Business Competence Analytics – Analysis Phase

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Learning Innovation

AN ENTERPRISE IRELAND & IDA IRELAND INITIATIVE

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1. Introduction

Companies are changing to become more agile to address modern business needs. Traditional corporate boundaries are becoming blurred and typical job roles are merging. As a consequence, employees must also change to develop a diverse and relevant set of competencies[1] to move across this fast-paced and continuously evolving work environment.

Transversal skills in areas such as collaboration and communication are critically important to employees in this environment. These are skills which have been learned in one context or to master a special situation/problem and can be transferred to another context (Voogt & Roblin, 2010).

However, it is very difficult to capture and objectively measure, analyse and visualise employees' transversal skills as performed on the job. There is no common understanding or agreement on how competencies or skills are defined and described. Organisations use different models with various ways of labelling and categorising competencies depending on their context of use.

Current practice in monitoring workforce competencies happens across various systems such as talent and/or performance management systems, LMSs and 360° feedback. Typically, these processes and systems do not deliver data that shows evidence for employees' competencies based on day-to-day job performance.

Current approaches lead to a lack of accurate data about day-to-day employee performance which impacts on any subsequent business reporting or analytics. Also, in order to accurately support performance improvement, competency data needs to be captured regularly, analysed and visualised in order to be able to give relevant, timely, and actionable insights.

Employees are also lacking integrated and easy-to-use tools to track their day-to-day performance and learning on the job. Real employee performance evidence such as more regular informal feedback from colleagues is not being captured on a continuous basis in one location. If there is a culture of regular feedback it is frequently ad-hoc and often distributed across multiple systems such as email and chat logs.

Some companies have started to recognise these issues and address them with more agile, continuous performance reviews, feedback approaches and tools. However, they still do not adequately address issues such as integrating into current employee workflows and reducing the subjectivity of the feedback and competencies through more evidence-informed data.

This report contains an overview of trends and challenges of talent and performance management (TM and PM) systems, followed by an overview of popular TM and PM systems showing what data they gather and how this data is analysed. A section on transversal skills will explain why they are important, how people learn them and how transversal skills are currently assessed. Some examples of current systems that attempt to approach feedback more effectively are discussed. This report concludes with a summary of key findings from the analysis phase and recommendations to take forward into the design phase of the Learnovate Business Competencies Analytics project.

2. Project Overview

Based on the industry challenges as outlined in the introduction, this project will research a web-based, flexible and agile demonstrator to assist the dynamic mapping of core desired competencies

[1] There is little consensus among researchers on the term **competency.** We suggest the following definition for the purpose of this report: "*A competency is the ability to perform effectively in a specific kind of task situation or in a specific kind of problem situation*" (GITP, pc). Competencies include skills, knowledge, personal traits and attitudes.

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within an organisation to observed behaviours/tacit knowledge of employees (implicitly or informally gathered). The project will focus on the areas of Learning Data Analytics and Visualisation that are mapped to core competencies within an organisation.

Our industry partners have indicated that they need integrated systems that enable their organisations to measure on the job performance – something that maps activity to existing competencies.

The **key objectives** for the project are:

- Create a learning service in which day to day learning and on-the-job activity is recognised and translated into near real-time or real-time meaningful visualisations of core (transversal) competencies.
- Provide L&D managers with learning analytic visualisation services to quickly and easily visualise and interpret information that is aligned to business metrics.
- To assist 360 assessment of staff through mapping on-the-job activities to required (transversal) competencies.

3. Talent and Performance Management: Trends and Challenges

There is widespread agreement that organisations must be appropriately organised to fully exploit their human resources to achieve competitive advantage. The way organisations currently try to do this is, for example, through Talent Management (TM) systems. For the purpose of this project, TM can be interpreted as a way of managing the talent of employees. Within this interpretation, it is important to note that talent is not something rigid. Therefore, TM needs to flexible; talent depends on the talent that an organisation needs at a specific time and place (Akram et al., 2014). TM also needs to ensure that an organisation's human resources are used to their fullest potential (Whelan et al., 2010). Furthermore, TM needs to be flexible as "talent" will depend on the talent that an organisation needs at a specific time and place.

One of the major challenges as highlighted in the literature is the failure of organisations to manage the talents of their employees effectively (Akram et al., 2014) and therefore, to be able to keep their employees. This goes for both average and top performers. Retention of all employees is important because of the costs associated with turnover. Retention of top performers is critical from a competitive perspective.

One of the deficiencies in current TM practices is that inaccurate data is used to identify talent. For example, employee performance appraisals data are commonly used to identify who is a key performer and who performs below average. These metrics are often inaccurate, **particularly in knowledge intensive environments** (Whelan et al., 2011), as knowledge workers typically have a skill set that includes both transversal skills and expertise related skills. Capturing data on transversal skills is challenging in general. In addition, evaluating the performance of knowledge workers is a challenge as much of the work takes place inside their heads. When knowledge sharing and creation does occur it tends to happen in the everyday workflow and in informal social networks.

Aguinis et al., (2012) suggest that a properly implemented performance management (PM) system can be an effective tool in retaining talent. Saba's eBook (2015) describes how the original goal for

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PM was to track employees' progress and improvement a well as to engage, motivate, and reward employees based on their individual efforts. According to Aguinis et al., (2012) performance management is a continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization. Aguinis et al., (2012) research-based recommendations that can help to retain talent, including creating and maintaining individualised development plans and ensuring that work is challenging, interesting and meaningful. Although there is general agreement that the intended goal of performance management (PM) is to *improve* employees' performance, Pulakos et al., (2015) state that so far, PM has failed to do so. PM is disliked by managers and employees alike and HR heads report that PM systems do not provide accurate or valuable information. According to the Pulakos et al., (2015) "*formal PM systems have reduced PM to intermittent steps and processes that are disconnected from day-to-day work and behaviours that actually drive performance"* (p. 51), such as communicating on-going expectations, providing informal feedback in real time, and developing employees through experience.

For example, within current PM systems, to set expectations and motivate employees to deliver, they need to input specific, measurable, achievable and realistic (SMART) goals. However, these goals cover an entire year usually and capturing the specificity that is required for SMART goals to drive performance is difficult. Ensuring that the goals are fair and equivalent between employees and that they will not be out-dated in weeks or months are other examples of challenges within current PM systems (Pulakos et al., 2015). In other words; annual goals do not account for the real pace of business (Saba, 2015).

In summary, both TM and PM seem to have flaws, in particular with regards to knowledge workers as the processes and systems fail to deliver data that shows evidence for employees' competencies by aggregating accurate data based on employees' day-to-day job performance.

The next section will provide an overview of existing TM and PM systems to get more insight into how they work and what kind of data they provide.

3.1 Talent and Performance Management Systems

The image below presents a breakdown of the most popular Talent Management (TM) platforms. An investigation of their features revealed their great similarities: typically, these top platforms would consist of several interoperable products, which were specific about PM, LMSs, HR, and career planning. Although vendors of TM and PM systems present themselves as being flexible, organisations would still need to implement one vendor's system in order to be able to aggregate various, consistent analytics on performance.

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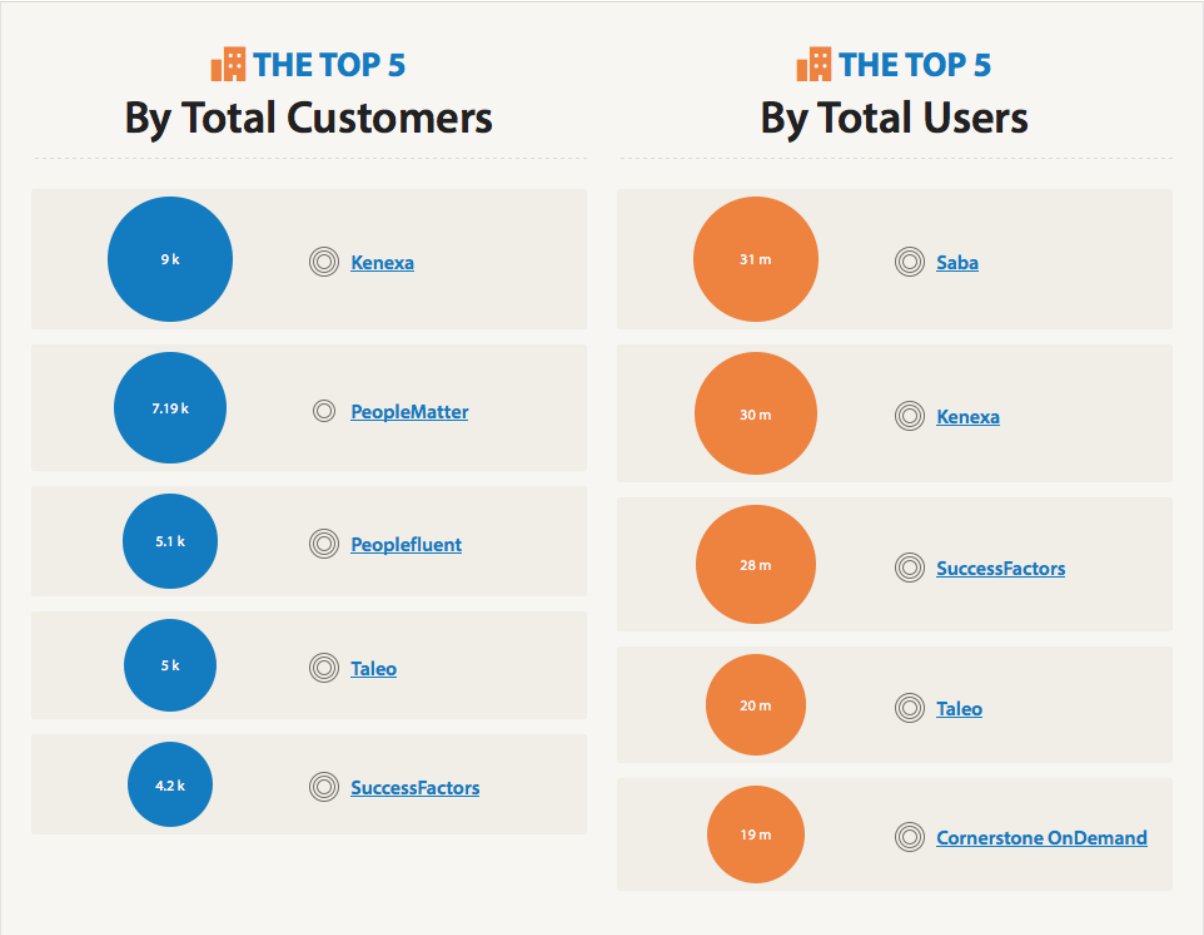

Figure 1: Source: http://www.capterra.com/talent-management-software/#infographic

As mentioned above, these popular systems have many commonalities. Apart from the structure of their platforms into dedicated products, the individual features they offer are also similar. Here we will focus on the PM and LMS products of these platforms and their features, since these are the ones more related to the project's objective (capturing business competencies); however, the similarities in the HR and career planning products are of an analogous kind and scale.

