&D), CHALLENGES AND RESPONSE

2.1.1 Defining Strategic Learning and Development

According to Armstrong (2016), strategic learning and development takes a broad and long-term view about how to ensure that the organisation has a knowledgeable, skilled and engaged workforce. The aim of strategic learning and development is to produce a coherent and comprehensive framework for developing people through the creation of a learning culture and the formulation of individual and organisational learning strategies (Armstrong, 2016).

2.1.2 L&D challenges

Despite increased recognition of the strategic value of L&D, organisations are confronted by significant challenges in actualising this strategic vision (Deloitte, 2016). This is apparent from a KPMG survey (2015), who found that approximately 30 percent of the global respondents cited skills and expertise deficiencies, sufficient work experience and inadequate resources within the realm and scope of business analytics within the HRM professional community adversely debilitated the value and business impact of the HRM function. These views are supported by LinkedIn Learning Solutions (2017), who state that one of the foremost challenges confronted by L&D practitioners, intent on demonstrating authentic business impact, is to measure their value by means of the appropriate metrics. According to these researchers, this is complicated by the complexity and sophistication of data science. Additional complications are reported by the CIPD (2014) survey, who found that 66 percent of respondents maintain that measuring L&D effectiveness is not an organisational priority and that access to data is also a major constraint, especially in larger organisations. Further credence to these assertions is offered by McKinsey

(2014), where respondents to a global survey indicated that their organisations' primary challenge and issue were with the deficiency of accurate and effective L&D metrics.

According to Ransbotham, Kiron and Prentice (2015) research, 50 percent of the survey respondents cite translating analytical insights into actionable business decisions as one of their high priority data analytics challenges. Seemingly, organisations tend to be less effective at applying analytical insights to strategy and this is evidenced by the fact that 43 percent of organisations report their deficiency of appropriate analytical skills as a key organisational challenge, especially in the L&D professional community (Ransbotham et al., 2015). Reassuringly, a CIPD survey (2014), reports a 14 percent annual decline in organisations confronting challenges in assessing the effectiveness of L&D practices and programmes.

Based on the research of Degreed (2016), the following three key challenges were raised by survey respondents:

- Learners don't have a lot of time for learning - work comes first;
- Learners don't think their employers value a lot of the learning they already do and
- Learners don't feel like they get adequate guidance or direction (from employers).

Armstrong (2016) express similar views by stating that a fundamental problem with formal training is that it can be difficult for people to transfer their learning on the course to the entirely different circumstances in their workplace. Training can seem to be remote from reality and the skills and knowledge can appear to be irrelevant (Armstrong, 2016).

According to a PWC (2017) global survey, organisations are encouraged to nurture agility, adaptability and re-skilling as the antidote to jobs which are at risk of becoming redundant owing to advances in technology. Governments and organisations can assist by easing the routes to training and retraining and

encouraging and incentivising adaptability and the critical and increasingly valued skills of leadership, creativity and innovation (PWC, 2017).

2.1.3 L&D's response

According to KPMG (2015), it is critically important for L&D professionals to implement an effective strategy to respond to these L&D challenges and to intensify their efforts to deliver a strategic value proposition. However, although business acumen, business literacy and commercial awareness have become critical skills for L&D practitioners, to enable the required alignment with business strategy, the Association for Talent Development's (ATD) State of the Industry report (Miller, 2014), questions whether these intentions are translating into meaningful business action. These assertions are supported by Skillsoft (2015) research that claim that, despite the majority of respondents acknowledging a dearth of skills, only 20 percent of organisations have aligned their L&D programmes to business growth objectives.

The above views are supported by the findings of the McKinsey global survey (2014), where respondents indicated that the L&D function requires significant room for improvement. Further to this respondent perception, only 25 percent described their organisations' L&D practices as "very effective" whereas only slightly more than 50 percent indicated that these programmes were "somewhat effective" (McKinsey, 2014). Similarly, Deloitte (2016), concluded that only 37 percent of organisations regarded their L&D programmes to be effective and only 30 percent described corporate L&D to be at the hub of business. According to a Degreed (2016) study of 512 employees, the conventional L&D toolkit doesn't work as well for today's hyperkinetic workers and this negative view, is reflected by the fact that only 18 percent of respondents would recommend their employers' training and development opportunities.

Although the CIPD (2014) anticipated that increased emphasis will be placed on the monitoring, measuring and evaluating the effectiveness of L&D practices, contradictory evidence can be found in the research findings of Benson-Armer, Otto and Van Dam (2015), who established that alarmingly 80 percent of organisations'

L&D functions failed to measure the value and impact of L&D programmes and that only 13 percent quantified the financial ROI of their L&D programmes. These findings are amplified by the research of Overton and Dixon (2016), who found that although 36 percent of L&D management teams report that they have a plan for how they will meet agreed business performance metrics, only 17 percent of these L&D professionals acknowledge that they measure agreed business Key Performance Indicators (KPIs) as a component of their L&D evaluation. Further, damning evidence is that L&D programmes are not regarded as being proactive, but rather implemented in response to specific programmes, which are disconnected from business growth objectives (Skillsoft, 2015).

According to the CIPD (2014), alarmingly, only 25 percent of the respondents reported that they seldom utilize collected L&D evaluation data. On a positive note, approximately 50 percent harness this L&D evaluation data as a means of forecasting future L&D needs, to compile skills development plans and to update the L&D evaluation at the culmination of each L&D review cycle (CIPD, 2014). Despite reporting some improvement in the HRM scorecard performance, the Deloitte Consulting LLP and Bersin by Deloitte (2016) survey found that CEOs and Chief Human Resources Officers, almost without exception, expressed their concern that their respective organisations are not developing skills at an acceptable tempo or developing leaders at all levels. Despite positive accounts by the CIPD (2014), that states that 33 percent claiming they are transparent about L&D effectiveness and report their findings, Deloitte's most recent research (2017), reports that the corporate L&D received a "net-promoter score of -8". According to these researchers, "this is about as low as it can go". Although 39 percent of HR managers rated their capabilities as good to excellent in 2016, this alarmingly dropped by 3 percent in 2017. Similarly, a Degreed report (2016) reflects a net promoter score of -31 percent.

Based on Deloitte's (2017) research, co-researcher, Bersin (2017), best practice organisations will have to accelerate their efforts to redesign their L&D infrastructure to keep pace with the advances within the digital era. However,

Bersin concedes that the majority of companies are still in the infancy of this transformation (Bersin, 2017).

2.2 IDENTIFIED LEARNING AND DEVELOPMENT (L&D) GLOBAL TRENDS

To achieve the purpose of this research study i.e. develop a business-minded perspective of the value and impact of L&D, the following globally, reputable research organisations and business management consultancies have been cited:

- O' Leonard (in collaboration with Bersin and Associates, 2011)
- Chartered Institute of People Development (CIPD), 2014
- KPMG (2015) and
- Deloitte (2016-2017)

2.2.1 O' Leonard research, 2011 (in collaboration with Bersin & Associates)

According to O' Leonard (2011), social learning is on the upgrade. Informal learning is both when and where employees experience training - "just in time" learning. Organisations need to shift their focus toward continuous learning, integrating it into the workplace and everyday behaviour. Social tools can be a valuable organisational learning resource. Employees want to use social networks and collaboration tools to source subject matter experts and other important information at work, similar to what they do in their personal lives. Businesses find themselves in the age of sharing. Therefore, unleashing user-generated content, which can enable and promote collaboration should be a key focal point and thrust. Employees can learn from experts within their own companies, irrespective of their business location, just as easily as from industry specialists on social media platforms. These social tools can be accessecl and used on a continuous basis, migrating and elevating the organisation toward a more informal learning culture.

2.2.2 Chartered Institute of People Development (CIPD) Research (2014)

- According to the CIPD (2014), given their proven effectiveness, on-the-job training and in-house L&D programmes and coaching have precedence over off-the-job training, formal education and external providers. This is reflected in the fact that 75 percent of organisations offer coaching or mentoring, with an additional 12 percent planning to expand these coaching services in the short term (CIPD, 2014).
- Extended learning scope - approximately 75 percent of organisations offer training to non-employee groups, for example students (37%) and 66% of not-for-profits (NPO) who train their volunteers (CIPD, 2014).
- According to the CIPD (2014), there is a proportional decline of total training time delivered by means of e-learning.
- There is a reported lack of integration, with less than a range of 50 to 66 percent of respondents reporting that L&D processes and systems are horizontally integrated (bundled) with other components of the HRM value chain (CIPD, 2014).
- Reassuringly, the CIPD (2014) reports that they expect closer (vertical) integration and alignment of L&D practices and business strategy.

2.2.3 KPMG research (2015)

Similar to the CIPD research (2014), KPMG report (2015) that there should be vertical alignment between the HRM activity and business insights and more importantly, L&D professionals must be seen to be actively facilitating this process. According to KPMG (2015), evidence-based HRM is important because of the overwhelming demands emanating from CEOs who are trying to grapple with complex and strategically-relevant issues such as regulators, customer requirements, talent and the demands of the workforce. The whole point of evidence-based HRM is to drive greater value through the optimal utilisation of the most important asset an organisation possesses i.e. its human resources. This emphasis shift is a powerful enabler and driver of organisational change. According to KPMG (2015), if L&D professionals are not vigilant, then they are losing out on vital opportunities to drive

business results. In support of this strategic ambition, 82 percent of respondents declared that they plan to increase their use of metrics and advanced analytics within one strategic cycle (KPMG, 2015).

2.2.4 Deloitte (2016) research

Across all 7 000 respondents to the Deloitte (2016) global survey, companies cited the following eight (8) human capital areas as the most urgent:

- Trend #1: Organisational design (92%);
- Trend #2: Leadership (89%);
- Trend #3: Culture (86%);
- Trend #4: Engagement (85%);
- Trend #5: Learning (84%);
- Trend #6: Design thinking (79%);
- Trend #7: Changing skills of HRM organisation (78%) and
- Trend #8: People analytics (77%)

The issues that are most pertinent to this research, are #5: Learning and #7: Changing skills of HRM organisation. According to Deloitte (2016), organisations are readily adopting new technologies and embracing new learning models. This study provides evidence of a 13 percent increase in the use of massive open online courses (MOOCs) and a 10 percent annual increase in the use of advanced video. Business and HR Managers have acknowledged that L&D practices must rapidly adapt to a dynamic business environment where employees insist on continuous, just-in-time (JIT) learning opportunities through innovative platforms, customised to their individual personal and work schedules (Deloitte, 2016). Deloitte (2016) report that organisations need to respond by means of an integrated, customised approach, designing and curating modern learning experiences for a new style and type of employee learning.

2.2.5 Deloitte (2017) research

Across all 10 000 respondents to the Deloitte (2017) global survey, companies cited the following ten (10) human capital areas as the most urgent:

- Trend #1: The organisation of the future (88%)
- Trend #2: Careers and learning reinvented (83%)
- Trend #3: Talent acquisition (81%)
- Trend #4: The employee experience (79%)
- Trend #5: Performance management (78%)
- Trend #6: Disruption of leadership (78%)
- Trend #7: Digital HRM (73%)
- Trend #8: People analytics (71%)
- Trend #9: Diversity and inclusion (69%)
- Trend #10: The future of work (63%)

The issues that are most pertinent to this research, are #2: Careers and learning reinvented and #7: Digital HRM and #8: People analytics.

83 percent of respondent companies' rate, Reinventing careers and learning, as important and 54 percent rate it urgent, which is an increase of 11 percent from 2016 (Deloitte, 2017). Given the urgency and the alarming nature of these trends, Bersin (2017), believes that organisations will have to re-engineer their career management and learning delivery structures and models.

2.3 EVALUATING THE IMPACT OF L&D PRACTICES

2.3.1 Methodology and Process

According to Garavan (1991), as cited in Tseng and McLean (2008), for L&D practices to transform to a strategic business partner, then it is an imperative to evaluate its performance. Zenger and Hurgis (1982), as cited in Tseng and McLean (2008), also point out that strategic L&D requires self-assessment and business relevant metrics.

According to the CIPD survey (2014), organisations have expanded their toolkit of methods to assess the impact of L&D practices. Typically, these methods include metrics-based methods, training ROI and the evergreen Kirkpatrick model. The most widely cited and recognised training evaluation method is the one proposed by Kirkpatrick (1998). According to this framework, evaluation and measurement can be conducted at the following four levels, namely:

- Reaction (of the learners to the trainer, training methods and other instructional factors)
- Learning (attained during the training period i.e. did the learners achieve the intended outcomes; what knowledge was gained; what skills were developed and what attitudes changed?)
- Behaviour/performance (what is the measure of the transfer of learning to the workplace i.e. has the learner applied the learning to his/her job; have the pre-identified performance gaps been addressed by the training?)
- Impact/results (has the training positively affected the ultimate well-being of the organisation, in terms of productivity, customer service and other key performance indicators?)

Phillips (2005) builds on the seminal work of Kirkpatrick (1998), by adding a level 5: Return-on-Investment (ROI), which provides a monetary dimension to the evaluation of L&D. However, the traditional approaches to learning evaluation of Kirkpatrick (1998); Phillips et al. (2007) and Brinkerhoff (2006) have been superseded by a more modern business imperative comprising six levels. In particular, levels 5 (ROI) and 6 (wider contribution) are indicative of the true, strategic business value of L&D practices. To this effect, Deloitte Consulting LLP & Bersin by Deloitte (2015), predict that "learning analytics" models are likely to be succeeded by a more integrated focus on "talent analytics".

2.3.2 Measuring the effectiveness of L&D activities

Ford (1993) as cited in Walton (1999), identifies three broad areas, which essentially cover the work of L&D practitioners, namely:

- Measures of training activity (concerning how much L&D occurred with the focus on formalised, structured learning for example metrics include the percentage of payroll relative to training expenditure; training expenditure per employee per annum; average number of training days per employee/annum; percentage of employees trained per year and L&D staff per 100 employees)
- Measures of training results (concerning how well L&D achieved its goals for example metrics include the average percent of positive course participant ratings per year; average percentage of satisfied L&D customers; average percent gain in learning/programme based on difference between pre-training and post-training test results; average percentage improvement in on-the-job performance and profits per employee per annum and cost savings as a ratio of training expenses)
- Measures of training efficiency (concerning the extent to which L&D maximises resources in pursuit of its mission for example metrics include the training cost per delegate per hour).

McCracken and Wallace (2000), build on the work of Garavan (1991) by stating that the emphasis of the L&D function is the evaluation of cost-effectiveness. Talent development systems are driven by the strategic requirements of the organisation.

2.4 BENEFITS OF OPTIMISING L&D PRACTICES

According to the CIPD (2015), leading edge companies (who score in the top 10 percent of the Towards Maturity Index) claim increased levels of productivity (72 percent) and transfer of learning (65 percent - refer to Kirkpatrick's level 3 of training evaluation). According to the CIPD (2015) researchers, it's apparent that by having the right skills is an accelerator of improved organisational performance. According to the CIPD (2015), these top performing organisations reap the financial benefits, for example, 21 percent increase in business revenue, of harnessing innovative learning approaches. This study also emphasises the non-financial benefits, for example, 14 percent decline in turnover rates and 62% improvement in change readiness (CIPD, 2015).

The above benefits are supported by Deloitte Consulting LLP & Bersin by Deloitte (2015), who state that expanded L&D practices will probably optimise business performance and also bolster levels of employee engagement. Similar findings are reported by the CIPD (2015), who quantify this benefit as a 21 percent increase in employee engagement. Further evidence of the benefits of optimising L&D practices is provided by Skillsoft (2015), that state that through investment in leadership development will contribute to higher levels of employee performance and, ultimately, promote organisational continuity and sustainability.

2.5 RECOMMENDED, FUTURE-FOCUSED STRATEGIC IMPERATIVES OF L&D

Given the literature review (refer to paragraph 2.2), the following ten (10) global, L&D trends were identified. This chapter systematically unpacked and discussed each of these ten (10) factors. In the process, sub-factors were identified and were the basis of formulating a research questionnaire and also the development of the conceptual framework and Scorecard, to transform current L&D practices into a strategic learning partner. These ten (10) factors are listed below:

- #1: Strategic mindset and alignment with business goals
- #2: Evidence-based, business metrics and predictive analytics
- #3: Learning architecture and design
- #4: Learning structures and roles
- #5: Enhanced skills set of L&D professionals
- #6: Extended learning, knowledge management and change to "skills building" L&D approach
- #7: Curating modern learning experiences for modern learners for example increased utilisation of social and e-learning
- #8: Learning organisation culture
- #9: Top management support and line manager engagement, contribution and involvement
- #10: Learning administration, assessment and processes.

2.5.1 Strategic mind-set and alignment with business goals

Garavan (1991), as cited in Tseng and McLean (2008), emphasises the imperative of strategic L&D to be integrated and aligned with the core business planning processes. Furthermore, L&D must have a heightened sense of awareness of the organisational vision and mission and also actively demonstrate its crucial contribution to the achievement of key organisational objectives. Barham et al. (1987), as cited in Tseng and McLean (2008), point out that strategic L&D involves a clear shift from fragmented and disjointed activities to a scenario where L&D are systematically linked to and embedded in the companies' goals, so that they are regarded as a critical success factor of future-proofing the organisation.

These views are supported by Phillips et al. (2007), who suggest that the value of L&D must be gauged by detecting changes in core business processes directly linked to an organisation's strategic goals. According to these authors, the value of training is demonstrated through the extent to which L&D programmes and organisational goals are aligned.

McCracken and Wallace (2000), build on the work of Garavan (1991) by stating that strategic L&D should acquire the internal learning consultancy competencies of an organisation, thus allowing it to influence and shape its corporate mission, goals, culture and organisational behaviour. The L&D function should be closely linked to top management so that managers can provide L&D inputs, particularly in respect of competencies needed to execute the company's strategy. Furthermore, these authors also add that L&D systems are driven by the strategic requirements of organisations. To actualise this strategic intent, L&D practices must be adequately planned, properly organised and integrated into core business processes.

According to SAP (2014), by transforming L&D programmes from tactical training into key strategic workforce initiatives can enable L&D professionals to address the identified skills gaps in their organisations. By managing the basics, it creates opportunities for the L&D team to work on linking the learning activities to business results through strategic tracking and analysis and implementing best practice

principles. By horizontally integrating (bundling) this with best practices throughout the HRM value chain, L&D professionals can change the manner in which learning benefits the organisation (SAP, 2014). According to the CIPD (2015), L&D strategy must be aligned to both business and learner needs. Consequently, L&D professionals must ensure that there is a direct link between L&D practices and organisational performance.

This view is supported by KPMG (2015), who state that although people management lacks precision, HRM professionals must establish synergy between L&D practices and the business delivery model. Advice offered by Deloitte Consulting LLP & Bersin by Deloitte (2016) is to re-align and re-engage i.e. HRM and L&D professionals must align L&D practices function with organisational goals and business needs.

According to a Skillsoft research survey (2015), organisations need to broaden their focus beyond organisational boundaries to align employee skills with the industry and marketplace goals to facilitate strategic business outcomes. Perhaps the best and most widely used tool to facilitate this alignment is the Balanced Business Scorecard (BBS), developed by Norton & Kaplan (1992). The BBS identifies a cause-effect relationship of the key determinants of organisational performance, with the learning, innovation and growth dimension, as the source. The BBS suggests that organisations view four critical perspectives of business, namely:

- Learning, innovation and growth;
- Business processes;
- Customer perspective and
- Financial perspective.

According to Bassi and McMurrer (2007), the HRM function should move beyond the scope of the traditional focus on process efficiency and transactional activities to a more strategic-orientation. This emphasis shift will require the application of strategic management principles. This will enable the HRM function to have a yardstick of effective people management, throughout the value chain.

Buckley & Caple (1990), as cited in Tseng & McLean (2008), point out that historically L&D has been unresponsive to organisational needs, unaware of how its activities link with HRM activities, and also caused a lack in ability to make significant evaluations. In light of this a Skillsoft research survey (2015), states that the pressures of new business innovation mean that modern business managers need to be vigilant and highly responsive to quickly adapt their L&D programmes. This will require constantly scanning the business environment.

L&D must view itself as one of the strategies available to an organisation, which intends to retain, develop and motivate its employees to increase the value of organisational learning (Buckley & Caple, 1990, as cited in Tseng & McLean, 2008). These views are endorsed by a Skillsoft research survey (2015), that states that organisations that successfully integrate learning throughout their business processes will deepen their talent pool at every level, creating an agile, productive and competent workforce.

2.5.2 Evidence-based, business metrics and predictive analytics

According to Deloitte (2016), given the fact that technological developments enable the probability of data-driven HRM decision making a possibility, 77 percent of business executives regard people analytics as a key priority. In light of this, KPMG (2015) projected that within the next five years, HRM will harness a more evidence-based approach to enable the achievement of the required vertical alignment with the strategic business objectives. This will send an unequivocal message to business managers that people performance is at the core of driving business performance (KPMG, 2015).

This view is supported by the CIPD (2015), who state that when people management processes are deployed as a future-fit strategy, then, a quantitative-analytical approach is crucial for capitalising on opportunities, mitigating risks and optimising decisions. According to Ransbotham, Kiron and Prentice (2015), given the competitive business landscape, organisations need to develop their data analytics acumen and digital literacy, to enable them to link business insights to key outcomes. Therefore, L&D professionals will have to become an expert L&D

performance advisor, through the mastery and insightful application of people analytics (Gartside, Silverstone, Farley & Cantrell, 2013).

However, the majority of respondents in a KPMG global survey (2015) stated that evidence-based HRM is still a fledging science and that in terms of their maturity, the HRM function was still in a growth phase. Therefore, the early adopters of data analytics are not yet at a high degree of sophistication. This low degree of receptivity and maturity is supported by the research of Bersin by Deloitte (2015), who found that only 4 percent of organisations are operating at Level 4: Predictive Analytics and 10 percent at Level 3: Strategic Analytics.

According to Gartside, Silverstone, Farley and Cantrell (2013), L&D professionals will have to utilise multiple sources of data to accurately detect labour trends for different talent segments and geographic markets. These views are supported by Deloitte (2016) who acknowledge that one of the most influential human capital trends in people analytics is the leveraging of external data to forecast talent development trends and to target high calibre talent. Accordingly, a host of cutting-edge analytics tools and data sources have emerged within the professional L&D space. Gartside, Silverstone, Farley and Cantrell (2013) believe that acquiring a strong analytics competency can enable an organisation to foster develop closer ties and business relationships with talent providers and other key stakeholders. These talent providers are better placed to anticipate an organisation's needs, groom the talent pipeline and provide just-in-time human resources (Gartside, Silverstone, Farley & Cantrell, 2013).

In response to these technological advances, Deloitte (2016), believe that organisations are capacitating people analytics task teams, declaring legacy systems as redundant and integrating divergent analytics groups, within the realm of HRM, into a coherent strategic business unit. This is reflected by the fact that there's a 13 percent increase from the previous year of organisations that are utilising workforce data as a means to forecast business performance (Deloitte, 2016).

2.5.3 Learning architecture and design

According Deloitte Consulting LLP & Bersin by Deloitte (2016) survey, best practice organisations are capitalising on and exploiting change-induced opportunities by dismantling traditional L&D models, promoting a new culture of organisational learning and by transforming the way in which employees learn. These best practice organisations are adopting new mindsets, which are fundamentally redefining the L&D function.

In their previous study, Deloitte (2015), organisations were encouraged to redesign their "learning architecture," and to "harmonise the formal, informal and the exploding world of external content into an integrated digital learning experience for employees". High-performing organisations have responded accordingly, where the employee is pivotal to this new learning architecture (Deloitte, 2016). Furthermore, these organisations have revisited and expanded their L&D vision, in which learning is managed as an ongoing process and as a corporate-wide, shared responsibility (Deloitte Consulting LLP & Bersin by Deloitte, 2016).

These views are supported by Benson-Armer et al. (2015) who advise organisations to adopt a shared responsibility approach. The researchers emphasised that the talent activity design needs to be re-configured and that critical talent management activities be adjusted to effectively align with the new approach. Practically, this encompasses the alignment of the L&D strategy for each individual activity (for example performance management or L&D), with supporting processes, activities and expected behaviours (Deloitte, 2015). Similar views are expressed by Benson-Armer et al. (2015), who recommend that L&D professionals should integrate L&D with the overall talent management architecture. This view is supported by Cotter (2016), who postulates that the traditional ADDIE (Analysis, Design, Development, Implementation and Evaluation) training process/cycle, should be transformed and re-configured into a strategic learning solutions model.

According to the LinkedIn Learning Solutions (2017) data, a viable strategy is to make learning readily and easily accessible, by means of self-directed, autonomous on-

demand learning vehicles. According to Armstrong (2016) a blended learning programme might be planned for an individual using a mix of planned experience, self-directed learning activities, e-learning and a host of other instructional techniques. Blended learning is a viable manner to maximise the bouquet of L&D options (LinkedIn Learning Solutions, 2017). This view is supported by Deloitte (2015), who state that effective L&D professionals have to redefine their roles by enabling learners to access user-friendly, learning content from a host of both internal and external sources. Furthermore, learning content should be customised to provide for individual learning programmes and L&D practitioners should promote collaborative learning and design knowledge-sharing platforms (Deloitte, 2015). Degreed (2016) support these strategies by recommending that L&D professionals build (or buy) shorter, more engaging content.

According to Cotter (2016), the critical success factors for transforming training to a strategic learning solution, *inter alia*:

- A vibrant, seamless and effective Performance Management System (PMS);
- L&D fullfil a strategic leadership role in learning management processes;
- Holding individual learners accountable for their learning and
- Concluding Service Level Agreements (SLA's) with outsourced training providers.

Research findings by Deloitte (2017) suggest that L&D technology is changing at an exponential rate. Outdated learning management systems are being phased out and replaced by a multitude of more sophisticated learning content curation technologies, with video-based and mobile learning at the forefront (Deloitte, 2017).

2.5.4 Learning structures and roles

According to Degreed (2016), most workplace learning infrastructure doesn't really work for modern workers. Given that organisational learning systems are predominantly utilised for structured, formal learning, modern learners only use these learning systems once every four months (Degreed, 2016).

To counteract this ineffectiveness, advice offered by Deloitte Consulting LLP & Bersin by Deloitte (2016), is that organisations need to rethink the current HRM structure. According to the CIPD (2015), learning structures and roles have systematically changed. These researchers believe that L&D professionals will have to redefine their identity, mission and functions to establish modern roles and organisational structures in order to optimise their strategic contribution and value. Cutting-edge learning organisations have transitioned from a training delivery model to a performance consulting (advisory) model, which requires L&D professionals to adopt a troubleshooting solutions-oriented approach (CIPD, 2015).

These views are supported by Benson-Armer et al. (2015), who recommend a partnering, co-ownership structural approach collaboratively fusing L&D practitioners with line managers; Deloitte Consulting LLP & Bersin by Deloitte (2015), who recommend synergy between centralized L&D programmes and infrastructure with decentralised learning teams who are embedded in the business, in which infrastructure, resources and organisational programmes are shared, and Ramlall (2002), who states that L&D practitioners should serve as collaborators with senior managers and the rest of the workforce to implement key business strategies.

McCracken and Wallace (2000), build on the work of Garavan (1991) by stating that all strategic partnerships are closed between line management and L&D professionals, who support line management so that objectives can be attained. These relationships include employment relations management, thus ensuring that the different angles of the approach function in mutual support of one another. According to Simmonds and Pedersen (2006), L&D professionals should fulfil the role of a strategic business partner, collaborating with senior management in a cohesive manner, especially in the implementation of strategic initiatives and change management processes. These views are supported by McCracken and Wallace (2000), built on the work of Garavan (1991) by stating that L&D practitioners act as organisational change consultants. The role of L&D practitioners, in fulfilling their strategic L&D mandate, therefore, shifts to organisational change consultants and facilitators (McCracken & Wallace, 2000).

Similar views are expressed by Dewett, as cited in the LinkedIn Learning Solutions (2017) report, that state that the primary focus of L&D professionals is to be change facilitators, enabling a process where learners readily embrace organisational change processes. L&D professionals should transform from performing a traditional and transactional role to navigate and guide learners through the change transition curve (LinkedIn Learning Solutions, 2017).

As facilitators, L&D practitioners fulfil the function of change agents, who provide the rationale, support and readiness for planned organisational changes, which are designed to enable the achievement of business strategies (Ramlall, 2002). According to Ramlall (2002), L&D practitioners need to function as visionary, proactive innovators, who are challenged to actively pursue and initiate strategies that will constantly create value for the organisation. According to Broad and Newstrom (2001), as cited in Yaw (2008), three L&D roles of the trainer must be recognised, which in turn lead to L&D effectiveness, namely:

- The trainer as a strategic organisational resource;
- An L&D expert and
- A skilled consultant.

Similarly, from a European perspective, Buyens et al. (2001) as cited in Simmonds and Pedersen (2006) emphasise that the modern role of an L&D practitioner is that of a performance consultant, strategic learning facilitator and a change agent. Similar views are expressed by Ulrich (2007: 14), who states that "to respond to the new business realities, HR must be more than partners; they must be players. Players contribute. They are engaged. They add and deliver value. Today's HR professionals are expected to deliver well beyond hiring, firing, payroll and employee policy administration. They do things that make a difference".

Ulrich's various research projects (2009) identify four (4) roles that can be played by HRM in its contribution to the new organisational forms. HRM players who master these roles add value and provide a strategic organisational competitive advantage. These roles, include:

- Coach;

- Architect;
- Designer and
- Facilitator.

According to Deloitte Consulting LLP & Bersin by Deloitte (2016), the goal of the corporate L&D is to curate the learning experience and, therefore, L&D professionals, must become architects of the learning experience.

According to LinkedIn Learning Solutions (2017), L&D professionals who master the ability to calculate the return-on-learning, can enable them to transition from a "service provider" to a "strategic business consultant". This view is supported by Cotter (2016), who states that one the critical success factors for graduating to a strategic learning partner, is to reposition their role to knowledge brokers and to transform the L&D function an efficient cost centre to an effective profit centre as well as by Overton and Dixon (2016), who report that 54 percent of L&D professionals consider their role as shifting towards performance consultancy.

2.5.5 Enhanced skills set of L&D professionals

According to a PWC (2015) survey, a strong and dynamic HRM function, fit for the digital age, is required to cope with the almost overwhelming challenges presented by the radical disruption sweeping through entire industries. These views are supported by Overton and Dixon (2016), whose research in collaboration with the CIPD, confirms that the L&D professionals need to develop a new, future-focused skills set.

According to a KPMG (2015) report, business managers are calling for HRM professionals to demonstrate business acumen, financial and data literacy and analytics expertise. This KPMG (2015) study also reports that these business managers require L&D professionals to possess the competency to communicate the business value and strategic relevance of their performance metrics. By the year 2020, L&D professionals will have to equip themselves with workforce analytics skills (KPMG, 2015). This view is supported by Overton and Dixon (2016), who state L&D

professionals need to prioritize and accelerate their skills development of evidence-based learning methodologies.

According to the CIPD (2014-2015), other skills gaps identified within the L&D professional-community include their stakeholder relationship building and -influence, analytical proficiency, technological literacy, business integration processes, change management and business and industry knowledge and acumen. Similar views are expressed by Deloitte Consulting LLP & Bersin by Deloitte (2016), who emphasise the imperative of *inter alia*:

- Business management specialization;
- Behavioural economics;
- Conceptual thinking skills;
- Digital literacy and
- Design thinking expertise.

According to Ulrich (2007), one of the twelve (12) principles and practices by which the new generation HRM professional should live is delivering value. In order to deliver value, HRM professionals need to clarify the following:

- Actions (for example, coach, architect, designer and facilitator);
- Roles and
- Competencies (strategic contribution; personal credibility; business HRM and technology expert).

Ulrich (2007) emphasises the strategic imperative of HRM commitment to the upgrading of the above actions, roles and competencies, as well as ensuring that as much knowledge about the operational, functional and strategic side of the business as possible for its contribution is acquired so that value is really added in a meaningful way. Similar views are expressed by Walton (1999), who hypothesise that Strategic L&D requires people in key roles who can meet the following criteria:

- They are able to conceptually harmonise and integrate learning, structure and strategy;
- They are appropriately positioned in an organisation to steer Strategic L&D;

- They are able to communicate their understanding to others to gain commitment; and
- They are able to focus on these key relationships and see them through (i.e. they have strategic time).

In light of this, Cotter (2016), states that two critical success factors for transforming training to a strategic learning solution is that the L&D function will have to operate as a cohesive professional business unit and they re-position themselves as a reputable Centre of Excellence (CoE), providing expert in-house advice.

2.5.6 Extended learning, knowledge management and change to a "skills building" L&D approach

According to Gartside, Silverstone, Farley & Cantrell (2013), most organisations seek extended workers for example consultants and contractors who already bring the requisite skills to the table. Business managers may question why they would invest in learning for such workers when they can easily take newly learned skills to other companies, especially their competitors. However, the best practice, future-focused HRM organisations will offer learning opportunities to these extended workers. By doing so, the value that they offer to the organisation will be amplified. It also assists the company to attract the best-of-breed amongst the extended workforce community. In fact, learning can go both ways; organisations themselves may also learn valuable insights from extended workers by capturing the knowledge extended workers have developed by working at a variety of organisations (Gartside, Silverstone, Farley & Cantrell, 2013).

According to Gartside et al. (2013), HRM can also facilitate knowledge transfer from extended workers to regular employees and provide incentives for knowledge sharing. This is especially important at the project level, where new online, collaborative tools can capture knowledge and conversations, email chains, document versions and other information related to that project. When an extended worker leaves, the project keeps running smoothly, because everyone who remains has access to all the essential information. Therefore, it is a strategic imperative

that the L&D function effectively utilises an electronic Knowledge Management System to ensure the retention of institutional memory (Marsh, 2016).

According to a Skillsoft research survey titled, *Skill Builders Versus Skill Buyers* (2015), 55 percent of respondents stated they favour a skills buying (external) as opposed to a skills building (internal L&D investment) strategy. Furthermore, given organisational growth being elevated to a strategic priority, this Skillsoft (2015) report suggests the L&D function should be instrumental in the following objectives:

- Future-proofing the organisation;
- L&D programmes are proactively designed with a future organisational expansion motive;
- L&D programmes drive career development mapping and
- L&D practices actively contribute to creating higher levels of employee engagement and -motivation (Skillsoft, 2015).

According to PWC (2017), 74% of employees indicated that they are ready to learn new skills or completely retrain in order to remain employable in the future. Organisational L&D has a duty to ensure that these modern employees are empowered to be future-fit.

2.5.7 Curating modern learning experiences for modern learners

Deloitte Consulting LLP & Bersin by Deloitte (2016), report that the future of learning will be typified by the following characteristics:

- Mobile learning apps;
- Video-based learning;
- Social learning;
- On-demand learning content to promote a just-in-time learning culture;
- Autonomous and self-directed learning environment and
- Customised and "consumer-centric" learning platforms, to meet the personal work and personal scheduled demands and -needs of individuals, especially the millennial generation.

These views are supported by Overton and Dixon (2016), whose research in collaboration with the CIPD, confirms that a modernised learning strategy must support the dynamic world of work and increasingly digital worker. This is evidenced by the fact that 83 percent of L&D management teams aspire to create a more self-directed learning culture, which essentially requires L&D practitioners to stimulate and foster a sense of employee ownership to structure their own personal learning strategy (Overton & Dixon, 2016). Similarly, Armstrong (2016), emphasises the need for L&D professionals to create a learning culture that is characterised by self-managed learning not instruction; long-term capacity building not short-term fixes and empowerment not supervision.

These views are supported by Accenture Consulting (2017), who suggest that digital learning methods, such as virtual reality and augmented reality technologies can provide realistic simulations to enable workers to master new manual tasks, so they can work with smart machinery. These digital technologies can reinforce correct procedures on the shop floor, monitoring how employees execute tasks and coaching them to optimise procedure and their performance (Accenture Consulting, 2017).

According to Deloitte (2017), in the modern world of automation, business transformation and continued obsolescence of skills, companies are acknowledging that delivering on a compelling, digital learning experience is a critical success factor. Advice offered by SAP (2014), is that organisations should harness social learning to enable, assist and support employees to learn when, where and how they want to. Organisational learning management systems should be agile enough to change with the times. Furthermore, organisations should be able to track and audit learning activities to increase compliance. In the modern business environment, learning won't be restricted to the classroom or even the desktop. Increasingly, learning is going mobile, on tablets and other devices.

According to CedarCrestone, workforce adoption for social tools integrated into learning and development is projected to grow 100% over the next year. Organisations are advised to invest in learning solutions that can extricate their LMS of the desktop and organisational silos, thereby improving collaboration. Given the

fact that these futuristic learning platforms offer a cost-effective option and also permit employees to interact online with subject matter experts, there is a business case for modern learning methodologies (Deloitte, 2016). Regrettably, organisations are battling to keep abreast with these accelerated technological advances and still favour a traditional L&D approach and strategy (Deloitte, 2016). This is evidenced by the fact that 61 percent of business executives' report major constraints which are retarding their progress towards an external self-directed learning model (Deloitte, 2016).

Similar findings are reported by LinkedIn Learning Solutions (2017), that claim that the most preferred training methods still tends to be trainer-led, classroom-based training. According to Deloitte (2016), the learning organisation culture is instrumental in stimulating ample opportunities for informal learning to flourish. The Deloitte (2016) researchers state that this is a break away from the traditional 70-20-10 learning model, in which organisations fixate on formal learning (10%). Organisations are encouraged to concentrate on creating windows of learning opportunity to capitalise on social learning (20 percent) and experiential learning (70 percent) (Deloitte, 2016). These strategies are supported by Degreed (2016), who recommend that to make self-driven learning meaningful, firstly, the right resources and tools have to be curated and, secondly, through engineering useful connections and interactions.

Furthermore, Degreed (2016), suggest that learners no longer restrict their learning to the office working environment and working hours. This is evidenced by the fact that 67 percent of respondents learn on their personal time and 18 percent are learning during travel or commutes. Other trends include 70 percent of learning is spent on personal computers and mobile (hand-held) devices like smartphones (17%) and tablets (13%) account for 30% of their digital development (Degreed, 2016).

