The Rise of Analytics in HR

Section 3:
Building a Data-Driven
HR Function

in Talent Solutions

About the report: The Rise of Analytics in HR

The need for high-performing talent has never been greater. It's clear that by leveraging data analytics, HR leaders are in a better position to hire, retain and grow their workforce.

But building a data-driven function across every dimension of the HR function – from talent acquisition to performance, to workforce planning and policies, and to employee engagement and retention – can be complex and challenging.

In this section, we look at how businesses and HR functions can begin their analytics journey by prioritising focus areas, identifying skill gaps, and understanding how to align requirements for HR analytics to these needs.

To find out more, download the full report at http://lnkd.in/riseofanalytics

Identify and Prioritise Focus Areas

Prioritise your focus areas

If you are new to adopting analytics into your HR function, you can explore where to start by identifying the established and emerging areas of focus for your business. **Established** areas can be your starting point to apply talent analytics to – moving onto **emerging** areas once the function and business leaders are more comfortable with the shift.

Typically for HR professionals in APAC, established areas are those where utilisation of analytics is more common. Emerging areas are those where utilisation of analytics is less common, but has grown rapidly in the past five years.

Established areas of focus include **compensation and benefits, talent acquisition, talent development** and **productivity.**

Emerging areas of focus include **employer branding, workforce planning** and **culture and diversity.**

Once you have identified your focus areas, you can turn your attention to the skills you need within the business to ensure your analytics function works effectively.

Emerging and established focus areas for analytics in HR
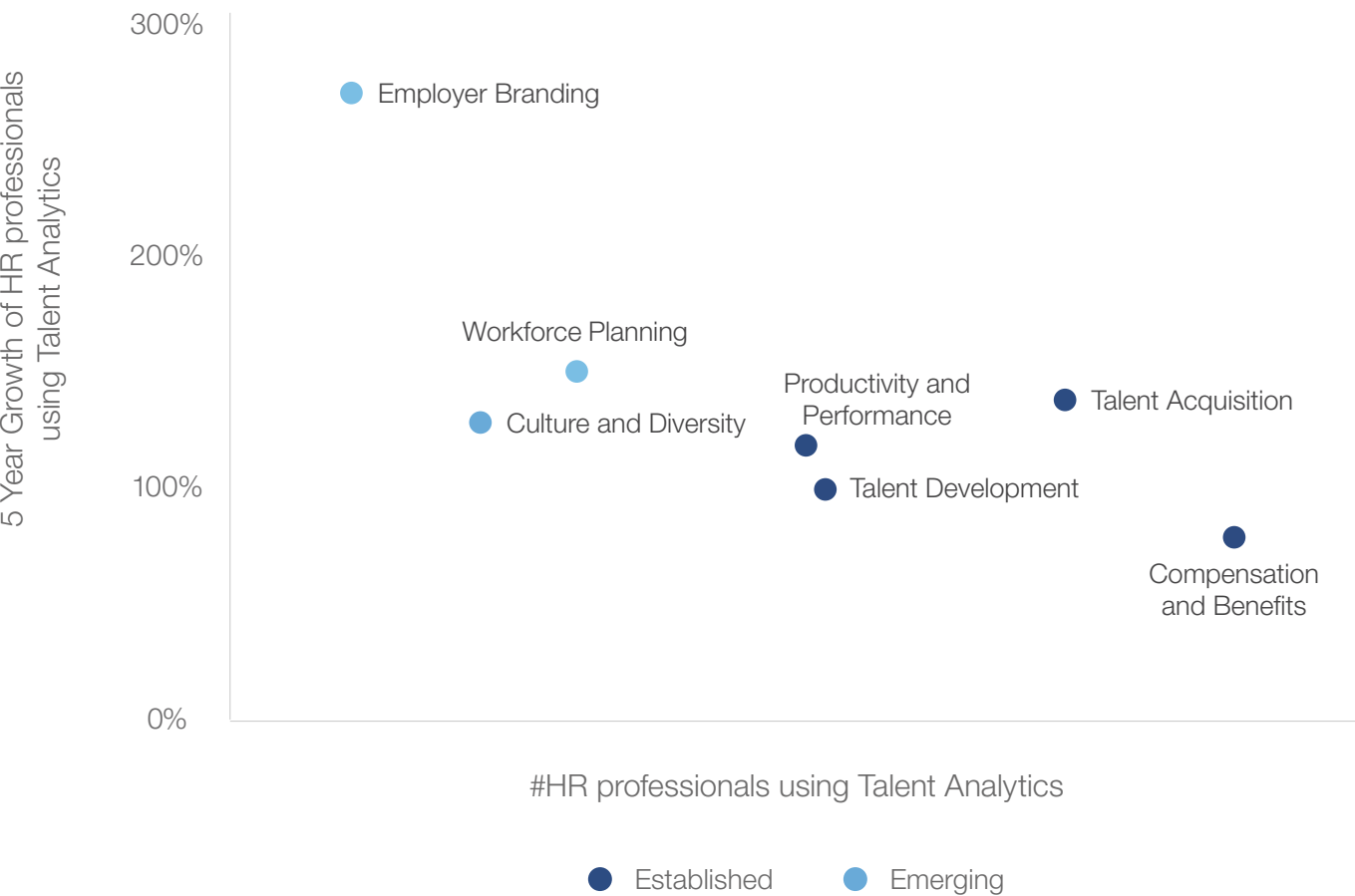
Note: Horizontal axis represents professionals in APAC who work on analytics in HR. Vertical axis represents the 5-year growth in such professionals.

When we look at priority areas in different APAC regions, we can see how these vary as per the different business realities in each market. For example, in India and China where people change jobs often, talent acquisition is a high priority. However, in Southeast Asia and Australia where attrition is less of an issue, the focus is on talent development and workforce planning respectively.

Identify the skills you need

To build analytics capabilities in your team, there are three areas that you should focus on: HR Domain Knowledge, Business & Strategic Thinking, and Data & Analytics.

Having skills across these three categories will allow your teams to apply analytics effectively on HR matters strategically, and push for necessary changes in the organisation.

While not everyone will have the same set of skills, it is beneficial to have a diversified team with analytics capabilities ranging from market research to big data and machine learning.

It's not just about building technical skills, it's also about having business acumen

HR Domain Knowledge

- **Recruiting and Placement**
  Sourcing

- **Compensation and Benefits**
  Payroll, Benefits negotiation

- **Other HR Domain Skills**
  Talent Management, Employee Engagement, Employer Branding, Workforce Planning, Employee Training, Organisational Development

Across the HR function, domain knowledge is key to applying statistics and analytics to ensure we're solving the right problems with the right approach.

Business & Strategic Thinking

- **Business Development and Relationship Management**

- **Strategy and Strategic Planning**

- **Business Analysis**

- **Management and Leadership**

This includes talent with business development and relationship management skills, as well as somewhat intangible qualities like leadership skills. The ability to understand how to build hypothesis, convert data into actionable insights, communicate insights articulately, and to make data-driven recommendations is crucial.