To demonstrate the similarities, below we include screen grabs of 3 of the most popular TM systems, and specifically the evaluation, appraisal, and feedback functionality. These platforms seem to have adopted a top-down approach, where a set of skills has been predefined and the feedback can be sought for this set of skills. For example, figure 3 shows an example on how an employee can request a rating for transversal skills, such as teamwork and communication. Moreover, it seems that the platforms are self-contained and that the employees need to log in these platforms to perform the tasks related to the above-mentioned features. The investigation on these platforms' websites revealed **no integration** of the platforms **with the existing workflows** of the knowledge workers.

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Figure 2: Saba claims to facilitate "Foster[ing] a culture of continuous coaching and feedback to elevate performance"

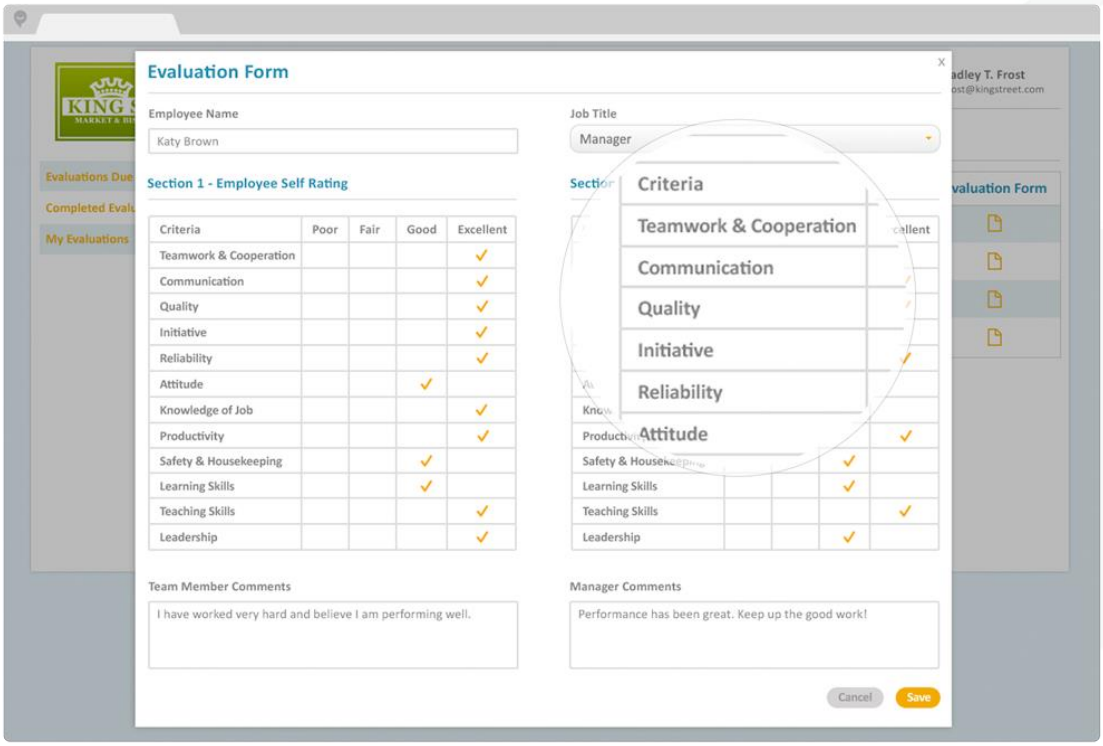

Figure 3: Peoplematter offers a feature similar to the one of Figure 2

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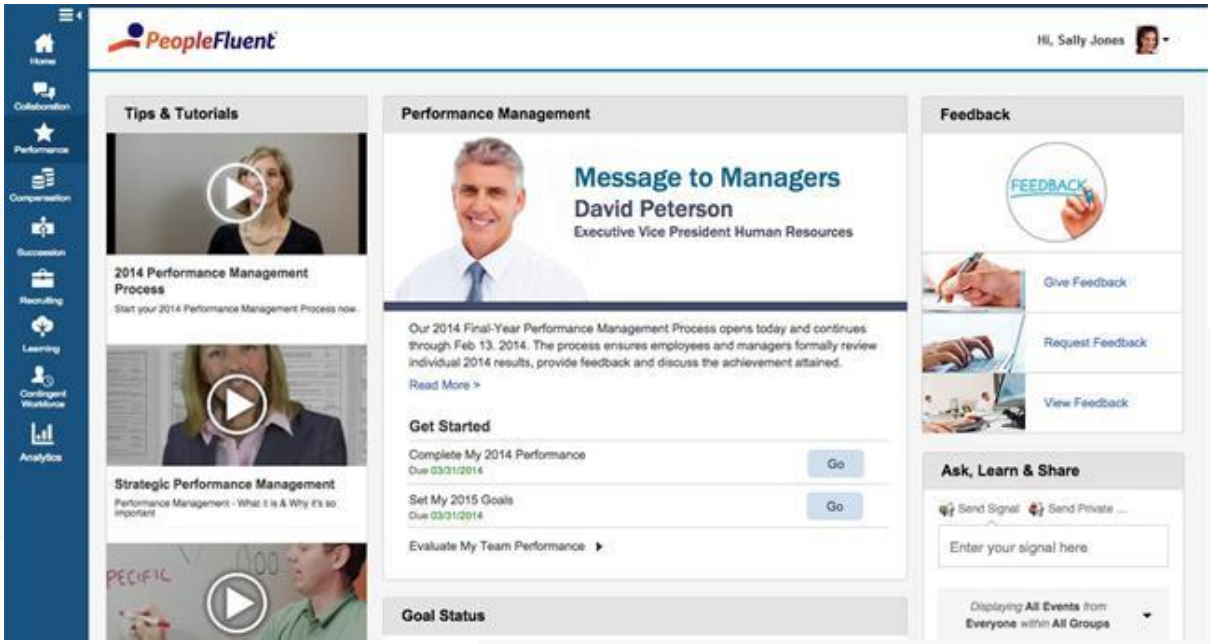

Figure 4: PeopleFluent PM and feedback functionality

It could be assumed that the experience of having to log in to yet another system may be putting employees off of using these platforms as it does not provide a smooth, intuitive user experience that is integrated in the workflow. This may thus result in gathering sporadic data that doesn't necessarily keep up with the organisation's pace of change and that does not necessarily provide data based on day-to-day performance. This could lead to inaccurate data with regard to performance.

Data Gathering and Dashboards for Talent Management

Organisations typically use Business Intelligence (BI) tools that visualise various metrics around either the performance of their employees or of their systems. Analytics concerning this performance have typically consisted of statistical metrics visualised by plotting related data in graphs and charts. Traditionally these analytics are visualised in a dedicated dashboard that aggregates them with the intention to offer a broad overview of the state of the organisation.

While visualising metrics can potentially give useful insight on the operations of an organisation, it presupposes that the analysed and visualised metrics rely on credible and meaningful data. For this reason, data gathering and capturing the context around data can be as or more important than the visualisation itself. In this section we present the state of the art with regard to data gathering for TM. The approach of focusing initially on gathering credible and meaningful data and then on their analysis and visualisation has been sense-checked with our industry partners and there seems to be significant consensus on pursuing this order of things.