2.5.8 Learning organisation culture

According to Senge (1990), a learning organisation is defined as the organisation where learning is so ingrained in the organisational fabric and where employees are constantly enhancing their capacity to create the results and future that they truly desire. A learning organisation is a collection of five disciplines, namely:

- Systems thinking;
- Personal mastery;
- Mental models;
- Building shared vision and
- Team learning (Senge, 1990).

Based on the research of Bersin & Associates and David Mallon (2010) and Deloitte Consulting LLP & Bersin by Deloitte (2015), L&D should be the custodian of talent and skills development and accordingly, should invest heavily in and be instrumental in creating, reinforcing a sustaining a robust organisational learning culture. Key to creating this culture of learning is to develop strategies to transfer the ownership of the learning experience to employees (Deloitte Consulting LLP & Bersin by Deloitte, 2016).

Deloitte (2016) report a significant transition within learning organisations from internal, L&D programmes to innovative platforms that result in self-empowered employees, who can readily curate learning from either internal and/or external sources. This view is supported by LinkedIn Learning Solutions (2017), that emphasises the value of establishing strong transformative learning cultures of learning, which stimulate and reward individual and organisational growth as well as by Bersin (2017), who states that the strength of an organisation's learning culture is the most influential driver of business impact.

It is recommended that organisations change their vantage point from viewing learners as students to that of customers (Deloitte, 2016). Furthermore, these researchers recommend a downscaling of the use of traditional instructor-led training methodology and start favouring a blended learning approach (Deloitte,

2016). In order to facilitate this transition, Deloitte (2016), advises switching from a content-centric to a learner-centric approach. This shift from control to empowerment is challenging for organisations, but learning organisations can reap significant learning benefits throughout the L&D value chain (Deloitte, 2016). These views are supported by Nel et al. (2004), who postulate that strategic L&D requires the creation and encouragement of an all-encompassing organisational learning environment and facilitates accessibility of learning for all employees.

According to Senge (1990), line managers, active stewards and learning agents, with definitive key roles, who should be empowered to cultivate a learning culture. This view is supported by Armstrong (2016) who states that a learning culture is one in which learning is recognised by top management, line managers and employees generally as an essential organisational process to which they are committed and in which they engage continuously.

2.5.9 Top management support and line manager engagement, commitment and involvement

As a key stakeholder, the active support, engagement and participation of top management, is a critical success factor for the development of strategic L&D (Garavan, 1991), as cited in Tseng and McLean (2008). This view is endorsed by McCracken and Wallace (2000), who build on the work of Garavan (1991), by stating that the support of top management is one of the critical success factors to promote the achievement of organisational learning.

According to Ulrich (2007), this strategic priority is reflected in the composition of boards of directors, with the appointment of HRM directors. From this pivotal position, these HRM directors become an advocate for current and future human capital (Ulrich, 2007). According to Holland and Light (1999) and Willcocks and Sykes (2000), as cited in Tseng and McLean (2008), business managers must be willing to assign and allocate precious organisational resources. These views are supported by Dong (2001), as cited in Tseng and McLean (2008), who suggests that top management's commitment to resources is crucial to ensure business continuity and

to strategically future-proof the organisation. This view is endorsed by McCracken and Wallace (2000), who build on the work of Garavan (1991), by stating that HRM constitutes a core element of the organisation's competitive advantage as well as Ulrich (2007) who states that HRM directors are the "architect of a company's strategy" by ensuring that a company has the human capital to fuel and accelerate its growth. In light of this, human performance is a strategic business priority (2016).

According to Garavan (1991), as cited in Tseng and McLean (2008), line managers are well positioned to identify and conduct a training needs analysis, channel these gaps to targeted L&D interventions and, if required, provide performance coaching and -counseling to employees. They are vital learning agents and an extension of the L&D function. In light of this, the competence of line managers to act in this L&D capacity and to collaboratively partner with L&D professionals are critical success factors of strategic L&D (Garavan, 1991, as cited in Tseng & McLean, 2008).

To promote these levels of line management competence, L&D professionals are investing heavily in the development of leadership communication and coaching skills (LinkedIn Learning Solutions, 2017).

2.5.10 Learning administration, assessment and -processes

McCracken and Wallace (2000), build on the work of Garavan (1991) by stating that L&D professionals fulfil both delivery and administrative roles. Deloitte (2017) state that most organisations are still utilising obsolete Learning Management Systems (LMS), which were originally designed to track compliance and formal L&D only. Given the changes in the L&D landscape, the L&D function will be compelled to migrate from manual to automated processes (Deloitte, 2017).

According to the South African Board for People Practice (SABPP) (2014), HR Risk Management is defined as a systematic approach of identifying and resolving people-related factors that can either have a positive or negative effect on the realisation of organisational objectives. Organisations put their sustainability in jeopardy if they do not consider the impact of HR risks on their business - a failure to manage HRM

risks may threaten the sustainability of companies. According to Steyn, as cited by SABPP (2014), the key role of HRM is to minimise the organisational HR risk profile.

According to Cotter (2016), a skills audit is a vital L&D administrative function. Essentially, a skills audit provides a snapshot that enables an organisation to ascertain the level of employee knowledge, skills and behavioural competencies (attributes). It is reconciled with the required competencies, contained in a Skills Matrix, to pinpoint the skills gaps. Thereafter, a dedicated L&D plan will be developed and resourced (Cotter, 2016). Given organisational growth objectives and commitment of employee development, L&D professionals have been presented with a golden opportunity to conduct skills audits and to reposition L&D as a strategic lever and -learning partner (SkillSoft, 2015).

Increasingly, more organisations are being compelled to make use of strategy mapping to demonstrate the direct and tangible cause-and-effect linkages between the learning and development dimension and the other, higher order dimensions. (Norton & Kaplan, 1992). According to Benson-Armer et al. (2015), L&D professionals need to take charge of the development of competency mapping and other L&D assessment processes. However, according to Cotter (2016), L&D will have to revise their current formative and summative assessment practices to ensure effective post-training, learner competency assessment practices.

According to Bassi and McMurrer (2007), L&D professionals have had to develop a robust system and method for measuring the impact of L&D programmes. Their emphasis shift to a strategic orientation, will require the utilisation of Human Capital Management (HCM) measurement tools. This method and system is a reliable predictor of organisational performance, harnessing leadership development, job design and knowledge sharing and also guides an organisation's investments in people (Bassi & McMurrer, 2007). According to CedarCrestone (2011-2012), it has become a strategic imperative for L&D professionals to show the training Return-on-Investment (ROI). This can be achieved through the adoption of scientifically valid measurement processes to evaluate L&D performance, the use of standard business metrics and performance dashboard reports (CedarCrestone, 2011-2012).

2.6 SYNOPSIS OF STRATEGIC L&D FACTORS AND RELATED SUB-FACTORS

In light of the above literature study, the following strategic L&D factors and related sub-factors have been identified and are tabulated below.

Table 2.1: Factors of and related sub-factors pertaining to strategic L&D

STRATEGIC L&D FACTOR	RELATED SUB-FACTORS
#1: Strategic mindset and alignment with business goals (13 sub-factors)	• 1.1 L&D plans are aligned to strategic business plans • 1.2 L&D practices are harnessed as a strategic lever to optimise the value of organisational learning • 1.3 L&D practices make an effective contribution to the achievement of key strategic goals • 1.4 The L&D function systematically identifies business environment changes • 1.5 The L&D function exerts a significant influence on the organisational culture • 1.6 L&D practices are horizontally integrated (bundled) into every aspect of business operations • 1.7 L&D practitioners strategically align the identified organisational skills gaps to the business objectives • 1.8 L&D practitioners apply best practices throughout the training cycle to optimise organisational learning benefits • 1.9 The L&D function adopts an integrated approach to create authentic behavioural change • 1.10 The L&D strategy is vertically aligned to individual employee learning needs • 1.11 The L&D function aligns workforce skills to industry-specific business priorities • 1.12 L&D practices develop a competent talent pool • 1.13 L&D practitioners apply strategic management principles
#2: Evidence-based, business metrics and predictive analytics (11 sub-factors)	• 2.1 L&D practitioners utilise data-derived metrics to measure L&D performance • 2.2 L&D practitioners are sufficiently competent to effectively manage large volumes of data of organisation-wide workforce analytics • 2.3 L&D practitioners generate competitive business intelligence, enabling line managers to make smarter business decisions • 2.4 The L&D function applies a quantitative analytical decision-making approach • 2.5 L&D practitioners are credible expert talent development advisors • 2.6 L&D practitioners accurately utilise multiple sources of valid data • 2.7 Training ROI calculations yield positive organisational dividends • 2.8 L&D practitioners utilise standard, business performance measures

	• 2.9 L&D practitioners utilise performance dashboard reports that quantify the organisational learning impact • 2.10 Apart from internal data, L&D practitioners effectively leverage external data to predict workforce trends • 2.11 L&D practitioners convert analytical insights into actionable business intelligence

Table 2.1: Factors of and related sub-factors pertaining to strategic L&D (continued)

STRATEGIC L&D FACTOR	RELATED SUB-FACTORS
#3: Learning architecture and design (11 sub-factors)	• 3.1 L&D practitioners apply innovative learning methodologies which transform the way that employees learn • 3.2 The organisational learning architecture is employee-centric • 3.3 The L&D function develops an integrated digital learning experience for all employees • 3.4 The organisational learning architecture enables learners to access digital content from a wide range of sources • 3.5 The L&D function have created internal knowledge-sharing programmes • 3.6 The development of the organisational learning architecture is a shared responsibility • 3.7 The L&D function assumes a strategic leadership role in learning management processes • 3.8 The training process generates organisational learning solutions • 3.9 When utilising outsourced training providers, the L&D function ensures that SLAs are enforced • 3.10 The organisation holds individual learners accountable for the application of learning • 3.11 The organisational PMS fits seamlessly into the L&D process
#4: Learning structures and roles (11 sub-factors)	• 4.1 The L&D function has shifted from training course delivery to a solutions-focused performance consulting model • 4.2 Acting as change consultants, L&D practitioners build the organisation's readiness to capitalise on change • 4.3 L&D practitioners are innovators • 4.4 L&D practitioners collaboratively build strategic alliances with all organisational stakeholders • 4.5 L&D practitioners coach line managers on how to effectively implement L&D strategies • 4.6 The L&D function collaboratively blends centralised learning programmes with regional learning teams in the organisation • 4.7 L&D practitioners are architects of dynamic learning experiences for employees • 4.8 L&D practitioners are strategic learning partners • 4.9 The L&D function has transformed from an efficient cost centre to an effective profit centre • 4.10 L&D is a visionary function • 4.11 The L&D function is a knowledge broker

Table 2.1: Factors of and related sub-factors pertaining to strategic L&D (continued)

STRATEGIC L&D FACTOR	RELATED SUB-FACTORS
#5: Enhanced skills set of L&D professionals (8 sub-factors)	• 5.1 Through their numerical proficiency, L&D practitioners are able to combine analytical acumen with learning insights • 5.2 L&D practitioners are data literate • 5.3 L&D practitioners are sufficiently insightful of the market forces within their business environment • 5.4 L&D practitioners are sufficiently skilled at stakeholder relationship building • 5.5 L&D practitioners keep abreast of modern L&D technologies • 5.6 L&D practitioners effectively apply conceptual thinking skills • 5.7 The L&D function performs as a cohesive professional unit • 5.8 The L&D function is a reputable CoE that provides expert in-house advice
#6: Extended learning, knowledge management and change to "skills building" L&D approach (6 sub-factors)	• 6.1 The organisation invests in L&D opportunities for extended stakeholders • 6.2 The organisation favours skills building over a skills-buying strategy • 6.3 The L&D function effectively utilises an electronic KMS to ensure the retention of institutional memory • 6.4 The L&D practice are instrumental in future-proofing the organisation (business continuity) • 6.5 L&D programmes are proactively designed with a future organisational expansion motive • 6.6 The L&D function actively contributes to creating higher levels of employee engagement
#7: Change to curating modern learning experiences for modern learners (6 sub-factors)	• 7.1 The organisation stimulates ample opportunities for informal learning to flourish • 7.2 The L&D function provides incentives for skills sharing • 7.3 The organisation invests heavily in technology-enabled learning tools • 7.4 The L&D function creates a self-directed learning environment • 7.5 In accommodating the millennial worker generation, the L&D function provides on-demand learning opportunities • 7.6 Organisational LMS, which track L&D performance, are sufficiently flexible to keep pace with rapidly changing learning technologies
#8: Learning organisation culture (6 sub-factors)	• 8.1 The L&D practices are instrumental in sustaining a robust organisational learning culture • 8.2 The organisation has shifted from internal L&D programmes to innovative learning platforms • 8.3 The organisation has transitioned from a content to learner-centric approach • 8.4 Line managers are active learning agents, who are empowered to cultivate a learning culture • 8.5 The L&D practices facilitate accessibility of learning for all employees • 8.6 The organisation has transitioned from a traditional instructor-led training methodology to a blended learning approach

Table 2.1: Factors of and related sub-factors pertaining to strategic L&D (continued)

STRATEGIC L&D FACTOR	RELATED SUB-FACTORS
#9: Top management support and line manager engagement, contribution and involvement (7 sub-factors)	• 9.1 L&D programmes have the committed support from top management, who actively participate throughout the L&D process • 9.2 Top management willingly allocate valuable organisational resources to the L&D function • 9.3 The L&D practices offer a critical source of sustainable competitive advantage for the organisation • 9.4 Line managers are competent in conducting accurate training needs analyses • 9.5 The L&D Director has a pivotal seat at boardroom level, able to influence the organisation's strategic direction • 9.6 Human performance is an organisational strategic priority • 9.7 Line management collaboratively partner with L&D practitioners to optimise the strategic impact of L&D
#10: Learning administration, assessment and -processes (6 sub-factors)	• 10.1 The L&D function has migrated from manual to automated processes • 10.2 The L&D function applies risk management strategies to proactively mitigate talent development threats • 10.3 The L&D function effectively implements skills auditing processes • 10.4 The L&D function utilises strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators • 10.5 The L&D function applies effective post-training, learner competency assessment practices • 10.6 The L&D function has adopted scientifically valid measurement processes to evaluate talent development performance

The x85 sub-factors formed the basis of constructing, crafting and formulating the research questionnaire. Refer to Chapter 3 in this regard.

2.7 SUMMARY OF CHAPTER TWO

Chapter two provided a detailed literature review of the status quo and future requirements of strategic L&D. This literature review identified x10 strategic L&D factors, which upon scrutiny and interrogation, were dissected to a related total of x 85 sub-factors. These sub-factors form the basis of developing the primary research instrument, a questionnaire.

CHAPTER THREE: THE RESEARCH DESIGN, PROCESS AND METHODOLOGY

3.1 INTRODUCTION TO CHAPTER THREE

This chapter will describe the research philosophy, research approach, research design, research process, data collection, research instrument, research sample, statistical methods and process. Furthermore, the reliability and validity of the research process and methodology, respectively will be discussed. The chapter will conclude with an explanation of the assurance of research conduct, consideration and rigour.

3.2 THE RESEARCH PROBLEM STATEMENT AND OBJECTIVES

As extracted from chapter one, the research problem statement:

"Learning and Development practices exhibit the inability to actively contribute to business performance at a strategic level".

As extracted from chapter two, a literature study of the factors of strategic L&D was conducted. From this review, it is apparent that the following ten (10) key factors of Strategic L&D are widely accepted by most subject matter experts:

- #1: Strategic mindset and alignment with business goals
- #2: Evidence-based, business metrics and predictive analytics
- #3: Learning architecture and design
- #4: Learning structures and roles
- #5: Enhanced skills set of L&D professionals
- #6: Extended learning, knowledge management and change to "skills building" L&D approach
- #7: Curating modern learning experiences for modern learners
- #8: Learning organisation culture

- #9: Top management support and line manager engagement, contribution and involvement
- #10: Learning administration, assessment and -process

As reported in chapter two, these ten (10) factors and their respective sub-factors formed the base line of designing and developing a comprehensive, 175-item (criteria) questionnaire. Refer to Annexure B.

3.3 THE RESEARCH PHILOSOPHY

3.3.1 Defining research philosophy and paradigm

The focus of research philosophy is on the source, nature and the creation of knowledge (Bajpai, 2011). These views are supported by Galliers (1991), who defines a research philosophy as a belief about the way in which data about a particular phenomenon should be gathered, analysed and utilised. The term *epistemology* as opposed to *doxology* define the scope of the various philosophies of research approach. Consequently, the purpose of science is the process of transforming aspects believed into known aspects i.e. *doxa* to *episteme* (Galliers, 1991). According to Galliers (1991), within the ambit of business research studies, there are four main research philosophies, namely:

- Positivist/scientific;
- Interpretivist/anti-positivist);
- Pragmatism and
- Realism.

According to Babbie (2014), a paradigm is a frame of reference or fundamental model for observation and understanding, which influences both people's perception and comprehension. Furthermore, this author states that a paradigm assists people to organise their view, observation and reasoning of something. A distinction is drawn between the types of theories that transcend various paradigms, namely: macrotheory relative to microtheory (Babbie, 2014).

3.3.2 Positivism

A positivistic paradigm assumes that researchers can scientifically discover the rules that govern social life (Babbie, 2014). This view is supported by Collins (2010), who states that positivism complies to an empiricist view of knowledge, that is "factual" knowledge gained through human experience and observation, inclusive of measurement, is credible and trustworthy. Therefore, the research findings are observable and quantifiable, which lends itself to statistical analysis (Collins, 2010). According to Crowther and Lancaster (2008), in positivism studies the researcher is independent from the research study. Therefore, no provision is made for human interests within the research study. Collins (2010) support these views by stating that the role of the researcher is limited to data collection and interpretation by means of an objective approach. Generally, the positivist philosophy adopts a deductive approach, whereas an inductive research approach is usually associated with a phenomenology philosophy. (Crowther & Lancaster, 2008). Wilson (2010) is of the view that the positivist paradigm is based exclusively on facts and considers the world to be external and objective. This view is supported by Crowther and Lancaster (2008), who believe that positivism relates to the viewpoint that a researcher needs to focus on facts, which differs from phenomenology, which concentrates on the meaning and has provision for human interest. Researchers caution that if researchers adopt a positivist approach, then the researcher should be independent of their research and, therefore, their research can be purely objective. Independent means that the researcher maintains minimal interaction with their research participants when they conduct their research (Wilson, 2010).

3.3.3 Interpretivist

According to Myers (2008), interpretivist entails researchers to interpret elements of the study and integrates human interest into a research study. Unlike positivism, this author believes that the departure point of interpretive research is that reality can only be achieved through social constructions. According to Collins (2010), the interpretivist philosophy, "reject the objectivist view and contend that meaning resides within the world independently of consciousness". According to Saunders et

al. (2012), it is important for the interpretivist researcher, to acknowledge differences between people and these studies generally focus on attaching meaning to the research findings.

3.3.4 Pragmatism

According to Saunders et al. (2012), pragmatism research philosophy accepts concepts to be relevant only if they support action and, therefore, no single point of view is pervasive enough to cover the picture holistically.

3.3.5 Realism

According to Saunders et al. (2012), realism is based on the assumption of a scientific approach to the development of knowledge. Realism can be divided into two groups, namely: direct (the world is seen through personal human senses) and critical" (Saunders, 2012). According to critical realism, observed images and sensations can be deceptive and they usually do not accurately represent the attributes of the real world (Novikov & Novikov, 2012).

3.3.6 Choice of the research philosophy

In light of a thorough comparative analysis and for due consideration of the research problem, purpose and objectives, the nature, scope and type of research, a positivistic research philosophy was utilised for this research study. This decision was informed and influenced by the following factors:

- The researcher wanted to conduct a purely scientific study;
- The researcher wanted the research to be empirical and factual;
- The researcher wanted to remain independent of the study;
- The researcher wanted to conduct an objective study - limited to data collection and interpretation - with limited interaction with the respondents;
- The researcher wanted to conduct a quantitative study;
- The researcher wanted to accurately and credibly measure the strategic impact of L&D

- The researcher wanted the findings to be observable and quantifiable;
- The researcher wanted to conduct a statistical analysis and
- The researcher wanted to limit/restrict the human interests within the research study.

3.4 THE RESEARCH APPROACH

According to Babbie (2016), deduction commences with an expected pattern that is tested against observations, whereas induction begins with observations and seeks to find a pattern within them. Similarly, Gulati (2009:42) state that "deductive means reasoning from the particular to the general". These views are supported by Pelissier (2008:3) who states that deductive reasoning can be explained as "reasoning from the general to the particular". The deductive approach requires the formulation of hypotheses and their subjection to testing during the research process, whereas inductive research studies do not formulate a hypothesis. Generally, the deductive approach is related to quantitative methods, whereas the inductive approach is associated with qualitative methods of data collection and data analysis (Pelissier, 2008).

3.4.1 Deductive approach

According to Wilson (2010:7), a deductive approach is concerned with "developing a hypothesis (or hypotheses) based on existing theory, and then designing a research strategy to test the hypothesis" These views are supported by Gulati (2009:42), who states that the deductive approach, "can be explained by the means of hypotheses" and, "is concerned with deducting conclusions from premises or propositions". Similarly, Snieder and Larner (2009:16), conclude that the deductive research approach, "explores a known theory or phenomenon and tests if that theory is valid in a given situations". These authors have noted that "the deductive approach follows the path of logic most closely. The reasoning starts with a theory and leads to a new hypothesis. This hypothesis is put to the test by confronting it with observations that either lead to a confirmation or a rejection of the hypothesis". In studies with a deductive approach, the researcher formulates a set of hypotheses at

the start of the research. Then, relevant research methods are chosen and applied to test the hypotheses to prove them right or wrong (Snieder & Larner, 2009).

3.4.2 Inductive approach

According to Neuman (2013), inductive reasoning commences with detailed observations and then transitions to more abstract generalisations, that is moving from specific to general. These views are shared by Goddard (2004), who states that inductive reasoning begins with the theories and observations that are proposed towards the latter end of the research process, which are informed as a result of these research observations. According to Bernard (2011:7), inductive research "involves the search for pattern from observation and the development of explanations i.e. theories, for those patterns through series of hypotheses" No theories or hypotheses would apply in inductive studies at the beginning of the research and the researcher is free in terms of altering the direction for the research study after the research process had commenced (Bernard, 2011).

3.4.3 Choice of the research approach

Subject to a thorough comparative analysis and for due consideration of the research problem, purpose and objectives, the nature, scope and type of research, an inductive research approach was pursued for this research study. This decision was informed and influenced by the following factors:

- No hypothesis was postulated
- The researcher wanted to move from a pattern of detailed and concrete observations to the development of explanations and abstract generalisations and
- Given the exploratory and descriptive nature of the study, the researcher wanted to move from specific to general research findings.

3.5 THE RESEARCH DESIGN

3.5.1 Exploratory and conclusive research

According to Saunders et.al. (2012), research design can be divided into two groups, namely: exploratory and conclusive. The intention of exploratory research is to explore specific aspects of the research focal points, but doesn't attempt to offer final, definitive and conclusive answers to the research questions (Saunders et al., 2012). In contrast to exploratory research studies, Nargundkar (2008:39) describes "Conclusive research is more likely to use statistical tests, advanced analytical techniques and larger sample sizes. Conclusive research is more likely to use quantitative, rather than qualitative techniques" (Nargundkar, 2008:39). Saunders et al. (2012) state that conclusive research can be divided into two categories, namely: descriptive and causal. According to Malhotra and Birks (2000:76), descriptive research, "is used to describe some functions or characteristics and causal research is used to research cause and effect relationships". It can be specified that "descriptive research helps researchers generate data that can explain the composition and characteristics of relevant groups. For example, these groups could be customers, employees, organisations or other service providers" (Neenlankavil, 2007:134).

3.5.2 Choice of the research design

Subject to a thorough comparative analysis and for due consideration of the research problem, purpose and objectives, the nature, scope and type of research, a conclusive research design was followed for this research study. This research design engaged the researcher in an intensive examination of issues and L&D data in order to determine the strategic value and impact of L&D management practices on organisational business performance (descriptive and causal).

3.6 THE RESEARCH PROCESS

The researcher followed the 5-step research process prescribed by Dudovskiy (2016), namely:

- Step 1: Selecting methods of data collection. Refer to paragraph 3.7 of this research study.
- Step 2: Collecting the primary data. Refer to paragraphs 3.7 and 3.8 of this research study.
- Step 3: Data analysis. Refer to paragraph 3.9 of this research study.
- Step 4: Reaching findings and conclusions. In this final part of the thesis, the researcher will have to justify why he thinks that research objectives have been achieved. Refer to Chapters 4 and 5 of this research study.
- Step 5: Completing the research study. Following all of the above-mentioned steps and organising separate chapters into one file leads to the completion of the first draft. The first draft of the thesis was prepared at least one month before the submission deadline. This is to allow adequate time to address feedback of the research supervisor (Dudovskiy, 2016).

3.7 DATA COLLECTION

According to Dudovskiy (2016), data collection can be sub-divided into two main categories, namely primary and secondary methods.

3.7.1 Primary data collection

Primary data collection methods can be sub-divided into two groups, namely: Quantitative and Qualitative (Dudovskiy, 2016). Quantitative research methods describe and measure the level of occurrences on the basis of numbers and calculations (Dudovskiy, 2016). According to this author, quantitative data collection methods are based in mathematical calculations in various formats. Methods of quantitative data collection and analysis include questionnaires with closed-ended questions, methods of correlation and regression, mean, mode and median (Dudovskiy, 2016). These views are supported by Bryman and Bell (2011:154), who

state that quantitative research is defined as "entailing the collection of numerical data and exhibiting the view of relationship between theory and research as deductive, a predilection for natural science approach and as having an objectivist conception of social reality". Consequently, this specific form of research uses quantitative data to analyse (Bryman & Bell, 2011). Similarly, Babbie (2014) defines quantitative analysis. "as the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect".

According to Dudovskiy (2016), the most commonly used quantitative research methods are experiments, closed-ended questionnaires, correlation and regression analysis methods and more. In contrast, qualitative data collection methods include focus groups, interviews, observation, questionnaires with open-ended questions, case studies, game or role-playing and others (Dudovskiy, 2016). On the contrary, Dudovskiy (2016) indicates that qualitative research methods don't involve numbers or mathematical calculations, that is, non-quantifiable. This author states that qualitative research is closely related to emotions, words, feelings, sounds, colours and other elements and, therefore, pursue a deeper level of understanding (Dudovskiy, 2016).

3.7.2 Secondary data collection

Dudovskiy (2016) provides examples of the sources of secondary data, for example, publications like books, academic journals, magazines and newspapers as well as electronic sources for example online portals and others. Secondary data collection was discussed in greater depth in Chapter 2: Literature Study of this thesis.

3.7.3 The choice of data collection approach and method

Subject to a thorough comparative analysis, sourced from the work of Dudovskiy (2016), this research study predominantly used a primary/quantitative data collection approach.

3.7.4 Applied data collection method (survey)

The survey method can be explained as "questioning individuals on a topic/s and then describing their responses" (Jackson, 2011:17). According to Galliers (1991), at any given point in time, surveys enable the researcher to collect and acquire data that is a snapshot of practices, situations and/or views, through the use of questionnaires and/or interviews. Given this fact, the survey method provided the researcher with a snapshot of the respondents (the sample group of 463) think, experience and perceive of the current strategic L&D practices. This snapshot was then generalised to the larger population. Surveys are frequently used in descriptive or explanatory research (Neuman, 2013). These views are supported by Babbie (2014) who states that surveys may be used for descriptive, explanatory and exploratory purposes. Surveys are excellent vehicles for measuring attitudes and orientations in a large population (Babbie, 2014). Given this and by referring to paragraph 3.5, the researcher is of the belief that the survey technique is an appropriate data collection method. Accordingly, the primary research method for this study was a structured questionnaire comprised of a significant number of closed-ended questions (x175 items). According to Neuman (2013), when utilising a questionnaire, the researcher does not manipulate any condition or situation, as the respondents merely respond/answer the questions. The data gathered is predominantly quantitative in nature and by means of a coding system all responses are valued numerically (Neuman, 2013). According to Galliers (1991), quantitative analytical techniques are then utilised to draw inferences from this data regarding existing relationships.

3.7.5 Implications of survey research

According to Neuman (2013), implications to be considered with the application of a survey questionnaire are the appropriateness; the sample size; assurance of the anonymity of the respondents; the predicted response rate and the available resources, in particular time and labour. The survey yields predominantly quantitative data and, therefore, the researcher should decide whether this data is adequate and sufficient or should be complemented and supported by qualitative

techniques. These steps ensure reliability, validity and accuracy of the findings, which are essential in order to generalise the conclusions for a larger population (Neuman, 2013). The survey questionnaire is a useful application when testing and measuring attitudes, perceptions and the climate (those are behavioural and social work setting aspects when conducting descriptive research). However, a survey questionnaire may be limited, as a stand-alone research technique when utilised for exploratory research using a transformational approach (Neuman, 2013). Two key weaknesses of the survey technique are that it is very challenging to realise insights relating to the causes of or processes involved in the phenomena measured and there are a multitude of potential research biases (Galliers, 1991).

3.8 THE RESEARCH INSTRUMENT: QUESTIONNAIRE

Subject to a comprehensive literature study, the ten (10) foremost factors of Strategic L&D were identified. From these factors, respective sub-factors (x85) were identified. These sub-factors served as the basis of the construction of an itemized (175 criteria) questionnaire. Two perspectives of questions, namely compliance and corresponding (strategic) importance questions were formulated. Refer to Annexure B. A four-point Likert-type scale was utilised. The descriptor range of the compliance perspective questions were:

- 1 = strongly disagree
- 2 = disagree
- 3 = agree to
- 4 = strongly agree

The descriptor range of the strategic importance perspective questions were:

- 1 = unimportant
- 2 = moderately important
- 3 = significantly important to
- 4 = critically important

Lozano et al. (2008) postulate that the optimal number of alternatives ranges between four and seven. With fewer than four alternatives the reliability and validity decrease and from seven alternatives onwards psychometric properties of the scale scarcely increase further. This view is supported by Revilla et al. (2014) who report research that strongly supports using 5-point scales. An online survey was the primary data collection tool for this research study. The researcher applied the Cronbach's alpha test, with an acceptable alpha range 0.7 - 0.8, to measure the internal consistency (reliability) of the Likert scale.

3.8.1 Guidelines for using questionnaires

According to Babbie (2014), the following guidelines are relevant for the asking of research questions:

- Appropriateness
- Clarity
- Formulation of questions (avoid double-barrelled questions, negative items and biased terms and items);
- Competency (of respondents to answer the questions)
- Willingness (of respondents to answer the questions)
- Relevance (of questions)
- Length of questions (short items are ideal)

The researcher used the above guidelines (Babbie, 2014) as a checklist to ensure the proper and correct formulation of research questions/items as well as the construction thereof. Refer to Annexure B. Consequently, the researcher opted to utilise the questionnaire as the exclusive method of data collection. The questionnaire was tested with a pilot group before distribution to the larger research population. A smaller, sample 21-24 representatives of the targeted respondents comprised of trusted, business associates received the following three (3) Survey Monkey online questionnaire links and were requested to complete the survey questionnaire.

- https://www.surveymonkey.com/r/LCLF8GJ
- https://www.surveymonkey.com/r/L3WJ3PG

- https://www.surveymonkey.com/r/L5CCWFC

Their feedback served as the basis of quality assurance, testing of the user-friendliness, time to complete and the accuracy. Subsequently, minor modifications and adjustments were made to this research questionnaire. Thereafter, the researcher conducted an online survey, which was open for 6 weeks. Refer to the link below:

- https://www.surveymonkey.com/r/WMQX579

Refer to Annexure A, for a copy of the Respondent Invitation letter that was circulated to the sample group.

3.8.2 Analysis of the questionnaire

Subject to a thorough analysis of the advantages and disadvantages of questionnaires, as primary data collection method, the researcher was adamant of its research value.

3.9 DATA ANALYSIS

With qualitative research, Dudovskiy (2016) states that the data analysis process requires the identification of common themes or patterns within the total responses and critically analysing these with the purpose to achieve the research objectives. In contrast, this author states when working with quantitative research studies, the data analysis requires the research to conduct a critical analysis and interpretation of statistics, with the objective of establishing the rationale behind the emergence of the key research findings. Comparisons of primary research findings to the findings of the literature study are crucial for both types of studies (Dudovskiy, 2016).

3.9.1 Qualitative data analysis

Qualitative data analysis can be conducted through the following three steps, namely:

- Step 1: Developing and applying codes;
- Step 2: Identifying themes, patterns and relationships and
- Step 3: Summarising the data (Dudovskiy, 2016).

3.9.2 Quantitative data analysis

According to Dudovskiy (2016), in quantitative data analysis, the researcher is required to convert raw numbers into meaningful data, through the application of rational and critical thinking. Given these challenges, it is imperative that the researcher demonstrates the following traits: fair and careful judgement and logical and unbiased thinking (Dudovskiy, 2016). A set of analytical software can be used to assist with analysis of quantitative data, for example, Microsoft Excel; Statistical Package for the Social Sciences (SPSS) (version 24) and Microsoft Access (Dudovskiy, 2016).

3.9.3 Choice of the quantitative data analysis software

In light of the primary advantages of SPSS, as proposed by Dudovskiy (2016), namely data files can be imported to other programmes; broad coverage of formulas and statistical routines and that it is annually updated to heighten sophistication, the researcher utilised SPSS software as the primary quantitative analytical tool. Given its versatility and user-friendliness, Microsoft Excel Spreadsheets were utilised as a complementary, supportive analytical tool.

3.9.4 Data administration

The researcher ensured meticulous and accurate data administration practices. All data integrity was verified, data stored safely and securely and backed-up periodically.

3.10 THE RESEARCH POPULATION AND SAMPLE

3.10.1 The research population

The research population that the researcher wanted to generalize the research finds to is the global business and learning and development community.

3.10.2 Defining sampling, value and benefits

Proctor (2003), defines sampling as a specific principle used to select members of the research population to be included in the research study. Dudovskiy (2016) expresses a similar view by stating that sampling is a principle that specifies both the conditions and serves as a guide to the process of selecting the members of a population to participate in the research study. Given the fact that many populations of interest are simply too vast to work with directly, techniques of statistical sampling have been developed to acquire samples extracted from larger populations (Proctor, 2003).

Brown (2006) summarizes the advantages of sampling in the following key points:

- Irrespective of size and type of research, enables the research to be manageable
- Significant cost saver
- Enhances the research findings accuracy
- Process efficiencies
- Expediency of primary data collection

3.10.3 The sampling process in primary data collection

The researcher followed the 5-stage sampling process proposed by Dudovskiy (2016), in primary data collection, namely:

- Stage 1: Defining the target population (the global business management and L&D community);

- Stage 2: Selection of the sampling frame (7 259 business and L&D Managers and professionals/practitioners globally);
- Stage 3: Determining the sampling size (approx. 500 - 7%)
- Stage 4: Selecting a sampling method (non-probability - convenience and purposive sampling)
- Stage 5: Applying the chosen sampling method in research practice (refer to paragraph 3.10.8 in this regard)

3.10.4 Types of samples

According to Dudovskiy (2016), sampling methods can be sub-divided into two categories, namely: Probability and Non-probability. In probability sampling every member of population has a known chance of participating in the research study (Dudovskiy, 2016). This author lists the following probability sampling methods:

- Simple
- Multistage
- Stratified systematic
- Cluster sampling

On the contrary, Babbie (2014) defines non-probability sampling as any technique in which samples are selected in some way not suggested by probability theory. Examples include reliance on available subjects as well as purposive (judgmental), snowball and quota sampling (Babbie, 2014).

3.10.5 Random sampling

According to Gravetter and Forzano (2011), random sampling is the purest and the most straightforward probability sampling strategy and each member of population is equally likely to be selected as part of the sample. These authors state that the logic behind simple random sampling is that it minimises bias from the selection procedure and, therefore, should result in more representative samples (Gravetter & Forzano, 2011).

According to Saunders et al. (2012), a sample size of more than approx. 400 hundred is required to be able to appropriately apply random sampling.

3.10.6 Purposive sample

According to Babbie (2014), purposive sampling is a type of non-probability sampling in which the units to be observed are selected on the basis of the researcher's judgment about which ones will be the most useful or representative.

3.10.7 Convenience sample

According to Dudovskiy (2016), convenience sampling is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the research study.

3.10.8 Choice of the type of research sample

The choice of sampling method directly influences the accuracy of the research findings, the validity and reliability of the study and also has significant implications on the overall quality of the research study (Dudovskiy, 2016).

Owing to accessibility constraints and the issue of confidentiality, purposive and convenience samples (non-probability) group/size, of approximately 7 259 business and L&D Managers and professionals/practitioners (sampling frame), were drawn for this research study. This sample was sourced from various business contacts, databases, networks and social media platforms for example LinkedIn, Twitter and business references from multiple industries, both locally and internationally. The majority of these respondents were based in South Africa, but were also represented by the African, North American, Australian, Asian and European continents.

The choice to opt for a convenience sample, was informed by the following the advantages suggested by Dudovskiy (2016):

- Efficiency because data collection can be facilitated in short time span
- User-friendliness because of the simplicity of sampling and the ease of research
- Versatility because it's helpful for pilot studies and for hypothesis generation
- Cost effective in comparison to some of the other sampling methods

3.10.9 Demographic profile of the respondents

Given the cross-industry nature of the research, the targeted respondents were representative of both the public (for example national, provincial and local governments) and private (for example, education/training, banking/insurance, information/communication technology and financial services and other) sectors. The following broad groups of respondents were targeted:

- L&D and Training managers
- Trainers
- Training administrators and skills development facilitators
- Line/business managers
- Academics/subject matter experts

These respondents were contacted directly by means of electronic mail through the completion of a self-administered questionnaire and an on-line survey through *Survey Monkey*. Refer to Annexure A. *Survey Monkey* is a popular online platform for facilitating primary data collection through questionnaires and this was a cost effective and user-friendly and efficient way of accessing the primary data and optimising the reach for this research study. Dudovskiy (2016) suggests the following benefits offered by Survey Monkey:

- User-friendliness
- Versatility (of question formats)
- Sophistication that is, provision of advanced data analysis capabilities.