Data & Analytics

- **Statistical Analysis & Data Mining**
  HR Analytics, Data Analytics, Data Management Statistics, Data Mining, Predictive Analysis SAS, R, Python

- **Business Intelligence**
  SAP Business Objects, Tableau

- **Big Data & Machine Learning**

- **Market Research & Insights**
  Quantitative and Qualitative Research, Market Research

- **HR Software**
  SAP products, SAP ERP, ATS, Taleo, HRIS Database Management, Workday, Peoplesoft

- **Data Engineering and Data Warehousing**
  Data Marts, Data Integration, Data Governance

- **Database Management & Software**
  SQL, Databases

This consists of everything from HR software and statistical analysis to data mining, big data & machine learning. Experts must understand data and know the right tools and skills to clean, extract, combine, analyse and visualise datasets. These skills are more relevant for the analytics specialists.
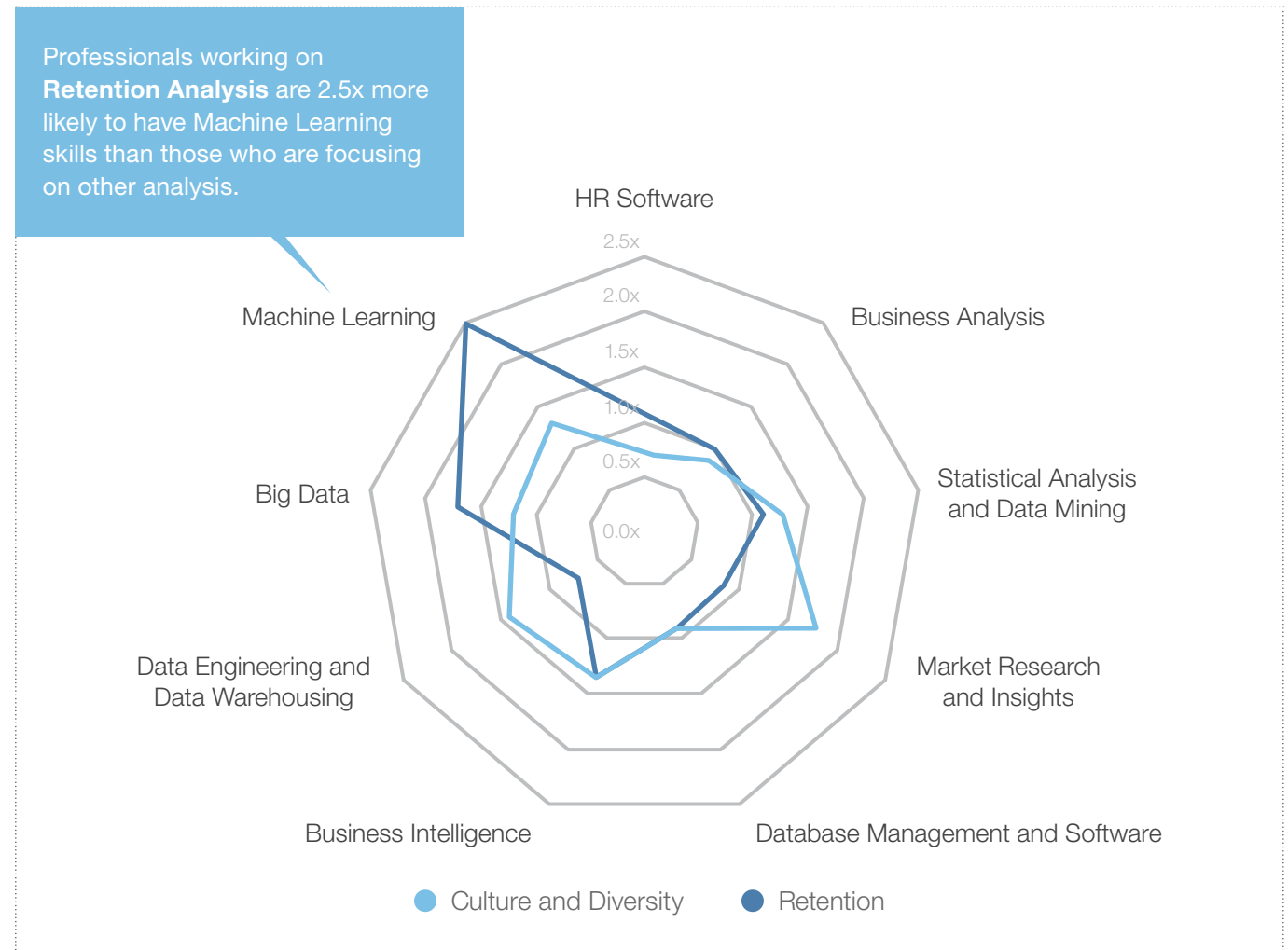
Align these skills to your needs

The skill requirements for analytics will differ depending on the type of business issues you are tackling – and it's important to note a one-size-fits-all approach won't work.

For example, more advanced analytics skills such as big data and machine learning are increasingly used for employee retention. On the other hand, professionals who worked on talent analytics related to culture and diversity are more likely to have market research skills.

Not all business needs require the same analytics skills

Example: Application of skills for retention analytics vs. culture & diversity analytics

Professionals working on **Retention Analysis** are 2.5x more likely to have Machine Learning skills than those who are focusing on other analysis.

Radar chart with axes: HR Software, Business Analysis, Statistical Analysis and Data Mining, Market Research and Insights, Database Management and Software, Business Intelligence, Data Engineering and Data Warehousing, Big Data, Machine Learning. Scale: 0.0x, 0.5x, 1.0x, 1.5x, 2.0x, 2.5x

Legend: ● Culture and Diversity   ● Retention

So how are HR leaders applying analytics and insights every day? The next section looks at how LinkedIn is helping businesses at each stage of the employee lifecycle.