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Data Gathering for Competencies

Although talent and performance management tools and techniques have improved greatly during the past 25 years, their analytics have been based on BI and have mainly focused on quantitative, measurable features like performance, since the difficulty of measuring subjective or culture/context-specific aspects, such as transversal skills, has been recognised. Thus, the aforementioned popular TM platforms and other, less popular tools alike, provide quantitative metrics without their meaningful context. A typical dashboard may resemble the one in the image below:

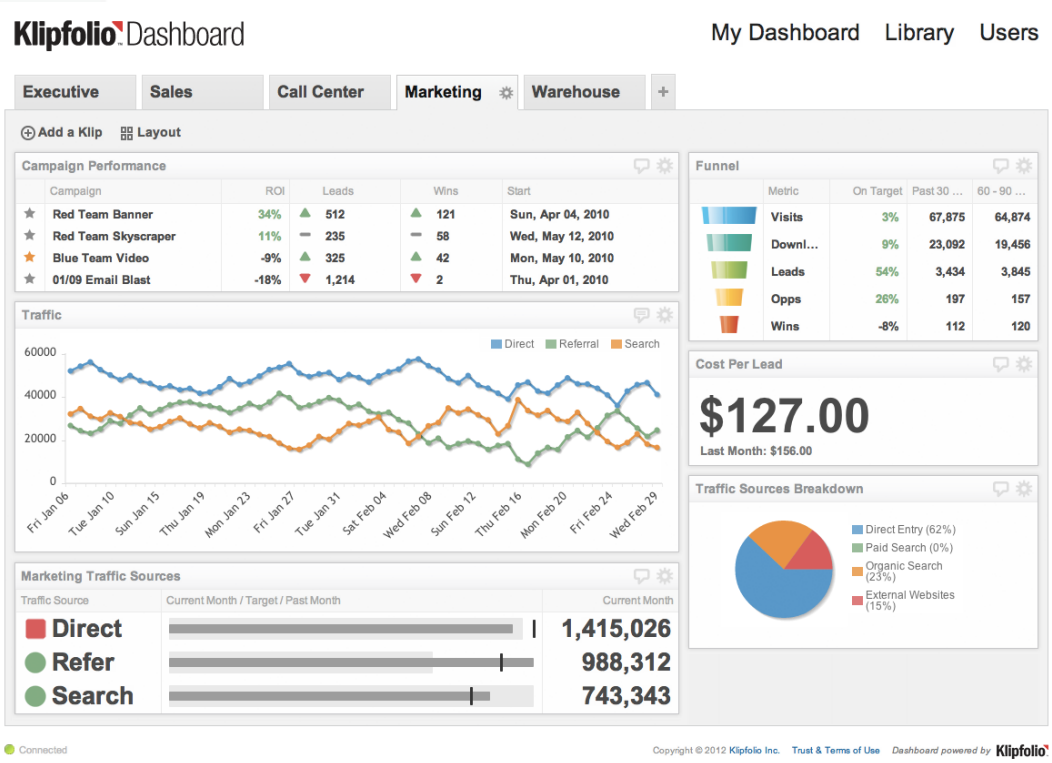

Figure 5: A typical BI dashboard. Quantitative and Qualitative data are often mixed in dashboards such as the one above.

Measuring performance in organisations has been accompanied by appraisals, usually during annual reviews.

Appraisals are so common in organisations that a variety of approaches exist. Small and medium sized enterprises may often use out-dated systems based on MS Word or Excel forms and templates; even if they try to capture competencies related to transversal skills and not just quantitative performance metrics, these templates are evidence of the lack of comprehensive tools to accomplish this task in a fashion integrated with their workflow. An example of such a template-based form is depicted below:

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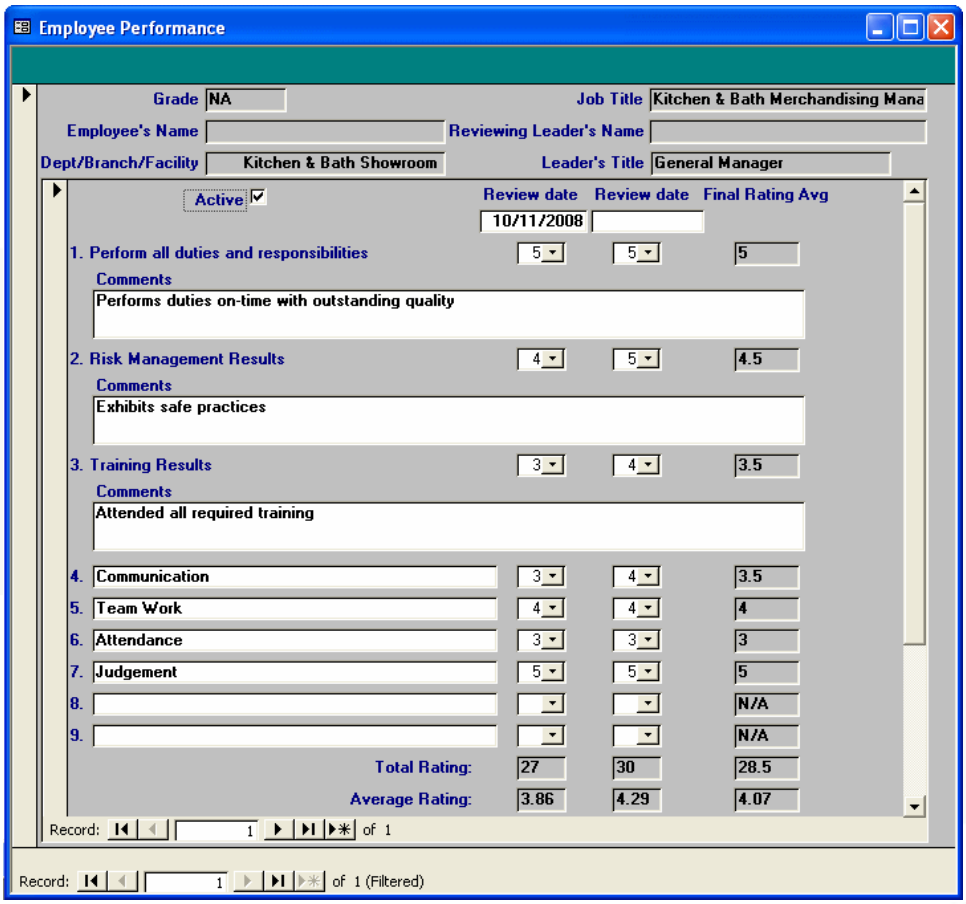
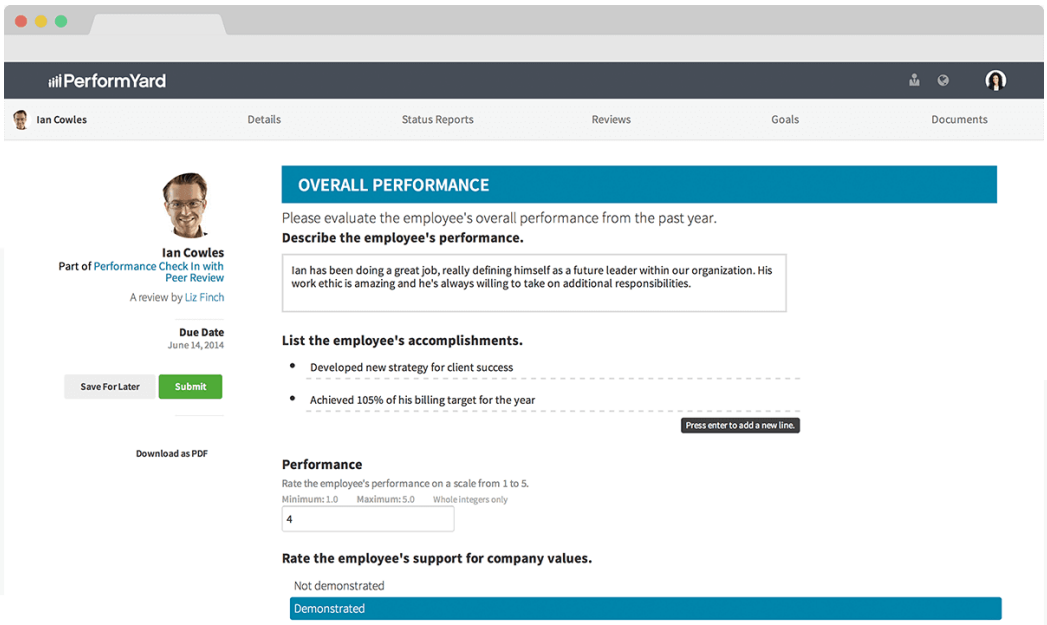


Figure 6: An appraisal tool built upon a productivity platform

Other tools have a more modern look and feel, and have applied modern visualisation methods and techniques. Modern applications have certain characteristics that distinguish them from traditional analytics dashboards.

One such characteristic is the incorporation of feedback. This change, in line with a corporate move towards 360 feedback reviews (explained in Section 5.1), includes textual continuous assessment of an employee. This feedback can be seen as evidence that supports a performance score, however it is not always linked to competencies in current systems.



Another characteristic of modern tools is that they typically involve the organisation's structure as a basis for their analytics. However, since common ownership of projects is only becoming more and more common, this overall view can give false impressions by generalising a metric of a department to all its members, even if some have done a tremendous job in cross-departmental projects. A brief investigation of analytics and BI dashboards revealed that departmental analytics often included performance and competency metrics on the same screen, as if they were of the same kind. This may lead to confusion and may inhibit the understanding of what the situation is at a glance.

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Figure 7: Performance in some systems is linked to the current organisation structure, potentially inhibiting change.

The image above shows how a piece of review and HR software links performance to the employee's department. The image below shows how quantitative performance metrics and competency metrics may appear together on a dashboard and potentially increase the cognitive workload of decision makers who will try to derive meaning from the dashboard.

