

**A science-based approach to talent
development**

2019



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4thTalent
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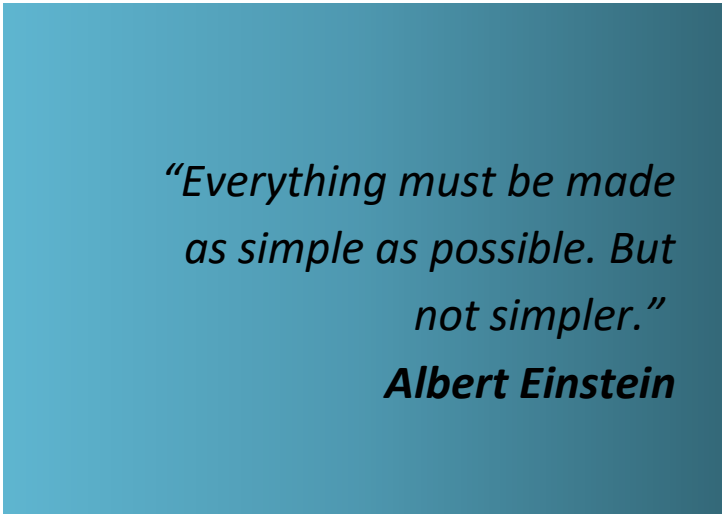
Executive summary

Fourth Talent is uniquely positioned to assist organisations to develop their workforces in a measured, scientific way with a focus on developing the right skills, behaviours and values that are needed to support their business outcomes.

Many executives are frustrated by the high investment into talent management and learning without a meaningful, measurable return on their investment. In fact, the development of the next generation of leaders and a failure to attract and/or retain top talent were rated amongst the top 5 issues facing more than 1,000 C-level executives worldwide in a 2018 study (Global Leadership Forecast, 2018). Talent management is often relegated to an annual, highly manual exercise to generate succession lists. Learning departments, trying to catch up with the fast rate of required skills change, are increasingly relying on open source material but without the necessary matching of curated content to competencies predictive of performance, learners are quickly overwhelmed by the choice of learning and underwhelmed by the quality of learning whilst line managers complain about the lack of skills to achieve their outcomes.

Fourth Talent believes that these frustrations can be attributed in part to a lack of scientific grounding in developing people and organisations. It is only by identifying and then developing those competencies that have been shown to predict performance that organisations can achieve return on learning investment. Moreover, it is only by matching the right learning content to each learner's measured learning needs in context of / as mapped against those competencies that the organisation requires to drive performance that sustainable performance improvement can happen.

Fourth Talent tackles this challenge by bringing research, science and augmented intelligence together to deliver a highly comprehensive performance predictive taxonomy of tasks underlying the capabilities required to carry out work, both now and in the future; an algorithm that matches people's capabilities, behaviours and values against the requirements for specific roles, tasks and corporate cultures; and hyper-personalised, curated learning journeys, career progression, succession planning and unbiased data on how best to deploy your human capital.



*“Everything must be made
as simple as possible. But
not simpler.”*
Albert Einstein

Tasks: the building blocks of performance

At the very core, human performance is underpinned by competence. Put very simply, competence is something that one needs to do well to be able to do a job role. A competency is therefore a characteristic of an individual that contributes to successful job performance and ultimately, the achievement of organisational results (Page & Wilson, 1994; Shippman et al., 2000). To demonstrate competence a person needs to be able to perform certain tasks at a particular level of proficiency.

Because organisations have different performance output requirements, generally guided by their organisational strategy, the way these competencies are defined can differ significantly between organisations. As an example, Company A is a large UK-based chain of home stores* with the motto “Living better”. This group will undoubtedly have customer service as one of its core competencies. When describing what good customer service looks like, the CEO may say: “We believe that everyone is a customer, whether it is our supply chain partners, our customers in store or the different parts of our organization working together. By doing the best you can for everyone in every interaction, we all live better”.

Now, take an international online FMCG group* (Company B) where customer service also takes centre stage but in a very different way. At this company the motto is “Delight through innovation” and they state that the type of people who work for them are committed to bringing innovation to their customers daily.

It therefore stands to reason that the tasks that Company A would require to determine if a person can deliver its version of customer service would be significantly different to those needed by Company B.