Applying Analytics to Answer
Critical Talent Questions
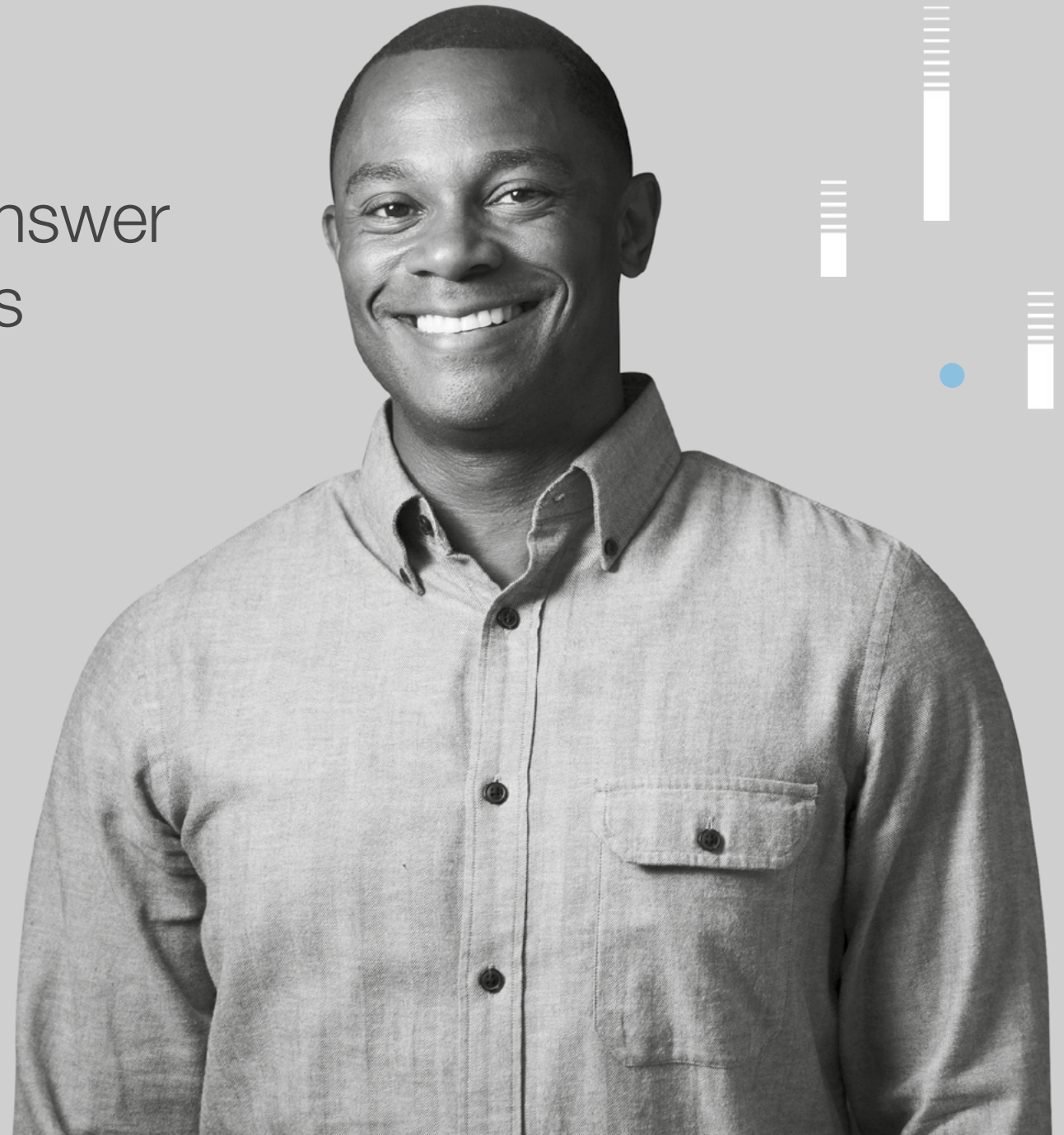
Successful analytics adoption depends on how you apply it

Introducing an analytics function into your HR team goes beyond simply investing in talent with the right skills and identifying key business focus areas – you need to understand where and how to apply it in a practical sense.

The key to success in utilising data is understanding how to apply it to your business, your needs and your organisational goals. Whether it's the recruiter, HR business partner, VP HR or the L&D consultant, it's HR professionals who are using data and insights to make a business case, highlight gaps and have a strategic conversation with senior leadership. Thus, access to analytics makes HR professionals more efficient in their jobs and provides them with the tools to elevate their position in the organisation.

The vision should be to make analytics available in a digestible format that is simple to access, so the general HR practitioner can easily reference and use it.

In fact, many organisations already provide – or plan to provide – a majority of HR data to HR business partners. By sharing data, the analytics and respective insights won't be wasted by sitting in a siloed, specialised team, and are instead available for the entire HR function.

The next section talks about LinkedIn's vision for the application of analytics.

" My department uses analytics to solve HR challenges such as organisation health, market competitiveness, talent development and recruitment data. These data sets provide us with decision-making information, so we can continue to work towards our goal of a digital company. "

Mildred Auyeung
Group Director, Human Resources
South China Morning Post

Talent Intelligence

LinkedIn's vision is to create economic opportunity for every member of the global workforce. Executing on that vision begins with mapping the digital economy - or creating the world's first economic graph.

LinkedIn's Economic Graph is a digital representation of the global economy based on data generated from 562 million members, 50,000 skills, 18 million employers, more than 11 million open jobs, and 29,000 educational institutions.
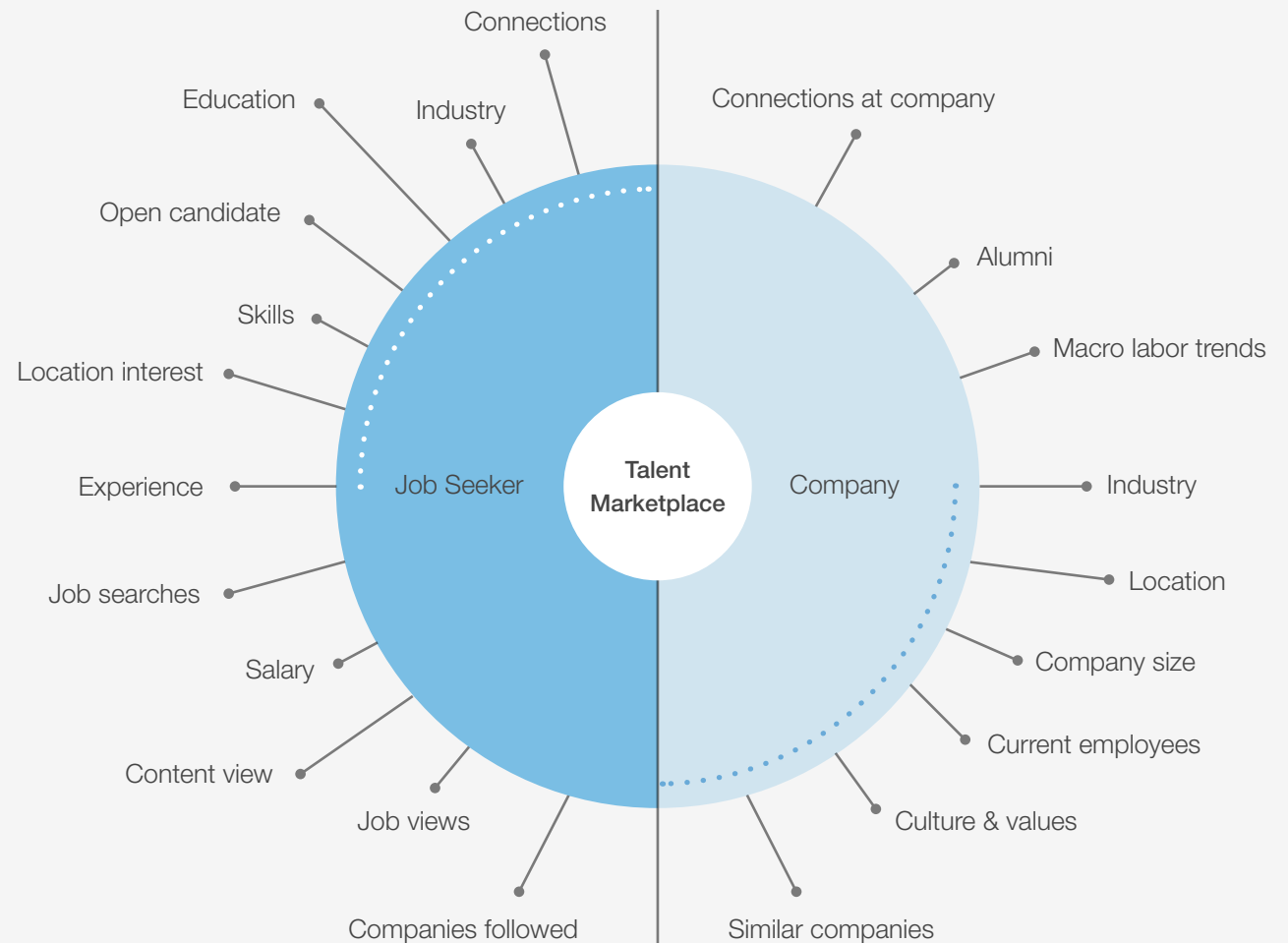
LinkedIn has created the world's largest talent marketplace where candidates and companies are interacting every single day. While 10 years ago we had a relatively small collection of profiles and some engagement, we now have a robust community where billions of interactions are taking place every day.