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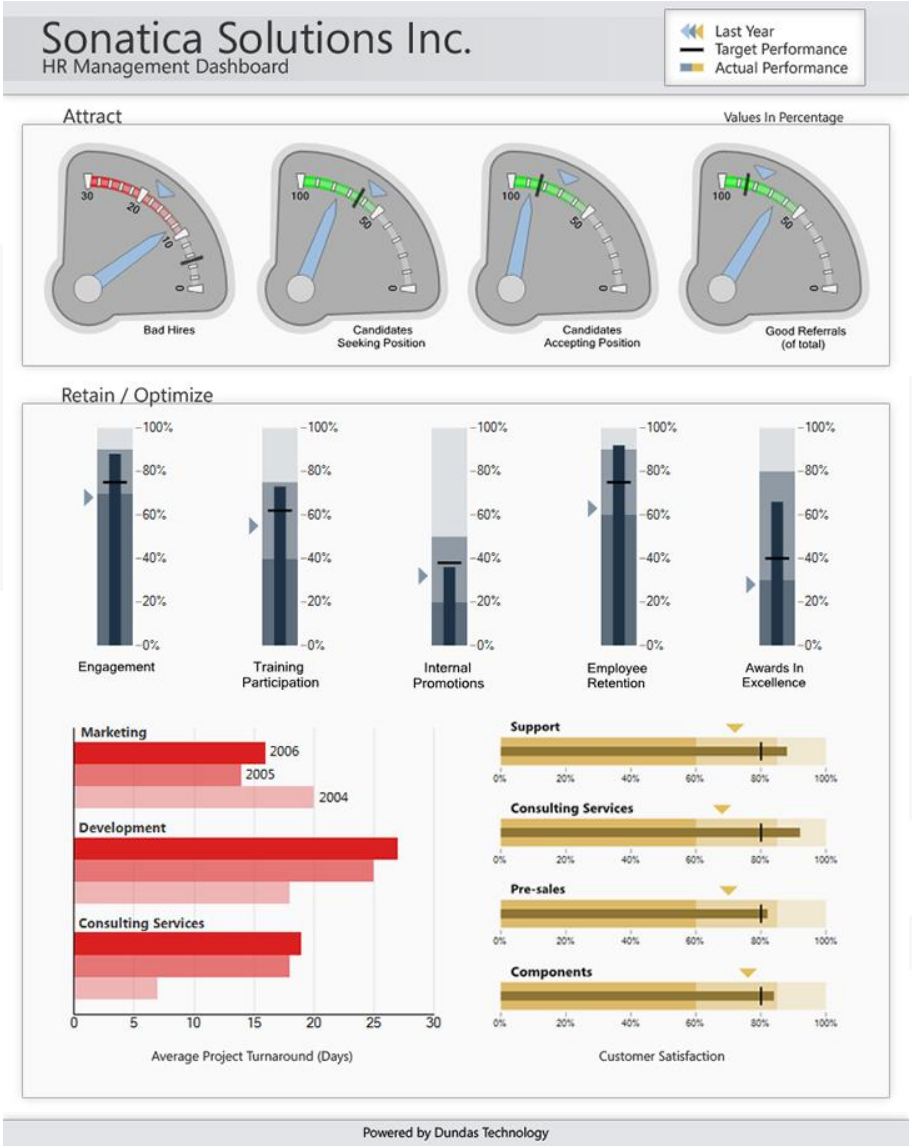

In conclusion, one can see that existing analytics for organisations have started including competencies in their dashboards, but are still:

- Performance-based,
- linked to the organisation's structure, and
- not actionable.

Despite the tools that one may use, the analytics they choose to depict, or their focus, there seems to be consensus that capturing transversal skills is increasingly important. At the same time there is wide recognition that these types of skills are harder to capture and measure than role-specific skills. The following section explains why transversal skills are considered to be so important and how they are currently assessed.

4. Transversal Skills

Transversal skills are considered more and more important in today's workplace. At the same time, organisations are facing the challenge of how to capture and measure them. *Why* transversal skills are important has widespread agreement. Our society has changed from an industrial society to an information and knowledge society. *Information society* refers to the overwhelming amount of information and information systems that are available through ICT. *Knowledge society* refers to the way our economy is organised. The terminology suggests that knowledge is the foundation of the knowledge society (Voogt & Roblin, 2010).

The ability to interpret information has become critical for many jobs. When looking at the required job types within our society, including the ones that do not yet exist, the assumption is that within all these jobs there will be a certain set of comparable key tasks. These key tasks require different and new competencies; that is the so-called transversal skills (Voogt & Roblin, 2010). The European Lifelong Guidance Policy Network defines transversal skills as *"the skills individuals have which are relevant to jobs and occupations other than the ones they currently have or have recently had. These skills may also have been acquired through non-work or leisure activities or through participation in education or training"* (Cedefop, 2008).

More generally, these are skills which have been learned in one context or to master a special situation/problem and can be transferred to another context. The term transversal skills is used interchangeably with key competences, soft skills, transferable skills, and 21st century skills. Voogt & Roblin (2010) have analysed 32 models on transversal skills.

4.1 Transversal skills: What do people need to learn and why?

The models that Voogt and Roblin (2010) have compared all have strong overlap with regards to which skills are considered transversal skills. However, the labelling to categorise skills varies widely, which makes it very difficult to compare the various models. This also comes to the surface when looking at other research. For example, Levin (2015) identifies *adaptability* is an important transversal skill. To accomplish an increase of adaptability and with that, work productivity, the author suggests to set out a range of dimensions, such as working in groups, problem-solving, decision-making, and so forth. The dimensions as suggested by Levin are main categories of competencies in Voogt and Roblin's (2010) study. Another example is Kyllonen's (2012) and Donovan's (2015) categorisation of transversal skills. Both use three main categories; that is cognitive competencies (critical thinking, problem solving), interpersonal competencies (collaboration, communication) and intrapersonal competencies (motivation, persistence).

Robles (2012) states that soft, or transversal, skills are *"critical for productive performance in today's workplace"* (p.453). The author defines soft skills as interpersonal (people) skills + personal and career attributes and these skills "*enhance a person's interactions, job performance, and career prospects"* (p.457). Interestingly, the author sees communication, teamwork, leadership and customer service as *career attributes*. Again, this confirms that researchers do not agree on transversal skill categorisation and labelling at all.

Studies also do not show clear agreement on what skills are most important. For our research purpose, it is critical to understand if certain skills are more important to business organisations than others. Hodge and Lear (2011) compare three resources that include surveys of employers on top

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rated skills; the 21st Century Survey (2008), National Association of Colleges and Employers (NACE) (2009) and American Management Association (AMA), (2010). As outlined above, Voogt and Roblin (2010) analysed 32 models on transversal skills and last, Robles (2012) conducted a survey among 90 business executives.

Table 1~~Table 3~~ below shows the 'top rated skills' (note that this is a mix of 'frameworks' and employer surveys).

Table 1~~3~~: Top rated skills based on frameworks and employer surveys

21st century survey (2008)	NACE (2009)	AMA (2010)	Voogt & Roblin (2010)	Robles (2012)	Finegold & Notabartolo (2012)	Kim & Trzmiel, 2014
Communication	**Communication**	**Communication**	**Communication**	**Communication**	**Communication**	**Communication**
Teamwork	**Teamwork**	**Collaboration/ Teamwork**	**Collaboration**	**Team work**	**Collaboration**	**Collaboration**
Ethics/Social Responsibility	Analytical	Critical Thinking/Problem Solving	ICT literacy	Integrity	Critical thinking	Problem solving
Professionalism	Technical	Creativity/ Innovation	Social/Cultural	Courtesy	Problem solving	Entrepreneurship
Reading Comprehension	Strong Work Ethic		Creativity	Responsibility	Decision making	Learning to learn
			Critical thinking	Social skills	ICT Literacy	
			Problem solving	Positive attitude	Creativity	
			Productivity	Professionalism	Leadership	
				Flexibility	Learning to learn	
				Work ethic	Flexibility	

Table 1~~Table 3~~ shows that **communication** and **teamwork/collaboration** are generally seen as the most important skills.

As stated previously, *why* transversal skills are important has widespread agreement. Donovan (2015) also stresses that "*governments across the world have identified skills shortages as a barrier to economic growth and business success" (p. 45)*. For organisations to be able to effectively compete, they need to reconsider and broaden their current (twentieth century) competency models to include the much-needed transversal skills.

Kim and Trzmiel (2014) provide an overview of the rationale for integrating transversal skills into education and training from a global, national and personal perspective.

Table 24: Kim and Trzmiel (2014) - Rationale for integrating transversal skills into education and training

	Economic discourse	***Social discourse***	***Humanity discourse***
Global perspective	Competitiveness	Understanding & Peace	Global citizenship
National perspective	GDP growth	HDI growth	Patriotism
Personal perspective	Employability	Community/Harmony	Moral formation

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4.2 Transversal skills: How do employees and students learn them?

A lot has been written by workplace learning in general (e.g. Eraut & Hirsh, 2007 and Cacciattolo, 2015). Cacciattolo (2015) argues that although workplace learning includes formal elements, it is predominantly informal in nature and is often incorporated into workplace social interactions and everyday practices. The author distinguishes the following broad categories of workplace learning:

- In-house training – planned learning activities.
- Experience-based learning opportunities – on the job learning activity, either evaluated through coaching and mentoring or unplanned during day-to-day tasks.
- Continuous learning - occurs where the work environment is all the time focused on the learning of new skills and knowledge and largely free of political conflict.
- Informal/unconscious learning – occurs with or without the encouragement of the organisation.

The role of the manager is considered essential; not so much to provide learning support but to set the climate, encourage their staff to take on the role of the learner as an integral part of their working responsibility and include the facilitation of learning in their management of performance.

Workplace learning is a complex phenomenon, especially with regards to transversal skills. Whereas hard skills can be learned and perfected over time, soft skills are more difficult to acquire and change (Robles, 2012). In addition, transversal skills such as collaboration/teamwork or communication mean very different things depending on the context. Finegold and Notabartolo (2012) point out a very important thing: It is critical to recognise that transversal skills should not be studied in isolation from occupation-specific contexts. For example, problem solving in engineering may entail very different skills from those needed to solve problems in social work. In addition, the following quote from Kautz et al., (2014) illustrates the complexity of the matter: *"Interventions to improve skills are effective to different degrees for different skills at different ages"*. Although there is agreement on the need for transversal skills in the workplace, there is hardly any evidence where and how such skills are best acquired.