As alluded to, the total reach of this research study was of 7 259 contacts (sampling frame), drawn predominantly from the LinkedIn business platform. The total number of respondents was 492, which represents a response rate of 6.78%. This was slightly

higher than the anticipated response rate of 5%. However, the number of valid and complete questionnaires was 463. Given that purposive and convenience samples were drawn, the response rate is probably marginally lower than other types of samples. However, the researcher was vigilant in following up with targeted and prospective respondents and expedited the process through three (3) reminder and courtesy e-mails. The unit of analysis under investigation for this research study was the L&D function, in executing L&D practices that impact on organisational business performance at a strategic level. Consequently, the independent variable was the current L&D practices and the dependent variable was the resultant strategic impact and value on the achievement of business results.

3.10.10 Challenges and constraints

The following challenges and constraints were experienced by the researcher:

- Although a trial revealed that the completion of the questionnaire took approximately 20 minutes, approx. 10 of the prospective respondents complained that the number of questions (175) was abnormally high, therefore, the time required to complete the questionnaire was excessive.
- 29 questionnaires had to be eliminated from the survey as they were incomplete. A root cause analysis revealed that these respondents failed to click over to page two, which contained question items 101 - 175.

3.11 THE STATISTICAL METHOD AND PROCESS

The statistical procedures performed in this research study can be predominantly regarded as descriptive statistics.

3.11.1 Descriptive statistics

Gravetter and Wallnau (2002) define descriptive statistics as statistical procedures that are used to summarise, organise and simplify data. This definition is supported by Trochim (2006), who define descriptive statistics as the basis of quantitative data analysis and offer researchers sample data summaries across one variable

(univariate) and Beins (2008), who state that descriptive statistics measure and record the immediate behaviour of data. According to Trochim (2006) descriptive statistics merely describe what the data shows and easily translates results into a distribution of frequency and percentages and overall averages. Descriptive statistics also reflect variability and central tendency of scores over a given distribution (Beins, 2008). The strength of descriptive statistics is its ability to collect, organize and compare vast amounts of discreet categorical and continuous non-discreet data in a more manageable form (Trochim, 2006). According to Beins (2008), the arithmetic operations that can be performed on the behaviour of variables over a distribution are referred to as mean, median and mode. Furthermore, in descriptive statistics, range simply refers to the difference of low-to-high scores while standard deviation calculates in z-score units how far any score is likely to fall, or "deviate" from the mean, or average score, in our dataset (Beins, 2008). The different descriptive statistics that were used in this research study include:

- Frequency distributions/percentages (description of the sample those are industry; position; years in the company; region/country of location as well as the size of the company)
- Means (scores per industry; position; years in company; region/country of location and size of company as well as of each of these 10 sub-factors per industry; position; years in the company; country of location as well as the size of the company)
- Standard deviations (scores per industry; position; years in company; region/country of location and size of company as well as of each of these 10 sub-factors per industry; position; years in the company; country of location as well as the size of the company)

3.11.2 Inferential statistics

Gravetter and Wallnau (2002) state that inferential statistics consist of a range of techniques that enable the researcher to study samples and then make generalisations about the populations from which they were selected. Similar views are expressed by Trochim (2006), who state that inferential statistics attempt to

reach conclusions that extend beyond the groundwork data summaries provided by descriptive statistics. The purpose of ANOVA is to test for significant differences between means and is similar to the t-test, but this is used when there are more than two groups to compare (Trochim, 2006). The research study utilised analysis of variance (ANOVA). ANOVA testing was utilised to draw inferences regarding the intergroup comparisons of the research sample on the subscale scores. Refer to paragraph 3.9.3. A combination of Excel Spreadsheets and SPSS software (version 24) was utilised for the analysis of collected quantitative data. The statistical analysis, by means of SPSS, was concluded within 2.5 months.

3.12 THE RELIABILITY OF THE STUDY

Owing to the fact that the constructs in social theory are often ambiguous, diffuse and are not directly observable, reliability and validity, are central issues in scientific measurement (Neuman, 2013). Furthermore, Neuman (2013) states that if indicators have a low degree of validity and reliability, then the research findings can be disputed and/or questionable. According to Neuman (2013), reliability relates to an indicator's dependability and consistency. Reliability means that the information provided by the indicators, for example, a questionnaire, does not vary as a result of characteristics of the indicator, instrument or measuring device itself (Neuman, 2013). Babbie (2014) concurs with this view by defining reliability as that quality of measurement method that suggests that the same data would have been collected each time in repeated observations of the same phenomenon. There are three types of reliability, namely (Neuman, 2013):

- Stability
- Representative
- Equivalence

Given that the questionnaire was the exclusive data collection instrument and the various checks-and-balances described in paragraph 3.8, the researcher is of the firm belief that the research findings are reliable.

3.13 THE VALIDITY OF THE STUDY

According to Pelissier (2008), research validity can be divided into two groups, namely: internal and external. It can be specified that the internal validity refers to how the research findings correspond with reality, whereas the external validity refers to the extent to which these research findings can be replicated to other environments (Pelissier, 2008). This view is supported by Babbie (2014), who states that validity can describe a measure that accurately represents the variable that it is intended to measure and Neuman (2013), who states that validity shows whether an indicator actually captures the meaning of the construct under consideration. Furthermore, Neuman (2013), states that when a researcher claims that an indicator is valid, it is valid for a specific definition and purpose and that the measurement of validity is the degree of fit between a construct and its indicators. Neuman (2013) list the following four types of measurement validity:

- Face
- Content
- Criterion
- Construct

Babbie (2014) expands on these types of measurement validity by defining face validity as that quality of an indicator that makes it seem a reasonable measure of some variable. Content validity is the degree to which a measure covers the range of meanings included within a concept, whereas criterion-related validity is the degree to which a measure relates to some external criterion, which is also referred to as predictive validity (Babbie, 2014). Construct validity is the degree to which a measure relates to other variables as expected within a system of theoretical relationships (Babbie, 2014). Cohen et al. (2007) provide a list of measures to ensure the validity of a research study. These measures include, *inter alia*:

- Research time scale;
- Methodology;
- Sample method and
- Ethical treatment of respondents.

For the purpose of this research study, a pilot test was conducted requesting feedback and by asking a panel of subject matter experts for their review, to achieve face and content validity. Criterion-related validity is irrelevant to this research study. In order to achieve construct validity, a factor analysis was conducted, which sought to determine whether the original, 10 factors/scales of Strategic L&D should be utilised. Refer to Appendices 1 and 2.

3.14 ETHICAL CONDUCT, CONSIDERATIONS AND RESEARCH RIGOUR

3.14.1 Defining ethics and ethical conduct

According to the Centre for Innovation in Research and Teaching (CIRT) (2016), ethics are the norms or standards for conduct that distinguish between right and wrong. The CIRT (2016) researchers believe that ethics assists by determining the difference between acceptable and unacceptable behaviours. This view is supported by Babbie (2014), who states that ethics is typically associated with morality and both deal with matters of right and wrong. The value of ethical standards is that they mitigate the fabrication or falsifying of data (CIRT, 2016). According to Tustin et al. (2005), the imperative of ethical conduct in business and society is illustrated by a worldwide initiative to establish independent national organisations to enhance ethical conduct. Consequently, the Ethics Institute of South Africa (EthicSA) was established in 1999, as an institutional response to this global recognition of the relevance and importance of ethical conduct.

EthicSA (2016), list the five components of ethics:

- Standards and values of proper ethical conduct
- Rights
- Obligations
- Character
- Consequences

Subject to a thorough scrutiny of these five ethical components, the researcher is of the firm belief that the research study is 100% compliant thereof.

According to Churchill (1992), as cited by Tustin et al. (2005), ethics focuses on the development of moral standards that can be applied to situations in which there can be actual of potential harm to an individual, a group and/or an organisation. Churchill (1992) believes that good ethics is essential for business, given the fact that most people respect ethical behaviour. Knowledge about ethical standards allows the researcher to conduct themselves in a manner that is ethically acceptable to others and ensures that they are comfortable with such actions (Tustin et al., 2005). According to the CIRT (2016), ethical considerations in research are critical. Consequently, these CIRT researchers believe at CIRT promotes the pursuit of knowledge and truth which is the primary goal of research (CIRT, 2016). Participants involved in social scientific research need to be cognizant of the general agreements shared by researchers about what is proper and improper in the conduct of scientific inquiry (CIRT, 2016).

3.14.2 Ethical considerations

According to Bryman and Bell (2011), ethical considerations can be specified as one of the most important parts of the research. Subsequent to the analysis of the ethical guidelines of nine professional social sciences research associations, Bryman and Bell (2011), compiled a list of ten principles of ethical considerations. These principles are supported by Babbie (2014) who summarizes the most important, prevailing ethical agreements in social research, namely:

3.14.2.1 Voluntary participation

Researchers concur that participation in research should normally be voluntary. However, this norm, can sometimes be in conflict with the scientific need for generalisability (Babbie, 2014).

3.14.2.2 No harm to participants

Researchers agree that research should not harm those who participate in it, unless they willingly and knowingly accept the risks of harm, giving their informed consent (Babbie, 2014).

3.14.2.3 Anonymity and Confidentiality

Whereas anonymity refers to the situation in which even the researcher cannot identify specific information with the individuals it describes, confidentiality refers to the situation in which the researcher promises to keep information about the subjects private (Babbie, 2014).

3.14.2.4 Deception

Many research designs involve a degree of deception of subjects. Given that deceiving people violates common standards of ethical behaviour, deception in research requires a strong justification. However, this is not absolute, as this justification may be challenged (Babbie, 2014). Over and above these ethical obligations and agreements to subjects, researchers also have a duty to the community of researchers. Specifically, this entails the following obligations (Babbie, 2014):

- *Analysis and reporting*
  This includes reporting results fully and accurately as well as disclosing errors, limitations and other shortcomings and deficiencies in the research (Babbie, 2014). Similar views are expressed by Tustin et al. (2005), who state that the following disclosure requirements should be met: A copy of the questionnaire; A description of the sample design and execution; A description of where, when and how the data were collected and Data analysis relevant to the conclusion of the report.
- *Institutional Review Boards (IRB)*
  The primary responsibility of an IRB is to minimise the risks potentially confronted by human participants in research. (Babbie, 2014). These views

are supported by the CIRT (2016) who states that one of the most important ethical considerations in research is the use of human subjects. The use of an IRB also helps to protect the institution and the researchers against potential legal implications from any behaviour that may be regarded as unethical (CIRT, 2016).

- ***Professional Code of Ethics***

  Babbie (2014), states that ethical issues in social research are both important and ambiguous. Consequently, most professional associations have developed and published formal codes of conduct describing what is considered acceptable and unacceptable professional conduct and behaviour (Babbie, 2005). These views are endorsed by the CIRT (2016), who state that, given the fact that ethical considerations are so important in research, many professional associations and agencies have adopted and implemented codes and policies that outline ethical behaviour and guide researchers. These codes address issues such as honesty, objectivity, respect for intellectual property, social responsibility, confidentiality, non-discrimination and more (CIRT, 2016). This view is supported by Babbie (2014), who states that professional associations in several disciplines publish codes of ethics to guide researchers. This ethical dilemma is espoused by the CIRT (2016), who claim that these codes of ethics and policies provide basic guidelines, but researchers will still be confronted by additional issues that are not specifically addressed. Therefore, this will require decision making by the researcher in order to avoid any form of misconduct (CIRT, 2016).

3.14.3 Researcher compliance

The researcher ensured compliance throughout the research survey with the following ethical principles and considerations:

- The principle of voluntary participation of respondents
- The principle of no harm to respondents
- Guarantee of respondent anonymity
- Guarantee of respondent confidentiality
- Guard against respondent deception

- Practice the values of integrity, respect for intellectual property, social responsibility, honesty, confidentiality, objectivity, non-discrimination and guarding against plagiarism
- Avoiding the use of discriminatory, offensive or other unacceptable language in the formulation of the research questionnaire and other correspondence and communication with research respondents
- Apply informed consent

Furthermore, the researcher complied with the duty and obligation to the community of researchers, through the accurate analysis and reporting of research findings. The researcher avoided misconduct during the research process and the thesis is, therefore, free of contradictions.

Prior to submission of this thesis, the researcher applied for ethical clearance, which required a scrutiny of the following documents:

- NWU's Manual for Postgraduate students;
- Guidelines for Research Ethics and
- NWU Policy on Plagiarism and Academic Misconduct.

3.15 SUMMARY OF CHAPTER THREE

Chapter three provided a detailed overview of the research philosophy, research approach, research design, research process, data collection, research instrument, research sample, statistical methods and process, the reliability and validity of the research process and methodology, respectively and the chapter concluded with an explanation of the assurance of ethical research conduct, consideration and rigour.

In each paragraph, a synoptic theoretical overview was provided, culminating in the exercising of a research best fit choice and a justification for each of these research decisions.

Chapter 4 focuses on the research findings and the interpretations of the statistical analysis.

CHAPTER FOUR: PRESENTATION OF DATA AND RESEARCH FINDINGS

4.1 INTRODUCTION TO CHAPTER FOUR

The purpose of this chapter is to report on the findings of the research, based on the methodology described in chapter three. Each category of the research findings begins with a summarised description of what it focuses on, followed by a table, which describes the findings. Most tables are followed by a graphic representation of the statistical analysis. Each table and the respective graphic illustration are then interpreted.

4.2 FREQUENCIES AND PERCENTAGES OF INDIVIDUAL AND INDUSTRY-RELATED DATA

4.2.1 Geographical region

Table 4.1: Geographical region frequency/percentages

Geographical region		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Asia	17	3.7	3.7	3.7
	Australasia	1	0.2	0.2	3.9
	Europe	13	2.8	2.8	6.7
	Middle East	6	1.3	1.3	8.0
	North America	6	1.3	1.3	9.3
	Rest of Africa	64	13.8	13.8	23.1
	South Africa	355	76.7	76.7	99.8
	South America	1	0.2	0.2	100.0
	Total	463	100.0	100.0	

For meaningful statistical analysis, the geographical regions were rationalized into three (3) clusters, namely: South Africa; Rest of Africa and the Rest of the World.

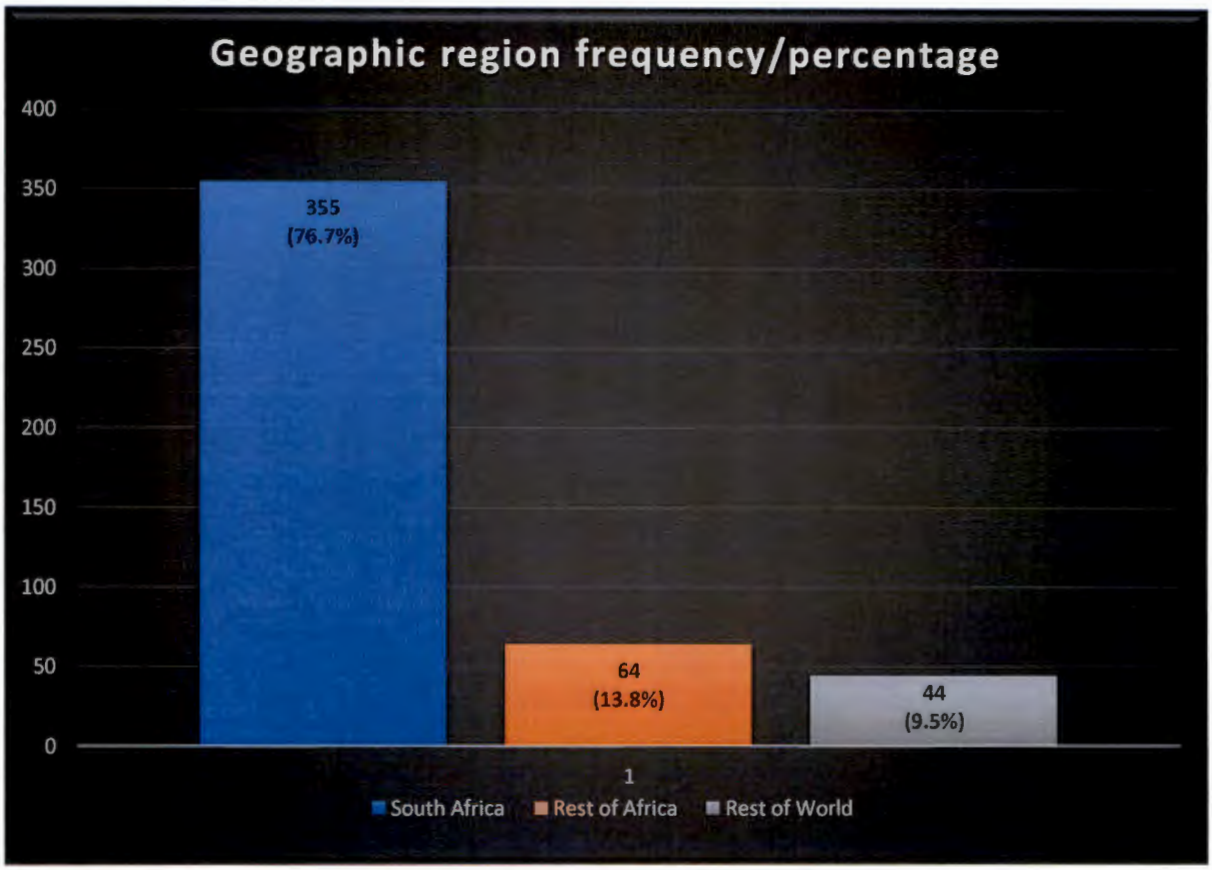


Figure 4.1: Geographic region frequency

From Table 4.1 and Figure 4.1 it is apparent that the majority of respondents were from South Africa, N = 355 (76.7%) and a minority of respondents were from the rest of Africa, N = 64 (13.8%) and the cluster of the rest of the world, N = 44 (9.5%). Therefore, the research findings do not offer a balanced perspective of the strategic value and impact of L&D practices, and there is a definite bias favouring South Africa. Consequently, the research findings are not representative of global L&D practices and will not be able to be generalised.

4.2.2 Tenure

Table 4.2: Tenure frequency/percentages

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	32	6.9	6.9	6.9
	1-3 years	111	24.0	24.0	30.9
	4-6 years	83	17.9	17.9	48.8
	7-9 years	63	13.6	13.6	62.4
	10+ years	174	37.6	37.6	100.0
	Total	463	100.0	100.0	

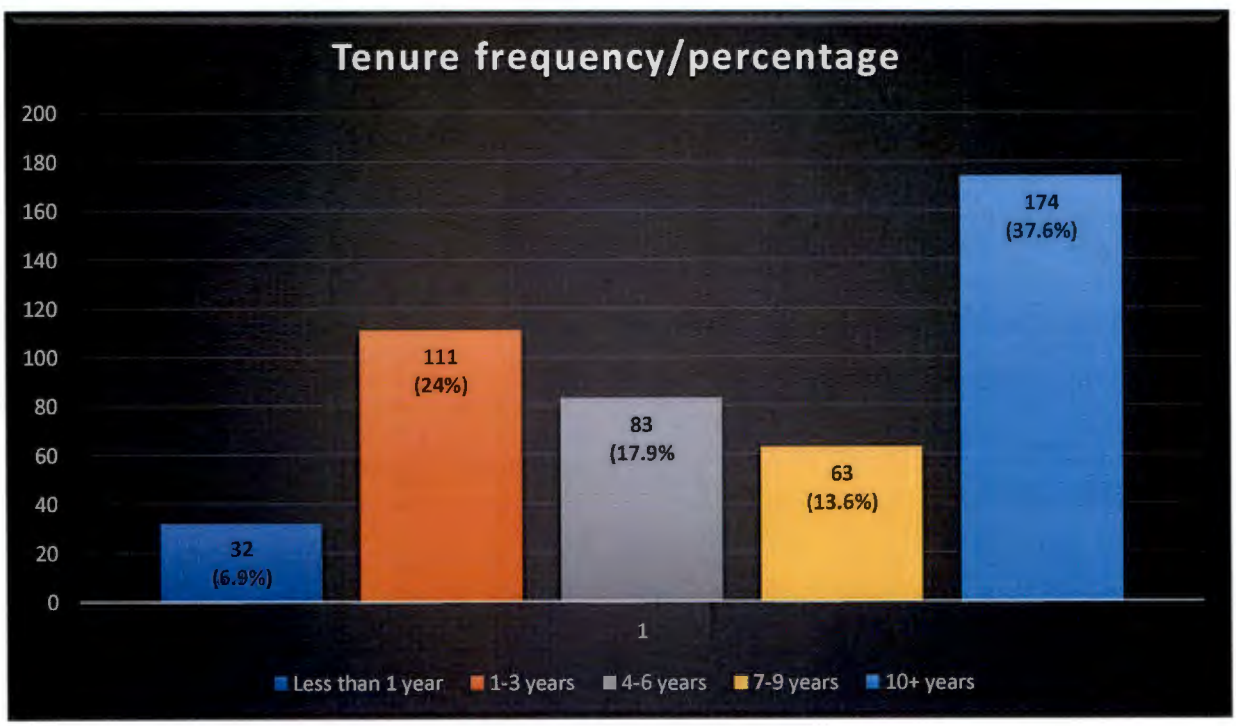


Figure 4.2: Tenure frequency

From Table 4.2 and Figure 4.2 it is apparent that the respondents' tenure ranged from inexperienced, that is, less than a year to 3 years, N = 143 (30.9%) to moderately experienced, 3-9 years, N = 146 (31.5%), to very experienced, that is,

beyond 10 years' experience, N = 174 (37.6%). The research findings offer a balanced perspective of the strategic value and impact of L&D practices. Consequently, the research findings were not distorted by the respondent's tenure within their respective organisations.

4.2.3 Size of the organisation

Table 4.3: Size of organisation frequency/percentages

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large/global/multinational (1500+ employees)	129	27.9	27.9	27.9
	Large/national (1000 - 1499 employees)	43	9.3	9.3	37.1
	Medium-sized (251 - 999 employees)	63	13.6	13.6	50.8
	Small (2-250 employees)	177	38.2	38.2	89.0
	Sole Proprietor (1-person business)	51	11.0	11.0	100.0
	Total	463	100.0	100.0	

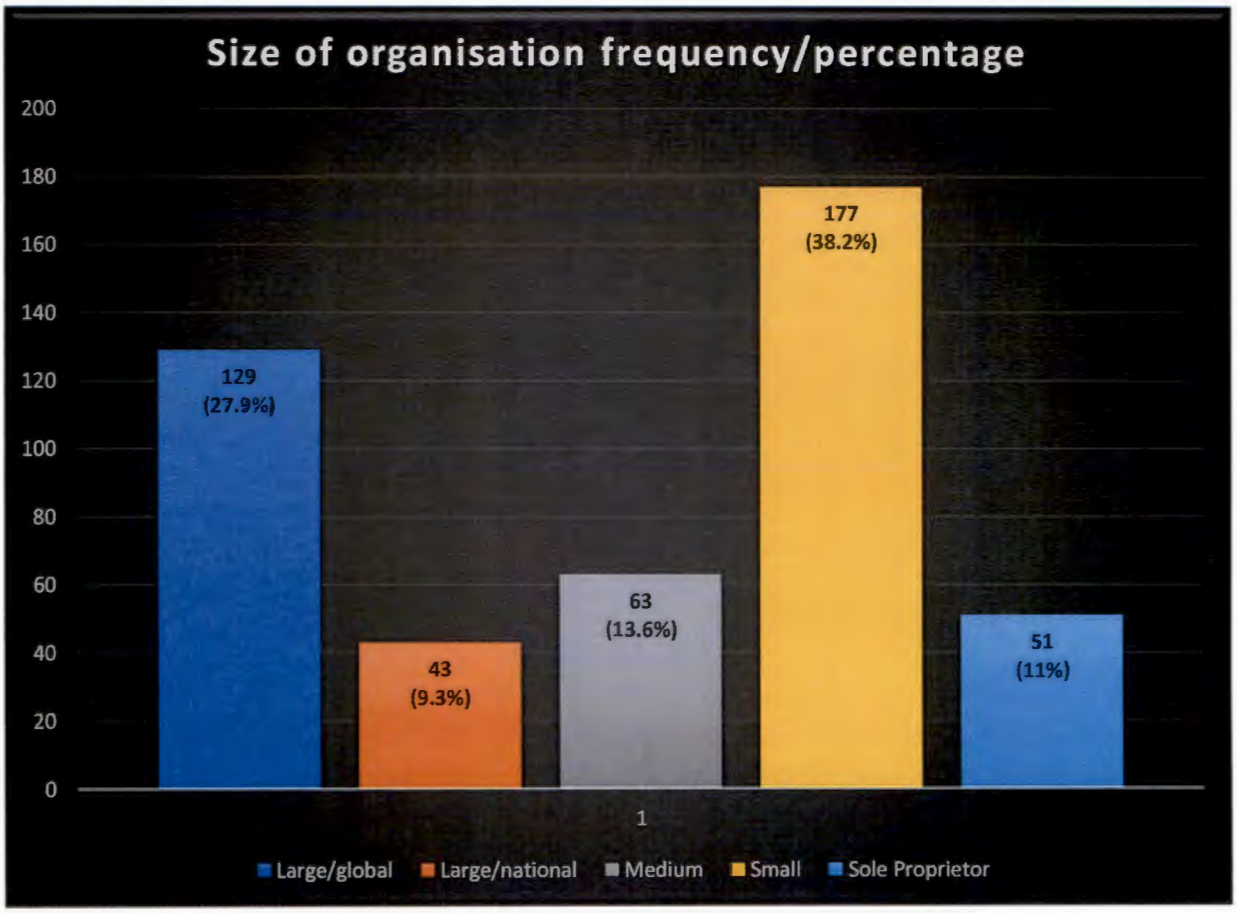


Figure 4.3: Size of organisation frequency

From the above Table 4.3 and Figure 4.3, it is apparent that the majority of the respondents were employed by small (38.2%) and large/global (27.9%) organisations. However, large/national (9.3%) medium (13.6%) and sole proprietor (11%) organisations were sufficiently represented for the research findings to offer a balanced perspective of the strategic value and impact of L&D practices. Therefore, the research findings were not distorted by the size of the organisation.

4.2.4 Industry/sector

Table 4.4: Industry/sector frequency/percentages

Industry		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agriculture, forestry, nature conversation and related	4	0.9	0.9	0.9
	Automotive and related	5	1.1	1.1	1.9
	Banking, asset/wealth management, investment and related	7	1.5	1.5	3.5
	Chemical, pharmaceutical, petroleum, gas and related	5	1.1	1.1	4.5
	Construction, building, architecture, property development and related	11	2.4	2.4	6.9
	Education - basic, primary, secondary and tertiary (university)	74	16.0	16.0	22.9
	Energy, utilities, water and related	4	0.9	0.9	23.8
	Engineering, metallurgy, smelters and related	13	2.8	2.8	26.6
	Financial services, accounting, management consulting and professional services	36	7.8	7.8	34.3
	Food and Beverage, hospitality, gaming, leisure, tourism and related	15	3.2	3.2	37.6
	Government (local or municipality level)	10	2.2	2.2	39.7

Table 4.4: Industry/sector frequency/percentages (continued)

	Industry	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government (national or provincial levels)	31	6.7	6.7	46.4
	Health and Welfare, medicine, medical science, pathology and related	11	2.4	2.4	48.8
	Information and Communication Technology, telecommunications, electronics and related	23	5.0	5.0	53.8
	Insurance	7	1.5	1.5	55.3
	Legal, safety, private security, police and related	4	0.9	0.9	56.2
	Manufacturing, fibre processing, packaging and related	9	1.9	1.9	58.1
	Manufacturing, sugar, fibre processing, packaging and related	1	0.2	0.2	58.3
	Media, advertising, marketing and related	10	2.2	2.2	60.5
	Mining	16	3.5	3.5	63.9
	Non-Government Organisation, NPO and community/faith-based and related	7	1.5	1.5	65.4
	Regulatory, professional body and trade union	3	0.6	0.6	66.1
	Training, Skills development and Human Resources Management	140	30.2	30.2	96.3
	Transport, logistics, warehousing, fleet management and related	12	2.6	2.6	98.9
	Wholesale, retail and related	5	1.1	1.1	100.0
	Total	463	100.0	100.0	

For meaningful statistical analysis and to ensure significant representation, the industries were rationalised into eleven (11) Sectoral Education and Training Authority (SETA) clusters. This logic was informed by the categorisation of

organisations to specific SETAs, who serve as the custodian of L&D in a particular industry. This decision was taken subject to consultation with the statistical consultant.

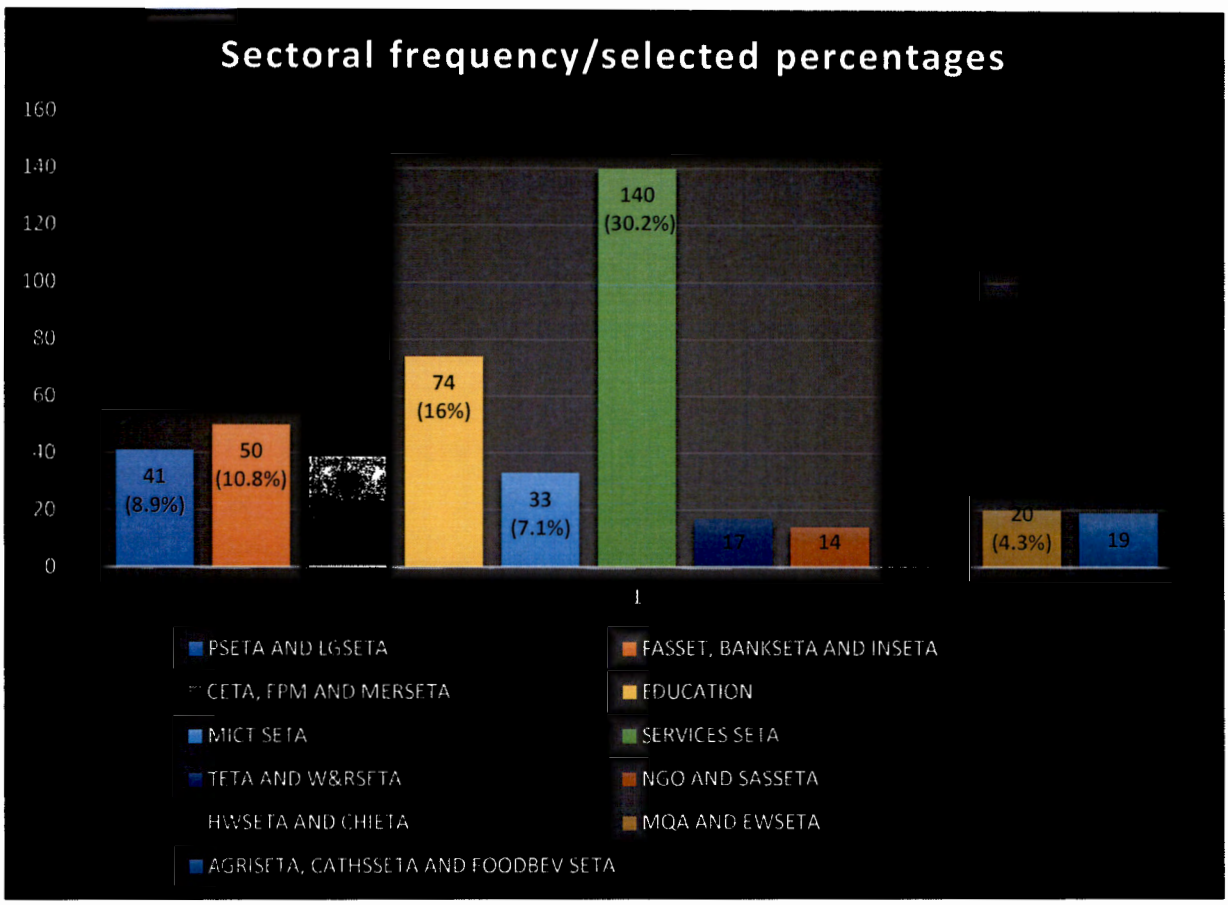


Figure 4.4: Sectoral frequency

From the above Table 4.4 and Figure 4.4, it is apparent that the research survey was a comprehensive cross-industry analysis. As indicated, the industries were rationalised and accordingly, eleven (11) specific industries were demarcated, for further statistical analysis. These with the industries representative of a range of 14 (minimum) to 140 (maximum). The three highest participating industry frequencies were:

- ServicesSETA: N = 140 (30.2%);
- Education (primary, secondary and tertiary): N = 74 (16%) and
- FASSET, BankSETA and INSETA: N= 50 (10.8%).

The research findings offer a balanced perspective of the industry-wide, strategic value and impact of L&D practices. Consequently, the research findings were not distorted by the respective industries in which the respondents were employed.

4.2.5 Position in the organisation

Table 4.5: Position frequency/percentages

Position		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Academic and Educator	33	7.1	7.1	7.1
	Business, Operational and/or - Line Manager (non-HRM or non-L&D)	74	16.0	16.0	23.1
	HRM Director/Manager and/or - Practitioner/HRBP	62	13.4	13.4	36.5
	Learning & Development Director, -Manager, CLO and/or Training Manager	71	15.3	15.3	51.8
	Occupational/Vocational Trainer or Training Facilitator	23	5.0	5.0	56.8
	Organisational Development (OD) Manager, Practitioner, Specialist and/or -Consultant	21	4.5	4.5	61.3
	Subject Matter Expert and/or L&D and/or Management - Consultant	63	13.6	13.6	74.9
	Training Administrator, - Coordinator, Administrator, ETD Practitioner and/or Skills Development Facilitator	77	16.7	16.7	91.6
	Training Provider, training events company owner and/or Conference Producer	39	8.4	8.4	100.0
	Total	463	100.0	100.0	

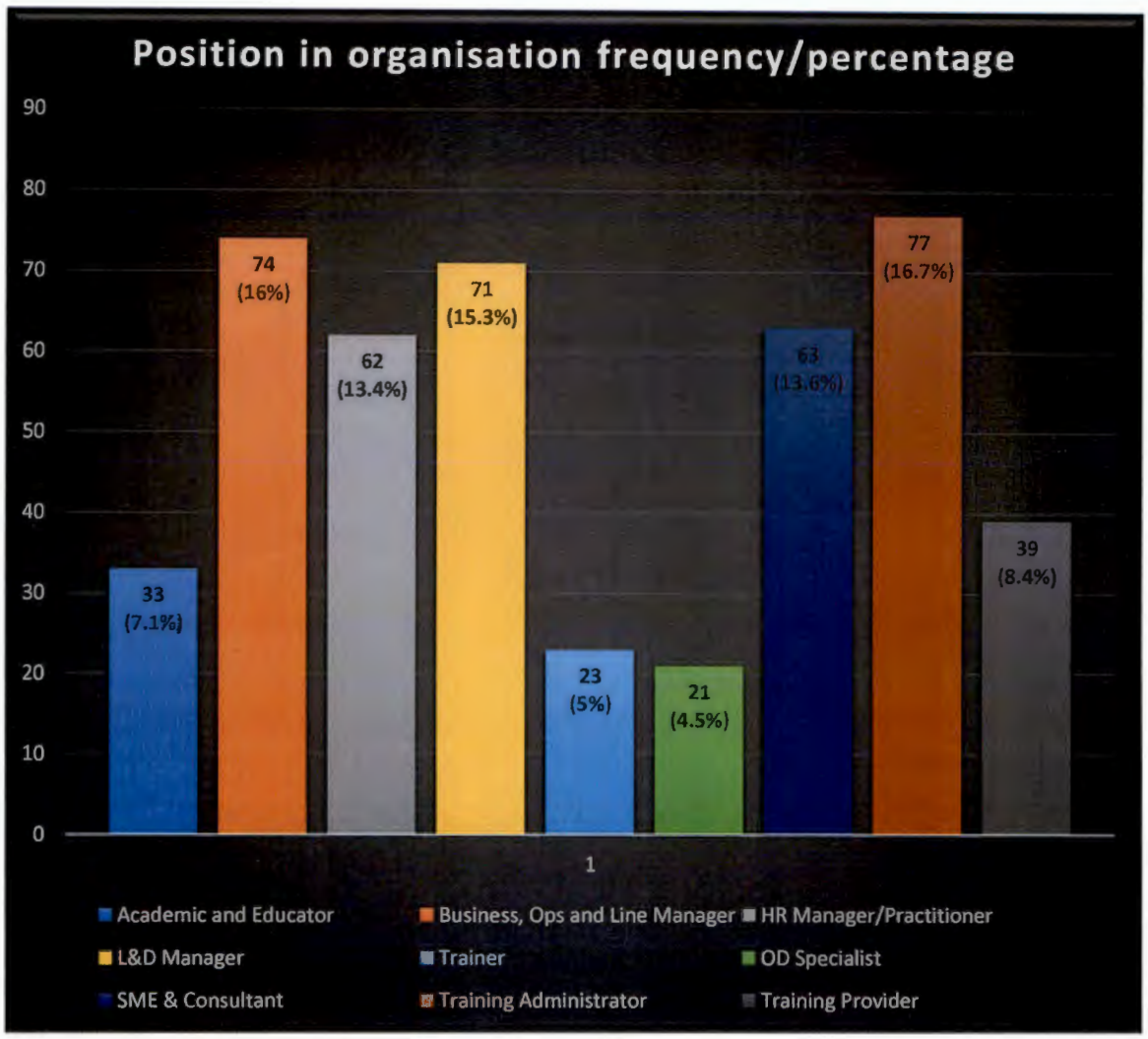


Figure 4.5: Position in organisation frequency

From the above Table 4.5 and Figure 4.5, it is apparent that the respondents of this research survey were representative of nine (9) occupational groups, ranging from N = 21 (minimum - 4.5%) for OD Managers, -Consultants and -Specialists to N = 77 (maximum - 16.7%) for Training Administrators, ETD Practitioners and SDFs. The research findings offered a balanced perspective of the strategic value and impact of L&D practices. Consequently, the research findings were not distorted by the respective positions of the respondents.