The insights generated from these billions of interactions can enable today's HR leaders to answer some of the most deep and complex questions raised by the CEO and senior business leaders.

This ammunition adds a data-driven foundation to your point of view, your experience, and your decisions. It can enable your team to marry their instincts with these insights to make the right decisions or elevate their position in the organisation, while also ensuring people are a competitive advantage for the business.

In the next few pages, find out how organisations can use insights from LinkedIn to answer critical questions across the employee lifecycle.

LINKEDIN HAS CREATED THE WORLD'S LARGEST TALENT MARKETPLACE WHERE CANDIDATES AND COMPANIES INTERACT EVERY DAY

Talent Marketplace

Job Seeker: Connections, Education, Industry, Open candidate, Skills, Location interest, Experience, Job searches, Salary, Content view, Job views, Companies followed

Company: Connections at company, Alumni, Macro labor trends, Industry, Location, Company size, Current employees, Culture & values, Similar companies

Talent Pool Analysis

SUPPLY AND DEMAND OF TALENT

**TALENT DEMOGRAPHIC AND COMPETITION**

This shows supply and demand of talent for a job profile or skill set. This includes talent pool competition in different cities, which can help you make decisions on pipelining, talent acquisition strategy, employer branding investment and geo-location strategy.

Overview

Professionals on LinkedIn

8.9K

Competition for Talent

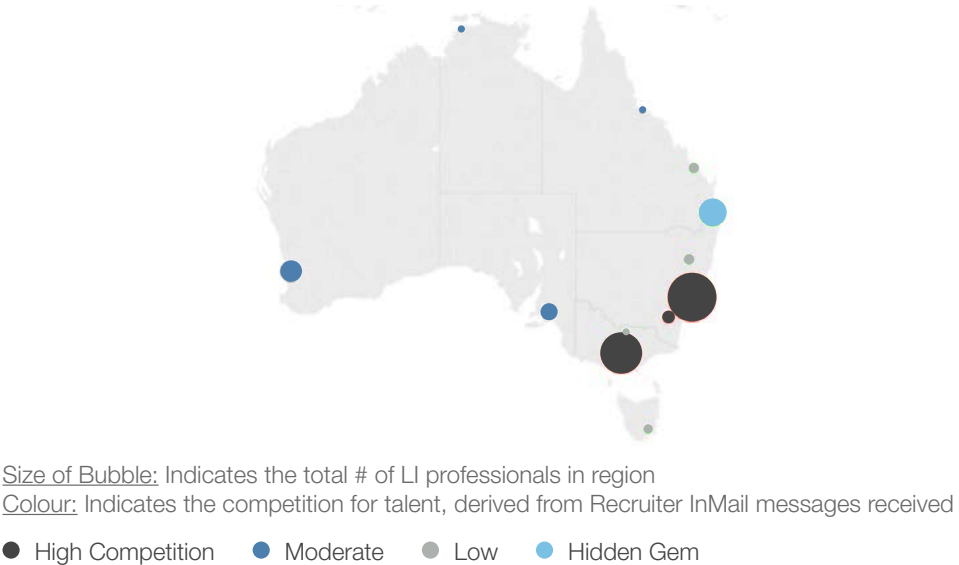| Low	Moderate	**High**
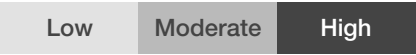
Level of competition is in the top 50% compared to other talent pools

Competition Trend

▲ 1.8%

change in avg. InMails per member last 12 months vs. prior 12 months

Supply and Demand Region

Size of Bubble: Indicates the total # of LI professionals in region
Colour: Indicates the competition for talent, derived from Recruiter InMail messages received

● High Competition ● Moderate ● Low ● Hidden Gem

	Location	Supply Professionals	Competition for Talent Demand	Trend	Top Industry
1	Sydney, AU	3.5K	Higher	↑	Software & IT Service
2	Melbourne, AU	2.4K	Higher	↑	Software & IT Service
3	Brisbane, AU	982	Hidden Gem	-	Finance

Workforce Planning:

- Why do I find it difficult to hire talent with certain skill sets?

- Where should I open my new R&D centre or my new office?

- Do I need to evaluate and increase my employer branding investment?

This analysis shows competition for the talent pool in different cities, which helps an organisation make decisions on pipelining, competitive talent acquisition strategy, employer branding investment and geo-location strategy.

Case Study: Novartis

How talent data helped Novartis choose a strategic location for its new office

For months, Novartis debated internally whether its new India office should be in Mumbai or Bangalore, as each city had strategic appeal. By leveraging insights from LinkedIn, the recruiting team was able to compare each city's talent pool on factors such as mobility and employers. Career level was also a key point of comparison, as Novatis successfully recruits most employees at mid-career. In the talent report, Mumbai was the clear winner over Bangalore with its much larger population of mid-career talent. Once the data was shared with all stakeholders, it only took three weeks to reach consensus on Mumbai.

The Impact

Faster decision-making

Time is money, and like most companies Novartis is constantly trying to move faster. So to rely solely on its ATS and application flow to choose an office location would not have been practical, and would have taken too long. The talent pool reports accelerated the company's ability to get alignment and take action.

Access to passive talent

The report also exposed Novartis to new pools of talent. To meet its demand for clinical talent, for example, the team had to look beyond pharma. Talent pool reports highlight the best alternate industries and companies to target, such as healthcare or insurance.

Ability to educate the business

Novartis has an internal team that does talent mapping, but to get a very detailed view of the full picture, the third-party data helps. Especially when the hiring team is from different parts of the world, it's a good way to communicate the local landscape.

> " We knew Mumbai had a good population and Bangalore had a good population, but without more insight into their differences in talent, it was hard to make a decision. But once the data came in, it was rather easy. "
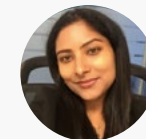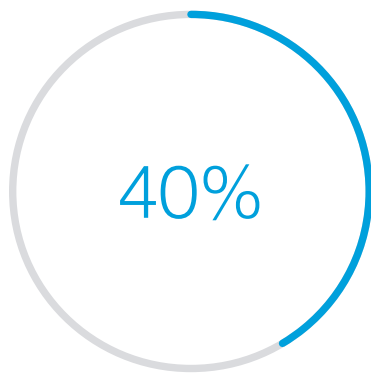
Priyanka Thatoi
Assistant Manager, Leadership & Campus Hiring
Novartis
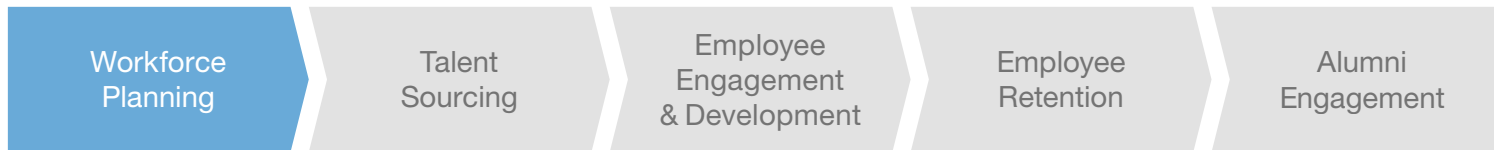
→ Gender Diversity