There are some examples on how people might learn transversal skills from a higher education and university context. For example, Conrad and Newberry (2011) list several instructional methods for business communication skills.

1. Embedding communication assessment in course content.
2. Teaching business communication theory and models, followed by applying them in a certain context.

Although results from research (e.g Opatrny, McCord, and Michaelsen (2014)) show us some insight in the way people learn transversal skills, the major challenge is to come up with objective standards in order to assess the skills. Robles (2012) states that many corporate L&D departments are reluctant to provide transversal skills training because calculating the ROI and measuring the effectiveness is extremely difficult. Finegold and Notabartolo (2012) note that the *"relationship between worker competencies and individual and organisational outcomes is complex and contested"* (p. 21), which confirms that it is unclear how to measure employees' transversal skills.

The next section will explore the current methods for assessing transversal skills.

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4.3 Transversal skills: How are they assessed?

As outlined in the previous section, how employees develop transversal skills in the workplace is complex, to say the least. There has been a lot written on assessing transversal skills within an educational setting (e.g. Pepper, 2011, Kyllonen, 2012, Soland et al., 2013) and also for the corporate sector, several assessment methods and tools can be identified (GITP, pc, Kyllonen, 2012)).

1. Combining standardised intelligence and personality assessments with behavioural measurements (role play simulations, interview, and assignments, Situational Judgment Tests)
2. Self-rating and rating by others
3. Bio data (e.g. badges as credit for an accomplishment)
4. Social Network Analysis (SNA)
5. 360 degree assessment/feedback

Standardised intelligence and personality assessments are found to be stable and usually they are only used once (Serlie, pc). Assessments such as behavioural measurements (e.g. role plays, simulations, Situational Judgment Tests) and threading tools are able to measure otherwise hard-to-measure constructs such as transversal skills and they usually have high predictive validity. However, they are not covering performance in the actual workplace context in which the employee usually needs to perform.

Self-rating and rating by others is used widely; 360 feedback is an example of this type of assessment. One of the problems with rating is that the commonly used Likert scale means different things to different people. Labels such as 'strongly agree' or 'seldom' are all subjective and open to wide ranging interpretations. One way to avoid this type of subjectivity is to use behaviourally anchored rating scales (BARS). BARS is a scale as well, however, it includes behavioural descriptions, for example "Extracts the essence of complex issues quickly and accurately". Any construct that can be rated by self, can probably also be rated by others. When others rate an individual, it needs to be taken into account that the rater does not have access to the ratee's personal experiences, thoughts and feelings, however, they might have a better and less biased perspective on the ratee's behaviour.

In this specific context, bio data refers to the collection of activities that provide evidence for an individual's acquired skills or demonstrated competency. For example, employees might fill out a questionnaire or will be interviewed on topics such as 'what type of sports did you play?' 'did you ever repair appliances at your house" (see Appendix 2 for an example). Several studies suggest that biodata is one of the better predictors of employee performance and that it has incremental validity when used in combination with personality or intelligence assessments (Breaugh et al, 2014). However, biodata only gives insight in an employees' past and based on that, it predicts the future. As such, it can play a role in assessing transversal skills to support the hiring process. However, biodata are not suitable to use in TM or PM.

SNA has the potential to assess transversal skills from a different perspective. As stated previously, one of the major deficiencies in TM and PM practices is the inaccurate data, especially within knowledge intensive environments. Knowledge sharing and creation within these environments tend to take place in informal social networks (Whelan, 2011). Research has well-documented that roles – such as gatekeepers, relationship promoters, brokers and connectors are influential and promote and coordinate the flow of information throughout social networks. Yet, the strategically important role provided by these individuals can often go unrecognised. Because they are informal, these

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powerful network structures often remain invisible to management. Social Network Analysis (SNA) plays a critical role in making invisible roles and connections visible (Whelan et al., 2010). With regard to transversal skills specifically, the idea is that SNA can help to explore to what extent these key roles are linked to certain transversal skills such as leadership or collaboration skills. For example, there is evidence that high performers differentiate from average ones in the purposeful building and maintenance of collaborative social networks (Whelan, 2011).

As mentioned previously, 360 degree assessment and feedback is part of self-rating and rating by others. The reason why we mention it separately is because 360° Feedback is so commonly used in the workplace. It is a practice where employees request anonymous ratings and narrative comments on job performance and other behaviours from a wide range of individuals who work with the employee. These individuals include peers, subordinates, managers, customers, immediate supervisors and self-ratings (Campion et al., 2015). Although 360° feedback's original purpose has been employee development, it is being commonly used as a performance management tool in the workplace.

The next section describes in more detail how 360° feedback currently is used in the workplace as well as its pros and cons in the light of performance improvement and capturing competencies.

5. Feedback to support performance improvement

5.1 360 feedback

There is an abundance of research on 360 feedback. However, according to Nowack and Mashihi (2012), the results are challenging to interpret because of the *"use of diverse and non-standardised competency models and definitions."* (p. 157) as well as different goals of the feedback process. There are both studies that show the benefits of 360 feedback and studies that show the opposite and suggest potential harm. However, one large meta-analysis on performance feedback showed that performance declined in one third of all studies. This decline was due to various reasons, such as depth of the feedback process, how feedback was delivered as well as the personality of the feedback recipient.

Nowack and Mashihi approach 360 feedback as it was originally intended: a feedback tool to support behaviour change. However, most organisations do not use 360 feedback for that purpose; usually 360 feedback is part of the current *broken* performance management process. As discussed previously, performance management as it stands is seriously damaged, far and foremost because it has reduced PM to intermittent steps and processes that are disconnected from the employee's actual day-to-day job tasks.

Interestingly, Campion et al, (2015) suggest that PM can be improved through the use of 360 feedback. Somehow, Campion et al., (2015) do not seem to acknowledge that 360 feedback is often times already part of the, flawed, PM systems. The authors do recognise that there is *"controversy over whether 360s should be used for evaluation as well as development or reserved just for development"* (p. 90).

Opponents argue that 360s for development-only purposes is both more accurate and more differentiated than evaluation ratings from a PM system because raters will be less candid, political

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forces will become part of the game, and recipients will be less accepting of feedback if there are implications for pay or promotion.

Proponents argue that 360 feedback is beneficial for evaluation because it increases reliability and reduces bias. In addition, the anonymous nature of 360 feedback should encourage candour (Campion et al., 2015). Lastly, employees are more likely to accept feedback when more people are giving you similar feedback.

However, Campion et al., seem to overly simplify the challenges of using 360 feedback, no matter if it is used for purely development purposes or for evaluation as well. Nowack and Mashihi, (2012) list eight factors that play a role in determining the extent of behavioural change and performance improvement after 360 feedback interventions. These factors include *(1) delivery and content of feedback, (2), interpretations and emotional responses to feedback, (3) personality of the participant, (4) feedback orientation of the participant, (5) readiness to change, (6) believes about change as well as self-esteem and self-efficacy, (7) goal intentions versus implementation intentions and (8) taking/sustaining actions while managing possible relapse* (p. 161).

Nowack and Mashihi (2012) report many other challenges with 360 feedback, such as the type and amount of raters that need to be included in order to provide accurate and meaningful feedback, choice of response scales, impact of (cultural) values, norms and beliefs, and so forth.

Despite the many challenges with 360 feedback, feedback in itself, as a tool for performance improvement and/or evaluation, is still perceived as *"one of the most crucial organisational levers"*; (Harms & Roebuck, 2010, p.413).

Two popular examples of 360 feedback tools are shown in the figures below: Qualtrics 360 and Appraisal 360. Supporting the typical current application of 360 feedback methods, both tools are more targeted at performance reviews than employee development. In Qualtrics, the feedback consists of a survey sent out via email to requested participants. Feedback is aggregated in the system and reports are generated which can be exported. In Appraisal 360, there are different competency groups for different types of roles e.g. team leaders, sales, middle managers. Again, the feedback is in the form a survey with rated statements scored out of 5 and free text questions. The system generates online reports which can export to PDF. The reports use mean scores, spider diagrams, comparison of self-score to peer rating and color-coding for peer seniority.

The next section explores other types of feedback systems and analyses their benefits as well as their challenges.