4.3 MEAN SCORES

Mean scores were calculated for compliance and importance items as well as the L&D capability gap index.

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. A compliance mean score of higher than 3, would indicate a satisfactory degree of L&D maturity. A compliance mean score of less than 3, would imply an unsatisfactory level of strategic L&D, indicating that L&D practices still tend to be transactional. This could have detrimental consequences for the performance and future of organisational L&D.

Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors. An importance mean score of higher than 3, would indicate a significant degree of L&D priority. An importance mean score of less than 3, would imply a strategic disregard for the strategic value and impact of L&D. This could have detrimental consequences for the performance and future of organisational L&D, in its quest to transform to a strategic learning partner.

L&D capability gap index is defined and calculated as the differential between the perceived importance of and the degree of compliance. A positive differential, that is, the degree of compliance is greater than the degree of importance, would indicate a satisfactory level of L&D readiness and vice versa. A negative differential could indicate that L&D practices exhibit a low to moderate level of readiness, lacking in strategic business impact and ill-equipped and unfit to future-proof organisations.

4.3.1 Overall mean score

By referring to Table 4.6, it is apparent that the overall mean score for the measurement of the strategic value and impact (compliance) of L&D for the group of respondents is 2.92. By referring to Table 4.6, it is apparent that the overall mean score for the importance of each of the factors is 3.23. Therefore, the overall L&D Capability Gap Index is -0.31. Given the fact that the numeric indicator of three (3) in the questionnaire is descriptive of agreement with the strategic L&D variables, the overall mean of 2.92 would suggest a below average, strategic impact and value (maturity) of L&D practices. The L&D Capability Index of -0.31 would suggest that the overall state of readiness is alarmingly low.

4.3.2 Mean scores per geographic region - compliance and importance

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors.

Table 4.6: Mean scores per geographic region (compliance and importance)

Region	N	Mean Score - compliance	N	Mean Score - importance	Capability gap index
South Africa	355	2.92	355	3.29	-0.37
Rest of Africa	64	3.04	64	3.35	-0.31
Rest of the world	44	2.8	45	3.06	-0.26
Total	463	2.92	464	3.23	-0.31

	Unfavourable
	Favourable

From Table 4.6 and Figure 4.6, it is apparent that the group, rest of Africa scored the highest compliance score (N = 64, 3.04) and the group, rest of the world scored the lowest compliance score (N = 45, 2.8).

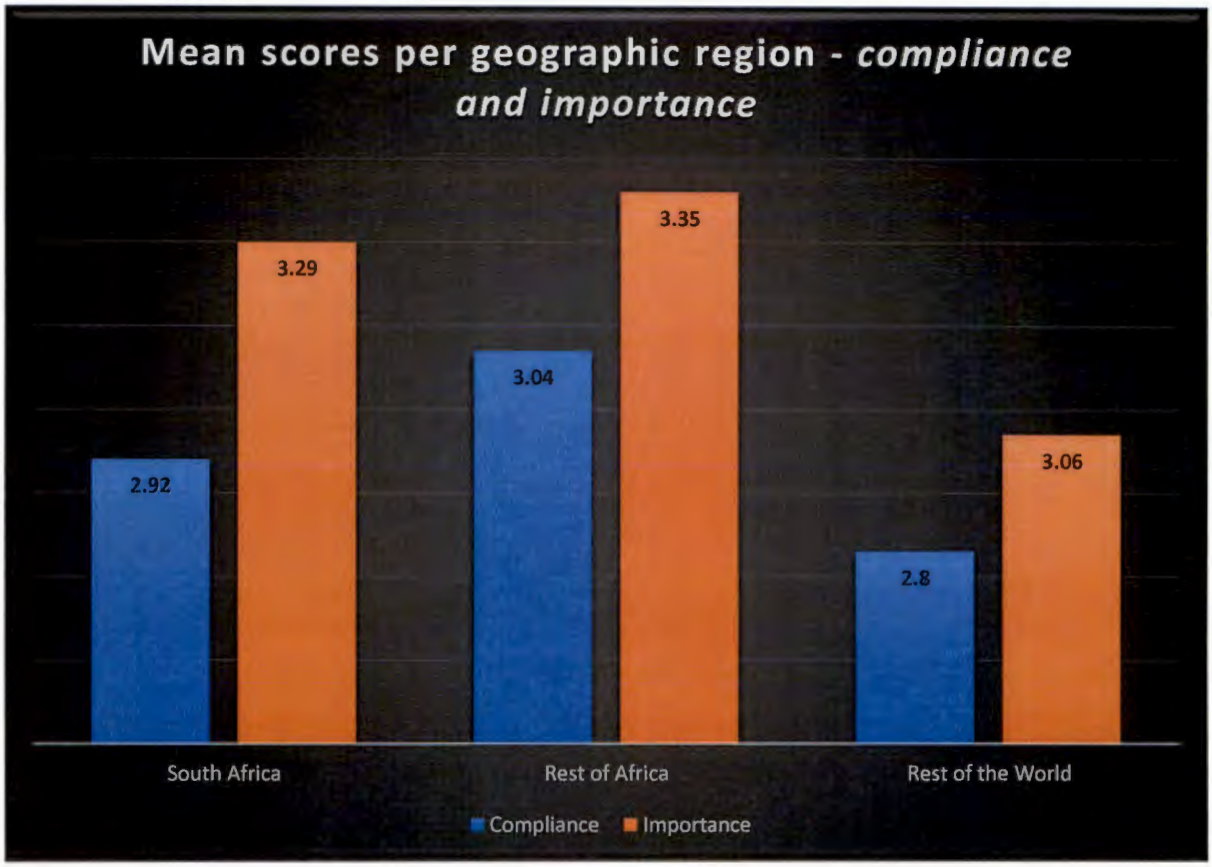


Figure 4.6: Overall mean score per geographic region (compliance and importance)

From Table 4.6 and Figure 4.6, it is apparent that the group, rest of world scored the least (narrowest) L&D capability gap index (N = 45, -0.26) and the group, South Africa scored the highest (widest) L&D capability gap index (N = 356, -0.37).

4.3.3 Mean scores per tenure - compliance and importance

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors.

Table 4.7: Mean score per tenure (compliance and importance)

Tenure		N	Mean score - compliance	Mean score - importance	L&D Capability Gap Index
Valid	Less than 1 year	32	3.02	3.21	-0.19
	1-3 years	111	2.9	3.22	-0.32
	4-6 years	83	2.91	3.22	-0.31
	7-9 years	63	2.93	3.24	-0.31
	10+ years	174	2.86	3.26	-0.4
	Total	463	2.92	3.23	-0.31

	Unfavourable
	Favourable

From Table 4.7 and Figure 4.7, it is apparent that the group, less than one year scored the highest compliance score (N = 32, 3.02) and the group, 10+ years scored the lowest compliance score (N = 174, 2.86).

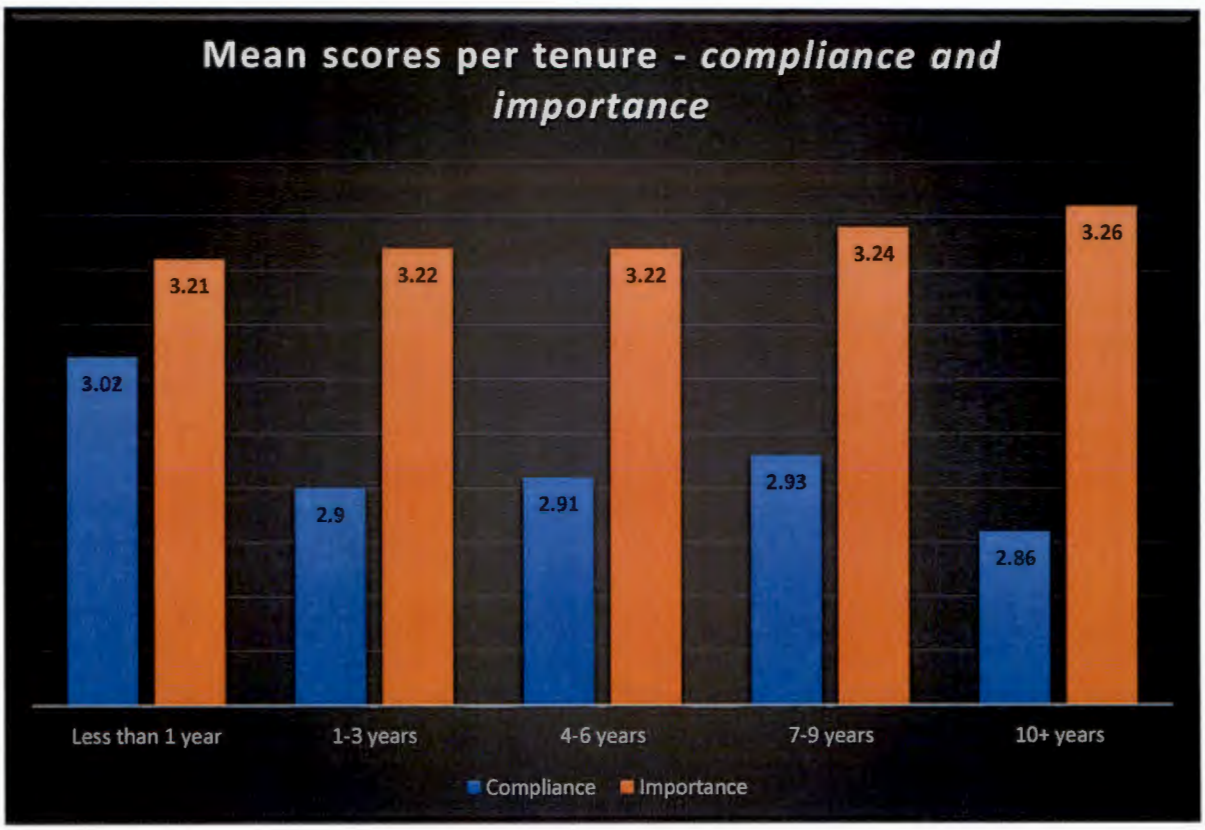


Figure 4.7: Overall mean score per tenure (compliance and importance)

From Table 4.7 and Figure 4.7, it is apparent that the group, less than one year scored the least (narrowest) L&D capability gap index (N = 32, -0.19) and the group, 10+ years scored the highest (widest) L&D capability gap index (N = 174, -0.4).

4.3.4 Mean scores per size of the organisation - compliance and importance

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors.

Table 4.8: Mean score per size of the organisation (compliance and importance)

		Frequency range (N)	Mean score - compliance	Mean score - importance	L&D Capability Gap Index
Valid	Large/global/multinational (1500+ employees)	110-129	2.93	3.27	-0.34
	Large/national (1000 - 1499 employees)	37-43	2.88	3.14	-0.26
	Medium-sized (251 - 999 employees)	51-64	2.89	3.22	-0.33
	Small (2-250 employees)	144-179	2.92	3.23	-0.31
	Sole Proprietor (1-person business)	45-51	2.97	3.34	-0.37
	Total	Max: 466	2.92	3.23	-0.31

	Unfavourable
	Favourable

From Table 4.8 and Figure 4.8, it is apparent that the group, sole proprietor scored the highest compliance score (N = 51, 2.97) and the group, large/national scored the lowest compliance score (N = 43, 2.88).

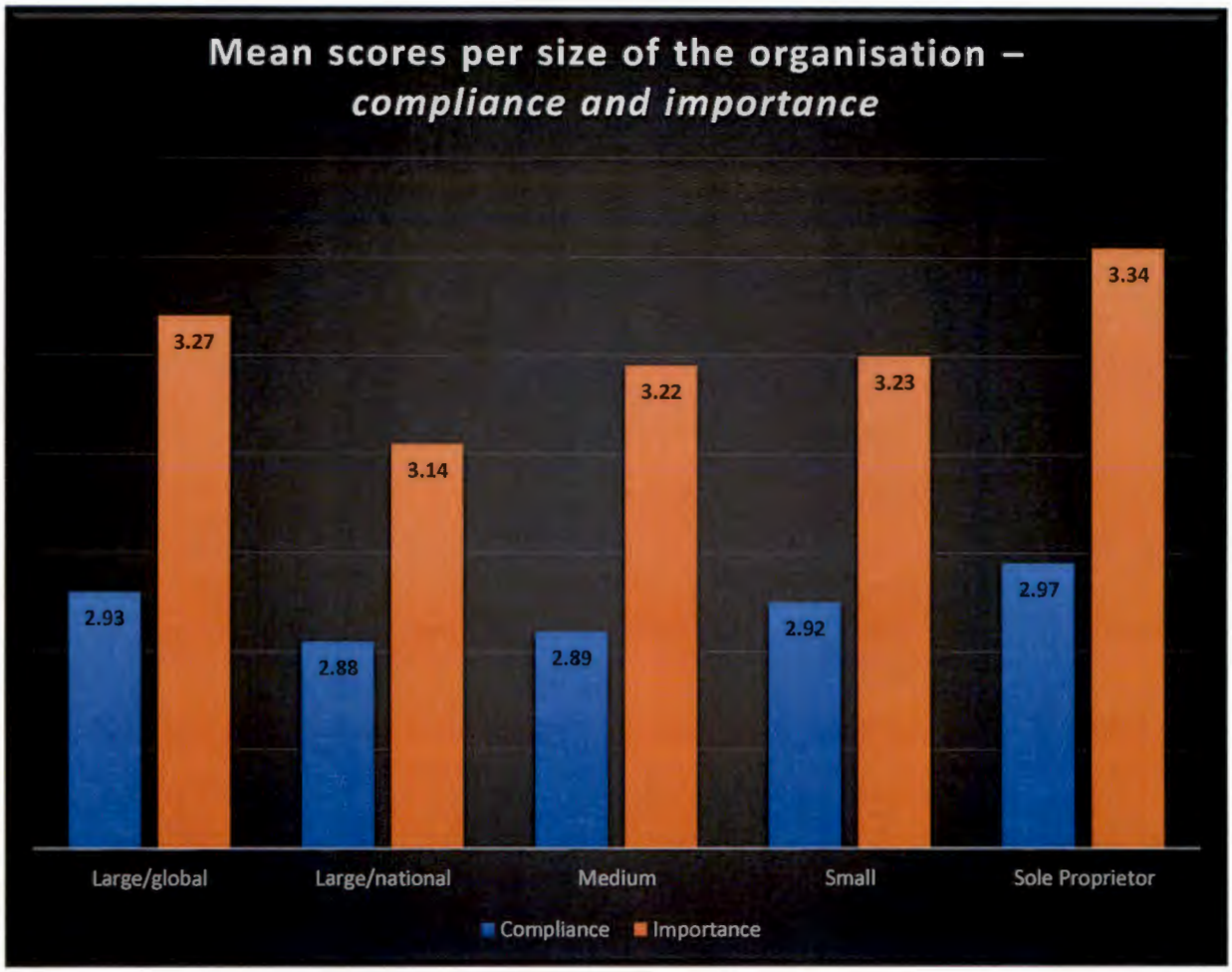


Figure 4.8: Overall mean score per size of the organisation (compliance and importance)

From Table 4.8 and Figure 4.8, it is apparent that the group, large/national scored the least (narrowest) L&D capability gap index (N = 43, -0.26) and the group, sole proprietor scored the highest (widest) L&D capability gap index (N = 51, -0.37).

4.3.5 Mean scores per industry/sector - compliance and importance

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors.

Table 4.9: Mean scores per industry/sector - compliance and importance

Industry/sector	Frequency range (N)	Mean score - compliance	Mean score - importance	L&D Capability Gap Index
PSETA AND LGSETA	35-42	2.76	3.14	-0.38
FASSET, BANKSETA AND INSETA	41-50	2.93	3.19	-0.26
CETA, FPM AND MERSETA	33-39	3.02	3.19	-0.17
EDUCATION	65-75	3.0	3.28	-0.28
MICT SETA	23-33	3.04	3.17	-0.13
SERVICES SETA	118-141	2.92	3.27	-0.35
TETA AND W&RSETA	12-17	2.88	3.1	-0.22
NGO AND SASSETA	9-14	2.73	3.23	-0.5
HWSETA AND CHIETA	13-16	3.03	3.34	-0.31
MQA AND EWSETA	19-20	2.96	3.38	-0.42
AGRISETA, CATHSSETA AND FOODBEV SETA	18-19	2.88	3.23	-0.35
TOTAL	Max: 465	2.92	3.23	-0.31

	Unfavourable
	Favourable

From Table 4.9 and Figure 4.9, it is apparent that the following three (3) groups scored the highest compliance score (in descending order):

- MICT SETA (N = 33, 3.04);
- HWSETA and CHIETA (N = 16, 3.03) and

- CETA, FPM and MERSETA (N = 39, 3.02).

From Table 4.9 and Figure 4.9, it is apparent that the following three (3) groups scored the lowest compliance score (in descending order):

- TETA and W&R SETA (N = 17, 2.88);
- PSETA and LGSETA (N = 42, 2.76) and
- NGO and SASSETA (N = 14, 2.73).

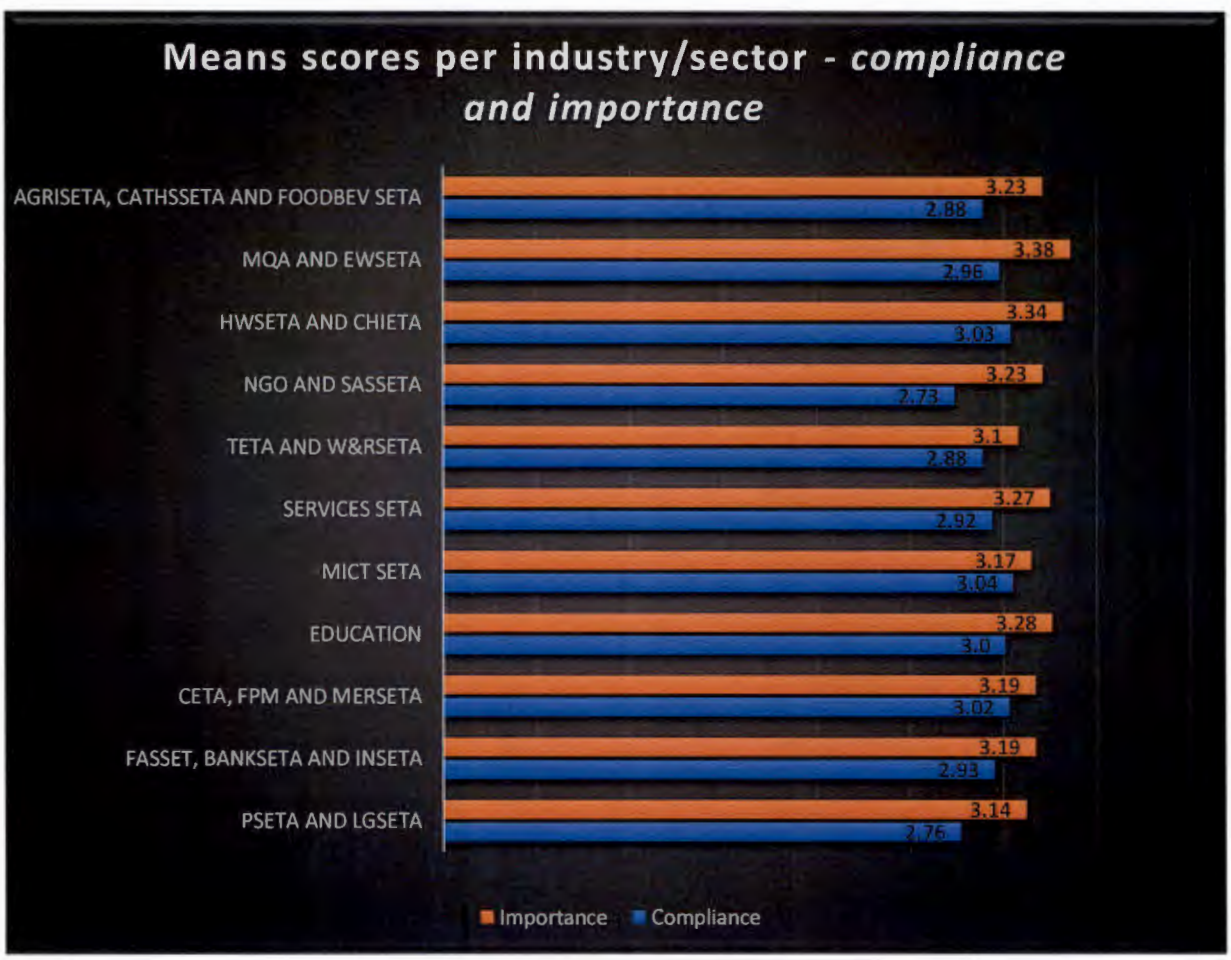


Figure 4.9: Mean scores per industry/sector - compliance and importance

From Table 4.9 and Figure 4.9, it is apparent that the following three (3) groups scored the scored the least (narrowest) L&D capability gap index (in descending order):

- MICT SETA (N = 33, -0.13);
- CETA, FPM and MERSETA (N = 39, -0.17) and

- TETA and W&R SETA (N = 17, -0.22).

From Table 4.9 and Figure 4.9, it is apparent that the following three (3) groups scored the highest (widest) L&D capability gap index (in descending order):

- NGO and SASSETA (N = 14, -0.5);
- MQA and EWSETA (N = 20, -0.42) and
- PSETA and LGSETA (N = 42, -0.38).

4.3.6 Mean scores per position in organisation - compliance and importance

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors. Importance was defined by the participating research respondents perceived strategic business priority of each of the L&D sub-factors.

Table 4.10: Mean scores per position in organisation - compliance and importance

Position		Frequency range (N)	Mean score - compliance	Mean score - importance	L&D Capability Gap Index
Valid	Academic and Educator	26-33	2.91	3.14	-0.23
	Business, Operational and/or -Line Manager (non-HRM or non-L&D)	60-74	2.88	3.12	-0.24
	HRM Director/Manager and/or -Practitioner/HRBP	49-61	2.85	3.18	-0.33
	Learning & Development Director, -Manager, CLO and/or Training Manager	63-71	2.92	3.22	-0.3
	Occupational/Vocational Trainer or Training Facilitator	20-23	2.86	3.2	-0.34
	Organisational Development (OD) Manager, Practitioner, Specialist and/or -Consultant	20-21	3.1	3.36	-0.26

	Subject Matter Expert and/or L&D and/or Management - Consultant	48-64	2.91	3.21	-0.3
	Training Administrator, -Coordinator, ETD Practitioner and/or Skills Development Facilitator	66-79	3.07	3.38	-0.31
	Training Provider, training events company owner and/or Conference Producer	35-39	2.82	3.21	-0.39
	Total	Max: 465	2.92	3.23	-0.31

	Unfavourable
	Favourable

From Table 4.10 and Figure 4.10, it is apparent that the following two (2) groups scored the highest compliance score (in descending order):

- Organisational Development (OD) Manager, Practitioner, Specialist and/or - Consultant (N = 21, 3.1) and
- Training Administrator, -Coordinator, ETD Practitioner and/or Skills Development Facilitator (N = 79, 3.07).

From Table 4.10 and Figure 4.10, it is apparent that the following two (2) groups scored the lowest compliance score (in descending order):

- HRM Director/Manager and/or -Practitioner/HRBP (N = 61, 2.85) and
- Training Provider, training events company owner and/or Conference Producer (N = 39, 2.82).

Figure 4.10: Mean scores per position in organisation - compliance and importance

From Table 4.10 and Figure 4.10, it is apparent that the following three (3) groups scored the scored the least (narrowest) L&D capability gap index (in descending order):

- Academic and Educator (N = 33, -0.23);
- Business, Operational and/or -Line Manager (N = 74, -0.24) and
- Organisational Development (OD) Manager, Practitioner, Specialist and/or -Consultant (N = 21, -0.26).

From Table 4.10 and Figure 4.10, it is apparent that the following three (3) groups scored the highest (widest) L&D capability gap index (in descending order):

- Training Provider, training events company owner and/or Conference Producer (N = 39, -0.39);
- Occupational/Vocational Trainer or Training Facilitator (N = 23, -0.34).
- HRM Director/Manager and/or -Practitioner/HRBP (N = 61, -0.33).

Furthermore, the researcher attempted to identify whether a perceptual gap exists between the respondent clusters who represented HR/L&D management and business, operational and line management (non-L&D).

Table 4.11: Comparative analysis: Perceptual Gap of L&D Capability Gap Index

HR/L&D MANAGEMENT		BUSINESS, OPERATIONAL AND LINE MANAGEMENT (NON-HR/L&D)	
Group	L&D Capability gap index	Group	L&D Capability gap index
HRM Director/Manager and/or - Practitioner/HRBP	-0.33	Business, Operational and/or - Line Manager (non-HRM or non-L&D)	-0.24
Learning & Development Director, -Manager, CLO and/or Training Manager	-0.3	Academic and Educator	-0.23
Occupational/Vocational Trainer or Training Facilitator	-0.34	Subject Matter Expert and/or L&D and/or Management - Consultant	-0.3
Training Administrator, - Coordinator, ETD Practitioner and/or Skills Development Facilitator	-0.31	Organisational Development (OD) Manager, Practitioner, Specialist and/or -Consultant	-0.26
Training Provider, training events company owner and/or Conference Producer	-0.39		
Average	-0.33	Average	-0.26

By referring to Table 4.11, it is apparent that there's a significant perceptual gap between the clusters of groups representing HR/L&D (N = 273, average of -0.33) and those representing business, operations and line management - non-HR/L&D (N = 192, average of -0.26) for the L&D capability gap index. Seemingly, the non-HR/L&D group regard the L&D capability gap index as less (narrower) than the HR/L&D group.

4.4 FACTOR ANALYSIS

4.4.1 Introduction

A total of 465 valid questionnaires were completed. This is higher than the recommended minimum sample size of 300 which is required for exploratory factor analysis (Tabachnick & Fidell, 2013). A comprehensive factor analysis of the ten (10) theoretical strategic L&D factors was conducted. The extraction method utilised was principal axis factoring. The rotation method was Direct Oblimin with Kaiser normalisation. The rotation converged in 26 iterations with the compliance questions and 36 iterations with the important questions. The KMO value for the important items as 0,973 and for compliance it was 0,970. In both cases, Bartlett's test was significant ($p<0.001$). Sampling adequacy could thus be assumed. The Kaiser criterion suggested that between 10 and 12 factors could be extracted in each case. Various solutions around these values were explored but appeared that a 10-factor solution fits the data the best, explaining 66,015% of the variance in the case of the important questions and 60,039% of the variance in the compliance items. Refer to Appendix A (compliance questions) and Appendix B (importance questions).

4.4.2 Reliability of factors/scales

Cronbach's alpha test was utilised to determine the reliability of the ten factors/scales. These results are tabulated for the total number of items (N) and then the individual sub-groups. A reliability coefficient of 0.70 or higher is considered "acceptable" in most social science research. By referring to Table 4.12, the Cronbach's Alpha Coefficient ranges between 0.839 and 0.945, which would suggest a high reliability index, for all ten (10) factors. By referring to the relationship between corrected item-total correlation, which typically should be greater than 0.25, all 83 of the questionnaire items (compliance) are higher than 0.25. The range was 0.484 to 0.816. By referring to the relationship between corrected item-total correlation, which typically should be greater than 0.25, all of the 79 questionnaire items (importance) are higher than 0.25. The range was 0.484 to 0.796.

Table 4.12: Reliability statistics of all individual items (Cronbach's Alpha)

Strategic L&D factor	Cronbach's Alpha	Cronbach's Alpha based on standardised items	Number of items (N)	Inter-item correlation (mean)
#1: Strategic mindset & alignment with business goals - compliance	0.92	0.92	12	0.491
#1: Strategic mindset & alignment with business goals - importance	0.92	0.91	9	0.563
#2: Evidence-based business metrics & predictive analytics - compliance	0.945	0.945	12	0.588
#2: Evidence-based business metrics & predictive analytics - importance	0.941	0.941	11	0.592
#3: Learning architecture & design - compliance	0.886	0.886	4	0.660
#3: Learning architecture & design - importance	0.85	0.85	4	0.586
#4: Provision of learning solutions - compliance	0.839	0.841	4	0.569
#4: Provision of learning solutions - importance	N/A	N/A	0	-
#5: Learning structures and roles - compliance	0.933	0.934	10	0.585
#5: Learning structures and roles - importance	0.9	0.902	8	0.534
#6: Enhance skills of L&D professionals - compliance	0.895	0.895	5	0.630
#6: Enhance skills of L&D professionals - importance	0.922	0.923	8	0.598
#7: Future-proofing the organisation - compliance	0.901	0.902	7	0.567
#7: Future-proofing the organisation - importance	0.898	0.9	7	0.563
#8: Curating modern learning experiences - compliance	0.896	0.896	6	0.591
#8: Curating modern learning experiences - importance	0.94	0.941	11	0.591
#9: Top management support & line manager engagement, contribution & involvement- compliance	0.915	0.915	8	0.575
#9: Top management support & line manager engagement, contribution & involvement- importance	0.9	0.9	7	0.562
#10: Learning administration, assessment & -processes - compliance	0.935	0.935	6	0.704
#10: Learning administration, assessment & -processes - importance	0.893	0.894	6	0.583

The average rating of the Inter-Item Correlation (mean) should typically be between 0.15 and 0.5. Items less than 0.15 have poor inter-item correlations, indicative that

they are not well related to each other and, therefore, might not be appropriate for measuring a single construct. Conversely, items that are higher than 0.50 tend to be very similar to each other, almost to the point that they may be regarded as redundant. By referring to Table 4.12, most of the strategic L&D factors rated, marginally higher than 0.5. The only exception is:

- #1: Strategic mindset and approach - compliance (0.491)

It can thus be inferred that items were strongly related to one another and respondents tended to respond similarly to the items.

4.5 DESCRIPTIVE AND INFERENTIAL STATISTICS: STRATEGIC L&D FACTORS AND SUB-FACTORS

4.5.1 Mean scores - compliance of Strategic L&D factors

One sample t-tests were conducted to investigate whether the mean scores on the various scales differed significantly from the Agree point (3). Results are reported in Table 4.13 below. Both statistical and practical significance will be reported. An alpha level of 0,05 was set for statistical significance. Results which were statistically significant, and, also, also had at least a medium effect size (0,5), will be reported on. However, there are no noteworthy factors to report in this regard.

Table 4.13: Strategic L&D factor mean scores - compliance

L&D Factor	N	Min.	Max.	Mean	Std. Deviation	T-test (Effect size)
#1: Strategic mindset & alignment with business goals	465	1.00	4.00	2.9674	0.60652	-0.0538
#2: Evidence based business metrics & predictive analytics	464	1.00	4.00	3.2721	0.56935	0.4779
#3: Learning architecture & design	459	1.00	4.00	2.8184	0.70275	-0.2583
#4: Provision of learning solutions	461	1.00	4.00	3.0145	0.63284	0.0229
#5: Learning structures and roles	461	1.00	4.00	2.9710	0.60579	-0.0479
#6: Enhanced skills of L&D prof's	391	1.00	4.00	2.8954	0.63069	-0.1659
#7: Future-proofing organisation	389	1.00	4.00	2.9095	0.63211	-0.1432
#8: Curating modern learning experiences	388	1.00	4.00	2.7675	0.66116	-0.3576
#9: Top management support & line manager engagement, contribution & involvement	388	1.00	4.00	2.8316	0.65434	-0.2574
#10: Learning administration, assessment & - processes	388	1.00	4.00	2.7511	0.73096	-0.3405
Valid N (list wise)	385			2.92		

	Unfavourable
	Favourable

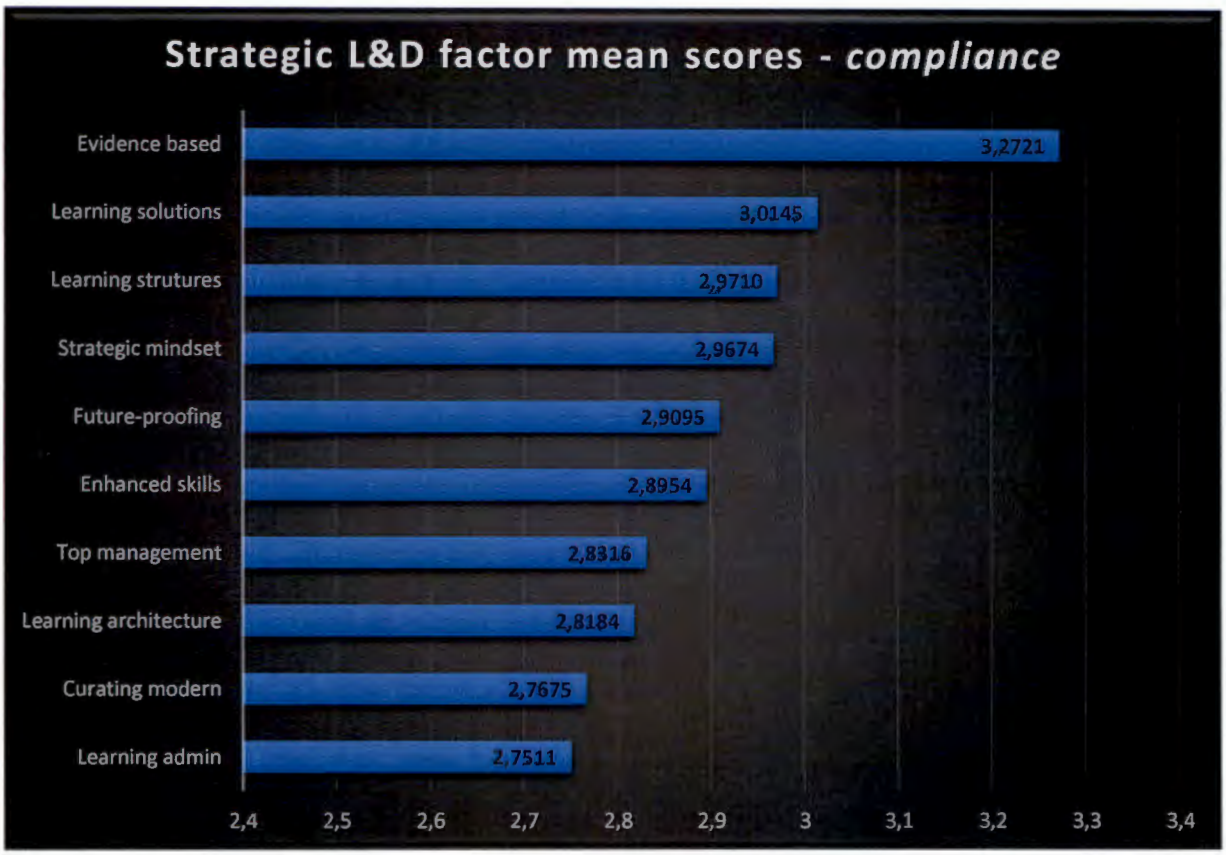


Figure 4.11: Strategic L&D factors mean scores - compliance

By referring to Table 4.13 and Figure 4.11, the three (3) most compliant factors are (in descending order):

- Evidence-based, business metrics and predictive analytics (3.27);
- Provision of learning solutions (3.01) and
- Learning structures and roles (2.97).

By referring to Table 4.13 and Figure 4.11, the three (3) least compliant factors are (in ascending order):

- Learning administration, assessment and -processes (2.75);
- Curating modern learning experiences (2.77) and
- Learning architecture and design (2.82).

Only two (2) of the total of ten (10) strategic L&D factors scored a mean of greater than 3, which is the (Likert scale) indicator of agreement/compliance from the questionnaire. These scores were not significantly higher than three though. From

the above analysis, collectively, it can be deduced that the current L&D practices are operating at administrative, traditional and transactional levels, but do not offer a strategic value proposition. Furthermore, current L&D practices seemingly have mastered the fundamentals, however, L&D does not appear to be adding much value strategically in its extended role as a strategic learning/business partner and change/transformational facilitator. There is also a glaring shortcoming regarding the curating of modern learning experiences in a dynamically changing business environment.

4.5.2 Average scores - compliance of sub-factors

The five (5) worst performing (least compliant) sub-factors are tabulated below:

Table 4.14: Average scores - compliance of sub-factors

Sub-factor	Related factor	Average score	Difficulty factor (out of 170 questions)
Q153 **Line managers are competent in conducting accurate training needs analyses.**	#9: Top management support	**65%**	**1**
Q164 **The L&D function has migrated from manual to automated processes.**	#10: Learning administration, assessment & - processes	**67%**	**2**
Q33 **L&D practitioners are sufficiently competent to effectively manage large volumes of data of organisation-wide workforce analytics.**	#2: Evidence-based business metrics & predictive analytics	**67%**	**3**
Q128 **The organisation invests heavily in technology-enabled learning tools.**	#8: Curating modern learning experiences	**67%**	**4**
Q169 **The L&D function has adopted scientifically valid measurement processes to evaluate talent development performance.**	#10: Learning administration, assessment & - processes	**67%**	**5**

The five (5) best performing (most compliant) sub-factors are tabulated below:

Table 4.15: Average scores - compliance of sub-factors

Sub-factor	Related factor	Average score	Difficulty factor (out of 170 questions)
Q8 **L&D practices make an effective contribution to the achievement of key strategic goals.**	#1: Strategic mindset	**79%**	**101**
Q152 **The L&D function is a vital source of sustainable competitive advantage for the organisation.**	#9: Top management support	**78%**	**91**
Q138 **The L&D function is instrumental in sustaining a robust organisational learning culture.**	#8: Curating modern learning	**77%**	**86**
Q155 **Human performance is an organisational strategic priority, at the hub of business decision-making.**	#9: Top management support	**77%**	**85**
Q62 **When utilising outsourced training providers, the L&D function ensures that Service Level Agreements are enforced.**	#4: Learning solutions	**77%**	**83**

4.5.3 Mean scores - importance of Strategic L&D factors

One sample t-tests were conducted to investigate whether the mean scores on the various scales differed significantly from the Agree point (3). Results are reported in Table 4.16 below. Both statistical and practical significance are reported. An alpha level of 0,05 was set for statistical significance. Results which were statistically significant, and, also, had at least a medium effect size (0,5), are reported on below.