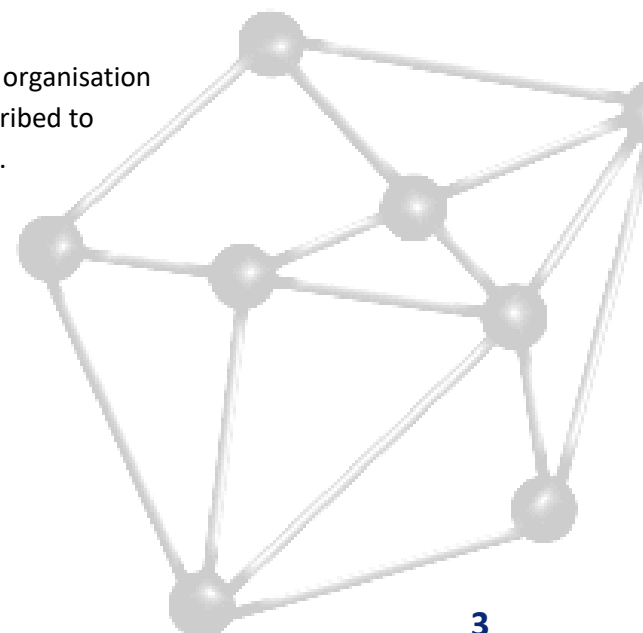
Table 1: Illustrative tasks underlying the Customer Service competency at two different companies

Company A	Company B
Service orientation	Customer centricity
Verbal communication	Innovation
Team work	Verbal reasoning

So, because competencies, through the demonstration of tasks, drive organisation results, no two companies will have the same contextual meaning ascribed to competencies that predict performance in their unique environments.

Any competence development programme should therefore start with a clear definition of the competencies and underlying tasks that are required to be successful.

* Illustrative – not based on any single organisation



The Fourth Talent approach to competence development

Fourth Talent employs both a theoretical and empirical approach to help your organisation identify the set of competencies, and ultimately tasks, that are required to achieve the desired organisational outcomes.

We start by leveraging our Performance Predictive Task Taxonomy, which has been developed over the past 8 years by a team of scientists from multidisciplinary backgrounds but with the common goal of identifying, through extensive literature reviews, expert analysis and hypothesis testing, those tasks that underpin competencies that ultimately predict performance.

Our team of approximately 30 scientists ensure that our solutions are comprehensive and accurate by incorporating multidisciplinary predictive models. These disciplines cover those specifically relevant to talent management e.g. Psychology, Neuroscience, Organisational Behaviour and Organisational Theory. It also covers one relevant to modelling such as Genetics, Quantum Physics and Phylogenetics.



Figure 1: The Fourth Talent approach to developing the Task Taxonomy

We then work with your organisation's subject matter experts to understand exactly what the competencies should look like in your organisation and what differentiates good from bad performers. Once we have a first version of your organisation's competency framework, we validate it by statistically determining which of the underlying tasks predicts actual performance the best. We use linear regression, and specifically, r^2 , to determine the proportion of the variance in performance (dependent variable) that can be explained by the particular task criteria (independent variable).

By leveraging both theoretical research and empirical study, we can quickly and accurately help you identify the building blocks of performance in your organisation or put differently, the ingredients that make up your company's "secret sauce".

This provides the client with the competency framework and baseline performance assessment needed to launch other talent management interventions.

* E.g. Yale School of Management, University of London, Harvard Business School

Measuring competence

Our assessments measure the individual's performance on clusters of task criteria, also known as competencies. Our assessments measure actual performance and is therefore not as prone to the inherent bias that comes with self-reporting tools.

We mainly use situational judgement and scenario-based tests to determine how an individual will behave in a certain situation, and how effective that response would be to achieve the outcomes required on a particular task in a particular organisation. Because these types of tests are based on hypothetical scenarios in the workplace, they are often viewed more positively by test takers than psychometric tests.

Predictive accuracy and precision are our main measures of success when developing our predictive model, whereas construct validity and test retest reliability (assuming no development intervention has taken place between the test events) are secondary measures of success for relevant assessments.

Where needed, we can combine competency assessments with personality assessments* (to provide a view of overall motivation and behavioural styles), values assessments (to provide a perspective on how decisions will be made), interest questionnaires (to determine what a person likes doing vs what they are good at) and knowledge assessments (to determine core knowledge of a particular subject e.g. knowledge of financial regulations) and 360 surveys (to determine how others perceive someone).

Learning content curation

Fourth Talent helps people prepare for the future world of work and as such, a major component of our approach to talent management is the development of people. But pushing learning content to people without matching it to their level of competence and in single-dimensional formats is generally doomed from the start.