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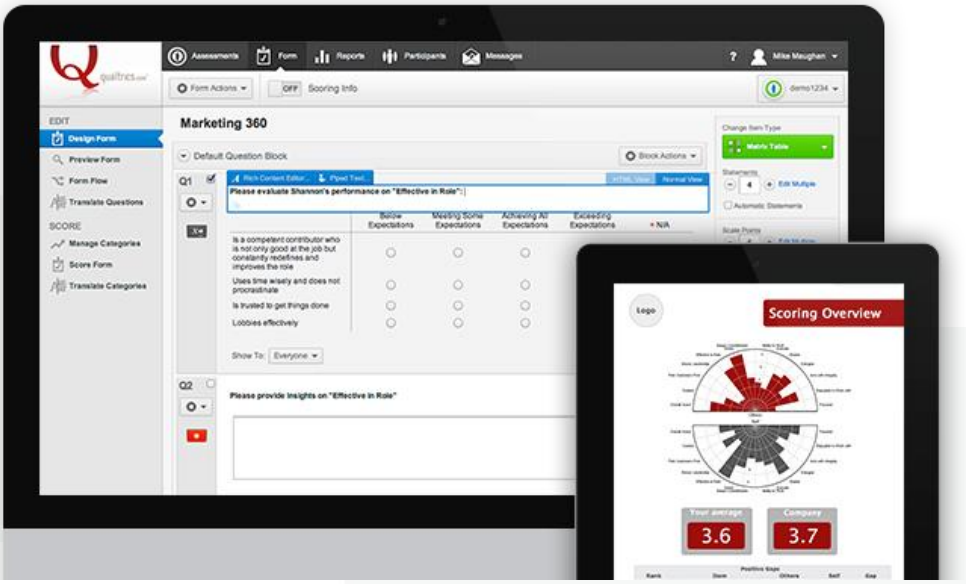

Feedback report for Homer Simpson

Summary Of Competencies

appraisal360

Team Working The ability to contribute to teams and to improve their effectiveness through personal commitment.	Your self score: Feedback score:	3.57 4.45
Adaptability/Change Management The ability to respond & adapt to changing circumstances and to manage, solve problems and provide solutions in a climate of ambiguity	Your self score: Feedback score:	3.57 4.38
Developing self The ability to focus on own development and to take action to learn.	Your self score: Feedback score:	3.57 4.37
Motivation The ability to support and encourage individuals and teams, so that they give of their best	Your self score: Feedback score:	3.29 4.37
Analytical thinking The ability to analyse, investigate & interpret data, issues & situations	Your self score: Feedback score:	2.71 4.35
Integrity and Ethical management The ability to work ethically according to professional & company values	Your self score: Feedback score:	3.43 4.35
Communication The ability to give and gather information and to actively manage the communication process	Your self score: Feedback score:	3.29 4.35
Decision Making The ability to evaluate or judge the best course of action and to make decisions at the appropriate speed	Your self score: Feedback score:	4.00 4.33
Planning and Organising The ability to plan, organise and prioritise work. Balancing resources, skills, priorities and timescales to achieve objectives	Your self score: Feedback score:	3.14 4.33
Leadership and inspiring others The ability to use personal skills to guide and inspire individuals/groups towards achieving goals	Your self score: Feedback score:	3.86 4.33
Developing others The ability to improve performance through training and development of individuals and teams.	Your self score: Feedback score:	3.14 4.26
Relationship Building The ability to get on well with a wide range of people and build long term trusting relationships	Your self score: Feedback score:	3.00 4.06

5.2 Other approaches to feedback

The conclusions presented above, both on broken TM and PM systems, as well as on the challenges with 360 feedback, have implications for the experience that individual employees will go through and of the culture that they will further cultivate within their organisation. If organisations strive to truly support performance improvement, performance metrics, whether or not combined with 360 feedback as it currently stands, would not be an appropriate approach. In order to accurately support performance improvement, competency data needs to be captured and analysed in order to be able to give relevant, timely, and actionable feedback.

In addition, the experience of linking feedback to performance improvement and career development has the benefits of being beneficial for the recipient, contributing to culture formation, and thus more meaningful for both the recipient and the organisation.

Pulakos et al., (2015) state that feedback with a pure development focus is both more accurate and differentiated than ratings from a PM system. However, "*the higher quality information these feedback tools provide can erode quickly, if their purpose changes from development to decision making or if even small, seemingly innocuous changes are made (e.g., making 360 assessments available to the employee's managers rather than the employee alone*)" (p. 59).

Pulakos et al., (2015) introduce a model of experiential learning extraction to support so-called 'everyday' PM with the objective to truly support performance improvement. Table 3~~Table 5~~ below shows the model and the role that feedback has within the model. Pulakos et al., (2015) stress that regular and informal feedback to "praise" and "course correct" in real time needs to be closely aligned with clear expectations. This is a major difference to the current PM and/or 360° feedback approach where feedback is usually given once or twice a year in a formal review session.

Table 3~~5~~: Experiential Learning Extraction to Support On-going PM

Type of measure	Works best when
Intentionality	Planning before the exercise • What do I want to learn? • How will it help the business? • How will it help my career? • How will I measure success?
Support networks	Expand learning and practice partners to include entire network: managers, peers, reports
Deliberate practice and feedback	Iteration is key • Can be used for all jobs • Structured practice • Obtaining feedback • Reflection and repetition
Reflection	Questions throughout and at the end to drive reflection • What did I learn from this experience? • How will I apply that to future performance?

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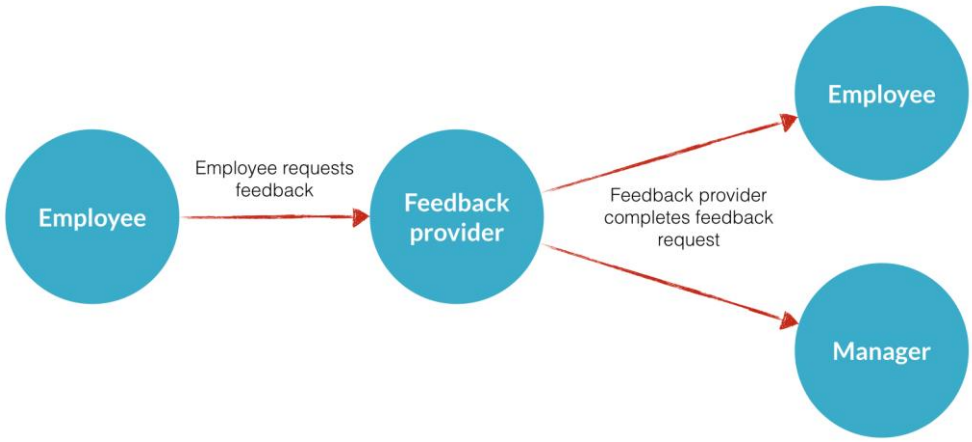
Feedback needs to be done right but what does that mean? For example, eponymous or unsolicited feedback may either be an unpleasant and annoying experience, or a helpful one, depending on many factors, such as how timely and actionable the feedback is, and on how much it focuses on behaviour and not on character. Moreover, it may feel like a surveillance experience. Anonymous feedback, especially unsolicited, may be equally harmful, if some use it for spreading malicious comments, or helpful, if employees thus disclose information on how to improve a process that is too sensitive to facilitate eponymous commentary.

This part of the user experience – tackling best practice for an anonymous feedback system - may be too large and out of scope for this phase of the project; having said that, an approach like PeopleGoal (see images below) that facilitates only solicited eponymous feedback, may be the best to deploy for a Learnovate trial, assuming that the objective is to provide evidence that competency data can be captured and analysed, and not the privacy aspects of the user experience. Thus, a demonstrably working model might arguably be the best to go on trial with rather than try to devise the optimal model.



Note that PeopleGoal's feedback tool is presented as a 360 feedback application, however not in the classic 'once or twice a year formal review' way. As far as we are able to analyse, PeopleGoal's 360° feedback tool has some features that show examples of 'how feedback is done right' (Palukos et al., 2015), such as:

- Praise and recognition ("Where did the individual perform well?").
- Continuous.
- Actionable (suggestions on what the feedback receiver can do to improve).

It also has a self-assessment feature which includes both an open text field ("How did I perform") and a rating (Levels 1-5). The meaning of the rating is unknown to us.

However, setting a goal is optional. If the employee decides to not set a goal, it is unclear what exactly the feedback has been requested for. This can be considered non-effective; in order to be able to request valuable feedback, you need to pose very specific questions (O'Hara, 2015) that tie back to a very specific goal. Also, although the feedback tool presents itself as supporting continuous feedback, feedback cannot be requested in real time. PerformanceGoal's feedback tool is not integrated in the workflow as it is part of a performance management system that employees would