The only noteworthy factor to report in this regard is:

- Enhanced skills of L&D Professionals (0.6210)

Table 4.16: Strategic L&D factor mean scores - importance

Factor	N	Minimum	Maximum	Mean	Std. Deviation	T-test (Effect size)
#1: Strategic mindset & alignment with business goals	464	1.00	4.00	3.2721	0.56935	0.4779
#2: Evidence-based business metrics & predictive analytics	463	1.00	4.00	3.1664	0.58694	0.2835
#3: Learning architecture & design	460	1.00	4.00	3.1955	0.60246	0.3245
#4: Provision of learning solutions	461	1.00	4.00	N/A	-	-
#5: Learning structures & roles	462	1.00	4.00	3.2580	0.56215	0.4589
#6: Enhanced skills of L&D prof's	391	1.00	4.00	3.3343	0.53837	0.6210
#7: Future-proofing the organisation	388	1.00	4.00	3.2140	0.56621	0.3780
#8: Curating modern learning experiences	388	1.00	4.00	3.1836	0.56537	0.3247
#9: Top management support & line manager engagement, contribution & involvement	388	1.00	4.00	3.2309	0.54708	0.4221
#10: Learning administration, assessment & -processes	387	1.00	4.00	3.2397	0.56123	0.4270
Valid N (list wise)	385			3.23		

	Unfavourable
	Favourable

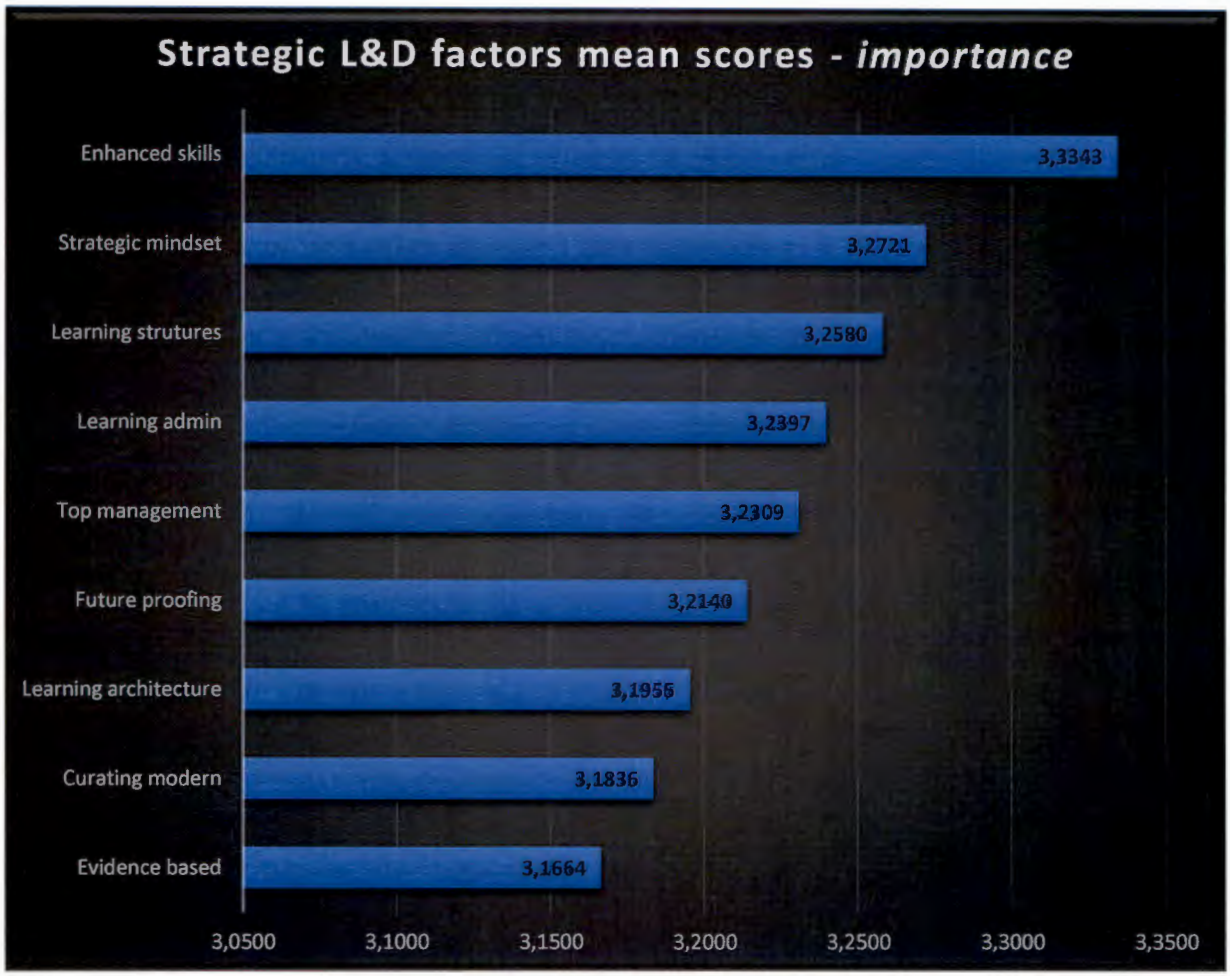


Figure 4.12: Overall mean scores - importance

By referring to Table 4.16 and Figure 4.12, the three (3) most strategically important factors are (in descending order):

- Enhanced skills set of L&D professionals (3.33);
- Strategic mindset and alignment with business goals (3.27) and
- Learning structures and roles (3.26).

By referring to Table 4.16 and Figure 4.12, the three (3) least strategically important factors are (in ascending order):

- Evidence-based, business metrics and predictive analytics (3.17);
- Curating modern learning experiences (3.18) and
- Learning architecture and design (3.2).

All ten (10) factors scored a mean of higher than the agree on point (3) in the research questionnaire, which is indicative of the strategic business importance and relevance of these factors.

4.5.4 Average scores - importance of sub-factors

The six (6) least important strategic L&D sub-factors are tabulated below:

Table 4.17: Average scores - importance of sub-factors

Sub-factor	Related factor	Average score	Difficulty factor (out of 170 questions)
Q133 **How strategically important is it for the L&D function to provide incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders?**	#8: Curating modern learning experiences	77%	82
Q134 **How strategically important is it for your organisation to invest heavily in technology-enabled learning tools?**	#8: Curating modern learning experiences	77%	84
Q67 **How strategically important is it for the L&D function to develop an integrated digital learning experience for all employees?**	#3: Learning architecture & design	78%	87
Q170 **How strategically important is it for the L&D function to migrate from manual to automated processes?**	#10: Learning administration, assessment & - processes	78%	88
Q43 **How strategically important is it for L&D practitioners to utilise**	#2: Evidence-based business metrics & predictive analytics	78%	89

data-derived metrics to measure L&D performance?			
Q68 **How strategically important is it for the organisational learning architecture to enable employees to access digital learning content from a range of sources?**	#3: Learning architecture & design	**78%**	**89**

The five (5) most important strategic L&D sub-factors are tabulated below:

Table 4.18: Average scores - importance of sub-factors

Sub-factor	Related factor	Average score	Difficulty factor (out of 170 questions)
Q110 **How strategically important is it for L&D practitioners to keep abreast of modern L&D technologies?**	#6: Enhanced skills of L&D prof's	**86%**	**170**
Q96 **How strategically important is it for L&D to be a visionary function, with a clear view of the critical skills needed in the future?**	#5: Learning structures and roles	**85%**	**169**
Q111 **How strategically important is it L&D practitioners to effectively apply conceptual thinking skills?**	#6: Enhanced skills of L&D prof's	**85%**	**168**
Q112 **How strategically important is it for the L&D function to perform as a cohesive professional unit, delivering value to your organisation?**	#6: Enhanced skills of L&D prof's	**85%**	**167**
Q94 **How important is it for L&D practitioners to be strategic learning partners, who have a good insight of your core business processes?**	#5: Learning structures and roles	**84%**	**166**

4.5.5 Strategic L&D Capability Gap Index

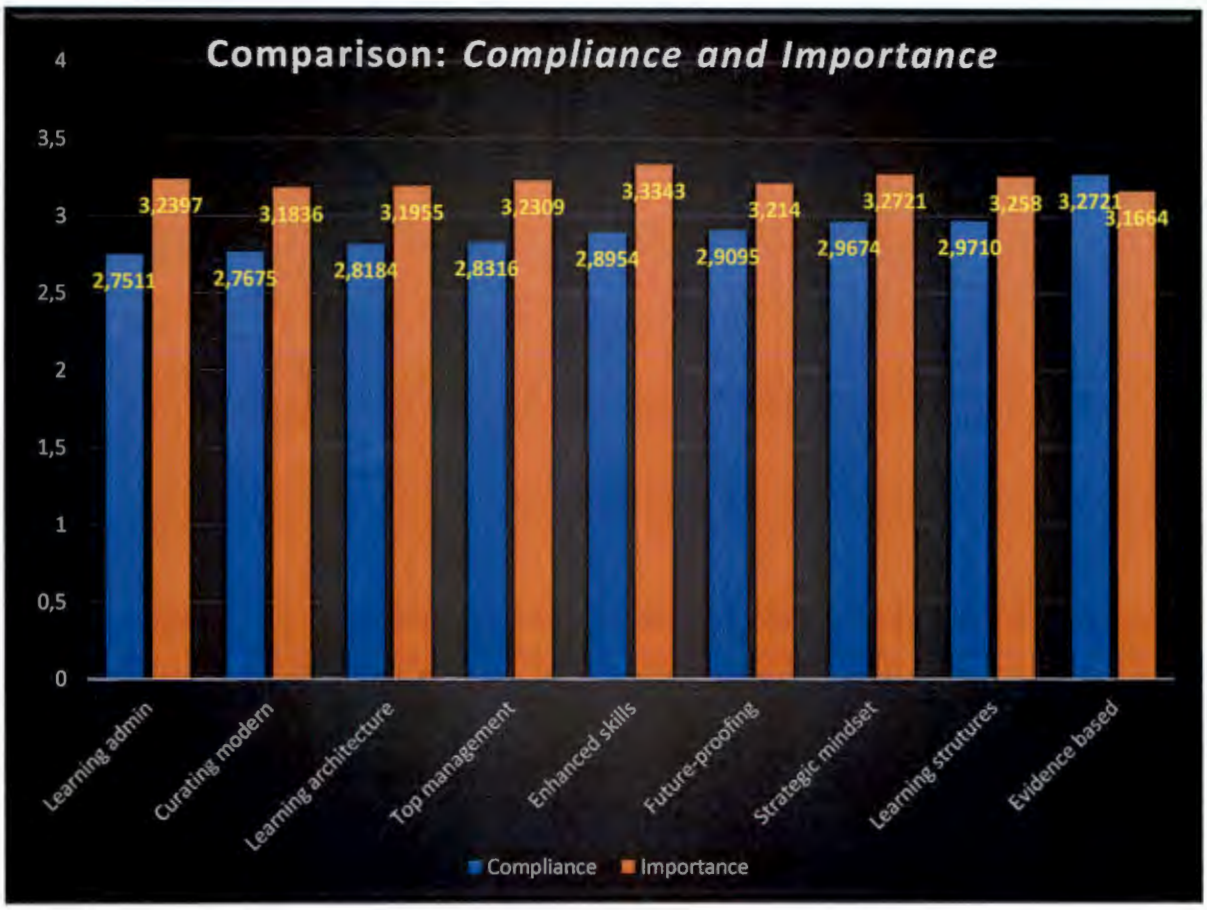


Figure 4.13: Comparison: Importance and Compliance

From Figure 4.13, it is apparent that in eight (8) of the nine (9) factors, the importance exceeds the compliance, which would suggest a low degree of maturity and readiness of L&D.

Table 4.19: L&D Capability Gap Index

Strategic L&D factor	N	L&D Capability Gap Index (Importance - Compliance)	Std. Deviation
#1: Strategic mindset & alignment with business goals	464	-0.3048	0,74985
#2: Evidence-based business metrics & predictive analytics	463	0.1057	0,46397
#3: Learning architecture & design	460	-0.3770	0,82157
#4: Provision of learning solutions	461	N/A	-
#5: Learning structures & roles	462	-0.2870	0,67405
#6: Enhanced skills of L&D prof's	391	-0.4389	0,72445
#7: Future-proofing the organisation	388	-0.3046	0,67065
#8: Curating modern learning experiences	388	-0.4160	0,76118
#9: Top management support & line manager engagement, contribution & involvement	388	-0.3993	0,38215
#10: Learning administration, assessment & -processes	387	-0.4886	0,49722
Valid N (list wise)	385	-0.31	

	Unfavourable
	Favourable

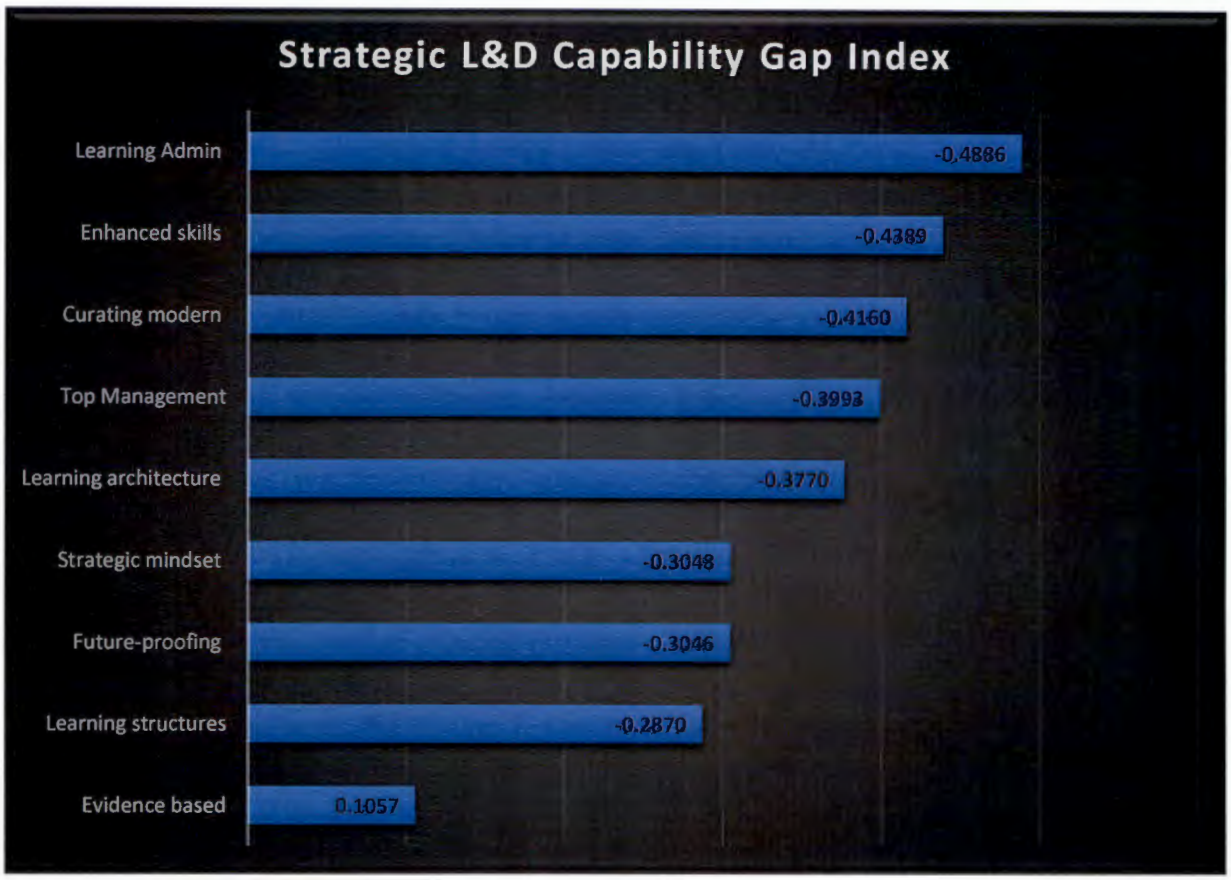


Figure 4.14: Strategic L&D Capability Gap Index

Of the nine (9) factors in which the strategic L&D capability gap index could be calculated, eight (8) factors were deficient, i.e. where the compliance mean was lower than the importance mean score. The only one (1) factor in which the compliance mean exceeded the importance mean was #2, Evidence-based, business metrics and predictive analytics (0.1057). By referring to Table 4.19 and Figures 4.13 and 4.14, the three (3) most (widest) L&D capability gaps are (in descending order):

- Learning administration, assessment and -processes (-0.49);
- Enhanced skills set of L&D professionals (-0.44) and
- Curating modern learning experiences (-0.42) and

By referring to Table 4.19 and Figures 4.13 and 4.14, the three (3) least (narrowest) L&D capability gaps are (in ascending order):

- Evidence-based, business metrics and predictive analytics (0.11);
- Learning structures and roles (-0.29) and

- Future-proofing the organisation (-0.3).

4.6 INTERGROUP COMPARISONS

4.6.1 ANOVA - compliance and importance per geographic region

For purposes of this research study, geographic regions were demarcated as S.A; Rest of Africa and Rest of the World.

Table 4.20: ANOVA - compliance and importance per geographic region

		Sum of Squares	df	Mean Square	F	Sig.
Strategic mindset - COMPLIANCE	Between Groups	0,847	2	0,424	1,152	**0,317**
	Within Groups	169,843	462	0,368		
	Total	170,690	464			
Strategic mindset - IMPORTANCE	Between Groups	1,148	2	0,574	1,777	**0,170**
	Within Groups	148,940	461	0,323		
	Total	150,088	463			
Evidence based metrics - COMPLIANCE	Between Groups	1,148	2	0,574	1,777	**0,170**
	Within Groups	148,940	461	0,323		
	Total	150,088	463			
Evidence based metrics - IMPORTANCE	Between Groups	4,539	2	2,270	6,752	**0,001**
	Within Groups	154,618	460	0,336		
	Total	159,158	462			
Learning architecture & design - COMPLIANCE	Between Groups	3,274	2	1,637	3,349	**0,036**
	Within Groups	222,916	456	0,489		
	Total	226,190	458			
Learning architecture & design - IMPORTANCE	Between Groups	4,384	2	2,192	6,176	**0,002**
	Within Groups	162,213	457	0,355		
	Total	166,598	459			
Learning solutions -COMPLIANCE	Between Groups	1,578	2	0,789	1,979	**0,139**
	Within Groups	182,645	458	0,399		
	Total	184,223	460			
Learning structures & roles - COMPLIANCE	Between Groups	2,057	2	1,029	2,825	**0,060**
	Within Groups	166,752	458	0,364		
	Total	168,809	460			

Learning structures & roles- IMPORTANCE	Between Groups	4,663	2	2,332	7,589	**0,001**
	Within Groups	141,019	459	0,307		
	Total	145,682	461			
Enhanced skills of L&D prof's - COMPLIANCE	Between Groups	2,935	2	1,467	3,741	**0,025**
	Within Groups	152,197	388	0,392		
	Total	155,132	390			

Table 4.20: ANOVA - compliance and importance per geographic region (continued)

		Sum of Squares	df	Mean Square	F	Sig.
Enhanced skills of L&D prof's - IMPORTANCE	Between Groups	2,807	2	1,404	4,940	**0,008**
	Within Groups	110,232	388	0,284		
	Total	113,039	390			
Future-proofing organisation - COMPLIANCE	Between Groups	2,379	2	1,189	3,007	**0,051**
	Within Groups	152,654	386	0,395		
	Total	155,033	388			
Future-proofing organisation - IMPORTANCE	Between Groups	1,018	2	0,509	1,592	**0,205**
	Within Groups	123,054	385	0,320		
	Total	124,071	387			
Curating modern learning - COMPLIANCE	Between Groups	0,710	2	0,355	0,811	**0,445**
	Within Groups	168,461	385	0,438		
	Total	169,171	387			
Curating modern learning - IMPORTANCE	Between Groups	0,918	2	0,459	1,439	**0,238**
	Within Groups	122,782	385	0,319		
	Total	123,700	387			
Top management support - COMPLIANCE	Between Groups	1,477	2	0,738	1,731	**0,178**
	Within Groups	164,221	385	0,427		
	Total	165,698	387			
Top management support - IMPORTANCE	Between Groups	3,438	2	1,719	5,889	**0,003**
	Within Groups	112,091	384	0,292		
	Total	115,529	386			
Learning administration – COMPLIANCE	Between Groups	2,062	2	1,031	1,939	0,145
	Within Groups	204,181	384	0,532		
	Total	206,243	386			
Learning administration - IMPORTANCE	Between Groups	1,977	2	0,989	3,174	**0,043**
	Within Groups	119,607	384	0,311		
	Total	121,584	386			

	Noteworthy

The ANOVA significance factors less than 0,05 represent significant differences. By referring to Table 4.20, the range is between 0.001 and 0.445. Significant differences are noted in the following factors:

- Evidence-based metrics - importance (0.001);
- Learning architecture and design - compliance (0.036);
- Learning architecture and design - importance (0.002);
- Enhanced skills of L&D Prof's - compliance (0.025);
- Enhanced skills of L&D Prof's - importance (0.008) and
- Top management support - importance (0.003).

4.6.2 Mean scores per strategic L&D factor per geographic region (compliance)

Compliance was defined by the participating research respondents perceived organisational L&D performance measured against each of the L&D sub-factors.

Table 4.21: Mean scores per strategic L&D factor per geographic region (compliance)

Factor	Region	N	Mean	Std. Deviation	Std. Error
Strategic mindset - COMPLIANCE	South Africa	356	2,9837	0,59576	0,03158
	Rest of Africa	64	2,9676	0,66100	0,08262
	Rest of the world	45	2,8380	0,60899	0,09078
	Total	465	2,9674	0,60652	0,02813
Evidence based metrics - COMPLIANCE	South Africa	355	3,2760	0,58199	0,03089
	Rest of Africa	64	3,3446	0,47915	0,05989
	Rest of the world	45	3,1383	0,57548	0,08579
	Total	464	3,2721	0,56935	0,02643
Learning architecture & design - COMPLIANCE	South Africa	352	2,7803	0,70727	0,03770
	Rest of Africa	63	3,0278	0,65394	0,08239
	Rest of the world	44	2,8239	0,69588	0,10491
	Total	459	2,8184	0,70275	0,03280
Learning solutions - COMPLIANCE	South Africa	354	3,0181	0,65000	0,03455
	Rest of Africa	63	3,1032	0,56196	0,07080
	Rest of the world	44	2,8580	0,56906	0,08579
	Total	461	3,0145	0,63284	0,02947
Learning structures & roles - COMPLIANCE	South Africa	353	2,9732	0,59975	0,03192
	Rest of Africa	64	3,0781	0,60250	0,07531
	Rest of the world	44	2,7977	0,63374	0,09554
	Total	461	2,9710	0,60579	0,02821
Enhanced skills of L&D prof's - COMPLIANCE	South Africa	301	2,8821	0,63682	0,03671
	Rest of Africa	54	3,0815	0,51910	0,07064
	Rest of the world	36	2,7278	0,68143	0,11357
	Total	391	2,8954	0,63069	0,03190
Future-proofing	South Africa	300	2,8898	0,64341	0,03715
	Rest of Africa	54	3,0926	0,53030	0,07216
	Rest of the world	35	2,7959	0,64102	0,10835

organisation - COMPLIANCE	Total	389	2,9095	0,63211	0,03205
Curating modern learning - COMPLIANCE	South Africa	299	2,7614	0,65235	0,03773
	Rest of Africa	54	2,8574	0,68928	0,09380
	Rest of the world	35	2,6810	0,69589	0,11763
	Total	388	2,7675	0,66116	0,03357

Table 4.21: Mean scores per strategic L&D factor per geographic region (compliance) (continued)

Factor	Region	N	Mean	Std. Deviation	Std. Error
Top management support - COMPLIANCE	South Africa	299	2,8099	0,66749	0,03860
	Rest of Africa	54	2,9838	0,62667	0,08528
	Rest of the world	35	2,7821	0,55930	0,09454
	Total	388	2,8316	0,65434	0,03322
Learning administration - COMPLIANCE	South Africa	299	3,0457	0,48621	0,02812
	Rest of Africa	54	3,1392	0,45965	0,06255
	Rest of the world	35	2,8590	0,42864	0,07245
	Total	388	3,0419	0,48111	0,02442

	Noteworthy

Given a comparative intergroup analysis, there were no significant differences in the mean scores per strategic L&D factor per geographic region (compliance), except for the following groups:

- Rest of Africa in the Learning Architecture factor (3.0278) and
- Rest of the world in the Learning Solutions (2.858) and Learning Administration (2.859) factors.

4.6.3 Mean scores per strategic L&D factor per geographic region (importance)

Table 4.22: Mean scores per strategic L&D factor per geographic region (importance)

Factor	Region	N	Mean	Std. Deviation	Std. Error
Strategic mindset - IMPORTANCE	South Africa	355	3,2760	0,58199	0,03089
	Rest of Africa	64	3,3446	0,47915	0,05989
	Rest of the world	45	3,1383	0,57548	0,08579
	Total	464	**3,2721**	0,56935	0,02643
Evidence based metrics - IMPORTANCE	South Africa	355	3,1830	0,60635	0,03218
	Rest of Africa	63	3,2771	0,48804	0,06149
	Rest of the world	45	2,8808	0,46951	0,06999
	Total	463	**3,1664**	0,58694	0,02728
Learning architecture & design - IMPORTANCE	South Africa	353	3,2214	0,60667	0,03229
	Rest of Africa	63	3,2579	0,54803	0,06905
	Rest of the world	44	2,8977	0,57141	0,08614
	Total	460	**3,1955**	0,60246	0,02809
Learning structures & roles - IMPORTANCE	South Africa	354	3,2836	0,56122	0,02983
	Rest of Africa	64	3,3268	0,50859	0,06357
	Rest of the world	44	2,9517	0,56110	0,08459
	Total	462	**3,2580**	0,56215	0,02615
Enhanced skills of L&D prof's - IMPORTANCE	South Africa	301	3,3512	0,54050	0,03115
	Rest of Africa	54	3,4120	0,52734	0,07176
	Rest of the world	36	3,0764	0,47366	0,07894
	Total	391	**3,3343**	0,53837	0,02723
Future-proofing organisation - IMPORTANCE	South Africa	299	3,2214	0,57002	0,03297
	Rest of Africa	54	3,2725	0,56551	0,07696
	Rest of the world	35	3,0612	0,52235	0,08829
	Total	388	**3,2140**	0,56621	0,02875
Curating modern learning - IMPORTANCE	South Africa	299	3,1899	0,57366	0,03318
	Rest of Africa	54	3,2416	0,56654	0,07710
	Rest of the world	35	3,0397	0,47602	0,08046
	Total	388	**3,1836**	0,56537	0,02870

Table 4.22: Mean scores per strategic L&D factor per geographic region (importance) (continued)

Factor	Region	N	Mean	Std. Deviation	Std. Error
Top management support - IMPORTANCE	South Africa	299	3,0457	0,48621	0,02812
	Rest of Africa	54	3,1392	0,45965	0,06255
	Rest of the world	35	2,8590	0,42864	0,07245
	Total	388	**3,0419**	0,48111	0,02442
Learning administration - IMPORTANCE	South Africa	298	3,2587	0,56750	0,03287
	Rest of Africa	54	3,2809	0,53868	0,07330
	Rest of the world	35	3,0143	0,50224	0,08489
	Total	387	**3,2397**	0,56123	0,02853

	Noteworthy

Given a comparative intergroup analysis, there were no significant differences in the mean scores per strategic L&D factor per geographic region (importance), except for the following groups:

- Rest of the world mean scores were significantly less measured against the factor mean and the other two groups.

4.6.4 ANOVA - compliance and importance per tenure

Table 4.23: ANOVA - compliance and importance per tenure

Factor		Sum of Squares	df	Mean Square	F	Sig.
Strategic mindset - COMPLIANCE	Between Groups	0,638	4	0,159	0,431	**0,786**
	Within Groups	170,052	460	0,370		
	Total	170,690	464			
Strategic mindset - IMPORTANCE	Between Groups	2,302	4	0,575	1,787	**0,130**
	Within Groups	147,786	459	0,322		
	Total	150,088	463			
Evidence based metrics - COMPLIANCE	Between Groups	2,302	4	0,575	1,787	**0,130**
	Within Groups	147,786	459	0,322		
	Total	150,088	463			
Evidence based metrics - IMPORTANCE	Between Groups	0,860	4	0,215	0,622	**0,647**
	Within Groups	158,297	458	0,346		
	Total	159,158	462			
Learning architecture & design - COMPLIANCE	Between Groups	1,219	4	0,305	0,615	**0,652**
	Within Groups	224,971	454	0,496		
	Total	226,190	458			
Learning architecture & design - IMPORTANCE	Between Groups	1,445	4	0,361	0,995	**0,410**
	Within Groups	165,152	455	0,363		
	Total	166,598	459			
Learning solutions - COMPLIANCE	Between Groups	0,357	4	0,089	0,221	**0,927**
	Within Groups	183,867	456	0,403		
	Total	184,223	460			
Learning structures & roles - COMPLIANCE	Between Groups	1,524	4	0,381	1,038	**0,387**
	Within Groups	167,285	456	0,367		
	Total	168,809	460			
Learning structures & roles - IMPORTANCE	Between Groups	1,641	4	0,410	1,301	**0,269**
	Within Groups	144,041	457	0,315		
	Total	145,682	461			

Table 4.23: ANOVA - compliance and importance per tenure (continued)

Enhanced skills of L&D prof's - COMPLIANCE	Between Groups	2,118	4	0,529	1,336	**0,256**
	Within Groups	153,014	386	0,396		
	Total	155,132	390			
Enhanced skills of L&D prof's - IMPORTANCE	Between Groups	0,657	4	0,164	0,564	**0,689**
	Within Groups	112,383	386	0,291		
	Total	113,039	390			
Future-proofing organisation - COMPLIANCE	Between Groups	1,734	4	0,433	1,086	**0,363**
	Within Groups	153,299	384	0,399		
	Total	155,033	388			
Future-proofing organisation - IMPORTANCE	Between Groups	0,731	4	0,183	0,567	**0,686**
	Within Groups	123,340	383	0,322		
	Total	124,071	387			
Curating modern learning - COMPLIANCE	Between Groups	4,391	4	1,098	2,551	**0,039**
	Within Groups	164,780	383	0,430		
	Total	169,171	387			
Curating modern learning - IMPORTANCE	Between Groups	0,311	4	0,078	0,241	**0,915**
	Within Groups	123,389	383	0,322		
	Total	123,700	387			
Top management support - COMPLIANCE	Between Groups	3,564	4	0,891	2,105	**0,080**
	Within Groups	162,135	383	0,423		
	Total	165,698	387			
Top management support - IMPORTANCE	Between Groups	0,601	4	0,150	0,500	**0,736**
	Within Groups	114,928	382	0,301		
	Total	115,529	386			
Learning administration - COMPLIANCE	Between Groups	3,054	4	0,764	1,436	**0,222**
	Within Groups	203,188	382	0,532		
	Total	206,243	386			
Learning administration - IMPORTANCE	Between Groups	0,985	4	0,246	0,780	**0,539**
	Within Groups	120,599	382	0,316		
	Total	121,584	386			

	Noteworthy

The ANOVA significance factors less than 0.05 represent significant differences. The ANOVA significance factors range between 0.039 and 0.927. The only significant difference is noted in the following factor:

- Curating modern learning - Compliance (0.039)

4.6.5 Mean scores per strategic L&D factor per tenure (compliance)

Table 4.24: Mean scores per strategic L&D per tenure (compliance)

Factor and Tenure		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Strategic mindset - COMPLIANCE	Less than 1 year	32	3,0366	0,57414	0,10150	2,8296	3,2436
	1-3 years	111	2,9525	0,60199	0,05714	2,8393	3,0657
	4-6 years	84	2,9454	0,58715	0,06406	2,8180	3,0729
	7-9 years	63	2,9033	0,62195	0,07836	2,7467	3,0600
	10+years	175	2,9977	0,62226	0,04704	2,9049	3,0905
	Total	465	**2,9674**	0,60652	0,02813	2,9121	3,0226
Evidence based metrics - COMPLIANCE	Less than 1 year	31	3,1416	0,57303	0,10292	2,9314	3,3518
	1-3 years	111	3,2065	0,57889	0,05495	3,0976	3,3153
	4-6 years	84	3,2196	0,65903	0,07191	3,0766	3,3626
	7-9 years	63	3,3228	0,53807	0,06779	3,1872	3,4583
	10+years	175	3,3439	0,52014	0,03932	3,2663	3,4215
	Total	464	**3,2721**	0,56935	0,02643	3,2202	3,3241
Learning architecture & design - COMPLIANCE	Less than 1 year	30	2,9500	0,57009	0,10408	2,7371	3,1629
	1-3 years	111	2,8371	0,73430	0,06970	2,6990	2,9752
	4-6 years	83	2,8434	0,68154	0,07481	2,6946	2,9922
	7-9 years	62	2,8468	0,62456	0,07932	2,6882	3,0054
	10+years	173	2,7616	0,74065	0,05631	2,6504	2,8727
	Total	459	**2,8184**	0,70275	0,03280	2,7540	2,8829
Learning solutions - COMPLIANCE	Less than 1 year	30	3,1083	0,42893	0,07831	2,9482	3,2685
	1-3 years	111	3,0173	0,65608	0,06227	2,8939	3,1407
	4-6 years	83	2,9880	0,66592	0,07309	2,8425	3,1334
	7-9 years	63	2,9921	0,53876	0,06788	2,8564	3,1277
	10+years	174	3,0172	0,66638	0,05052	2,9175	3,1170
	Total	461	**3,0145**	0,63284	0,02947	2,9565	3,0724
Learning structures & roles - COMPLIANCE	Less than 1 year	31	3,1000	0,39917	0,07169	2,9536	3,2464
	1-3 years	111	2,9858	0,61867	0,05872	2,8694	3,1022
	4-6 years	83	3,0036	0,57264	0,06286	2,8786	3,1287
	7-9 years	63	3,0192	0,56780	0,07154	2,8762	3,1622
	10+years	173	2,9052	0,65381	0,04971	2,8071	3,0033

	Total	461	**2,9710**	0,60579	0,02821	2,9156	3,0264

Table 4.24: Mean scores per strategic L&D per tenure (compliance) (continued)

Factor and Tenure		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Enhanced skills of L&D prof's - COMPLIANCE	Less than 1 year	25	3,0480	0,62791	0,12558	2,7888	3,3072
	1-3 years	98	2,9265	0,71703	0,07243	2,7828	3,0703
	4-6 years	70	2,9429	0,61115	0,07305	2,7971	3,0886
	7-9 years	51	2,9490	0,47471	0,06647	2,8155	3,0825
	10+years	147	2,8075	0,62286	0,05137	2,7060	2,9090
	Total	391	**2,8954**	0,63069	0,03190	2,8327	2,9581
Future-proofing the organisation - COMPLIANCE	Less than 1 year	25	3,0800	0,53940	0,10788	2,8573	3,3027
	1-3 years	98	2,8950	0,67243	0,06793	2,7602	3,0299
	4-6 years	70	2,9429	0,63674	0,07611	2,7910	3,0947
	7-9 years	51	2,9888	0,57417	0,08040	2,8273	3,1503
	10+years	145	2,8458	0,63464	0,05270	2,7416	2,9500
	Total	389	**2,9095**	0,63211	0,03205	2,8465	2,9725
Curating modern learning experiences - COMPLIANCE	Less than 1 year	25	3,0800	0,54246	0,10849	2,8561	3,3039
	1-3 years	98	2,7565	0,68526	0,06922	2,6191	2,8938
	4-6 years	70	2,8429	0,60851	0,07273	2,6978	2,9880
	7-9 years	51	2,8137	0,61702	0,08640	2,6402	2,9873
	10+years	144	2,6678	0,68747	0,05729	2,5546	2,7811
	Total	388	**2,7675**	0,66116	0,03357	2,7015	2,8335
Top management support - COMPLIANCE	Less than 1 year	25	3,0750	0,49739	0,09948	2,8697	3,2803
	1-3 years	98	2,8967	0,70025	0,07074	2,7563	3,0371
	4-6 years	70	2,8497	0,62787	0,07504	2,7000	2,9995
	7-9 years	51	2,8603	0,56715	0,07942	2,7008	3,0198
	10+years	144	2,7261	0,67601	0,05633	2,6148	2,8375
	Total	388	**2,8316**	0,65434	0,03322	2,7663	2,8969
Learning admin - COMPLIANCE	Less than 1 year	25	3,1253	0,51147	0,10229	2,9142	3,3365
	1-3 years	98	3,0581	0,53735	0,05428	2,9503	3,1658
	4-6 years	70	3,0228	0,50961	0,06091	2,9013	3,1443
	7-9 years	51	3,0693	0,40900	0,05727	2,9542	3,1843
	10+years	144	3,0159	0,44758	0,03730	2,9422	3,0896
	Total	388	**3,0419**	0,48111	0,02442	2,9938	3,0899

Noteworthy

By referring to Table 4.24 and Figure 4.15, a comparative intergroup analysis, reveals no significant differences in the mean scores per strategic L&D factor per tenure (compliance), except for the following groups:

- Less than one year, marginally higher than the factor mean and other tenure groups in most of the strategic L&D factors and 10+years, marginally less than the factor mean and other tenure groups in most of the strategic L&D factors, in particular:

  - *Learning architecture*
  - *Future-proofing*
  - *Curating modern learning*
  - *Top management support*