HOW WELL ARE YOU ATTRACTING FEMALE TALENT
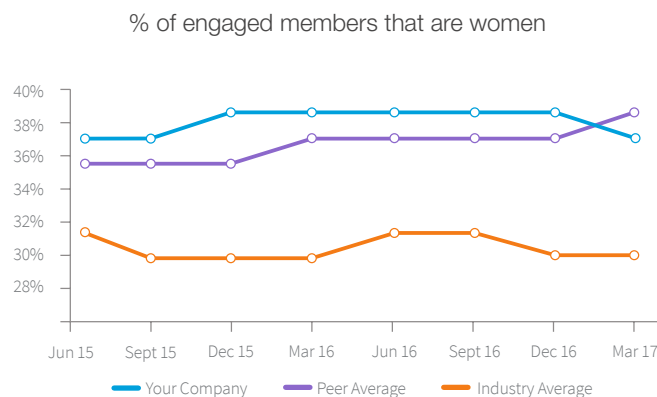
ATTRACTING FEMALE TALENT

40%

Attracting Female Talent

of members who engaged with you on LinkedIn are women.

*Engagement includes members who follow/view your LinkedIn page or view your jobs.

…As compared to your industry over time

% of engaged members that are women

	Jun 15	Sept 15	Dec 15	Mar 16	Jun 16	Sept 16	Dec 16	Mar 17

Legend: Your Company — Peer Average — Industry Average

…Across business functions

|		Your Company	Peer Average	Industry Average
	Comms	53%	54%	30%
	Engineering	20%	22%	22%
	Finance	39%	43%	34%
	Human Resources	61%	58%	52%
	IT	32%	31%	22%

Gender Diversity:

- How do I build a gender diverse workforce?

- Why do I find it difficult to engage and hire women leaders?

- How does my organisation compare to competitors with respect to diversity?

This type of analysis shows how female talent engages with your organisation compared to industry and peer averages across functions and seniority levels. It can be used for benchmarking, as well as reveal areas of opportunities for you, which can lead to decisions on diversity initiatives and employer branding.
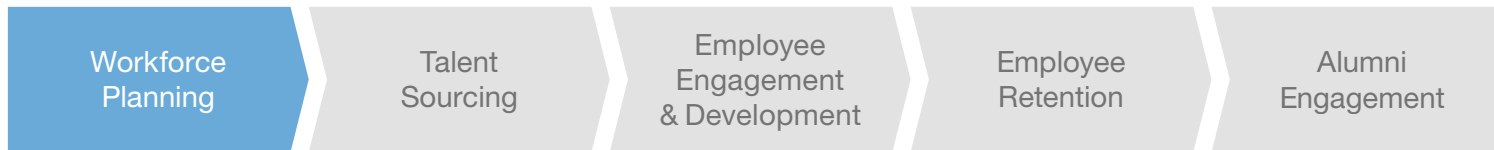
◆ Workforce Skills Density

COMPARING SKILLS DENSITY TO IDENTIFY STRENGTHS & GAPS

● Engineers in your company   ● Engineers in peer company
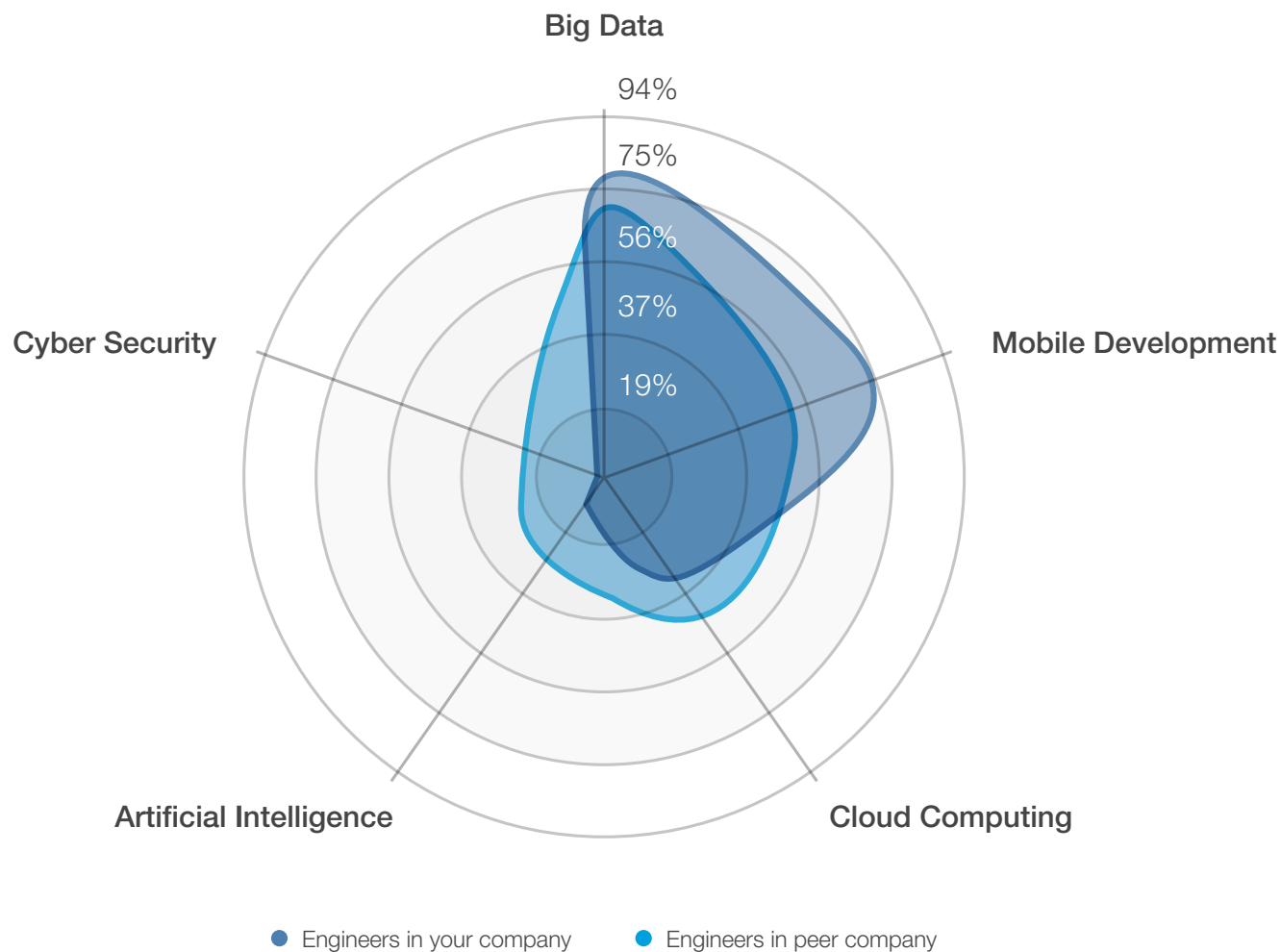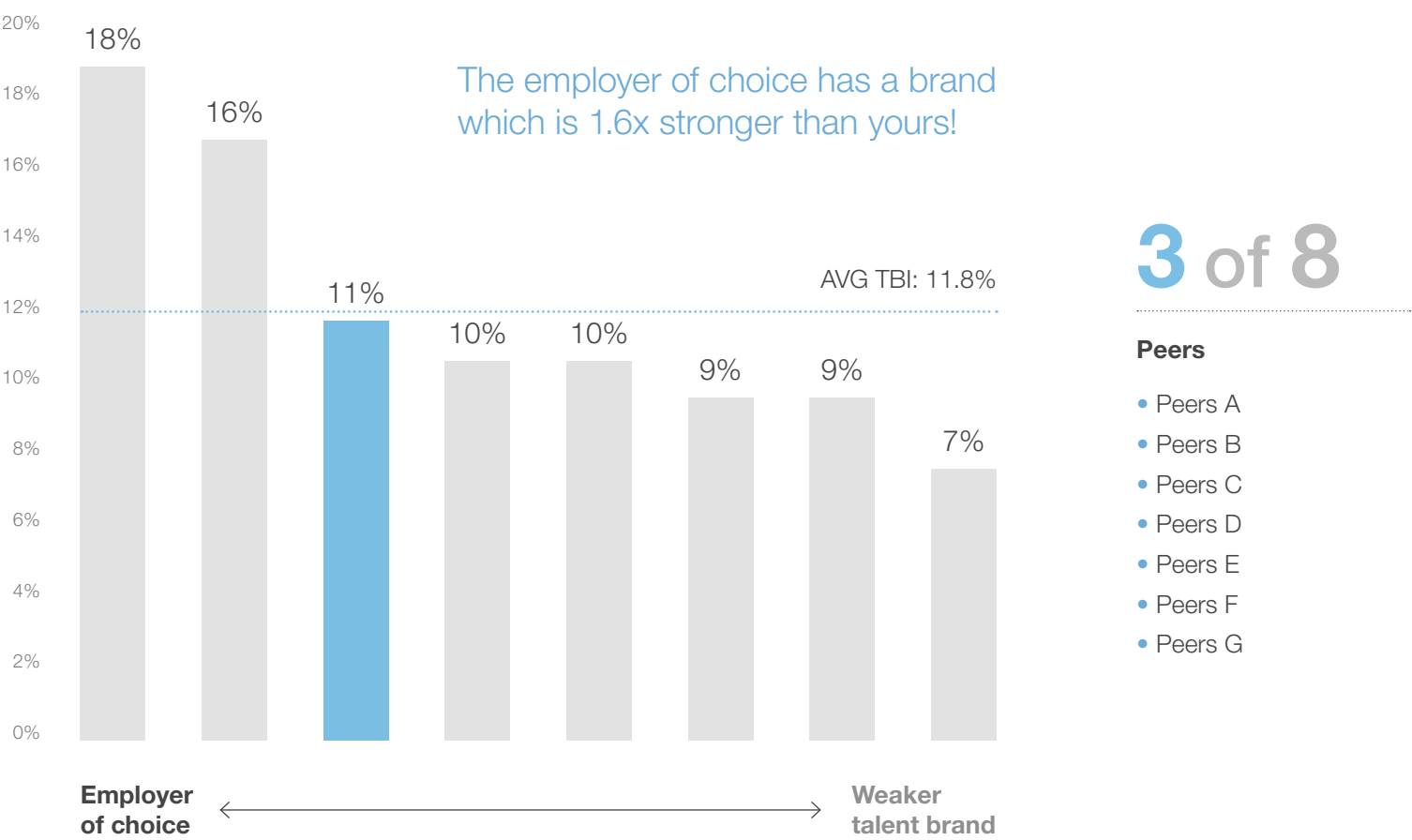
Skills Analysis:

- How does the skills profile of my workforce compare to my competitors?

- What competencies are my competitors investing in?

- Where should I focus in reskilling and upskilling my workforce?

This type of analysis shows how your organisation compares to your competitors in the penetration and adoption of certain skills. It can be used for various purposes such as analysing skills gaps, understanding competitors' investment in capabilities, and building out the upskilling and reskilling strategy for your workforce.

Brand Audit

MEASURING THE STRENGTH OF A COMPANY'S EMPLOYER BRAND

YOUR COMPANY'S TALENT BRAND RANKS 3RD OF 8 COMPETITORS

Talent Sourcing:

The employer of choice has a brand which is 1.6x stronger than yours!

AVG TBI: 11.8%

18% 16% 11% 10% 10% 9% 9% 7%

Employer of choice ← → **Weaker talent brand**

3 of 8

Peers

- Peers A
- Peers B
- Peers C
- Peers D
- Peers E
- Peers F
- Peers G

- How strong is my employer brand compared to my competitors?

- Is my employer brand growing stronger or weaker over time?

- How can I grow my employer brand?

This type of analysis shows how your organisation compares with peers with respect to the **Talent Brand Index** (TBI). The Talent Brand Index is calculated based on engagement of LinkedIn members with your jobs and career page on LinkedIn.

Workforce
Planning

Talent
Sourcing

Employee
Engagement
& Development

Employee
Retention

Alumni
Engagement

Internal Mobility

UNDERSTAND INTERNAL MOVEMENTS BETWEEN DEPARTMENTS

WHICH ARE THE MOST COMMON INTERNAL CROSS-FUNCTIONAL MOVEMENTS AMONGST YOUR EMPLOYEES?
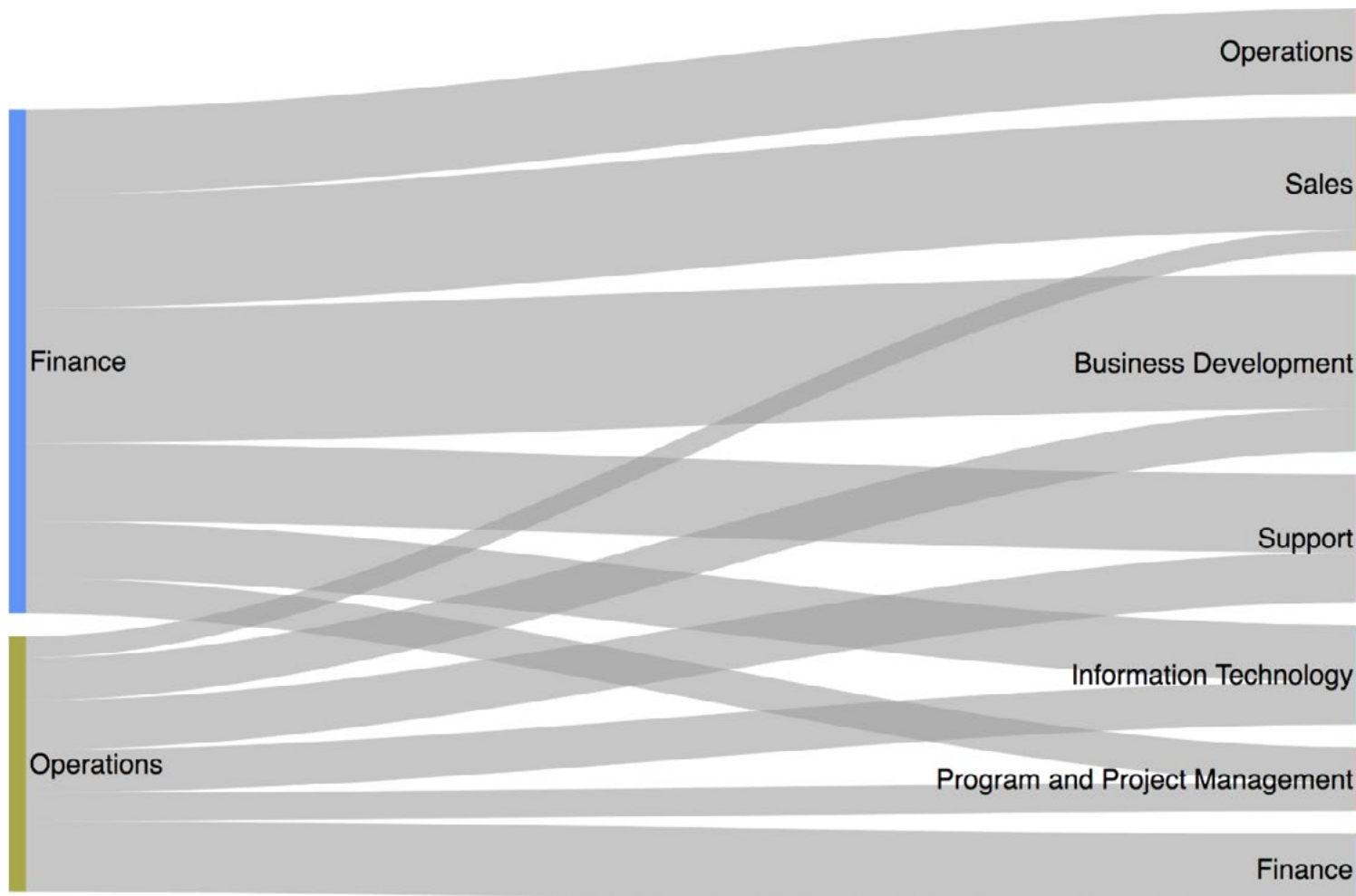
Employee Engagement & Development:

- Where are the most common internal movements?

- Which internal mobility paths lead to higher retention?

This type of analysis shows the most common internal career paths for your employees. You can benchmark this against your peers and industry to build career growth plans for high potential talent, which will help to prevent attrition of top talent.

Case Study: Nielsen

Using data to identify internal mobility as a key to retention

One of Nielsen's businesses engaged its People Analytics team to understand why the company was losing talent. Starting with five years of people data in a (big) spreadsheet and some hypotheses, they identified the factors most highly correlated with attrition.

The biggest finding was that employees with a change in job responsibilities due to promotion or lateral movement within the past two years were much less likely to leave. This insight prompted Nielsen's leadership to focus on making it easier for employees to learn about and pursue jobs internally and identifying "at-risk" high performers and proactively putting opportunities in front of them.

The Impact

More opportunities for employees

There was an 8x increase in internal mobility in the initiative's first year.

Increased employee retention

Most groups achieved a 5-10% increase in annual retention of their at-risk employees.

Immediate credibility for talent analytics

The analysis caught the attention of other business leaders and has since been replicated for other Nielsen units.

> " This was the furthest thing from an academic exercise. This directly impacted the business. Everybody feels retention. The data let us make solid recommendations that the company could take action on immediately. "

Chris Louie
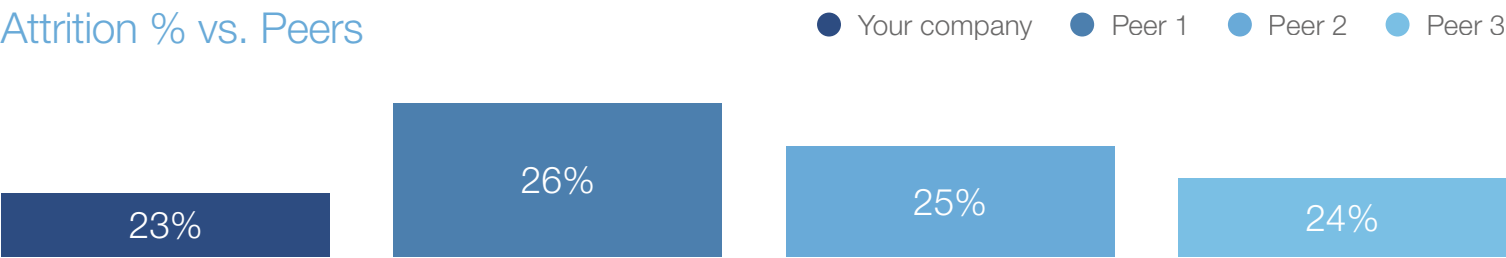**SVP, People Analytics and Talent Acquisition**
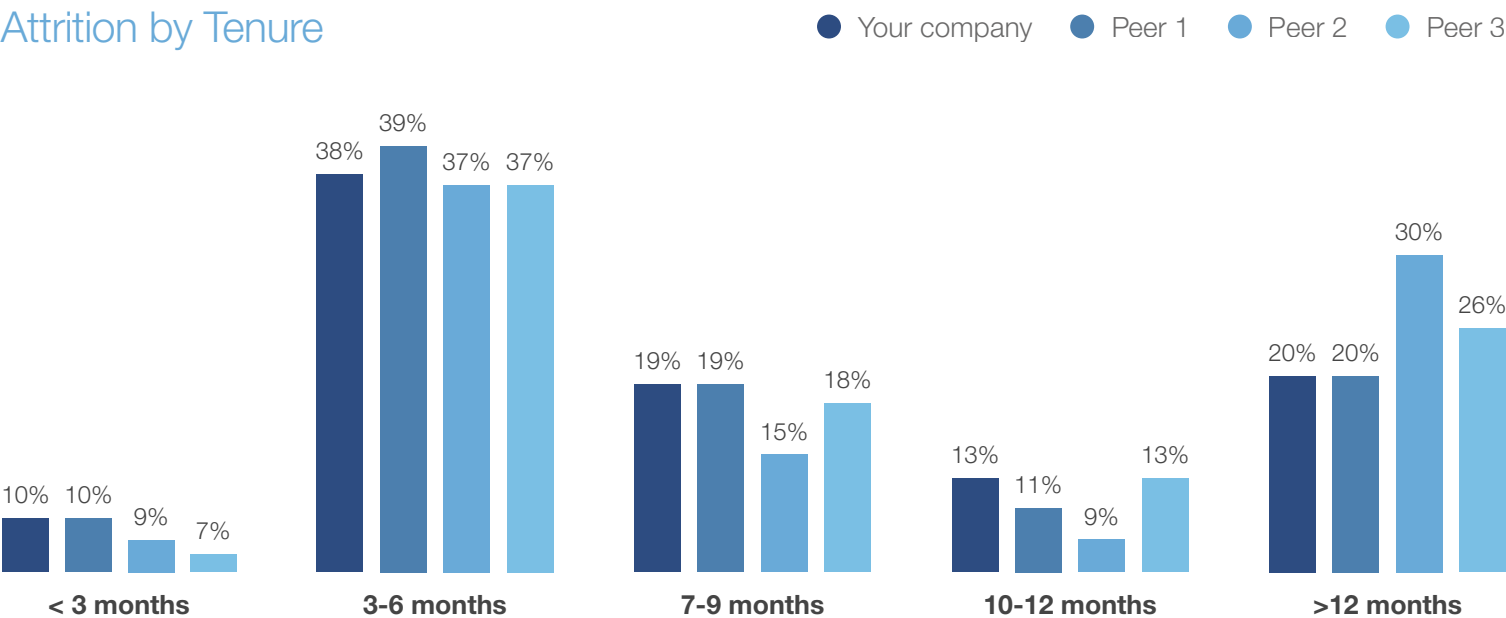**Nielsen**

• Attrition & Tenure Analysis

COMPARE ATTRITION RATES AND TENURE WITH INDUSTRY PEERS

YOUR COMPANY'S ATTRITION IS HIGHEST BETWEEN 3 AND 6 MONTHS OF JOINING, COMPARABLE TO INDUSTRY PEERS

Attrition % vs. Peers

● Your company ● Peer 1 ● Peer 2 ● Peer 3

23% 26% 25% 24%

Attrition by Tenure

● Your company ● Peer 1 ● Peer 2 ● Peer 3

< 3 months: 10% 10% 9% 7%
3-6 months: 38% 39% 37% 37%
7-9 months: 19% 19% 15% 18%
10-12 months: 13% 11% 9% 13%
>12 months: 20% 20% 30% 26%

Employee Retention:

• What types of roles have the highest attrition rate?