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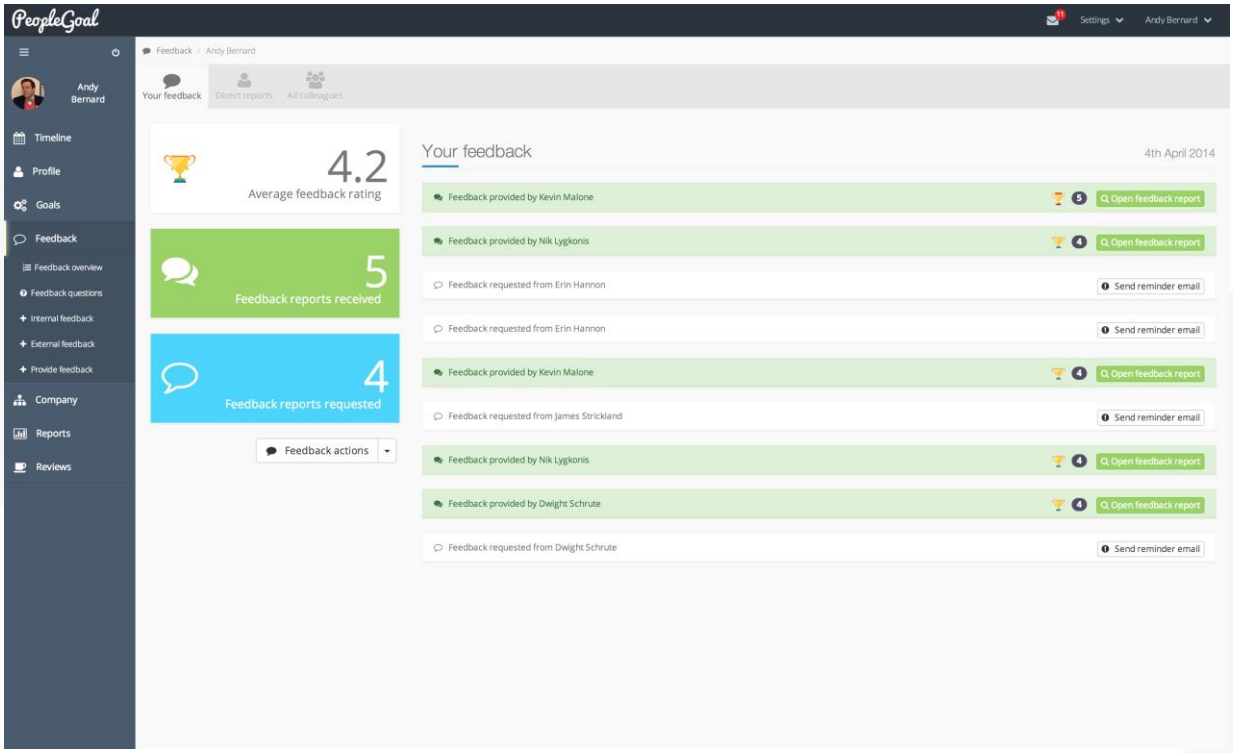
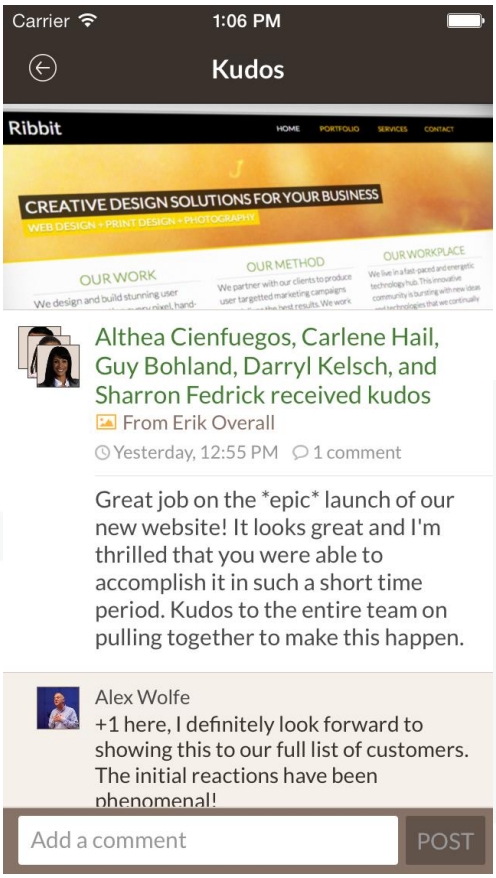
need to login to. Furthermore, it is unclear to what extent the feedback in PeopleGoal's system is tied to performance metrics or performance reviews.



Some applications deliberately take some effort to decouple the feedback process from performance metrics. They reward the feedback process itself and include a "kudos" metric that is generic. See an example (tribeHR) below:



This is a strong example of a focus on positive feedback, which is a critical component in an effective feedback process (Pulakos, 2015).

Impraise is another example of a system that focuses on supporting more rapid, continuous feedback. As shown in the figure below, it is a mobile focused approach that allows employees to ask for feedback on their contributions, assign the skills they want to receive feedback on and select the recipients, following a similar approach to PeopleGoal that way. The skills are not necessarily transversal, they can also be role-related (e.g. software development). Recipients get mobile notifications and can rapidly leave constructive feedback or positive recognition. The employees have access to a dashboard of their collated feedback and skills. Managers are also involved in the process and receive reports which they can use to support employee development or as input to performance evaluations. This feedback app is a strong example on how feedback can be integrated in the workflow. The app also shows that finding the balance between making it fast yet effective is a dilemma. Impraise does provide support to make feedback effective ('Be more specific'), however this is optional. This way, employees can end up with just a rating that is not as effective for learning.

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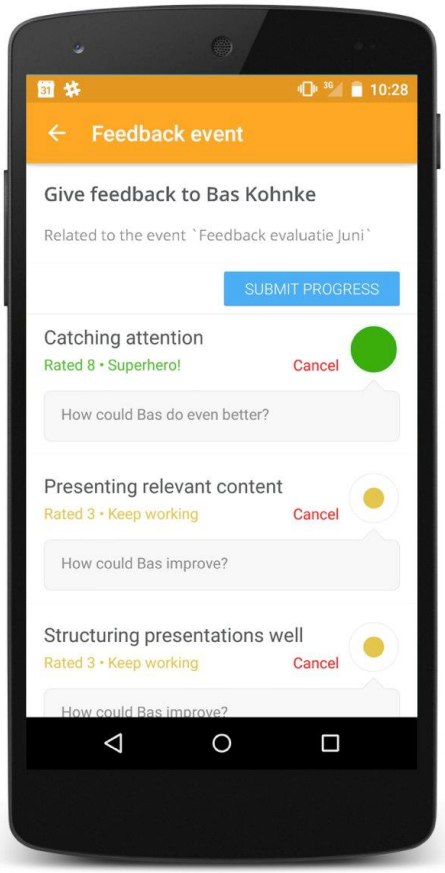

It is out of scope for this project phase to describe several feedback systems in more detail. However, we have looked at several online and feel confident to conclude that, apart from the appearance of mobile applications that facilitate feedback, such as Impraise, there is no app that integrates with an employee's workflow, and even the popular TM platforms analysed in a previous section do not offer integration. It can also be said that feedback has not had an impact on analytics and their visualisation on dashboards, as it has typically been linked to performance metrics as an extra provided piece of evidence.

Another feature that seems to be lacking in existing feedback systems, except for Impraise's mobile feedback application, is that, although the feedback is sometimes tied to learning or performance objectives, it never seems to be linked with specific competencies, such as transversal skills. It needs to be noted that large organisations may have such applications with the aforementioned features included without disclosing public information about them.

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6. Summary of Key Findings of Analysis Phase

- **Companies and required employee skill sets are changing -** Companies are changing to become more agile to address modern business needs. Traditional corporate boundaries are becoming blurred and job roles are merging and overlapping. Employees must also change to develop a diverse and relevant set of competencies to move across a fast-paced and continuously evolving work environment.
- **Need for transversal skills -** Transversal skills in areas such as collaboration and communication are critically important to employees in this environment. However, it is very difficult to capture and objectively measure, analyse and visualise employees' transversal skills on the job. There is no common understanding or agreement on how competencies or skills are defined and described. Organisations use different models with various ways of labelling and categorising competencies depending on their context of use.
- **Current talent and performance management processes and technologies are limited -** Companies have traditionally tracked employee talent and performance using large, monolithic HR platforms and inflexible, infrequent processes such as annual reviews. These processes and systems mostly do not deliver data that shows evidence for employees' competencies based on day-to-day job performance. Attempts at more regular, agile approaches such as 360 feedback have typically not been accepted into day-to-day workflows and have often been used to supplement the existing infrequent and rigid processes.
- **Performance analytics not accurate enough -** Current approaches lead to a lack of accurate data about day-to-day employee performance which impacts on any subsequent business reporting or analytics. Some current platforms include competencies in their reporting dashboards, however, they are still performance-based, linked to the organisation's structure, and not actionable. In order to accurately support performance improvement, competency data needs to be captured regularly, analysed and visualised in order to be able to give relevant, timely, and actionable insights.
- **Employee development not supported enough** - Employees are lacking integrated and easy-to-use tools to track their day-to-day performance and learning on the job. Real employee performance evidence such as more regular informal feedback from colleagues is not being captured on a continuous basis in one location. If there is a culture of regular feedback it is frequently ad-hoc and often distributed across multiple systems such as email and chat logs. Capturing, analysing, visualising this data in a dedicated platform can support employees in many ways such as supplementing annual performance reviews or as a motivating factor for professional development and training.
- **Trend towards more agile, continuous approaches to TM and PM** - Some companies have started to recognise these issues and address them with more agile, continuous performance reviews, feedback approaches and tools. These approaches can provide more accurate performance reporting of key business metrics while also allowing employees to develop their skills based on continuous, relevant feedback. However, they still do not address issues such as integrating into current employee workflows and reducing the subjectivity of the feedback and subsequent competencies through more evidence-based data.

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7. Summary of Key Recommendations for Design Phase

- **Focus on feedback** - Use feedback as the method to track and analyse employee competencies. Develop more agile feedback methods and tools that aggregate continuous feedback from multiple people over time. Design approaches that fit into current workflows and support more evidential feedback methods to reduce subjectivity in the data. Develop a flexible and reusable approach to the management of competencies that can be easily adapted to different companies.
- **Focus on transversal skills** - Target transversal skills as they are highly relevant to modern businesses and typically difficult to track, analyse and visualise. Focus on the most common transversal skills e.g. collaboration and communication, for prototype and trial. Design frameworks/models and architectures to also be applicable to other type of competencies in the future e.g. technical, sales.
- **Increase quantity and quality of data** - The design stage should ideally focus on reducing the subjectivity and context dependent nature of feedback through continuous collection from multiple people over time and through the use of evidence. This evidence could include linking feedback and competencies to more focused learning objectives or workplace tasks, events or teams. Integrating other sources of employee knowledge or activity data such as formal training systems could also be used to increase the reliability and objectivity of the data, however, this is unlikely to be achievable within the scope of this project.
- **Integrate into existing workflows** - Focus on integrating into existing employee workflows by delivering high quality UI/UX to support more continuous day-to-day use. Remove barriers to frequent, rapid actions and integrate as seamlessly as possible into current employee high-use technologies such as email, mobile or web, while not compromising effectiveness of the feedback.
- **Support more accurate business performance analytics -** The design stage should address the analytics of employee competency and performance data. This should be continuous, aggregated and focus on key business metrics. Visualisations should be relevant and fit into existing employee workflows. Analytics should be actionable.
- **Support employee development** - The design stage should ideally also address the employee's own performance management and professional development. Employees should be given more insight and ownership of their performance and competencies. Make it more regular and part of their daily workflow. Deliver employee-focused analytics and visualisations that fit into existing employee workflows. Allow employees to make use of this data to support annual performance reviews or professional development and training.