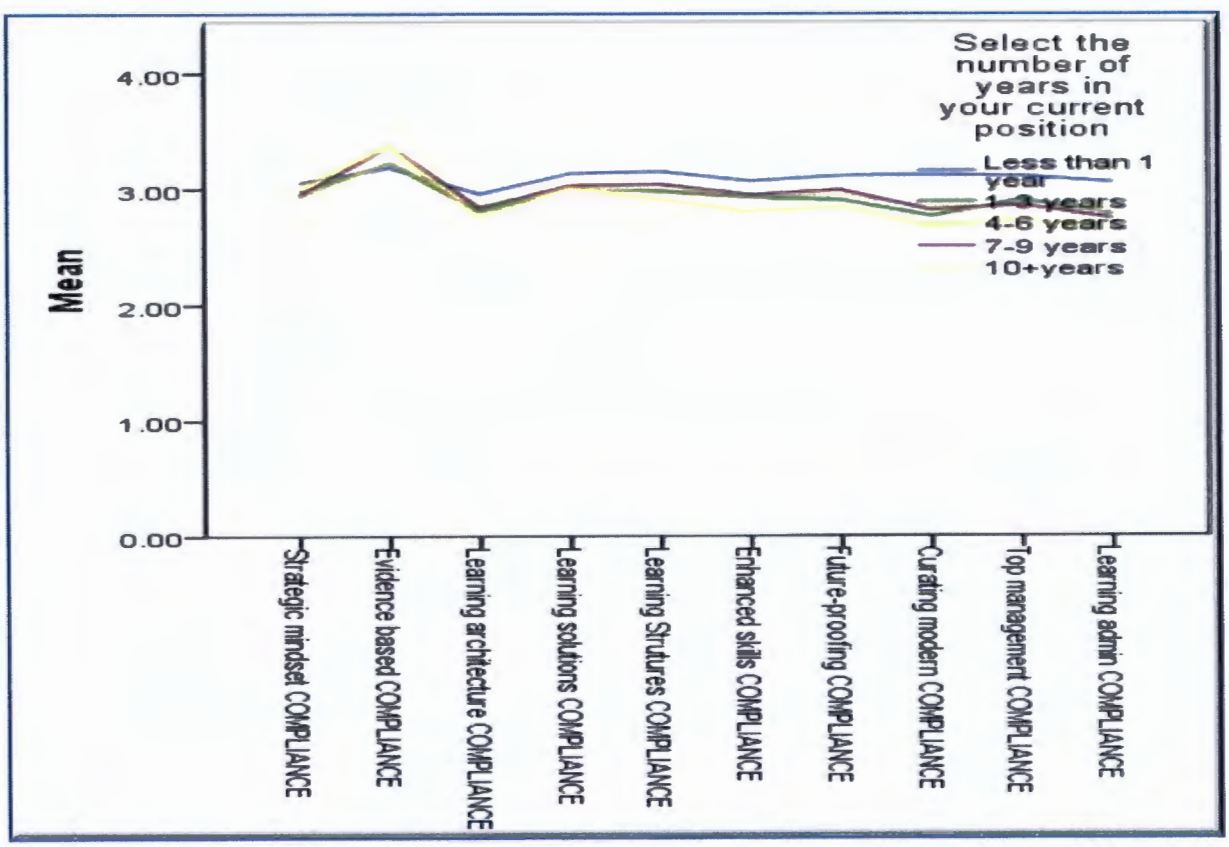


Figure 4.15: Mean scores per strategic L&D per tenure (compliance)

4.6.6 Mean scores per strategic L&D factor per tenure (importance)

Table 4.25: Mean scores per strategic L&D factor per tenure (importance)

Factor and Tenure		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Strategic mindset - IMPORTANCE	Less than 1 year	31	3,1416	0,57303	0,10292	2,9314	3,3518
	1-3 years	111	3,2065	0,57889	0,05495	3,0976	3,3153
	4-6 years	84	3,2196	0,65903	0,07191	3,0766	3,3626
	7-9 years	63	3,3228	0,53807	0,06779	3,1872	3,4583
	10+years	175	3,3439	0,52014	0,03932	3,2663	3,4215
	Total	464	**3,2721**	0,56935	0,02643	3,2202	3,3241
Evidence based metrics - IMPORTANCE	Less than 1 year	30	3,0242	0,60346	0,11018	2,7989	3,2496
	1-3 years	111	3,1491	0,63350	0,06013	3,0299	3,2682
	4-6 years	84	3,1600	0,60780	0,06632	3,0281	3,2919
	7-9 years	63	3,1771	0,48344	0,06091	3,0553	3,2988
	10+years	175	3,2010	0,57953	0,04381	3,1146	3,2875
	Total	463	**3,1664**	0,58694	0,02728	3,1128	3,2200
Learning architecture & design - IMPORTANCE	Less than 1 year	30	3,0500	0,53498	0,09767	2,8502	3,2498
	1-3 years	111	3,1959	0,64262	0,06099	3,0751	3,3168
	4-6 years	83	3,2339	0,64987	0,07133	3,0920	3,3758
	7-9 years	63	3,1111	0,59868	0,07543	2,9603	3,2619
	10+years	173	3,2327	0,56328	0,04283	3,1481	3,3172
	Total	460	**3,1955**	0,60246	0,02809	3,1403	3,2507
Learning structures & roles - IMPORTANCE	Less than 1 year	31	3,2231	0,50087	0,08996	3,0394	3,4068
	1-3 years	111	3,1914	0,60204	0,05714	3,0782	3,3047
	4-6 years	83	3,2123	0,64186	0,07045	3,0722	3,3525
	7-9 years	63	3,2500	0,52460	0,06609	3,1179	3,3821
	10+years	174	3,3313	0,51453	0,03901	3,2543	3,4083
	Total	462	**3,2580**	0,56215	0,02615	3,2066	3,3094
Enhanced skills of L&D prof's - IMPORTANCE	Less than 1 year	25	3,2700	0,55396	0,11079	3,0413	3,4987
	1-3 years	98	3,2895	0,60245	0,06086	3,1688	3,4103
	4-6 years	70	3,3209	0,58627	0,07007	3,1811	3,4607
	7-9 years	51	3,3309	0,42043	0,05887	3,2126	3,4491
	10+years	147	3,3827	0,50516	0,04166	3,3003	3,4650
	Total	391	**3,3343**	0,53837	0,02723	3,2808	3,3878

Table 4.25: Mean scores per strategic L&D factor per tenure (importance) (continued)

Factor and Tenure		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Future-proofing organisation - IMPORTANCE	Less than 1 year	25	3,1829	0,57958	0,11592	2,9436	3,4221
	1-3 years	98	3,1613	0,61184	0,06180	3,0387	3,2840
	4-6 years	70	3,1939	0,64580	0,07719	3,0399	3,3479
	7-9 years	51	3,2087	0,45285	0,06341	3,0813	3,3360
	10+years	144	3,2670	0,52847	0,04404	3,1800	3,3541
	Total	388	**3,2140**	0,56621	0,02875	3,1575	3,2706
Curating modern learning experiences - IMPORTANCE	Less than 1 year	25	3,1222	0,67558	0,13512	2,8433	3,4010
	1-3 years	98	3,1863	0,59018	0,05962	3,0680	3,3047
	4-6 years	70	3,1465	0,62409	0,07459	2,9977	3,2953
	7-9 years	51	3,1783	0,42793	0,05992	3,0579	3,2986
	10+years	144	3,2122	0,54592	0,04549	3,1223	3,3022
	Total	388	**3,1836**	0,56537	0,02870	3,1271	3,2400
Top management support - IMPORTANCE	Less than 1 year	25	3,1253	0,51147	0,10229	2,9142	3,3365
	1-3 years	98	3,0581	0,53735	0,05428	2,9503	3,1658
	4-6 years	70	3,0228	0,50961	0,06091	2,9013	3,1443
	7-9 years	51	3,0693	0,40900	0,05727	2,9542	3,1843
	10+years	144	3,0159	0,44758	0,03730	2,9422	3,0896
	Total	388	**3,0419**	0,48111	0,02442	2,9938	3,0899
Learning administration - IMPORTANCE	Less than 1 year	25	3,3333	0,49535	0,09907	3,1289	3,5378
	1-3 years	97	3,2715	0,62190	0,06314	3,1461	3,3968
	4-6 years	70	3,1429	0,56344	0,06734	3,0085	3,2772
	7-9 years	51	3,2516	0,48117	0,06738	3,1163	3,3870
	10+years	144	3,2448	0,55533	0,04628	3,1533	3,3363
	Total	387	**3,2397**	0,56123	0,02853	3,1836	3,2958

	Noteworthy

By referring to Table 4.25 and Figure 4.16, a comparative intergroup analysis, reveals no significant differences in the mean scores per strategic L&D factor per tenure (importance), except for the following groups:

- Less than one year, marginally less than the factor mean and other tenure groups in most of the strategic L&D factors and 10+years, marginally higher than the factor mean and other tenure groups in most of the strategic L&D factors, in particular:

  - *Strategic mindset*
  - *Evidence-based metrics*
  - *Learning architecture*

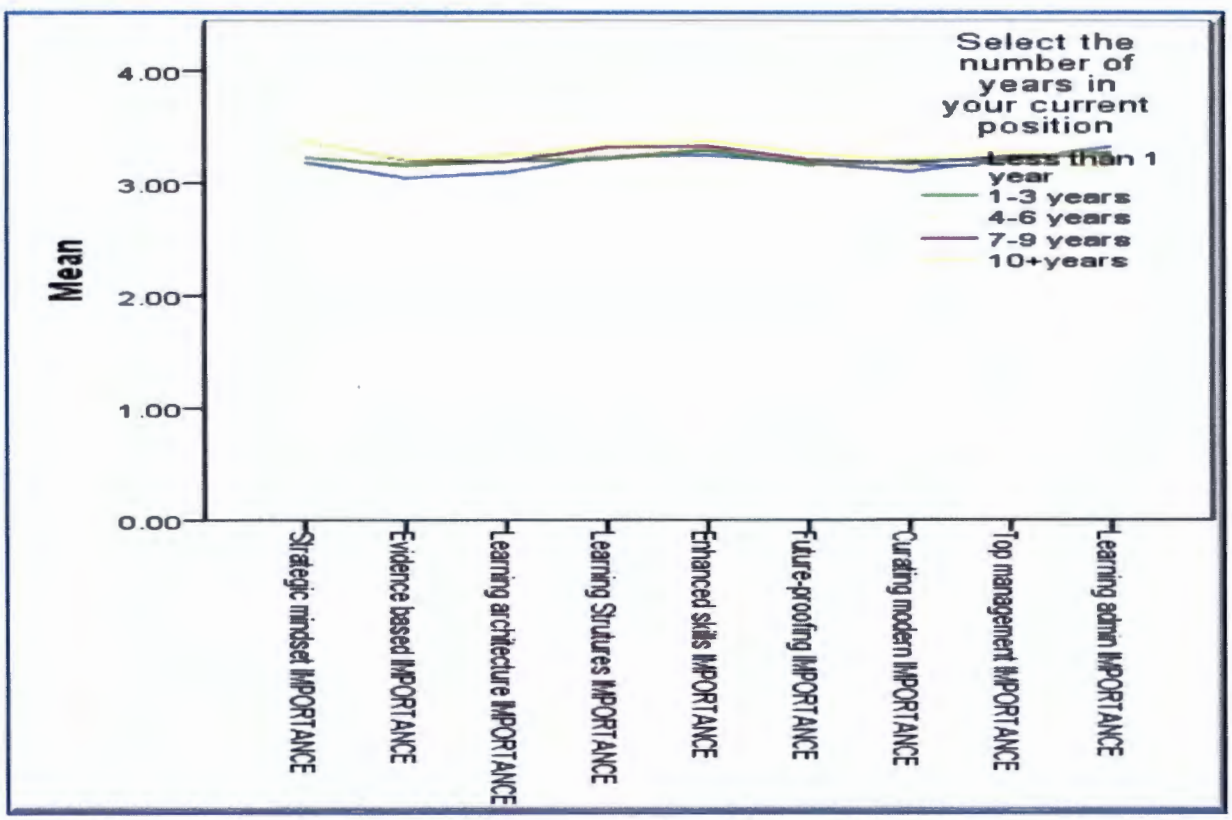


Figure 4.16: Mean scores per strategic L&D factors per tenure (importance)

4.6.7 Mean scores per Strategic L&D factor per size of the organisation (compliance and importance)

By referring to figures 4.17 and 4.18, there were no significant differences based on the size of the organisation for the strategic L&D factors based on compliance and importance, respectively.

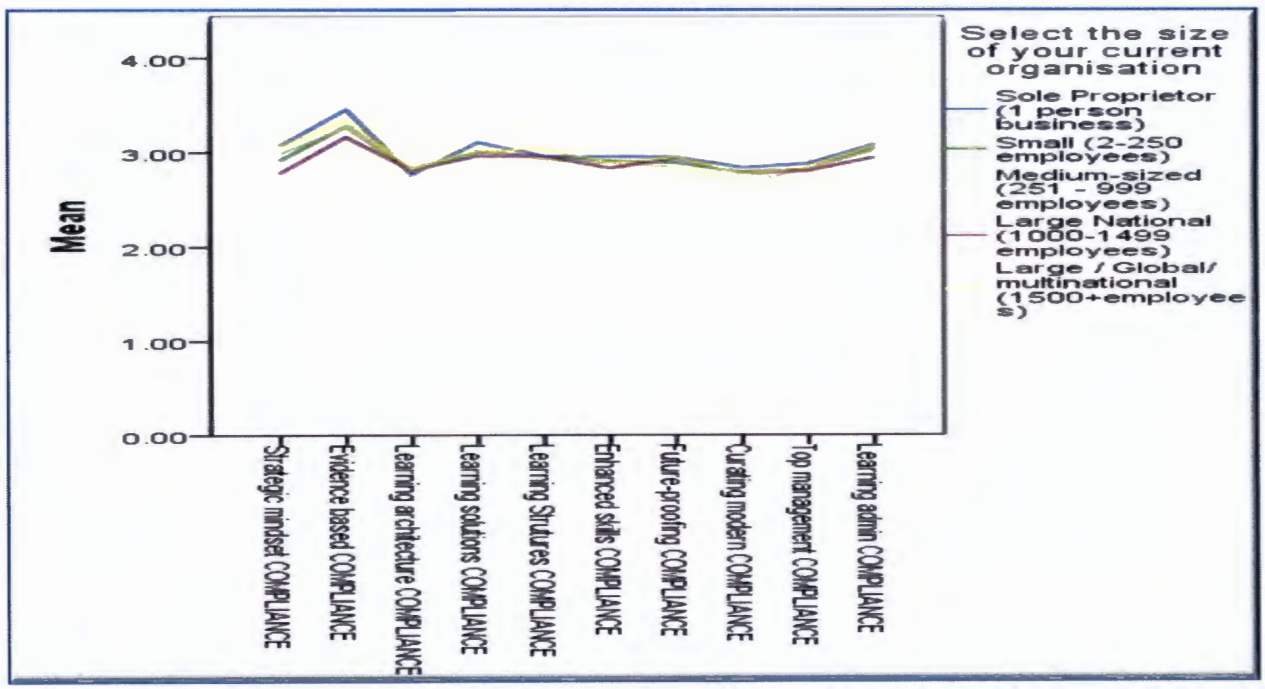


Figure 4.17: Mean scores per Strategic L&D factor per size of the organisation (compliance)

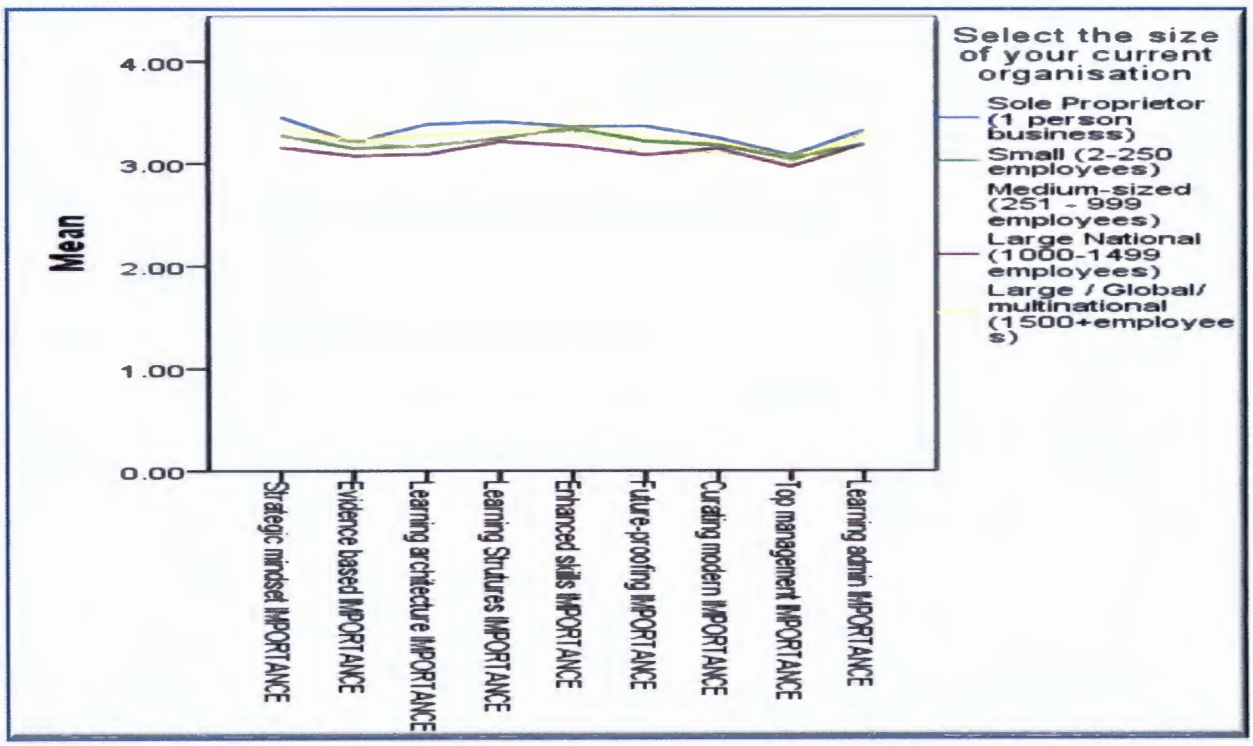


Figure 4.18: Mean scores per Strategic L&D factor per size of the organisation (importance)

4.6.8 Remainder of ANOVA's

Given that the number of pairwise comparisons became too much when there are too many groups, the researcher decided not to use ANOVA's for the remaining three demographic variables, that is, the size of the organisation; industry/sector and position. Even though an ANOVA itself can be done, the motivation and logic of this decision are based on the fact that the post hoc analysis will not be meaningful to interpret.

4.7 SUMMARY OF CHAPTER FOUR (RESEARCH FINDINGS)

This chapter reported on the findings and resultant interpretation of a comprehensive statistical analysis. Descriptive and intergroup comparison statistics were utilised with the purpose of measuring the strategic impact and value (maturity) of L&D practices as well as the Capability Gap Index, across 11 (rationalised) industries/sectors.

The chapter commenced by reporting on the description of the sample (maximum of 465 respondents), namely: the frequencies of the geographical region; industry/sector; position; tenure as well as the size of the company. This was followed by descriptive statistics, these being, mean scores per geographical region; industry/sector; tenure; position and size of the company. The most significant findings included the overall mean score of 2.92 (compliance), which is indicative of a below average state of strategic L&D maturity. Furthermore, an overall mean score of 3.23 (importance) and the overall L&D Capability Gap Index of -0.31, were computed.

This was followed by factor analysis, which determined that the original, ten (10) theoretical factors/scales of L&D be re-grouped and utilised accordingly. Various reliability tests confirmed a high degree of reliability of these 10 factors. The focus then shifted to reporting on the mean scores of each of these ten (10) factors. Alarmingly, only two (2) of the factors scored a mean above the agreed point (3). All ten (10) factors scored a mean of higher than the agree on point (3), which is indicative of the strategic business importance and relevance of these factors. When computing the resultant, Strategic L&D Capability Gap Index, only one (1) factor, namely, Evidence-based business metrics and predictive analytics, was positive. All other factors scored a deficit, which is indicative of the low degree of readiness.

There is also a perceptual gap between HRM/L&D managers and business, line and operational managers (non-L&D).

The researcher also identified the most and least compliant as well as the most and least important sub-factors.

The chapter concluded by discussing ANOVA tests of inter-group comparisons drawn from the various sub-groups. No significant and noteworthy variances were recorded. ANOVA's were used for two of the demographic variables only, namely: geographic region and tenure.

The final chapter of this thesis focused on the interpretation of the research findings and making recommendations about how L&D practices can be transformed to become a strategic learning partner.

CHAPTER FIVE: OVERVIEW OF THESIS, RECOMMENDATIONS AND CONCLUDING REMARKS

5.1 INTRODUCTION TO CHAPTER FIVE

The objective of this research study was to determine the degree to which L&D practices impact on business performance at a strategic level. Accordingly, the purpose of this chapter is to reflect on the research findings obtained from the 463 completed questionnaires, to reach defined conclusions and to make recommendations on how organisations can strategically transform and re-position their L&D practices, to actualise to a credible strategic learning partner. This chapter will be guided and informed by formulating conclusions to the research objectives, namely:

- #1: To determine the current strategic levels of L& D impact (maturity);
- #2: To determine the priority factors driving strategic L&D; the current state of L&D readiness to deliver these strategic factors and determine the differential i.e. the capability gap index;
- #3: To construct an internationally-relevant and multi-disciplinary applicable, Strategic Business Management-aligned, Learning and Development measurement tool (scorecard) and
- #4: To develop a conceptual framework and business-valued processes to transform and re-position the L&D function to become a strategic business partner.

5.2 INTERPRETATION OF RESEARCH FINDINGS (CONCLUSIONS)

5.2.1 To determine the current strategic levels of L& D impact (maturity)

From the comprehensive statistical analysis, as reported in chapter 4, it can be concluded that the overall, cross-industry strategic impact and value of L&D practices is unsatisfactory and indicative of a below average state of strategic L&D

maturity. The fact that the overall mean scores for all industries (N = 463) is 2.92 (compliance) is a testament to this fact. This overall mean score must be viewed in the context that the numeric indicator/value of three (3) indicates agreement in the research questionnaire. Therefore, there is considerable room for improvement in all industries/sectors and geographical regions. Furthermore, it can be concluded that for the most part, current L&D practices are not strategic when measured against the identified ten factors and related sub-factors of strategic L&D. Undoubtedly, there are pockets of excellence in certain industries/sectors and geographical regions, but largely the L&D practices can be perceived as a reactive, administrative function and not as a proactive, strategic learning partner. The researcher decided to categorize the levels of strategic L&D maturity into four (4) categories, namely:

- Level 1: Traditional L&D (mean score range of 1 - 2.49);
- Level 2: Transactional L&D (mean score range of 2.5 - 2.99);
- Level 3: Transformational L&D (mean score range of 3.0 - 3.49) and
- Level 4: Strategic L&D (mean score range of 3.5 - 4.0).

Based on the research findings, it is apparent that the overall mean score (2.92) would suggest that the majority of L&D practices can be pegged at a Level 2: Transactional L&D of the strategic L&D maturity model, on the cusp of Level 3: Transformational L&D.

This level of strategic L&D maturity is illustrated in Figure 5.1 below.

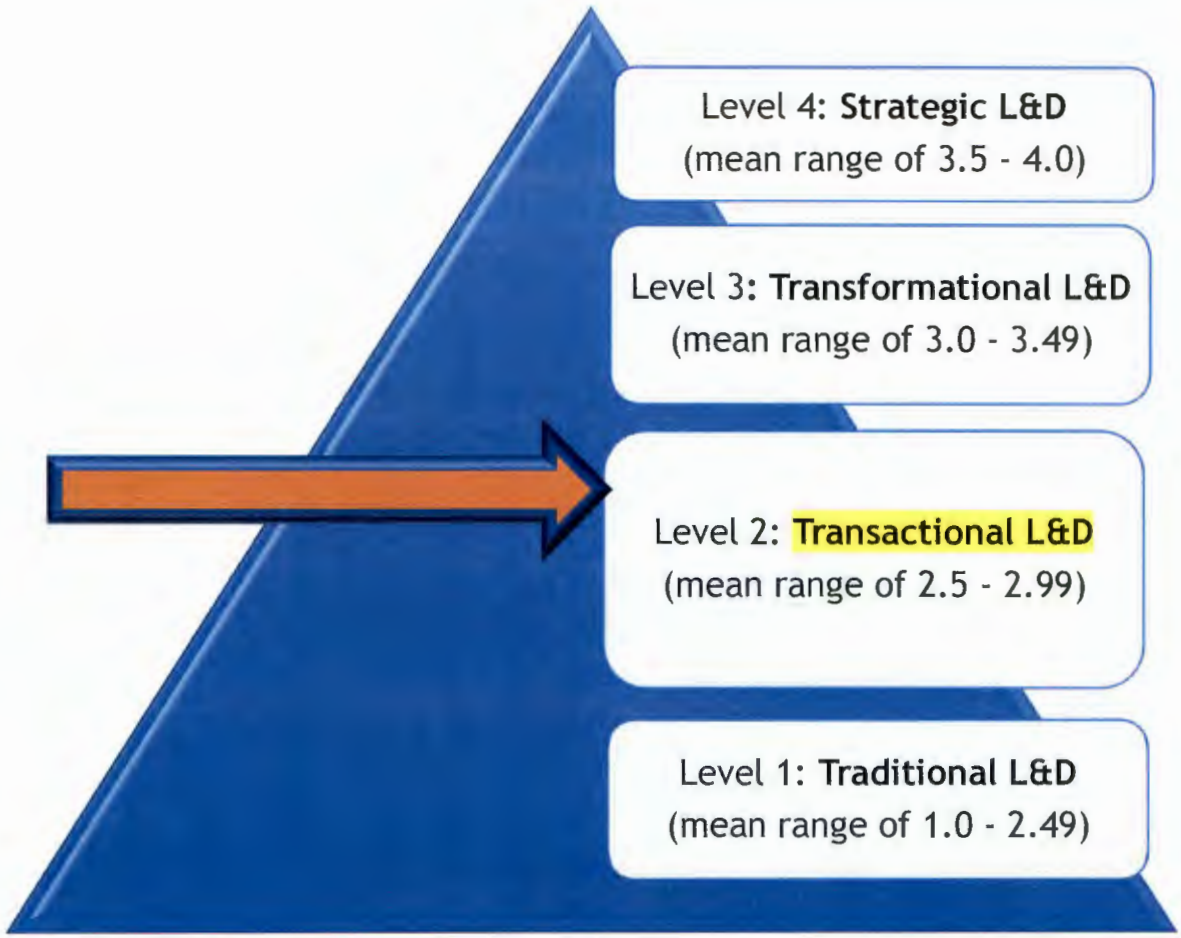


Figure 5.1: Strategic L&D Maturity Model

As reported in Chapter 4: Research Findings and by referring to Table 5.1, the three (3) most compliant factors are:

- 1. Evidence-based, business metrics and predictive analytics (3.27);
- 2. Provision of learning solutions (3.01) and
- 3. Learning structures and roles (2.97).

As reported in Chapter 4: Research Findings and by referring to Table 5.1, the three (3) least compliant factors are:

- 10. Learning administration, assessment and -processes (2.75);
- 9. Curating modern learning experiences (2.77) and
- 8. Learning architecture and design (2.82).

The above findings would suggest that the priority strategic L&D factors that L&D managers should focus on to facilitate the improvement of their strategic impact (maturity) are:

- Learning administration, assessment and -processes (2.75);
- Curating modern learning experiences (2.77) and
- Learning architecture and design (2.82).

Refer to Table 5.4 for the researcher's recommended improvement strategies in this regard.

Table 5.1: Relative Ranking and Level of Maturity of the strategic L&D factors mean scores

L&D Factor	N	Mean	Std. Deviation	Relative Ranking	Level of Maturity
#1: Strategic mindset & alignment with business goals	465	2.9674	0.60652	4	Level 2: Transactional L&D
#2: Evidence-based business metrics and predictive analytics	464	3.2721	0.56935	1	Level 3: Transformational L&D
#3: Learning architecture & design	459	2.8184	0.70275	8	Level 2: Transactional L&D
#4: Provision of learning solutions	461	3.0145	0.63284	2	Level 3: Transformational L&D
#5: Learning structures & roles	461	2.9710	0.60579	3	Level 2: Transactional L&D
#6: Enhanced skills of L&D prof's	391	2.8954	0.63069	6	Level 2: Transactional L&D
#7: Future-proofing organisation	389	2.9095	0.63211	5	Level 2: Transactional L&D
#8: Curating modern learning experiences	388	2.7675	0.66116	9	Level 2: Transactional L&D
#9: Top management support & line management engagement, involvement & contribution	388	2.8316	0.65434	7	Level 2: Transactional L&D
#10: Learning administration, assessment and -processes	388	2.7511	0.73096	10	Level 2: Transactional L&D
Valid N (list wise)	385	2.92			Transactional L&D

By referring to Table 5.1 above, it is apparent that only two (2) of the total of ten (10) strategic L&D factors scored a mean of higher than 3, which is the (Likert scale) indicator of agreement/compliance from the questionnaire. However, these scores were not significantly higher than 3.

From the above analysis, collectively, it can be deduced that the current L&D practices are operating at a transactional level, and, therefore, do not offer a significant and meaningful strategic value proposition. Furthermore, current L&D practices seemingly have mastered the traditional and transactional L&D functions.

However, L&D does not appear to be adding much strategic value in its extended role as a change/transformational facilitator (level 3) and strategic learning partner (level 4). In particular, there are glaring shortcomings and gaps regarding the learning administration, assessment and -processes and curating of modern learning experiences in a dynamically changing business environment. Based on these research findings, it is apparent that the majority of L&D factors, those being eight can be pegged at a Level 2: Transactional L&D of strategic L&D maturity, whereas only 2 of the factors can be pegged at Level 3: Transformational L&D. This would suggest a relatively low degree of L&D maturity.

These levels of maturity of the strategic L&D factors are illustrated in Figure 5.2 below.

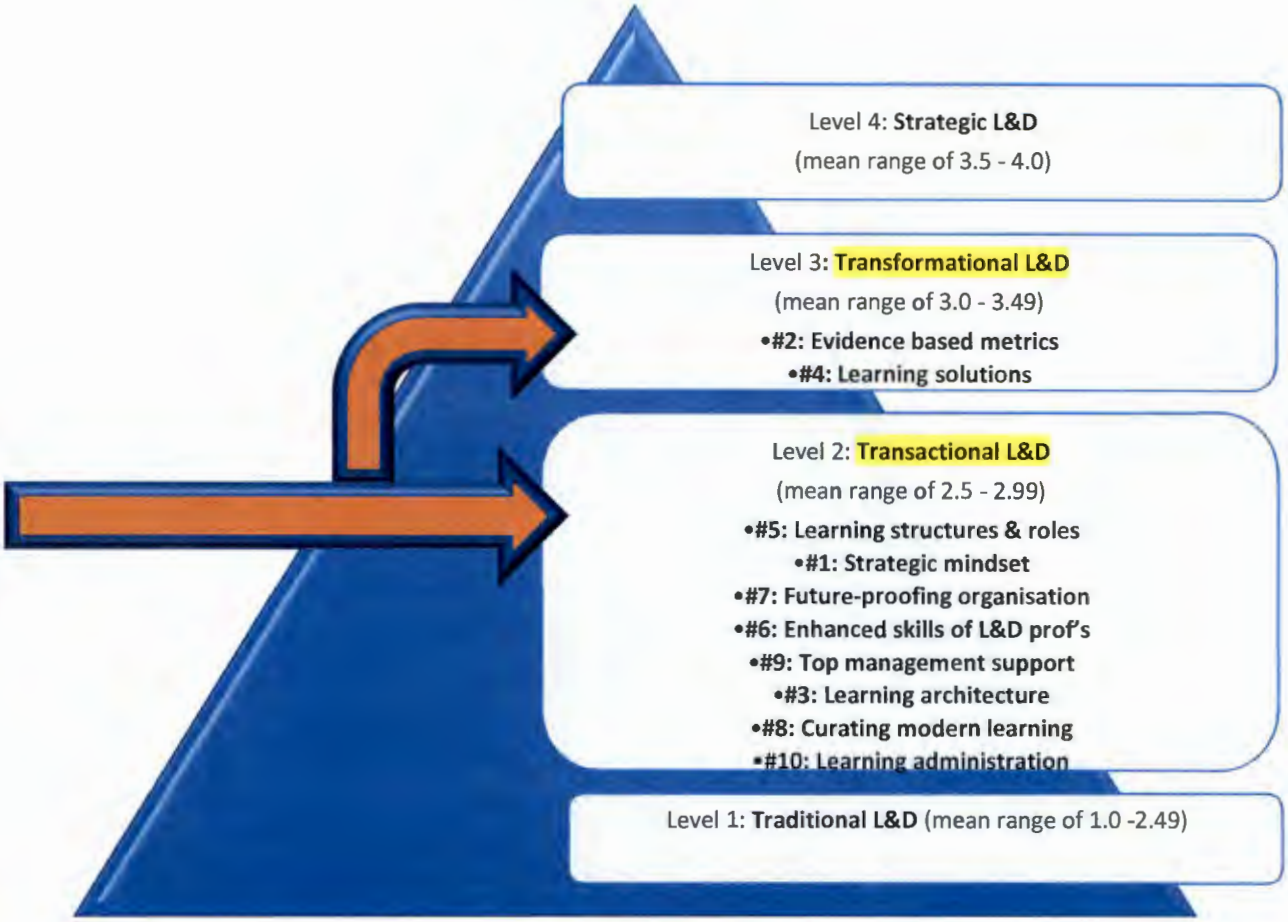


Figure 5.2: Maturity Model of Strategic L&D factors

5.2.2 To determine the priority factors driving strategic L&D; the current state of L&D readiness to deliver these strategic factors and determine the differential, that is, the capability gap index

As reported in Chapter 4: Research Findings and by referring to Table 5.2, the three (3) most strategically important factors are:

- 1. Enhanced skills set of L&D professionals (3.33);
- 2. Strategic mindset and alignment with business goals (3.27) and
- 3. Learning structures and roles (3.26).

As reported in Chapter 4: Research Findings and by referring to 5.2, the three (3) least strategically important factors are:

- 9. Evidence-based, business metrics and predictive analytics (3.17);
- 8. Curating modern learning experiences (3.18) and
- 7. Learning architecture (3.2).

Table 5.2: Relative ranking and Level of Importance of the strategic L&D factors mean scores

Factor	N	Mean	Std. Deviation	Relative Ranking	Level of Importance
#1: Strategic mindset & alignment with business goals	464	3.2721	0.56935	2	Level 3: Transformational L&D
#2: Evidence-based business metrics and predictive analytics	463	3.1664	0.58694	9	Level 3: Transformational L&D
#3: Learning architecture & design	460	3.1955	0.60246	7	Level 3: Transformational L&D
#4: Provision of learning solutions	461	N/A	-	-	N/A
#5: Learning structures & roles	462	3.2580	0.56215	3	Level 3: Transformational L&D
#6: Enhanced skills of L&D prof's	391	3.3343	0.53837	1	Level 3: Transformational L&D
#7: Future-proofing organisation	388	3.2140	0.56621	6	Level 3: Transformational L&D
#8: Curating modern learning experiences	388	3.1836	0.56537	8	Level 3: Transformational L&D
#9: Top management support & line management engagement, involvement & contribution	388	3.2309	0.54708	5	Level 3: Transformational L&D
#10: Learning administration, assessment & -processes	387	3.2397	0.56123	4	Level 3: Transformational L&D
Valid N (list wise)	385	3.23			Transformational L&D

All ten (10) factors scored a mean of higher than the agree point (3), which is indicative of the Level 3: Transformational L&D business importance and relevance of these factors. It is apparent that eight (8) of the nine (9) factors, in which the strategic L&D capability gap index could be computed, were deficient, i.e. where

the compliance mean was lower than the importance mean score. Factor #2, Evidence-based, business metrics and predictive analytics (mean score of 0.1057) was the only exception, in that the compliance mean score exceeded the importance mean score. As reported in Chapter 4: Research Findings and by referring to Table 5.3, the three (3) widest L&D capability gaps are:

- 1. Learning administration, assessment and -processes (-0.49);
- 2. Enhanced skills set of L&D professionals (-0.44) and
- 3. Curating modern learning experiences (-0.42) and

The above findings would also suggest that the priority strategic L&D factors that L&D managers should focus on to facilitate the improvement of their strategic level of readiness are 1. Learning administration, assessment and -processes (-0.49); 2. Enhanced skills set of L&D professionals (-0.44) and 3. Curating modern learning experiences (-0.42). (Refer to Table 5.4 for the researcher's recommended improvement strategies in this regard).

As reported in Chapter 4: Research Findings and by referring to Table 5.3, the three (3) narrowest L&D capability gaps are:

- 9. Evidence-based, business metrics and predictive analytics (0.11);
- 8. Learning structures and roles (-0.29) and
- 7. Future-proofing the organisation (-0.3).

Table 5.3: Relative ranking of the L&D Capability Gap Index and Level of Readiness

Strategic L&D factor	N	L&D Capability Gap Index (Importance - Compliance)	Std. Deviation	Relative Ranking	Level of Readiness
#1: Strategic mindset & alignment with business goals	464	-0.3048	0,74985	6	Level 2: Low
#2: Evidence-based business metrics & predictive analytics	463	0.1057	0,46397	9	Level 3: Moderate
#3: Learning architecture & design	460	-0.3770	0,82157	5	Level 2: Low
#4: Provision of learning solutions	461	N/A	-	-	N/A
#5: Learning structures & roles	462	-0.2870	0,67405	8	Level 2: Low
#6: Enhanced skills of L&D prof's	391	-0.4389	0,72445	2	Level 2: Low
#7: Future-proofing organisation	388	-0.3046	0,67065	7	Level 2: Low
#8: Curating modern learning experiences	388	-0.4160	0,76118	3	Level 2: Low
#9: Top management support	388	-0.3993	0,38215	4	Level 2: Low
#10: Learning administration, assessment & -processes	387	-0.4886	0,49722	1	Level 2: Low
Valid N (list wise)	385	-0.31			Level 2: Low

By referring to the Strategic L&D Capability Gap Index research findings, the research decided to categorise the levels of strategic L&D readiness into four (4) categories, namely:

- Level 1: Alarming (capability gap index range -0.5 and lower);
- Level 2: Low (capability gap index range of 0 to -0.49);
- Level 3: Moderate (capability gap index range of 0.01 to 0.49) and
- Level 4: High (capability gap index range of 0.5 and higher).