When curating learning content, we focus on several elements:

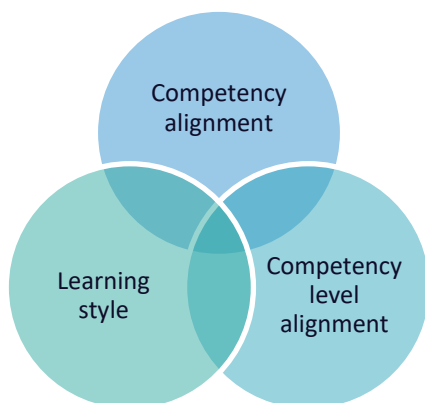


Figure 2: Elements of content curation

Firstly, learning content must match a certain competency or set of competencies. Our first step in content curation is to look at whether the learning item aligns to the competency definition. Once content is in use, we can use machine learning to statistically evaluate the effectiveness of learning items and dynamically adjust the learning recommendations in an ongoing fashion.

* Not designed or supplied by Fourth Talent. Integrated into results only.

Learning content must also match a person’s current skill level in a field. Too many organisations make large investments on introductory learning content that never develops deep skills, especially when new or future skills are at stake.

An example of this has been seen in many organisations trying to embed agile ways of working – the easiest solution is often deemed to be the deployment of an “Introduction to Agile” training course. Doing this means you alienate a significant portion of your learning audience: (a) the ones who are forced to attend training for something that is not applicable to them and they should in fact, have little or no knowledge of the subject and (b) those who are interested but who have probably already started upskilling themselves who are then frustrated by the basic nature of the training.

When we curate our learning content, our second check ensures that the content is suitable to the starting competence level (e.g. beginner, intermediate or advanced) and to the end goal. Like competency alignment, we can use machine learning to continuously adjust our assessment of the appropriate content level.

Lastly, almost all modern learning theories have at their core the premise that people all learn in different ways. And while most organisations have adopted a blend of learning modalities, few use a variety of modalities to address the same competency. Fourth Talent focuses on deep learning and as such incorporates a variety of learning styles when curating our content. These elements will be curated, developed, and automatically presented to the learner for use in combination to accelerate their learning. A selection of these are indicated in figure 3.

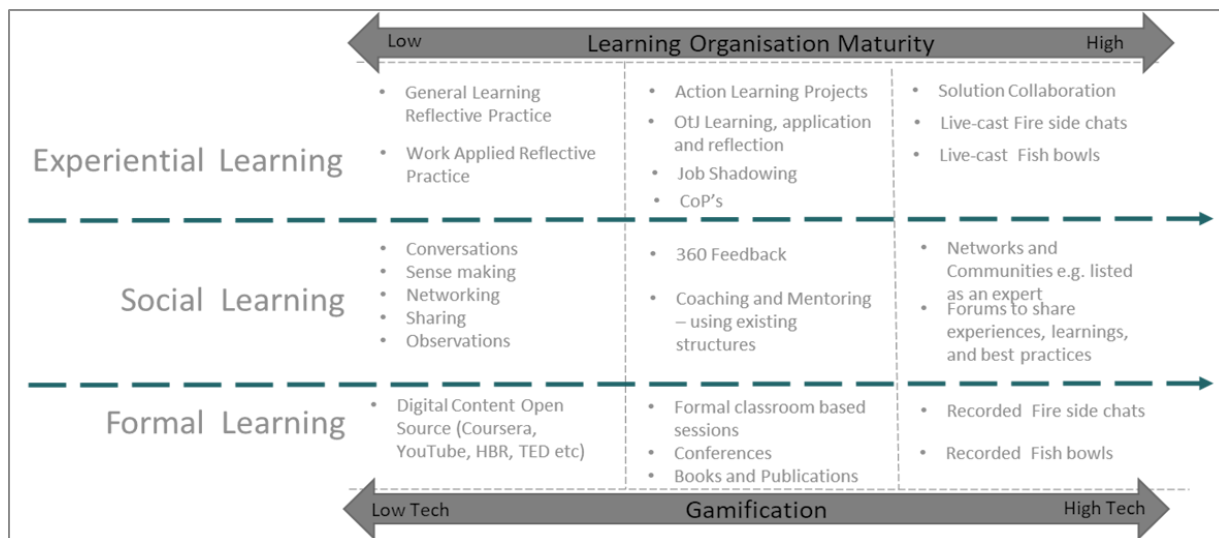


Figure 3: Learning elements across different learning modalities

By using measured competence to drive learning, and by curating learning content using the elements described above, Fourth Talent is able to create hyper-personalised development journeys i.e. learning journeys that are fully customised to help the individual achieve their learning goals in a way that suits them.