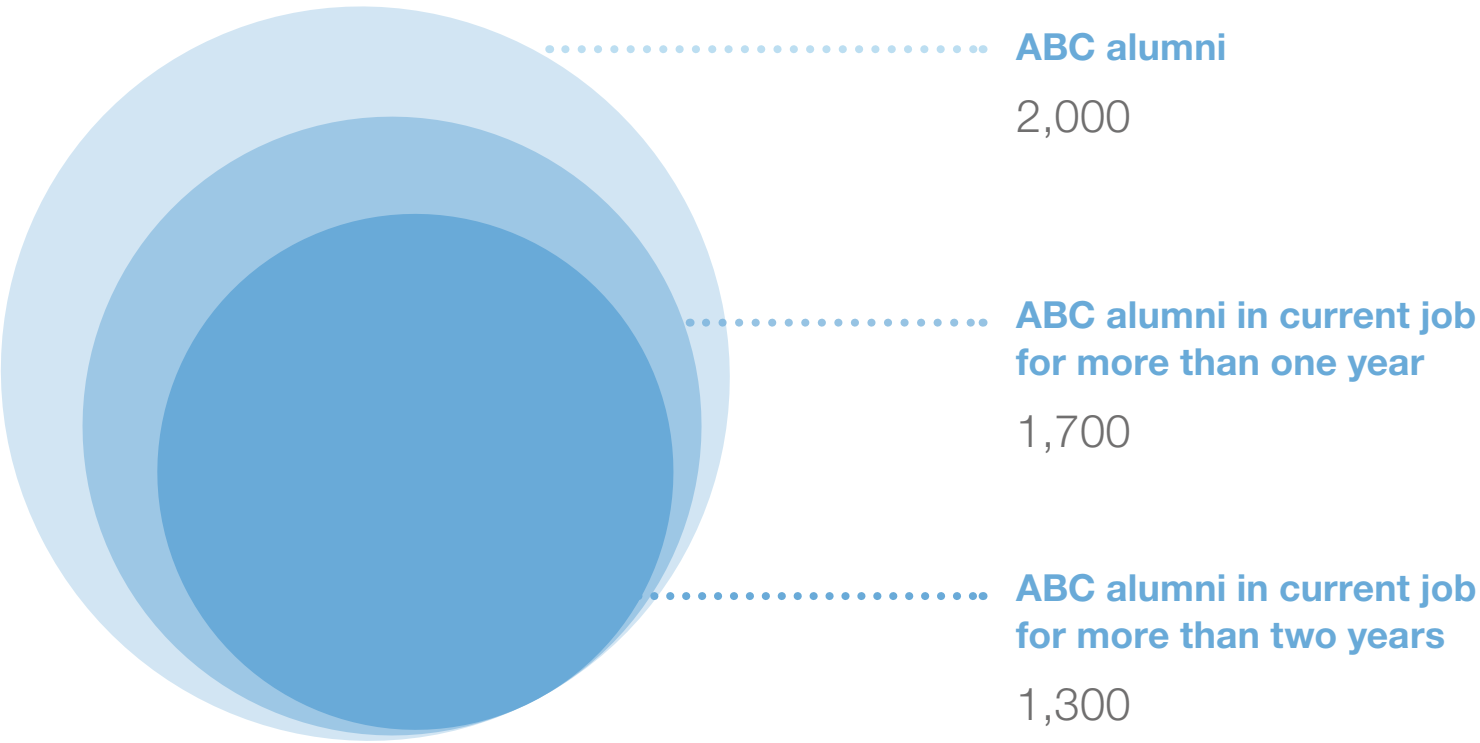• What is the typical tenure of your employees?

This analysis shows the tenure of your employees, and when they are most likely to leave.

17

Alumni Engagement

FIND OUT WHAT ALUMNI MEMBERS ARE DOING TODAY

YOUR COMPANY HAS 2,000 ALUMNI MEMBERS IN SINGAPORE, MOSTLY WORKING IN COMPETITOR BANKS

ABC alumni

2,000

ABC alumni in current job for more than one year

1,700

ABC alumni in current job for more than two years

1,300

Alumni Engagement:

- How can I keep alumni talent engaged for future career opportunities?

- How many alumni members on LinkedIn are interested in our career opportunities?

This type of analysis shows the career trajectory of your alumni at an aggregate level after they moved out from your organisation. This can help you think through your alumni engagement opportunities and open up strategies to pipeline alumni as boomerang hires.

Conclusion

As you evaluate where your team stands on your journey to adopt analytics and using it to build a data-driven function, here are the top three things you can start thinking about:

1. Prioritise key areas of the business for analytics application

When applying analytics to the HR function, it's important to assess which areas to focus on first. Utilising an analytical approach to address business issues in key areas will have a much stronger outcome than attempting to apply analytics across the board – especially in companies where introducing data analytics is a larger cultural shift.

2. Invest in data and analytics literacy

Overall, only 30% of HR professionals in APAC have analytics-related skills. We found that penetration of analytics skills increases with seniority in the HR function.

Data Analytics Skills Penetration by Seniority in HR

Entry	27%
Senior	30%
Manager	36%
Director+	38%

Thus, there is a pressing need to drive data literacy and training to upskill your HR staff. This can be achieved through offline formal training programs or through online platforms such as LinkedIn Learning Solutions. For example, LinkedIn has an internal program called Data Driven University to train managers on storytelling through the power of data.

3. Change the mindset of your people to be data-first

Building a data-driven organisation that functions within an analytics space begins with changing your corporate culture. Driven from the top, the culture needs to be one where data-driven thinking and action is rewarded and appreciated.

Methodology

The result of this analysis represents the world seen through the lens of LinkedIn data. As such, it is influenced by how members choose to use the site, which can vary based on professional, social, and regional culture, as well as overall site availability and accessibility. These variances were not accounted for in the analysis.

We looked at all members who list dated work experience on their profile and grouped the millions of unique, user-input job titles based on common job roles (which have many permutations). For example, the "HR analytics" job title includes user input titles such as "people analytics" and "workforce analytics." We also looked at members whose functions are listed as HR, which is determined through either member input or LinkedIn's standardisation algorithm based on member position, occupation and/or the industry segment of the employing company.

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The LinkedIn Economic Graph

562M members

50K skills

18M employers

11M open jobs

29K educational institutions