The mean Strategic L&D Capability Gap Index of -0.31, would suggest a low degree of L&D readiness. Furthermore, based on the research findings, it is apparent that the majority of L&D factors, that is, eight can be pegged at a Level 2: Low state of readiness, whereas only 1 of the factors, namely Evidence-based, business metrics and predictive analytics can be pegged at Level 3: Moderate state of readiness.

These levels of readiness of the strategic L&D factors are illustrated in Figure 5.3 below.

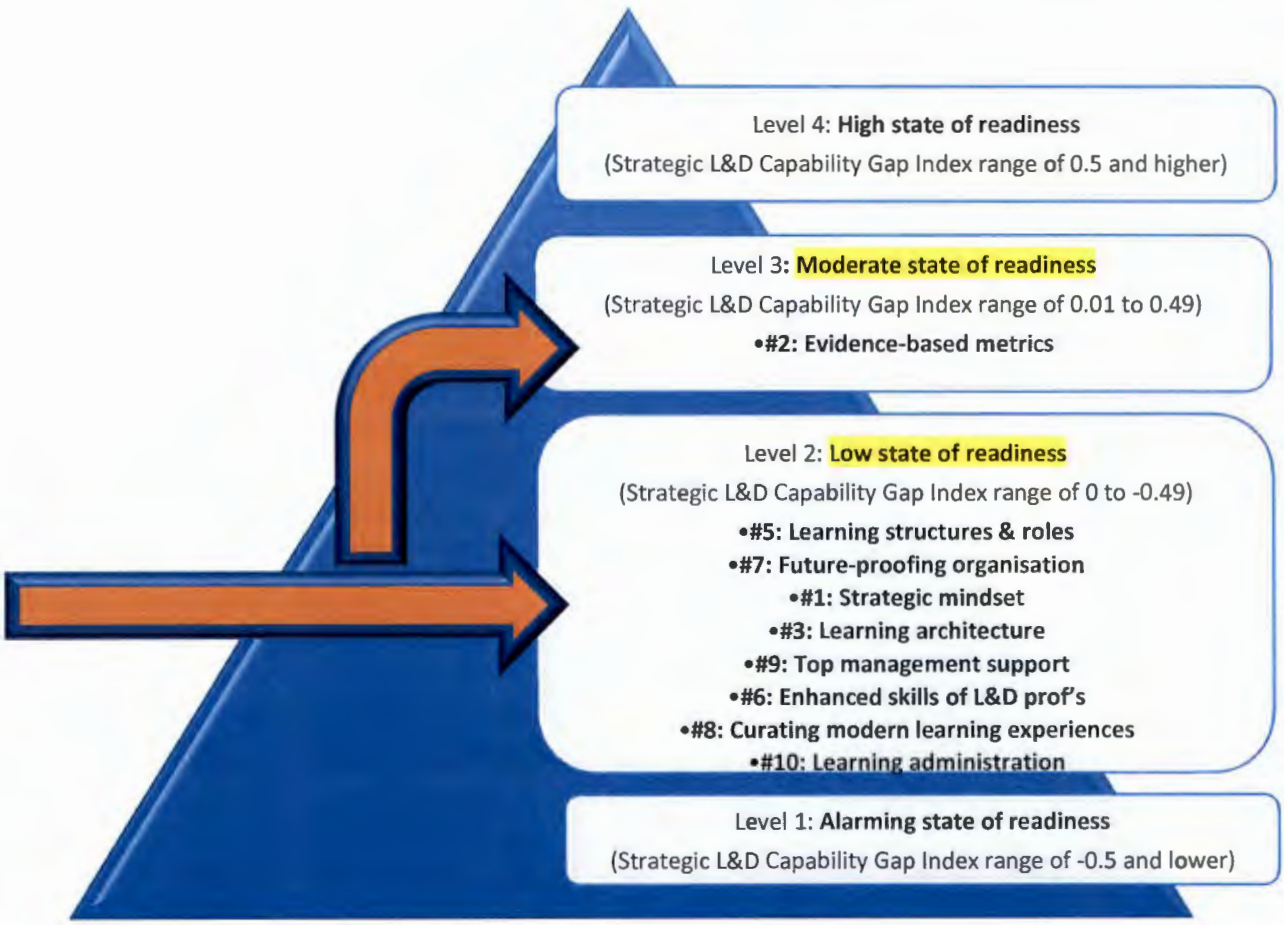


Figure 5.3: Level of Readiness Model: Strategic L&D factors

5.2.3 To construct an internationally-relevant and multi-disciplinary applicable, Strategic Business Management-aligned, Learning and Development measurement tool (scorecard)

Refer to Figure 5.4 for a 74-item, weighted Strategic L&D Scorecard. The key components of the Scorecard include:

- Key Performance Areas (KPS's) - i.e. strategic L&D factors
- Objective/s (per KPA)
- Key Performance Indicators (KPI's), i.e. Strategic L&D sub-factors (Measures)
- Targets
- Priority/importance of the KPI
- Compliance rating of the KPI
- Calculation of the L&D Capability Gap Index
- Improvement Initiatives
- Calculation of sub-totals
- Calculation of grand total

KEY PERFORMANCE AREA (KPA) #1: STRATEGIC MINDSET AND ALIGNMENT WITH BUSINESS GOALS (10%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
1.1 Learning and Development (L&D) plans are aligned with strategic business plans					
1.2 L&D practices are harnessed as a strategic lever to optimise the value of organisational learning					
1.3 L&D practices make an effective contribution to the achievement of key strategic goals					
1.4 The L&D function systematically identifies business environment changes, which could disrupt key organisational operating activities					
1.5 The L&D function exerts a significant influence on the organisational culture					
1.6 L&D practices are horizontally integrated (bundled) into every aspect of business operations					
1.7 L&D practitioners strategically align the identified organisational skills gaps to the business objectives					
1.8 L&D practitioners apply best practices throughout the training cycle to optimise organisational learning benefits					
1.9 The L&D function adopts an integrated approach to create authentic behavioural change that is consistent with organisational strategic goals					
1.10 The L&D strategy is aligned with individual, employee learning needs					
1.11 The L&D function aligns workforce skills with industry-specific business priorities					
1.12 L&D practices develop a competent talent pool, which provides organisational competitive advantages					

SUB-TOTAL	/10%			/10%	%
KEY PERFORMANCE AREA (KPA) #2: EVIDENCE-BASED, BUSINESS METRICS AND PREDICTIVE ANALYTICS (5%)					
OBJECTIVE/S:					

Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
2.1 L&D practitioners utilise data-derived metrics to measure L&D performance					
2.2 L&D practitioners are sufficiently competent to manage large volumes of data of organisation-wide workforce analytics effectively					
2.3 L&D practitioners generate competitive business intelligence, enabling line managers to make smarter business decisions					
2.4 The L&D function applies a quantitative analytical decision-making approach, to capitalise on strategically valuable opportunities					
2.5 L&D practitioners are credible expert talent development advisors, who utilise predictive analytics					
2.6 L&D practitioners accurately utilise multiple sources of valid data					
2.7 Training Return-on-Investment (ROI) calculations yield positive organisational dividends					
2.8 L&D practitioners utilise standard, business performance measures, which are linked to organisational results					
2.9 L&D practitioners utilise performance dashboard reports that quantify the organisational learning impact					
2.10 Apart from internal data, L&D practitioners effectively leverage external data to predict workforce trends					
2.11 L&D practitioners convert analytical insights into actionable business intelligence					
2.12 L&D practitioners are data literate, who are capable of					

communicating the business relevance of their findings to line managers					
SUB-TOTAL	/5%			/5%	%

KEY PERFORMANCE AREA (KPA) #3: LEARNING ARCHITECTURE AND DESIGN (5%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
3.1 The organisational learning architecture is employee-centric, thereby actively promoting a life-long learning process					
3.2 The L&D function develops an integrated digital learning experience for all employees					
3.3 The organisational learning architecture enables employees to access digital learning content from a range of sources					
3.4 The L&D function have created internal knowledge-sharing programmes, thereby promoting collaborative learning experiences					
SUB-TOTAL	/10%			/10%	%

KEY PERFORMANCE AREA (KPA) #4: PROVISION OF LEARNING SOLUTIONS (5%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
4.1 The development of the organisational learning architecture is a shared responsibility, co-owned by L&D practitioners and line management					
4.2 The L&D function assumes a strategic leadership role in learning management processes					
4.3 The training process generates organisational learning solutions					
4.4 When utilising outsourced training providers, the L&D function ensures that Service Level agreements are enforced					
SUB-TOTAL	/5%			/5%	%

KEY PERFORMANCE AREA (KPA) #5: LEARNING STRUCTURES AND ROLES (5%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
5.1 The L&D function has shifted from training course delivery to a solutions-focused performance consulting model					
5.2 Acting as change consultants, L&D practitioners build the organisation's readiness to capitalise on change					
5.3 L&D practitioners are innovators, continuously searching for value-creating best practice strategies					
5.4 L&D practitioners collaboratively build strategic alliances with all organisational stakeholders					
5.5 L&D practitioners coach line managers on how to effectively implement L&D strategies					
5.6 L&D practitioners are architects of dynamic learning experiences for employees					
5.7 L&D practitioners are strategic learning partners, who have good insight into the core business processes					
5.8 The L&D function has transformed from an efficient cost centre to an effective profit centre					
5.9 L&D is a visionary function, with a clear view of which critical skills the organisation will need in the future					
5.10 The L&D function is a knowledge broker, able to generate intellectual capital					
SUB-TOTAL	/5%			/5%	%

KEY PERFORMANCE AREA (KPA) #6: ENHANCED SKILLS SET OF L&D PROFESSIONALS (15%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
6.1 L&D practitioners are sufficiently skilled at stakeholder relationship building, enabling them to facilitate buy-in to L&D transformation					
6.2 L&D practitioners keep abreast of modern L&D technologies					
6.3 L&D practitioners effectively apply conceptual thinking skills					
6.4 The L&D function performs as a cohesive professional unit, delivering strategic value to the organisation					
6.5 The L&D function is a reputable Centre of Excellence (CoE), which provides expert in-house advice					
SUB-TOTAL	/15%			/15%	%

KEY PERFORMANCE AREA (KPA) #7: FUTURE-PROOFING THE ORGANISATION (5%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
7.1 The organisation invests in L&D opportunities for extended stakeholders, for example contractors, thereby improving their respective value to the organisation					
7.2 The organisation favours skills building (L&D investment of current employees) over a skills buying strategy (appointing skills-ready external applicants) to fill the necessary competency gaps in the organisation					
7.3 The L&D function effectively utilises an electronic Knowledge Management System to ensure the retention of institutional memory					
7.4 The L&D function is instrumental in future-proofing the organisation, through the skills development of high potential employees					
7.5 L&D programmes are proactively designed with a future organisational expansion motive					
7.6 The L&D function actively contributes to creating higher levels of employee engagement					
7.7 The organisation has transitioned from content to learner-centric approach, providing employees					

with increased learning autonomy					
SUB-TOTAL	/10%			/10%	%

KEY PERFORMANCE AREA (KPA) #8: CURATING MODERN LEARNING EXPERIENCES (15%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
8.1 The organisation stimulates ample opportunities for informal learning to flourish					
8.2 The L&D function provides incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders					
8.3 The organisation invests heavily in technology-enabled learning tools					
8.4 The L&D function creates a self-directed learning environment					
8.5 In accommodating the millennial worker generation, the L&D function provides on-demand learning opportunities					
8.6 Organisational learning management systems, which track L&D performance, are sufficiently flexible to keep pace with rapidly changing learning technologies					
SUB-TOTAL	/15%			/15%	%

KEY PERFORMANCE AREA (KPA) #9: TOP MANAGEMENT SUPPORT AND LINE MANAGER ENGAGEMENT, COMMITMENT AND INVOLVEMENT (10%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
9.1 Line managers are active learning agents, empowered to cultivate a learning culture					
9.2 The L&D function facilitates accessibility of learning for all employees, through inclusive learning strategies					
9.3 L&D programmes have the committed support from top management, who actively participate throughout the L&D process					
9.4 Top management willingly allocate valuable organisational resources to the L&D function					
9.5 Line managers are competent in conducting accurate training needs analyses					
9.6 The L&D Director has a pivotal seat at boardroom level, able to influence the organisation's strategic direction					
9.7 Human performance is an organisational strategic priority, at the hub of business decision-making					
9.8 Line management collaboratively partner with L&D practitioners to optimise the strategic impact of L&D					

SUB-TOTAL	/10%			/10%	%

KEY PERFORMANCE AREA (KPA) #10: LEARNING ADMINISTRATION, ASSESSMENT AND -PROCESSES (15%)					
OBJECTIVE/S:					
Key Performance Indicator (KPI): Strategic L&D MEASURES	TARGETS	Priority/importance of KPI	Compliance rating of KPI	L&D Capability Gap Index	Improvement INITIATIVES
10.1 The L&D function has migrated from manual to automated processes					
10.2 The L&D function applies risk management strategies to mitigate talent development threats proactively					
10.3 The L&D function effectively implements skills auditing processes					
10.4 The L&D function utilises strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators					
10.5 The L&D function applies effective post-training, learner competency assessment practices					
10.6 The L&D function has adopted scientifically valid measurement processes to evaluate talent development performance					
SUB-TOTAL	/15%			/15%	%
GRAND TOTAL	/100%			/100%	%

Figure 5.4: Weighted Strategic L&D Scorecard

5.2.4 To develop a conceptual framework and business-valued processes to transform and re-position the L&D function to become a strategic business partner

Refer to Figure 5.5 for the Strategic Learning and Development Conceptual Framework, for the researcher's contribution to the global L&D body of knowledge.

5.2.4.1 Key components

The key components of this conceptual framework include:

Enablers:

- KPI #1: Strategic mindset and alignment with business goals
- Horizontal integration of L&D value chain functions

Inputs:

- KPI #6: Enhanced skills set of L&D professionals
- KPI #7: Top management support, line management engagement, involvement and contribution

Transformation:

- KPI #3: Learning architecture and design
- KPI #5: Learning structures and roles
- KPI #8: Curating modern learning experiences
- KPI #10: Learning administration, assessment and -processes
- KPI #2: Evidence-based business metrics and predictive analytics (efficiency, effectiveness and strategic impact categories of metrics)

Outputs:

- L&D objectives:
  - KPI #4: Provision of learning solutions
  - KPI #7: Future-proofing the organisation

Business Environment:

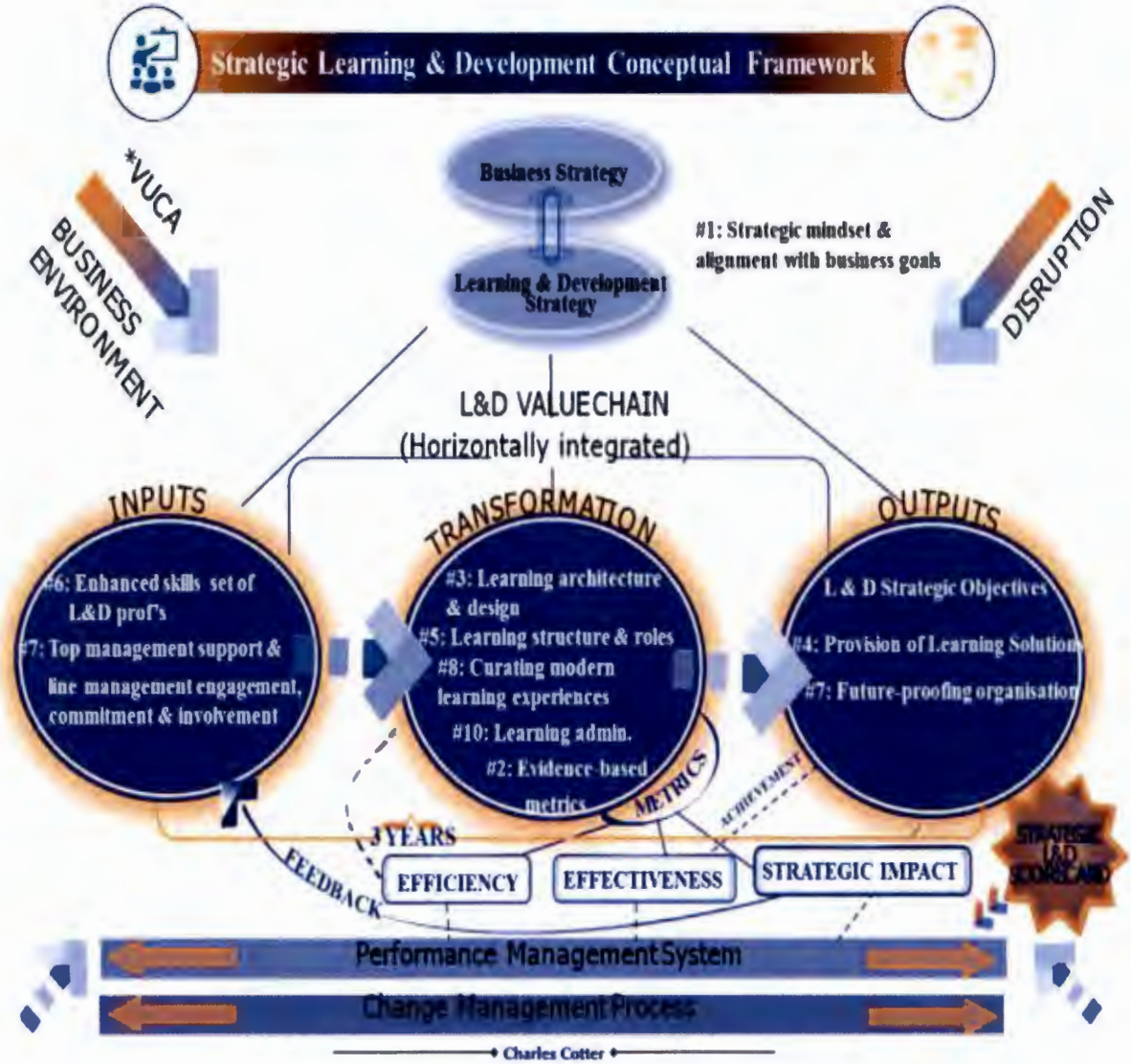
- VUCA
- Disruption

Foundation:

- Performance management system
- Change management process

Strategic L&D Scorecard:

- Incorporation of the ten (10) KPI's (over a 3-year cycle)



* VUCA (Volatile, uncertain, complex and ambiguous)

Figure 5.5: Strategic Learning and Development Conceptual Framework

Refer to Table 5.4 for dedicated and specific recommendations in this regard.

5.2.4.2 Application of this conceptual framework

L&D managers who want to transform and re-position the L&D function to become a strategic learner partner are advised to implement the following 10-step process cycle. This will provide L&D managers with a 3-year strategic road-map:

- Step 1: Conduct a gap analysis (by means of the Weighted Strategic L&D scorecard);
- Step 2: Formulate and implement change management and improvement interventions;
- Step 3: Ensure the horizontal integration (bundling) across the L&D value chain;
- Step 4: Formulate 3-year L&D strategy and facilitate vertical alignment of this L&D strategy with the organisational business strategy (KPI #1);
- Step 5: Foundational work - invest heavily in the input factors (refer to KPI #6 and #7);
- Step 6: Initiation work - roll out the transformation process (refer to KPI #3, 5, 8 and 10);
- Step 7: Periodically monitor, track, measure and report on strategic L&D metrics (refer to KPI #2);
- Step 8: Conduct an annual audit to evaluate the strategic impact of L&D, with KPI #4 and #7 as the yardstick;
- Step 9: Generate business and performance management intelligence and
- Step 10: Feed this business intelligence back into the system, make the necessary revisions and re-initiate new 3-year L&D cycle/process.

5.2.4.3 Relationship and business impact of the conceptual framework

The strategic L&D conceptual framework is based on open systems thinking in which the sub-systems (KPIs) are interdependent. The KPIs are receptive to and influenced by micro, market and macro-environmental forces and disruptors and in turn, exert an influence on the business environment, albeit to a far less extent. L&D managers are able to exercise control over these KPIs, but they have limited control over the disruptors emanating from the market and macro-environments. The strategic L&D conceptual framework provides L&D managers and -professionals with a coherent, integrated and strategically relevant model, which will enable the fast-tracking of the L&D transformation from level 2 (of maturity) and low state of readiness to a strategic learning partner. The Weighted Strategic L&D Scorecard provides L&D managers with a toolkit and the 10-step process cycle provides a strategic road-map. The researcher strongly recommends that L&D managers and -professionals follow these guidelines.

5.3 RESEARCH RECOMMENDATIONS

To improve the current strategic value and impact of L&D practices, the following recommendations are proposed, based on the research conclusions and -questions.

5.3.1 To determine the current strategic levels of L& D impact (maturity)

The following research-related recommendations are proposed:

- That organisations across all industries/sectors take cognisance of the below-average (mean score of 2.92) perceived strategic impact and value of L&D practices (maturity), which is indicative of transactional L&D (level 2). In this regard, it is, furthermore, recommended that L&D managers follow the proposed improvement interventions (Refer to Table 5.4);
- In particular, cognisance should be taken of the three lowest-rated compliance factors, namely:
  - 1. Learning administration, assessment and -processes (2.75);
  - 2. Curating modern learning experiences (2.77) and
  - 3. Learning architecture and design (2.82);
- That organisations across all industries/sectors take cognisance of the five (5) worst performing (least compliant) sub-factors (refer to paragraph 4.5.2 and Table 4.14). In this regard, it is, furthermore, recommended that L&D managers follow the proposed improvement interventions (Refer to Table 5.4);
- That L&D managers, -practitioners, -professionals and other interested parties work together collaboratively, vigilantly and conscientiously to improve the effectiveness and strategic value of these poor performing strategic L&D (sub) factors;
- In light of the above, that L&D managers, -practitioners, -professionals and other interested parties seriously rethink and re-visit their current L&D practices, with the objective of re-positioning the L&D function to transform to a strategic learning partner. To this effect, it is, furthermore, recommended that L&D managers initially conduct an audit by means of the

weighted Strategic L&D Scorecard (refer to Figure 5.4) and subsequently, follow the proposed improvement interventions (Refer to Table 5.4);

- That L&D managers, -practitioners, -professionals and other interested parties pool their vast resources and intellectual capital to form a pool of expertise on how to re-align, re-position and transform current L&D practices from offering a transactional L&D (level 2) function to bringing strategic impact and value (level 4).

5.3.2 To determine the priority factors driving strategic L&D; the current state of L&D readiness to deliver these strategic factors and determine the differential, i.e. the capability gap index

The following research-related recommendations are proposed:

- That organisation across all industries/sectors take cognisance of the three (3) most strategically important factors, namely:
  - 1. Enhanced skills set of L&D professionals (3.33);
  - 2. Strategic mindset and alignment with business goals (3.27) and
  - 3. Learning structures and roles (3.26);
- That organisations across all industries/sectors take cognisance of the five (5) most important strategic L&D sub-factors (refer to paragraph 4.5.4 and Table 4.18);
- That organisations across all industries/sectors take cognisance of the low level of readiness of the L&D function, as reflected in the Strategic L&D Capability Gap Index (mean score of -0.31);
- In particular, cognisance should be taken of the three (3) widest strategic L&D capability gaps, namely:
  - 1. Learning administration, assessment and -processes (-0.49);
  - 2. Enhanced skills set of L&D professionals (-0.44) and
  - 3. Curating modern learning experiences (-0.42) and

About the above shortcomings, it is recommended that organisations concentrate on the proposed improvement interventions, referred to in Table 5.4.

Table 5.4: Proposed improvement interventions for the low scoring factors and widest L&D capability gap indices

Strategic L&D factor	Proposed improvement interventions

#10: Learning administration, assessment and -processes	• L&D practices should harness and deploy automation and 4-G technology
	• L&D practices should harness and deploy the following strategically relevant processes:
	  ○ *Risk management*
	  ○ *Skills Auditing*
	  ○ *Strategy mapping*
	• L&D evaluation and -measurement practices should concentrate on the following strategically relevant processes:
	  ○ *Level 4 of evaluation (business impact and results)*
	  ○ *Level 5 (training ROI)*
	  ○ *Scientifically valid summative learner competency assessment tools*
	• L&D managers, -professionals and -practitioners should become more accountable and liable for the monitoring, evaluation and measurement of strategic L&D practices
	• L&D managers, -professionals and -practitioners should shift from administering the L&D function to creating and adding real business value and building high performing organisations

#6: Enhanced skills set of L&D professionals	• L&D managers, -professionals and -practitioners should invest in the short to -medium term acquisition and development of the following core competencies:
	  ○ *Stakeholder relationship building and -management*
	  ○ *Change management and transformation*
	  ○ *Business acumen*
	  ○ *Digital and technological literacy*
	• L&D managers, -professionals and -practitioners should invest in the short to -medium term acquisition and development of the following types of thinking:
	  ○ *Strategic thinking*
	  ○ *Systems thinking*
	  ○ *Conceptual thinking*
	  ○ *Analytical thinking*
	• L&D managers, -professionals and -practitioners should improve their credibility in the eyes of business managers by:
	  ○ *Becoming a reputable source of strategically relevant-information*
	  ○ *Generating business intelligence and predictive analytics*
	  ○ *Transforming to export, strategic performance advisors and -in-house management consultants*
	• L&D managers, -professionals and -practitioners should collectively pool their knowledge and skills and create:
	  ○ *A cohesive professional unit and a vehicle for strategic value delivery to their organisations*
	  ○ *Centres of Excellence (CoE)*
	  ○ *Strategic learning partnerships*
	• L&D managers, -professionals and -practitioners should intensify their focus on instilling a sense of professionalism and work ethic in L&D practices

Table 5.4: Proposed improvement interventions for the low scoring factors and widest L&D capability gap indices (continued)

Strategic L&D factor	Proposed improvement interventions
#8: Curating modern learning experiences	• L&D managers, -professionals and -practitioners should be more innovative when curating, adopting and implementing L&D practices • L&D managers, -professionals and -practitioners should subscribe to best of breed and cutting-edge learning methodologies and -tools • L&D managers, -professionals and -practitioners should invest significantly more L&D resources into informal learning methods, e.g. social and experiential learning • In accommodating modern (millennial) learners, L&D managers, -professionals and -practitioners should invest in, curate, harness and deploy the following digital learning methods and tools: o *Mobile learning* o *Micro learning* o *Just-in-time (on-demand) learning* o *Video-enabled learning* o *Virtual reality learning* • L&D managers, -professionals and -practitioners should provide financial and non-financial incentives for skills sharing and -transfer and highly experienced and competent employees and from extended stakeholders, e.g. contractors • Learning management systems should be sufficiently agile to keep abreast with sophisticated and dynamically changing learning technologies
#3: Learning architecture and design	• L&D managers, -professionals and -practitioners should design and develop an organisational learning architecture that complies with the following strategically relevant principles: o *Employee-centric* o *Actively promoting a life-long learning process* o *Integrated digital learning experience for all employees* o *Accessibility of digital learning content from a range of sources and -platforms* • L&D managers, -professionals and -practitioners should create internal knowledge-sharing programmes • L&D managers, -professionals and -practitioners should intensify their focus on developing a talented workforce and building capacity to learn and grow - individually and organisationally • L&D managers, -professionals and -practitioners should promote collaborative learning experiences for all employees • L&D managers, -professionals and -practitioners should focus on making employees *"more competitive and less comfortable"* and creating organisational competitive advantages and core competencies
General (based on sub-standard sub-factors)	• L&D managers, -professionals and -practitioners should ensure that business/line managers are empowered to be competent in conducting accurate training needs analyses • L&D managers, -professionals and -practitioners should be sufficiently competent to manage large volumes of data of organisation-wide workforce analytics effectively • That L&D is a visionary function, with a clear view of the critical skills needed by their organisations in the future • That the L&D function is sufficiently capacitated as a strategic learning partner, that has very good insight of the core business processes

Furthermore, it is recommended that:

- Organisations utilise the above interventions as a basis for improving the strategic value and impact (maturity) and readiness of L&D practices; and
- Organisations pinpoint the other low-scoring sub/factors and urgently implement L&D improvement strategies and plans.

5.3.3 To construct an internationally-relevant and multi-disciplinary applicable, Strategic Business Management-aligned, Learning and Development measurement tool (scorecard)

The following research-related recommendation is proposed:

- That L&D Managers, practitioners and -professionals embrace, adopt and utilise the Strategic L&D Scorecard, both as a predictive (diagnostic) and evaluation (analytical and/or auditing) tool, to enhance the strategic value proposition of L&D and to re-position the L&D function from a transactional (level 2) to a strategic learning partner (level 4).

5.3.4 General

The following research-related recommendations are proposed:

- That participating respondents, organisations and industries/sectors and other interested stakeholders take cognisance of the findings of this research study, that is the status quo of L&D practices, those are the strategic maturity, readiness and -gaps and
- That participating respondents, organisations and industries/sectors and other interested stakeholders use the findings of this research study as a baseline and/or benchmark yardstick, as a means of improving the strategic impact of their respective L&D practices.

5.3.5 Extent to which the research objectives have been achieved

Given the above conclusions and recommendations, the researcher is of firm belief that all four (4) of the research objectives (as set out in Chapter 1 of this thesis) have been achieved.

5.3.6 Identification of new fields of study flowing from this PhD research

That additional and follow-up research at post-doctoral level be undertaken with the purpose of developing a Strategic L&D toolkit of metrics to enable organisations to analyse, measure, monitor, implement and audit/evaluate their L&D practices.

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ANNEXURE A: RESPONDENT INVITATION LETTER

Invitation to participate as a Respondent: PhD research survey (Strategic L&D)

Dear L&D Professional

I would like to invite you to participate in my PhD research survey, which attempts to measure the strategic impact and value of Learning and Development (L&D) practices globally. The research objectives include:

- To determine the level of strategic maturity of current L&D practices;
- To determine the L&D capability gap index (i.e. differential between the status quo and perceived importance);
- To develop and conceptualize a strategic L&D scorecard/model and
- To recommend strategies to transform current L&D practices into a strategic learning partner.

By participating in this research survey, you will make a valuable contribution to the current level of understanding and insight regarding the strategic contribution of L&D practices, thereby expanding the body of knowledge in this field.

Thank you for taking out your valuable time to complete this questionnaire. The questionnaire comprises a total of 175 items and it should not take longer than 25 minutes to complete. As a respondent, you can be assured of the strictest confidentiality of the information that you provide. In order to gain maximum benefit from this survey, it is important that you respond in an honest and truthful manner. Please ensure that you answer all 175 questionnaire items (NB: there are two pages).

I have made use of Survey Monkey as the on-line, data collection platform. Please refer to the survey link below:

https://www.surveymonkey.com/r/WMQX579

I would respectfully request that you complete the questionnaire within three (3) days.

As a valued respondent, I am willing to share the findings/outcome of this research with you. Please e-mail the researcher charlescot@polka.co.za in this regard.

Furthermore, I would appreciate if you could circulate this survey within your global business network.

Again, thank you for your willingness to participate in this research survey. Your time and contribution to the professional development of L&D, is much appreciated.

Best wishes and regards.

Charles Cotter (PhD Researcher)
084 562 9446
charlescot@polka.co.za

ANNEXURE B: RESEARCH QUESTIONNAIRE

Measuring the strategic impact and value of Learning and Development (L&D) practices globally

1. Select the industry/sector of your organisation

2. Select your position in your current organisation

- HRM Director, -Manager and/or -GM
- Learning & Development Director, -Manager, CLO and/or Training Manager
- Training Administrator, -Coordinator, ETD Practitioner and/or Skills Development Facilitator
- Academic
- Subject Matter Expert and/or L&D and/or Management -Consultant
- Business and/or -Line Manager (non-HRM or non-L&D)
- Occupational/Vocational Trainer or Training Facilitator
- Other (please specify)

3. Select the number of years in your current position

10+ years 7-9 years 4-6 years 1-3 years Less than 1 year

4. Select the size of your current organisation

- Large/global/multinational (1500+ employees)
- Large/national (1000 - 1499 employees)
- Medium-sized (251 - 999 employees)
- Small (2-250 employees)
- Sole Proprietor (1person business)

5. Select the geographic location of your current organisation

- South Africa
- Rest of Africa
- North America
- South America
- Europe
- Middle East
- Asia
- Australasia

6. Learning and Development (L&D) plans are aligned to strategic business plans.

Strongly disagree Disagree Agree Strongly agree

7. L&D practices are harnessed as a strategic lever to optimise the value of organisational learning.

Strongly disagree Disagree Agree Strongly agree

8. L&D practices make an effective contribution to the achievement of key strategic goals.

Strongly disagree Disagree Agree Strongly agree

9. The L&D function systematically identifies business environment changes, which could disrupt key organisational operating activities.

Strongly disagree Disagree Agree Strongly agree

10. The L&D function exerts a significant influence on the organisational culture.

Strongly disagree Disagree Agree Strongly agree

11. L&D practices are horizontally integrated (bundled) into every aspect of business operations.

Strongly disagree Disagree Agree Strongly agree

12. L&D practitioners strategically align the identified organisational skills gaps to the business objectives.

Strongly disagree Disagree Agree Strongly agree

13. L&D practitioners apply best practices throughout the training cycle to optimise organisational learning benefits,

Strongly disagree Disagree Agree Strongly agree

14. The L&D function adopts an integrated approach to create authentic behavioural change that is consistent with organisational strategic goals.

Strongly disagree Disagree Agree Strongly agree

15. The L&D strategy is aligned to individual, employee learning needs.

Strongly disagree Disagree Agree Strongly agree

16. The L&D function aligns workforce skills to industry-specific business priorities.

Strongly disagree Disagree Agree Strongly agree

17. L&D practices develop a competent talent pool, which provides organisational competitive advantages.

Strongly disagree Disagree Agree Strongly agree

18. L&D practitioners apply strategic management principles.

Strongly disagree Disagree Agree Strongly agree

19. How important is it for your organisation to have L&D plans aligned to the strategic business plans?

Unimportant Moderately important Significantly important Critically important

20. How important is it for the L&D function to be harnessed as a strategic lever to optimise the value of organisational learning?

Unimportant Moderately Significantly Critically

21. How important is it for the L&D function to make an effective contribution to the achievement of key strategic goals?

Unimportant Moderately Significantly Critically

22. How strategically important is it for the L&D function to systematically identify business environment changes, which could disrupt key organisational operating activities?

Unimportant Moderately Significantly Critically

23. How strategically important is it for the L&D function to exert a significant influence on your organisation's culture?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

24. How strategically important is it for L&D practices to be horizontally integrated (bundled) with every aspect of your organisation's business operations?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

25. How important is it for L&D practitioners to strategically align the identified organisational skills gaps to business objectives?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

26. How strategically important is it for L&D practitioners to apply best practices throughout the training cycle, thereby enhancing organisational learning benefits?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

27. How important is it for the L&D function to adopt an integrated approach to creating authentic behavioural change that is consistent with your organisational strategic goals?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

28. How important is it for the L&D strategy to be aligned to the individual, employee learning needs?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

29. How strategically important is it for the L&D function to align the workforce skills to industry-specific business priorities?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

30. How strategically important is it for the L&D function to develop a competent talent pool, that provides organisational competitive advantages?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

31. How important is it for L&D practitioners to apply strategic management principles?

○ Unimportant ○ Moderately ○ Significantly ○ Critically

32. L&D practitioners utilise data-derived metrics to measure L&D performance.

Strongly disagree Disagree Agree Strongly agree

33. L&D practitioners are sufficiently competent to effectively manage large volumes of data of organisation-wide workforce analytics.

Strongly disagree Disagree Agree Strongly agree

34. L&D practitioners generate competitive business intelligence, enabling line managers to make smarter business decisions.

Strongly disagree Disagree Agree Strongly agree

35. The L&D function applies a quantitative analytical decision-making approach, in order to capitalize on strategically valuable opportunities.

Strongly disagree Disagree Agree Strongly agree

36. L&D practitioners are credible expert talent development advisors, who utilise predictive analytics.

Strongly disagree Disagree Agree Strongly agree

37. L&D practitioners accurately utilise multiple sources of valid data.

Strongly disagree Disagree Agree Strongly agree

38. Training Return-on-Investment (ROI) calculations yield positive organisational dividends.

Strongly disagree Disagree Agree Strongly agree

39. L&D practitioners utilise standard, business performance measures, which are linked to organisational results.

Strongly disagree Disagree Agree Strongly agree

40. L&D practitioners utilise performance dashboard reports that quantify the organisational learning impact.

Strongly disagree Disagree Agree Strongly agree

41. Apart from internal data, L&D practitioners effectively leverage external data to predict workforce trends.

Strongly disagree Disagree Agree Strongly agree

42. L&D practitioners convert analytical insights into actionable business intelligence.

Strongly disagree Disagree Agree Strongly agree

43. How strategically important is it for L&D practitioners to utilise data-derived metrics to measure L&D performance?

Unimportant Moderately important Significantly important Critically important

44. How strategically important is it for L&D practitioners to be sufficiently competent to effectively manage large volumes of organisation-wide data of workforce analytics?

Unimportant Moderately Significantly Critically

45. How strategically important is it for L&D practitioners to generate competitive business intelligence, which enables your line managers to make smarter business decisions?

Unimportant Moderately Significantly Critically

46. How important is it for the L&D function to apply a quantitative, analytical decision-making approach, thereby capitalising on strategically valuable opportunities?

Unimportant Moderately Significantly Critically

47. How strategically important is it for L&D practitioners to be credible, expert talent development advisors, who utilise predictive analytics?