Using technology to put it all together

The use of competence as a way of predicting performance is not new; in fact, competence as a better predictor of performance than intelligence was postulated by David McClelland in 1973. But while many human resource and learning professionals will support the idea of science-backed approaches to managing and developing talent, the sheer amount of work to manage the intricate and large data constructs that underlie competency frameworks often means that competency frameworks remain in the realm of the theoretical. However, technology now presents us with an opportunity to fully harness the power of competency frameworks in a manner that meets the needs of an individual and the organisation.

Fourth Talent uses an intelligent technology platform to bring these elements together on a customised, fit-for-purpose front-end. Our technology architecture enables rapid application development and complex data integration while meeting the security requirements of our clients.

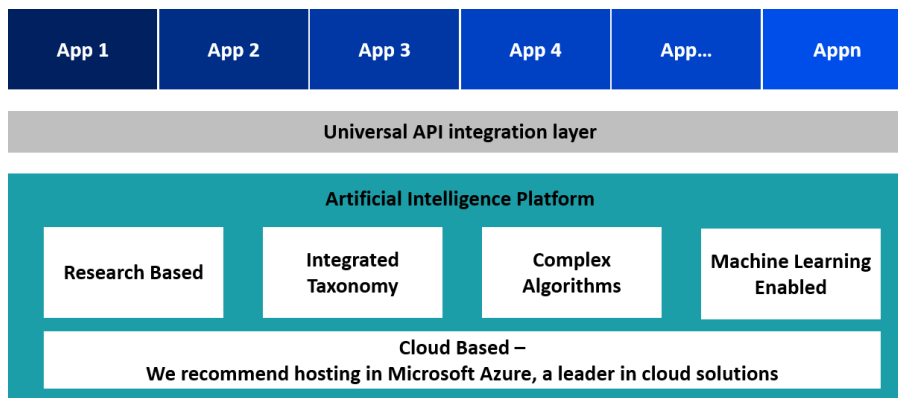


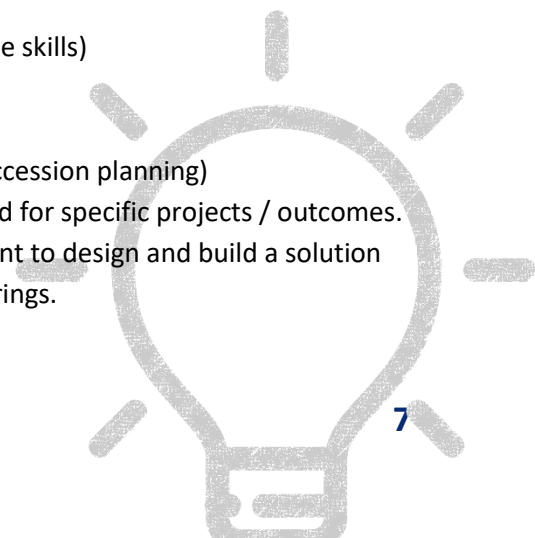
Figure 4: Fourth Talent Technology architecture

Moreover, the technology is used to drive the intelligent, automatic and dynamic assessment and matching process between target competence, actual competence and development interventions. For a more in-depth view on augmented intelligence and talent management, refer to [The rise of artificial intelligence in talent management by Kerry Kohl](#).

The platform can be configured and deployed to meet various needs, most notably:

- Talent development (e.g. identifying and developing skills for succession)
- Future skills development
- Knowledge and skills learning (e.g. developing progressive compliance skills)
- Learning academies
- Organisational restructuring
- As part of the talent identification processes (e.g. recruitment or succession planning)
- Workforce deployment, particularly where skills need to be deployed for specific projects / outcomes.

To ensure our clients get the best from the platform, we work with each client to design and build a solution that works for them and we support our clients with various consulting offerings.



Summary

By making talent management a highly personalised journey for every individual while matching the demands of the organisation closely, Fourth Talent's science-backed approach to talent development not only brings talent management to life, but it also ensures that organisations are truly able to develop and measure the skills they need tomorrow, today.

Furthermore, by using cutting-edge technology talent management can now be managed online and continuously adapted to suit your organisational needs. It also enables the effective use of the "Big Data" that talent management data undoubtedly brings within large organisations.

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Talk to us

We would love to talk to you about how our offering can help your organisation.

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