Unimportant Moderately Significantly Critically

48. How strategically important is it for L&D practitioners to utilise multiple sources of valid data?

Unimportant Moderately Significantly Critically

49. How strategically important is it for the training Return-on-Investment calculations to yield positive organisational dividends?

Unimportant Moderately Significantly Critically

50. How strategically important is it for L&D practitioners to utilise standard business performance measures, which are linked to organisational results?

Unimportant Moderately Significantly Critically

51. How strategically important is it for L&D practitioners to utilise performance dashboard reports, which quantify organisational learning impact?

Unimportant Moderately Significantly Critically

52. Over and above internal data, how strategically important is it for L&D practitioners to effectively leverage external data to predict workforce trends?

Unimportant Moderately Significantly Critically

53. How strategically important is it for L&D practitioners to convert analytical insights into actionable business intelligence?

Unimportant Moderately Significantly Critically

54. L&D practitioners apply innovative learning methodologies which transform the way that employees learn.

Strongly disagree Disagree Agree Strongly agree

55. The organisational learning architecture is employee-centric, thereby actively promoting a life-long learning process.

Strongly disagree Disagree Agree Strongly agree

56. The L&D function develops an integrated digital learning experience for all employees.

Strongly disagree Disagree Agree Strongly agree

57. The organisational learning architecture enables employees to access digital learning content from a range of sources.

Strongly disagree Disagree Agree Strongly agree

58. The L&D function have created internal knowledge-sharing programmes, thereby promoting collaborative learning experiences.

Strongly disagree Disagree Agree Strongly agree

59. The development of the organisational learning architecture is a shared responsibility, co-owned by L&D practitioners and line management.

Strongly disagree Disagree Agree Strongly agree

60. The L&D function assumes a strategic leadership role in learning management processes.

Strongly disagree Disagree Agree Strongly agree

61. The training process generates organisational learning solutions.

Strongly disagree Disagree Agree Strongly agree

62. When utilising outsourced training providers, the L&D function ensures that Service Level Agreements are enforced.

Strongly disagree Disagree Agree Strongly agree

63. The organisation holds individual learners accountable for the application of learning through formal learner contracts.

Strongly disagree Disagree Agree Strongly agree

64. The organisational performance management system fits seamlessly into the L&D process.

Strongly disagree Disagree Agree Strongly agree

65. How strategically important is it for L&D practitioners to apply innovative learning methodologies which transform the way that employees learn?

Unimportant Moderately important Significantly important Critically important

66. How strategically important is it for your organisational learning architecture to be employee-centric, thereby actively promoting a life-long learning process?

Unimportant Moderately Significantly Critically

67. How strategically important is it for the L&D function to develop an integrated digital learning experience for all employees?

Unimportant Moderately Significantly Critically

68. How strategically important is it for the organisational learning architecture to enable employees to access digital learning content from a range of sources?

Unimportant Moderately Significantly Critically

69. How strategically important is it for the L&D function to create internal knowledge-sharing programmes, thereby promoting collaborative learning experiences?

Unimportant Moderately Significantly Critically

70. How strategically important is it that the development of your organisational learning architecture is a shared responsibility, co-owned by L&D practitioners and line management?

Unimportant Moderately Significantly Critically

71. How important is it that the L&D function assumes a strategic leadership role in learning management processes?

Unimportant Moderately Significantly Critically

72. How strategically important is it for the training process to generate learning solutions?

Unimportant Moderately Significantly Critically

73. How strategically important is it for the L&D function to enforce Service Level Agreements when utilising outsourced training providers?

Unimportant Moderately Significantly Critically

74. How strategically important is it for your organisation to hold individual learners accountable for the application of learning by means of formal learner contracts?

Unimportant Moderately Significantly Critically

75. How strategically important is it that your organisation's performance management system fits seamlessly into the L&D process?

Unimportant Moderately Significantly Critically

76. The L&D function has shifted from training course delivery to a solutions-focused performance consulting model.

Strongly disagree Disagree Agree Strongly agree

77. Acting as change consultants, L&D practitioners build the organisation's readiness to capitalise on change.

Strongly disagree Disagree Agree Strongly agree

78. L&D practitioners are innovators, continuously searching for value-creating best practice strategies.

Strongly disagree Disagree Agree Strongly agree

79. L&D practitioners collaboratively build strategic alliances with all organisational stakeholders.

Strongly disagree Disagree Agree Strongly agree

80. L&D practitioners coach line managers on how to effectively implement L&D strategies.

Strongly disagree Disagree Agree Strongly agree

81. The L&D function collaboratively blends centralised learning programmes with regional learning teams in the organisation.

Strongly disagree Disagree Agree Strongly agree

82. L&D practitioners are architects of dynamic learning experiences for employees.

Strongly disagree Disagree Agree Strongly agree

83. L&D practitioners are strategic learning partners, who have good insight into the core business processes.

Strongly disagree Disagree Agree Strongly agree

84. The L&D function has transformed from an efficient cost centre to an effective profit centre.

Strongly disagree Disagree Agree Strongly agree

85. L&D is a visionary function, with a clear view of which critical skills the organisation will need in the future.

Strongly disagree Disagree Agree Strongly agree

86. The L&D function is a knowledge broker, able to generate intellectual capital.

Strongly disagree Disagree Agree Strongly agree

87. How strategically important is it for the L&D function to shift from training course delivery to a solutions-focused performance consulting model?

Unimportant Moderately important Significantly important Critically important

88. How strategically important is it for L&D practitioners to act as change consultants, able to build your organisation's readiness to capitalise on change?

Unimportant Moderately Significantly Critically

89. How strategically important is it for L&D practitioners to be innovators, who continuously search for value-creating best practice strategies?

Unimportant Moderately Significantly Critically

90. How important is it for L&D practitioners to collaboratively build strategic alliances with all your organisation's stakeholders?

Unimportant Moderately Significantly Critically

91. How important is it for L&D practitioners to coach line managers on how to effectively implement L&D strategies?

Unimportant Moderately Significantly Critically

92. How strategically important is it for the L&D function to collaboratively blend centralised learning programmes with regional learning teams in the organisation?

Unimportant Moderately Significantly Critically

93. How strategically important is it for L&D practitioners to be architects of dynamic learning experiences for employees?

Unimportant Moderately Significantly Critically

94. How important is it for L&D practitioners to be strategic learning partners, who have good insight of your core business processes?

Unimportant Moderately Significantly Critically

95. How strategically important is it for the L&D function to transform from an efficient cost centre to an effective profit centre?

Unimportant Moderately Significantly Critically

96. How strategically important is it for L&D to be a visionary function, with a clear view of the critical skills needed in the future?

Unimportant Moderately Significantly Critically

97. How strategically important is it for the L&D function to be a knowledge broker, able to generate intellectual capital?

Unimportant Moderately Significantly Critically

98. Through their numerical proficiency, L&D practitioners are able to combine analytical acumen with learning insights.

Strongly disagree Disagree Agree Strongly agree

99. L&D practitioners are data literate, who are capable to communicate the business relevance of their findings to line managers.

Strongly disagree Disagree Agree Strongly agree

100. L&D practitioners are sufficiently insightful of the market forces within their business environment.

Strongly disagree Disagree Agree Strongly agree

101. L&D practitioners are sufficiently skilled at stakeholder relationship building, enabling them to facilitate buy-in to L&D transformation.

Strongly disagree Disagree Agree Strongly agree

102. L&D practitioners keep abreast of modern L&D technologies.

Strongly disagree Disagree Agree Strongly agree

103. L&D practitioners effectively apply conceptual thinking skills.

Strongly disagree Disagree Agree Strongly agree

104. The L&D function performs as a cohesive professional unit, delivering strategic value to the organisation.

Strongly disagree Disagree Agree Strongly agree

105. The L&D function is a reputable Centre of Excellence (CoE) that provides expert in-house advice.

Strongly disagree Disagree Agree Strongly agree

106. How strategically important is it for L&D practitioners to be numerically proficient, with the ability to combine analytical acumen with learning insights?

Unimportant Moderately important Significantly important Critically important

107. How strategically important is it for L&D practitioners to be data literate, with the capability to communicate the business relevance of their findings to line managers?

Unimportant Moderately Significantly Critically

108. How strategically important is it for L&D practitioners to have sufficient insight to the market forces within their business environment?

Unimportant Moderately Significantly Critically

109. How strategically important is it for L&D practitioners to be sufficiently skilled at stakeholder relationship building, enabling them to facilitate buy-in to L&D transformation?

Unimportant Moderately Significantly Critically

110. How strategically important is it for L&D practitioners to keep abreast of modern L&D technologies?

Unimportant Moderately Significantly Critically

111. How strategically important is it L&D practitioners to effectively apply conceptual thinking skills?

Unimportant Moderately Significantly Critically

112. How strategically important is it for the L&D function to perform as a cohesive professional unit, delivering value to your organisation?

Unimportant Moderately Significantly Critically

113. How strategically important is it for the L&D function to serve as a reputable Centre of Excellence (CoE), that provides expert in-house advice.

Unimportant Moderately Significantly Critically

114. The organisation invests in L&D opportunities for extended stakeholders e.g. contractors, thereby improving their respective value to the organisation.

Strongly disagree Disagree Agree Strongly agree

115. The organisation favours a skills building (L&D investment of current employees) over a skills buying strategy (appointing skills-ready external applicants) to fill the necessary competency gaps in the organisation.

Strongly disagree Disagree Agree Strongly agree

116. The L&D function effectively utilises an electronic Knowledge Management System to ensure the retention of institutional memory.

Strongly disagree Disagree Agree Strongly agree

117. The L&D function is instrumental in future-proofing the organisation, through the skills development of high potential employees.

Strongly disagree Disagree Agree Strongly agree

118. L&D programmes are proactively designed with a future organisational expansion motive.

Strongly disagree Disagree Agree Strongly agree

119. The L&D function actively contributes to creating higher levels of employee engagement.

Strongly disagree Disagree Agree Strongly agree

120. How strategically important is it for your organisation to invest in L&D opportunities for extended workers to enhance their respective value to your organisation?

Unimportant Moderately important Significantly important Critically important

121. How strategically important is it for your organisation to apply a skills building in favour of a skills buying strategy?

Unimportant Moderately Significantly Critically

122. How strategically important is it for your organisation to effectively utilise an electronic Knowledge Management System to retain institutional memory?

Unimportant Moderately Significantly Critically

123. How strategically important is it for the L&D function to be instrumental in ensuring that your organisation is future-proof, enabled through the skills development of high potential employees?

Unimportant Moderately Significantly Critically

124. How strategically important is it for your organisation to have proactively designed L&D programmes that have a future organisational growth motive?

Unimportant Moderately Significantly Critically

125. How strategically important is it for the L&D function to actively contribute to creating higher levels of employee engagement?

Unimportant Moderately Significantly Critically

126. The organisation stimulates ample opportunities for informal learning to flourish.

Strongly disagree Disagree Agree Strongly agree

127. The L&D function provides incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders.

Strongly disagree Disagree Agree Strongly agree

128. The organisation invests heavily in technology-enabled learning tools.

Strongly disagree Disagree Agree Strongly agree

129. The L&D function creates a self-directed learning environment.

Strongly disagree Disagree Agree Strongly agree

130. In accommodating the millennial worker generation, the L&D function provides on-demand learning opportunities.

Strongly disagree Disagree Agree Strongly agree

131. Organisational learning management systems, which track L&D performance, are sufficiently flexible to keep pace with rapidly changing learning technologies.

Strongly disagree Disagree Agree Strongly agree

132. How strategically important is it for your organisation to stimulate ample opportunities for informal learning to flourish?

Unimportant Moderately important Significantly important

Critically important

133. How strategically important is it for the L&D function to provide incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders?

Unimportant Moderately Significantly Critically

134. How strategically important is it for your organisation to invest heavily in technology-enabled learning tools?

Unimportant Moderately Significantly Critically

135. How strategically important is it for your organisation to create a self-directed learning environment?

Unimportant Moderately Significantly Critically

136. How strategically important is it for the L&D function to provide on-demand learning opportunities, in order to accommodate the millennial worker generation?

Unimportant Moderately Significantly Critically

137. How strategically important is it for your organisation's learning management system, which tracks L&D performance, to be sufficiently flexible to keep pace with rapidly changing learning technologies?

Unimportant Moderately Significantly Critically

138. The L&D function is instrumental in sustaining a robust organisational learning culture.

Strongly disagree Disagree Agree Strongly agree

139. The organisation has shifted from internal, L&D programmes to innovative learning platforms.

Strongly disagree Disagree Agree Strongly agree

140. The organisation has transitioned from a content to learner-centric approach, providing employees with increased learning autonomy.

Strongly disagree Disagree Agree Strongly agree

141. Line managers are active learning agents, empowered to cultivate a learning culture.

Strongly disagree Disagree Agree Strongly agree

142. The L&D function facilitates accessibility of learning for all employees, through inclusive learning strategies.

Strongly disagree Disagree Agree Strongly agree

143. The organisation has transitioned from a traditional instructor-led training methodology to a blended learning approach.

Strongly disagree Disagree Agree Strongly agree

144. How strategically important is it for the L&D function to be instrumental in sustaining a robust organisational learning culture?

Unimportant Moderately important Significantly important

Critically important

145. How strategically important is it for your organisation to shift beyond internally-focused learning programmes to innovative learning platforms?

Unimportant Moderately Significantly Critically

146. How strategically important is it for your organisation to transition from a content to learner-centric approach, thereby providing employees with increased learning autonomy?

Unimportant Moderately Significantly Critically

147. How strategically important is it for your organisation's line managers to be active learning agents, who are empowered to cultivate a learning culture?

Unimportant Moderately Significantly Critically

148. How strategically important is it for the L&D function to facilitate accessibility of learning for all employees, through inclusive learning strategies?

Unimportant Moderately Significantly Critically

149. How strategically important is it for your organisation to transition from a traditional instructor-led training methodology to a blended learning approach?

Unimportant Moderately Significantly Critically

150. L&D programmes have the committed support from top management, who actively participate throughout the L&D process.

Strongly disagree Disagree Agree Strongly agree

151. Top management willingly allocate valuable organisational resources to the L&D function.

Strongly disagree Disagree Agree Strongly agree

152. The L&D function is a vital source of sustainable competitive advantage for the organisation.

Strongly disagree Disagree Agree Strongly agree

153. Line managers are competent in conducting accurate training needs analyses.

Strongly disagree Disagree Agree Strongly agree

154. The L&D Director has a pivotal seat at boardroom level, able to influence the organisation's strategic direction.

Strongly disagree Disagree Agree Strongly agree

155. Human performance is an organisational strategic priority, at the hub of business decision-making.

Strongly disagree Disagree Agree Strongly agree

156. Line management collaboratively partner with L&D practitioners to optimise the strategic impact of L&D.

Strongly disagree Disagree Agree Strongly agree

157. How strategically important is it for L&D programmes to have the committed support of your top management, who actively participate throughout the L&D process?

Unimportant Moderately important Significantly important Critically important

158. How strategically important is it for your top management to willingly allocate valuable organisational resources to the L&D function?

Unimportant Moderately Significantly Critically

159. How strategically important is it for the L&D function to be a vital source of sustainable competitive advantage for your organisation?

Unimportant Moderately Significantly Critically

160. How strategically important is it for your organisation's line managers to be competent in accurately conducting training needs analyses?

Unimportant Moderately Significantly Critically

161. How strategically important is it for the L&D Director to have a pivotal seat at boardroom level, with the ability to influence your organisation's strategic direction?

Unimportant Moderately Significantly Critically

162. How important is it for human performance to be managed as a strategic priority in your organisation, which is at the hub of business decision-making?

Unimportant Moderately Significantly Critically

163. How strategically important is it for your organisation's line management to collaboratively partner with L&D practitioners to optimise the strategic impact of L&D?

Unimportant Moderately Significantly Critically

164. The L&D function has migrated from manual to automated processes.

Strongly disagree Disagree Agree Strongly agree

165. The L&D function applies risk management strategies to proactively mitigate talent development threats.

Strongly disagree Disagree Agree Strongly agree

166. The L&D function effectively implements skills auditing processes.

Strongly disagree Disagree Agree Strongly agree

167. The L&D function utilises strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators.

Strongly disagree Disagree Agree Strongly agree

168. The L&D function applies effective post-training, learner competency assessment practices.

Strongly disagree Disagree Agree Strongly agree

169. The L&D function has adopted scientifically valid measurement processes to evaluate talent development performance.

Strongly disagree Disagree Agree Strongly agree

170. How strategically important is it for the L&D function to migrate from manual to automated processes?

Unimportant Moderately important Significantly important Critically important

171. How strategically important is it for the L&D function to effectively apply risk management strategies to mitigate talent development threats?

Unimportant Moderately Significantly Critically

172. How strategically important is it for the L&D function to effectively implement skills auditing practices?

Unimportant Moderately Significantly Critically

173. How strategically important is it for the L&D function to ulitise strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators?

Unimportant Moderately Significantly Critically

174. How strategically important is it for the L&D function to effectively apply post-training, learner competency assessment practices?

Unimportant Moderately Significantly Critically

175. How strategically important is it for the L&D function to adopt scientifically valid measurement processes to evaluate talent development performance?

Unimportant Moderately Significantly Critically

APPENDIX 1: RESEARCH QUESTIONNAIRE RESULTS FACTOR ANALYSIS

Pattern Matrix[a]

	Factor									
	1	2	3	4	5	6	7	8	9	10
#10: LEARNING ADMINISTRATION, ASSESSMENT AND PROCESSES:										
Q167 The L&D function utilises strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators.	0,544									
Q168 The L&D function applies effective post-training, learner competency assessment practices.	0,478									
Q169 The L&D function has adopted scientifically valid measurement processes to evaluate talent development performance.	0,470									
Q165 The L&D function applies risk management strategies to proactively mitigate talent development threats.	0,466									
Q166 The L&D function effectively implements skills auditing processes.	0,457									
Q164 The L&D function has migrated from manual to automated processes.	0,316									
#1: STRATEGIC MIND-SET AND ALIGNMENT WITH BUSINESS GOALS:										
		0,742								

Q8 L&D practices make an effective contribution to the achievement of key strategic goals.										
Q10 The L&D function exerts a significant influence on the organisational culture.		0,737								
Q9 The L&D function systematically identifies business environment changes, which could disrupt key organisational operating activities.		0,685								
Q11 L&D practices are horizontally integrated (bundled) into every aspect of business operations.		0,650								
Q12 L&D practitioners strategically align the identified organisational skills gaps to the business objectives.		0,629								
Q7 L&D practices are harnessed as a strategic lever to optimise the value of organisational learning.		0,623								
Q14 The L&D function adopts an integrated approach to create authentic behavioural change that is consistent with organisational strategic goals.		0,578								
Q6 Learning and Development (L&D) plans are aligned to strategic business plans.		0,559								
Q13 L&D practitioners apply best practices throughout the training cycle to optimise organisational learning benefits.		0,538								
Q16 The L&D function aligns workforce skills to industry-specific business priorities.		0,496								
Q15 The L&D strategy is aligned to individual, employee learning needs.		0,486								0,363

Q17 L&D practices develop a competent talent pool, which provides organisational competitive advantages.		0,479	
Q18 L&D practitioners apply strategic management principles.			
#2: EVIDENCE-BASED, BUSINESS METRICS AND PREDICTIVE ANALYTICS:			
Q37 L&D practitioners accurately utilise multiple sources of valid data.			-0,752
Q33 L&D practitioners are sufficiently competent to effectively manage large volumes of data of organisation-wide workforce analytics.			-0,713
Q34 L&D practitioners generate competitive business intelligence, enabling line managers to make smarter business decisions.			-0,704
Q36 L&D practitioners are credible expert talent development advisors, who utilise predictive analytics.			-0,698
Q35 The L&D function applies a quantitative analytical decision-making approach, in order to capitalize on strategically valuable opportunities.			-0,689
Q32 L&D practitioners utilise data-derived metrics to measure L&D performance.			-0,642
Q40 L&D practitioners utilise performance dashboard reports that quantify the organisational learning impact.			-0,625
Q42 L&D practitioners convert analytical insights into actionable business intelligence.			-0,606

Q41 Apart from internal data, L&D practitioners effectively leverage external data to predict workforce trends.			-0,542							
Q38 Training Return-on-Investment (ROI) calculations yield positive organisational dividends.			-0,507							
Q39 L&D practitioners utilise standard, business performance measures, which are linked to organisational results.			-0,447							
Q99 L&D practitioners are data literate, who are capable to communicate the business relevance of their findings to line managers.			-0.352							
Q64 The organisational performance management system fits seamlessly into the L&D process.										
#5: LEARNING STRUCTURES AND ROLES:										
Q78 L&D practitioners are innovators, continuously searching for value-creating best practice strategies.				-0,642						
Q86 The L&D function is a knowledge broker, able to generate intellectual capital.				-0,625						
Q79 L&D practitioners collaboratively build strategic alliances with all organisational stakeholders.				-0,548						
Q83 L&D practitioners are strategic learning partners, who have good insight into the core business processes.				-0,534						
Q85 L&D is a visionary function, with a clear view of which critical skills the organisation will need in the future.				-0,525						

Q82 L&D practitioners are architects of dynamic learning experiences for employees.				-0,489						
Q77 Acting as change consultants, L&D practitioners build the organisation's readiness to capitalise on change.				-0,479						
Q80 L&D practitioners coach line managers on how to effectively implement L&D strategies.				-0,464						
Q81 The L&D function collaboratively blends centralised learning programmes with regional learning teams in the organisation.				-0,408						
Q76 The L&D function has shifted from training course delivery to a solutions-focused performance consulting model.				-0,389						
Q84 The L&D function has transformed from an efficient cost centre to an effective profit centre.				-0,360						
Q98 Through their numerical proficiency, L&D practitioners are able to combine analytical acumen with learning insights.				-0,341						
Q100 L&D practitioners are sufficiently insightful of the market forces within their business environment.										
#6: ENHANCED SKILLS SET OF L&D PROFESSIONALS:										
Q102 L&D practitioners keep abreast of modern L&D technologies.					-0,522					
Q104 The L&D function performs as a cohesive professional unit, delivering strategic value to the organisation.					-0,515					

Q103 L&D practitioners effectively apply conceptual thinking skills.					-0,455
Q105 The L&D function is a reputable Centre of Excellence (CoE), that provides expert in-house advice.					-0,372
Q101 L&D practitioners are sufficiently skilled at stakeholder relationship building, enabling them to facilitate buy-in to L&D transformation.					-0,364
#7: FUTURE-PROOFING:					
Q140 The organisation has transitioned from a content to learner-centric approach, providing employees with increased learning autonomy.					-0,368
Q117 The L&D function is instrumental in future-proofing the organisation, through the skills development of high potential employees.					-0,339
Q139 The organisation has shifted from internal, L&D programmes to innovative learning platforms.					-0,321
Q115 The organisation favours a skills building (L&D investment of current employees) over a skills buying strategy (appointing skills-ready external applicants) to fill the necessary competency gaps in the organisation.					-0,315
Q114 The organisation invests in L&D opportunities for extended stakeholders e.g. contractors, thereby improving					-0,304

their respective value to the organisation.										
Q118 L&D programmes are proactively designed with a future organisational expansion motive. Q119 The L&D function actively contributes to creating higher levels of employee engagement.										
#3: LEARNING ARCHITECTURE AND DESIGN: **Q56** The L&D function develops an integrated digital learning experience for all employees. **Q57** The organisational learning architecture enables employees to access digital learning content from a range of sources. **Q58** The L&D function have created internal knowledge-sharing programmes, thereby promoting collaborative learning experiences. **Q55** The organisational learning architecture is employee-centric, thereby actively promoting a life-long learning process. **Q54** L&D practitioners apply innovative learning methodologies which transform the way that employees learn.						-0,814 -0,781 -0,550 -0,528 -0,333				
#4: LEARNING SOLUTIONS ORIENTED: **Q60** The L&D function assumes a strategic leadership role in learning management processes.							0,550			

Q59 The development of the organisational learning architecture is a shared responsibility, co-owned by L&D practitioners and line management.							0,470	
Q61 The training process generates organisational learning solutions.							0,399	
Q62 When utilising outsourced training providers, the L&D function ensures that Service Level agreements are enforced.								
#9: TOP MANAGEMENT SUPPORT AND LINE MANAGER ENGAGEMENT, CONTRIBUTION AND INVOLVEMENT:								
Q151 Top management willingly allocate valuable organisational resources to the L&D function.								0,634
Q150 L&D programmes have the committed support from top management, who actively participate throughout the L&D process.								0,565
Q156 Line management collaboratively partner with L&D practitioners to optimise the strategic impact of L&D.								0,534
Q154 The L&D Director has a pivotal seat at boardroom level, able to influence the organisation's strategic direction.								0,524
Q153 Line managers are competent in conducting accurate training needs analyses.								0,481
Q155 Human performance is an organisational strategic priority, at the hub of business decision-making.							0,314	0,415

Q141 Line managers are active learning agents, empowered to cultivate a learning culture.								0,367	
Q152 The L&D function is a vital source of sustainable competitive advantage for the organisation.								0,312	
Q142 The L&D function facilitates accessibility of learning for all employees, through inclusive learning strategies. Q138 The L&D function is instrumental in sustaining a robust organisational learning culture. Q143 The organisation has transitioned from a traditional instructor-led training methodology to a blended learning approach. Q63 The organisation holds individual learners accountable for the application of learning through formal learner contracts.									
#8: CURATING MODERN LEARNING EXPERIENCES FOR MODERN LEARNERS:									
Q128 The organisation invests heavily in technology-enabled learning tools.									0,665
Q129 The L&D function creates a self-directed learning environment.									0,603
Q131 Organisational learning management systems, which track L&D performance, are sufficiently flexible to keep pace with rapidly changing learning technologies.									0,562

Q130 In accommodating the millennial worker generation, the L&D function provides on-demand learning opportunities.									0,543
Q127 The L&D function provides incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders.									0,387
Q126 The organisation stimulates ample opportunities for informal learning to flourish.									0,349
Q116 The L&D function effectively utilises an electronic Knowledge Management System to ensure the retention of institutional memory.									0,313

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 26 iterations.

APPENDIX 1: RESEARCH QUESTIONNAIRE RESULTS FACTOR ANALYSIS (2)

Pattern Matrix[a]

	Factor									
	1	2	3	4	5	6	7	8	9	10
#9: TOP MANAGEMENT SUPPORT AND LINE MANAGER ENGAGEMENT, CONTRIBUTION AND INVOLVEMENT:										
Q159 How strategically important is it for the L&D function to be a vital source of sustainable competitive advantage for your organisation?	0,549									
Q158 How strategically important is it for your top management to willingly allocate valuable organisational resources to the L&D function?	0,544									
Q163 How strategically important is it for your organisation's line management to collaboratively partner with L&D practitioners to optimise the strategic impact of L&D?	0,463									
Q157 How strategically important is it for L&D programmes to have the committed support of your top management,	0,458									

who actively participate throughout the L&D process?		
Q162 How important is it for human performance to be managed as a strategic priority in your organisation, which is at the hub of business decision-making?	0,458	
Q161 How strategically important is it for the L&D Director to have a pivotal seat at boardroom level, with the ability to influence your organisation's strategic direction?	0,442	
Q160 How strategically important is it for your organisation's line managers to be competent in accurately conducting training needs analyses?	0,412	
#8: CURATING MODERN LEARNING EXPERIENCES FOR MODERN LEARNERS:		
Q135 How strategically important is it for your organisation to create a self-directed learning environment?		-0,627
Q145 How strategically important is it for your organisation to shift beyond internally-focused learning programmes to innovative learning platforms?		-0,537

Q146 How strategically important is it for your organisation to transition from a content to learner-centric approach, thereby providing employees with increased learning autonomy?		-0,536
Q136 How strategically important is it for the L&D function to provide on-demand learning opportunities, in order to accommodate the millennial worker generation?		-0,532
Q144 How strategically important is it for the L&D function to be instrumental in sustaining a robust organisational learning culture?		-0,517
Q133 How strategically important is it for the L&D function to provide incentives for skills sharing, through the facilitation of skills transfer from extended stakeholders?		-0,509
Q149 How strategically important is it for your organisation to transition from a traditional instructor-led training methodology to a blended learning approach?		-0,489
Q132 How strategically important is it for your organisation to stimulate ample opportunities for		-0,440

informal learning to flourish?											
Q147 How strategically important is it for your organisation's line managers to be active learning agents, who are empowered to cultivate a learning culture?		-0,432									
Q148 How strategically important is it for the L&D function to facilitate accessibility of learning for all employees, through inclusive learning strategies?		-0,428									
Q137 How strategically important is it for your organisation's learning management system, which tracks L&D performance, to be sufficiently flexible to keep pace with rapidly changing learning technologies?		-0,394									0,325
#1: STRATEGIC MIND-SET AND ALIGNMENT WITH BUSINESS GOALS:											
Q21 How important is it for the L&D function to make an effective contribution to the achievement of key strategic goals?			0,837								
Q20 How important is it for the L&D function to be harnessed as a strategic lever to			0,768								

optimise the value of organisational learning?			
Q23 How strategically important is it for the L&D function to exert a significant influence on your organisation's culture?			0,701
Q24 How strategically important is it for L&D practices to be horizontally integrated (bundled) with every aspect of your organisation's business operations?			0,698
Q19 How important is it for your organisation to have L&D plans aligned to the strategic business plans?			0,687
Q22 How strategically important is it for the L&D function to systematically identify business environment changes, which could disrupt key organisational operating activities?			0,673
Q25 How important is it for L&D practitioners to strategically align the identified organisational skills gaps to business objectives?			0,583
Q26 How strategically important is it for L&D practitioners to apply best practices throughout the training cycle, thereby enhancing			0,450

organisational learning benefits?									
Q27 How important is it for the L&D function to adopt an integrated approach to creating authentic behavioural change, that is consistent with your organisational strategic goals?			0,434						
Q29 How strategically important is it for the L&D function to align the workforce skills to industry-specific business priorities?			0,348						
Q28 How important is it for the L&D strategy to be aligned to the individual, employee learning needs?									
#2: EVIDENCE-BASED, BUSINESS METRICS AND PREDICTIVE ANALYTICS:									
Q46 How important is it for the L&D function to apply a quantitative, analytical decision-making approach, thereby capitalising on strategically valuable opportunities?				0,757					
Q44 How strategically important is it for L&D practitioners to be sufficiently competent to effectively manage large volumes of				0,740					

organisation-wide data of workforce analytics?				
Q45 How strategically important is it for L&D practitioners to generate competitive business intelligence, which enables your line managers to make smarter business decisions?				0,719
Q48 How strategically important is it for L&D practitioners to utilise multiple sources of valid data?				0,648
Q51 How strategically important is it for L&D practitioners to utilise performance dashboard reports, which quantify organisational learning impact?				0,630
Q53 How strategically important is it for L&D practitioners to convert analytical insights into actionable business intelligence?				0,624
Q47 How strategically important is it for L&D practitioners to be credible, expert talent development advisors, who utilise predictive analytics?				0,623
Q50 How strategically important is it for L&D practitioners to utilise standard business performance measures, which are linked to organisational results?				0,587

Q43 How strategically important is it for L&D practitioners to utilise data-derived metrics to measure L&D performance?				0,566	
Q52 Over and above internal data, how strategically important is it for L&D practitioners to effectively leverage external data to predict workforce trends?				0,518	
Q49 How strategically important is it for the training Return-on-Investment calculations to yield positive organisational dividends?				0,447	
Q31 How important is it for L&D practitioners to apply strategic management principles?				0,387	
#6: ENHANCED SKILLS SET OF L&D PROFESSIONALS:					
Q108 How strategically important is it for L&D practitioners to have sufficient insight to the market forces within their business environment?					-0,581
Q106 How strategically important is it for L&D practitioners to be numerically proficient, with the ability to combine analytical acumen with learning insights?					-0,516

Q107 How strategically important is it for L&D practitioners to be data literate, with the capability to communicate the business relevance of their findings to line managers?					-0,497
Q109 How strategically important is it for L&D practitioners to be sufficiently skilled at stakeholder relationship building, enabling them to facilitate buy-in to L&D transformation?					-0,487
Q111 How strategically important is it L&D practitioners to effectively apply conceptual thinking skills?					-0,423
Q110 How strategically important is it for L&D practitioners to keep abreast of modern L&D technologies?					-0,368
Q112 How strategically important is it for the L&D function to perform as a cohesive professional unit, delivering value to your organisation?	0,307				-0,333
Q113 How strategically important is it for the L&D function to serve as a reputable Centre of Excellence (CoE), that provides expert in-house advice.					-0,303

#5: LEARNING STRUCTURES AND ROLES:										
Q88 How strategically important is it for L&D practitioners to act as change consultants, able to build your organisation's readiness to capitalise on change?						0,510				
Q89 How strategically important is it for L&D practitioners to be innovators, who continuously search for value-creating best practice strategies?						0,497				
Q87 How strategically important is it for the L&D function to shift from training course delivery to a solutions-focused performance consulting model?						0,490				
Q91 How important is it for L&D practitioners to coach line managers on how to effectively implement L&D strategies?						0,453				
Q90 How important is it for L&D practitioners to collaboratively build strategic alliances with all your organisation's stakeholders?						0,358				
Q30 How strategically important is it for the L&D function to develop a competent talent pool, that provides organisational										

competitive advantages?										
Q93 How strategically important is it for L&D practitioners to be architects of dynamic learning experiences for employees?										
#10: LEARNING ADMINISTRATION, ASSESSMENT AND PROCESSES:										
Q175 How strategically important is it for the L&D function to adopt scientifically valid measurement processes to evaluate talent development performance?							0,623			
Q173 How strategically important is it for the L&D function to ulitise strategy mapping to demonstrate the cause-effect relationship of learning programmes to key, business performance indicators?							0,612			
Q171 How strategically important is it for the L&D function to effectively apply risk management strategies to mitigate talent development threats?							0,596			
Q170 How strategically important is it for the L&D function to migrate from manual to automated processes?							0,508			
Q174 How strategically important is it for the							0,505			

L&D function to effectively apply post-training, learner competency assessment practices?								
Q172 How strategically important is it for the L&D function to effectively implement skills auditing practices?							0,485	
#5: LEARNING STRUCTURES AND ROLES:								
Q96 How strategically important is it for L&D to be a visionary function, with a clear view of the critical skills needed in the future?								0,444
Q74 How strategically important is it for your organisation to hold individual learners accountable for the application of learning by means of formal learner contracts?								0,436
Q75 How strategically important is it that your organisation's performance management system fits seamlessly into the L&D process?								0,416
Q97 How strategically important is it for the L&D function to be a knowledge broker, able to generate intellectual capital?								0,399
Q73 How strategically important is it for the								0,386

L&D function to enforce Service Level 5ments when utilising outsourced training providers?										
Q71 How important is it that the L&D function assumes a strategic leadership role in learning management processes?								0,380		
Q70 How strategically important is it that the development of your organisational learning architecture is a shared responsibility, co-owned by L&D practitioners and line management?								0,348		
Q95 How strategically important is it for the L&D function to transform from an efficient cost centre to an effective profit centre?								0,313		
Q69 How strategically important is it for the L&D function to create internal knowledge-sharing programmes, thereby promoting collaborative learning experiences?										
Q94 How important is it for L&D practitioners to be strategic learning partners, who have good insight of your core business processes?										
Q92 How strategically important is it for the L&D function to										

collaboratively blend centralised learning programmes with regional learning teams in the organisation?										
#3: LEARNING ARCHITECTURE AND DESIGN:										
Q68 How strategically important is it for the organisational learning architecture to enable employees to access digital learning content from a range of sources?									0,515	
Q67 How strategically important is it for the L&D function to develop an integrated digital learning experience for all employees?									0,513	
Q65 How strategically important is it for L&D practitioners to apply innovative learning methodologies which transform the way that employees learn?									0,504	
Q66 How strategically important is it for your organisational learning architecture to be employee-centric, thereby actively promoting a life-long learning process?									0,370	
Q72 How strategically important is it for the training process to generate learning solutions?										

#7: FUTURE-PROOFING										
Q124 How strategically important is it for your organisation to have proactively designed L&D programmes that have a future organisational growth motive?										0,628
Q123 How strategically important is it for the L&D function to be instrumental in ensuring that your organisation is future-proof, enabled through the skills development of high potential employees?										0,571
Q122 How strategically important is it for your organisation to effectively utilise an electronic Knowledge Management System to retain institutional memory?										0,553
Q121 How strategically important is it for your organisation to apply a skills building in favour of a skills buying strategy?										0,482
Q125 How strategically important is it for the L&D function to actively contribute to creating higher levels of employee engagement?										0,431
Q134 How strategically important is it for your organisation to invest		-0,368								0,401

heavily in technology-enabled learning tools?										
Q120 How strategically important is it for your organisation to invest in L&D opportunities for extended workers to enhance their respective value to your organisation?										0,358

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 36 iterations.

ANNEXURE C: LETTER FROM STATISTICAL CONSULTANT

Liezel Korf Associates
ASSESSMENT • DEVELOPMENT • RESEARCH • STATISTICS

1 November 2017

To whom it may concern

This serves to confirm that I assisted Mr Charles Cotter (Student number 21512884) with the statistical analysis for his Ph.D. thesis.

Kind regards

Dr Liezel Korf

ANNEXURE D: LETTER FROM LANGUAGE EDITOR

Dynamic Language & Translation Specialists

Antoinette Bisschoff
71 Esselen Street, Potchefstroom
Tel: 018 293 3046
Cell: 082 878 5183
antoinettebisschoff@mweb.co.za
CC No: 1995/017794/23

Thursday, 09 November 2017

To whom it may concern,

Re: Letter of confirmation of language editing

The dissertation **Transforming learning and development into a strategic, value-adding business solution: A conceptual and business-minded framework** by **Charles Cotter (Student No. 21512884 – 2015)** was language and technically edited. The referencing and sources were checked as per NWU referencing guidelines. Final corrections remain the responsibility of the author.

Antoinette Bisschoff

Officially approved language editor of the NWU since 1998
Member of SA Translators Institute (no. 100181)

Precision ... to the last letter