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Appendix 1: Competency Models and Frameworks

*A **competency model** is a collection of competencies that are relevant to the performance of a particular job, job family or function area whereas a **competency framework** is a broad framework for integrating, organising and aligning various competency models* (HRPA, 2015)

A summary of the key findings are provided:

- 16 competency models / frameworks
- 277 total competencies
- Average of 15 competencies
- Average of 32 pages in each document
- 12 out of 16 organisations categorise competencies
- 12 out of 16 organisations have levels associated with the competencies

The following section will present the matching competencies, the frequency of competency words and a case study presenting 16 competency models and frameworks is included in the Case Study section.

Matching competencies

From the 277 competencies, Table 4~~Table 1~~ highlights the competencies which were identical. The most popular matches were *decision making, communication, customer focus, leadership, performance management* and *resilience*.

Table ~~41~~: Matching Competencies

Competency	Frequency
Decision Making	5
Communication	3
Customer Focus	3
Leadership	3
Performance Management	3
Resilience	3
Analytical Thinking	2
Change Management	2
Continuous Learning	2
Creativity And Innovation	2
Developing Others	2
Flexibility	2
Impact And Influence	2
Integrity	2
Managing Change	2

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Problem Solving	2
Self-Awareness	2
Strategic Thinking	2
Strategic View	2
Sustainable Outcome	2
Vision	2

Frequency of Competency Words

Table 5~~Table 2~~ reveals the frequency of words within the 277 competencies. The most popular words are *management, development, leadership / leading, strategic, planning* and *change*.

Table 5~~2~~: Frequency of Competency Words

Competency	Example	Frequency
Management	*Change, Diversity and Conflict*	16
Development	*Opportunities and Talent, Plan*	10
Leadership / Leading	*Personal and Team*	9
Strategic	*Alignment, Thinking and Review*	9
Planning	*Execution and Development*	8
Change	*Management and Readiness*	8
Awareness	*Organisational, External and Self*	7
Decision	*Making*	6
Communication	*Written, Measurement and Effective*	5
Influence	*Impact*	5
Collaboration	*Working Environment and With Others*	5
Problem Solving	*Critical Thinking and Decision Making*	5
Customer Focus	*N/A*	5
Performance	*Management*	5
Decision Making	*N/A*	5
Focus	*Business and Customer*	5
Responsibility	*Cultural, Social and Personal*	5
Delivery	*Service and Solution*	5
Integrity	*N/A*	4
Interpersonal	*Style and Understanding*	4
Interpersonal	*Relations, Understanding and Style*	4

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Impact	*Evaluation and Influence*	3
Resilience	*N/A*	3
Creativity And Innovation	*N/A*	3
Flexibility	*N/A*	3
Quality	*Management and Focus*	3
Analytical Thinking	*N/A*	2
Conceptual	*N/A*	2
Continuous Learning	*N/A*	2
Risk	*N/A*	2
Relationship Building	*N/A*	2

Competency models: Conclusions

Seven key conclusions have been drawn from this report:

1. There is significant difference in how the same competencies are described, even within the same sector
2. There is no consistency between the models or frameworks
3. It would be difficult to "re-use" the models or frameworks due to the fact that many of the competencies are broken down into levels which are specific to job roles
4. Very few technology applications are mentioned in the reports (asides from the **Headlight Human Resources Professional Competency Framework** and the **Civil Service Competency Framework**), it is assumed that a lot of the models or frameworks are manual
5. Some of the models took significant time to develop, for example the **Change Management Institute** competency model took 18 months
6. Some of the models took a significant number of people to be involved, for example the **Human Resources Professional Competency Framework** competency model approx. 80 people
7. Some models, for example **KIPP Leadership Framework and Competency Model** are used in association with interview protocols, selection rubrics, leadership and development roadmaps and goal setting.

Competency Models Case Studies

Ministry of Justice

- Focus: Ministry of Justice managers and employees
- 5 competencies
- 4 levels associated with each competency
    - Each level contains specific statements about the type of behaviour that needs to be shown to be classed as a competence

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- Examples of types of evidence that might be collected are listed
- Each level also has examples of behaviour that could be developed

- Each competency is fully introduced and described
- 28 page document

1. Focussing on the customer
2. Developing our people
3. Using evidence to make decisions
4. Planning and managing resources
5. Working as a team

H and F Core Competency Models

- Focus: Self development
- 8 competencies
- Each competency has 4 levels
  - Individual
  - Team Leader Supervisory
  - Middle Manager
  - Senior Manager
- Within each competency two descriptions are provided
  - "What the competency is"
  - "What the competency is not"
- 12 page document

1. Self-management
2. Performance management
3. Communication
4. Team and partnership working
5. Leadership
6. Planning and use of resources
7. Customer focus
8. Strategic thinking and managing chances

Headlight Human Resources Professional Competency Framework

- Focus: Talent Management
- 12 competencies
- 4 categories
- 5 levels

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- Each competency has a description
- 11 page document

Thinking
1. Strategic judgement
2. Decision making
3. Creative capacity
Learning
4. Developing self
5. Drive and motivation
6. Managing change
Interacting
7. Influencing others
8. Leading people
9. Supporting colleagues
Delivering
10. Customer focus
11. Driving quality
12. Achieving results

Human Resources Professional Competency Framework

- Focus: Human Resource Management
- 48 competencies
- 9 categories
- Each competency has between 4 and 6 levels
- 139 page document

Strategy
1. Strategic perspective
2. Government principles
3. Leadership
4. Business acumen
5. Strategic alignment
6. International human resource management
Professional Practice

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7. Balanced interests
8. Ethics
9. Legal
10. Responsible governance
11. Advancement of the profession
12. Evidence based approach
13. External trends
Organisational Effectiveness
14. Productivity
15. Organisational structure
16. Employee engagement
17. Risk
18. Change management
19. Team effectiveness
20. Job analysis
21. Communicating challenges and developments
Workforce Planning and Talent Management
22. Workforce plan development
23. Employee value proposition
Labour and Employment Relations
24. Collaborative work environment
25. Legislation, collective agreements and policies
26. Labour and employee relation strategies
27. Negotiation
28. Diversity management and inclusiveness
29. Representing individuals and organisations before tribunals
Total Rewards
30. Total rewards structure development
31. Total rewards structure implementation
32. Total rewards structure evaluation
33. Value of total rewards
Learning and Development

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34. Learning culture
35. Learning priorities
36. Provision of continuing development opportunities
37. Learning and development program implementation
38. Learning and development priorities evaluation
39. Mentoring and coaching
Health, Wellness and Safe Workplaces
40. Health and safety
41. Health, safety and wellness policies and procedures
42. Wellness
43. Physiological health and well being
Human Resources Metrics, Reporting and Financial Management
44. Informed business decisions
45. Human resources management
46. Human resources information systems
47. Human resources information
48. Human capital investments

The Centre for Learning and Development (Newfoundland Labrador)

- Focus: Learning and Development
- 6 competencies
- Each competency has 6-12 different levels
- Document includes steps to develop learning plans and an employee and manager competency self-assessment comprising of behavioural descriptors
- 31 page document

1. Organisational
2. Communication
3. Service delivery
4. Technical
5. Adaptability
6. Interpersonal

World Health Organisation (WHO) Global Competency Model

- Focus: Human resources

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- 13 competencies
- Each competency is defined in detail
- Effective behaviours and ineffective behaviours examples are outlined
- 8 page document

1. Communicating in a creditable and effective way
2. Knowing and managing yourself
3. Producing results
4. Moving forward in a changing environment
5. Fostering integration and teamwork
6. Respecting and promoting individual and cultural differences
7. Setting an example
8. Creating and empowering and motivating environment
9. Ensuring the effective use of resources
10. Building and promoting partnerships across the organisation and beyond
11. Driving the World Health Organisation to a successful future
12. Promoting innovation and organisational learning
13. Promoting World Health Organisation's position in health leadership

The National Child Welfare Workforce Institute

- Focus: Leadership
- 30 competencies
- 5 categories
- Each category and competency is defined with correlate to "leadership pillars"
- 4 proficiency levels are defined
    - Executive
    - Manager
    - Supervisor
    - Case worker
- 48 page document

Leading Change
1. Creativity and innovation
2. External awareness
3. Flexibility
4. Strategic thinking
5. Vision

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Leading in Context
6. Partnering
7. Political savvy
8. Influencing / negotiating
Leading People
9. Conflict management
10. Developing others
11. Team building
12. Cultural responsiveness
13. Leveraging diversity
Leading for Results
14. Accountability
15. Capacity building
16. Service orientation
17. Decisiveness
18. Entrepreneurship
19. Financial management
20. Planning and organisation
21. Problem solving
22. Technical creditability
Fundamental Competencies
23. Continuous learning
24. Effective communication
25. Imitative
26. Interpersonal relations
27. Integrity / honesty
28. Resilience
29. Personal leadership
30. Social responsibility

NHS Clinical Leadership Competency Framework

- Focus: Leadership
- 20 competencies

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- "Examples in practice" of learning and development opportunities are provided for each competency targeted at
    - Students
    - Practitioners
    - Experienced practitioners
- 5 categories
- 67 page document

Demonstrating Personal Qualities
1. Developing self-awareness
2. Managing yourself
3. Continuing personal development
4. Acting with integrity
Working with Others
5. Developing networks
6. Building and maintaining relationships
7. Encouraging contribution
8. Working with teams
Managing Services
9. Planning
10. Managing resources
11. Managing people
12. Managing performance
Improving Services
13. Ensuring patient safety
14. Critically evaluating
15. Encouraging improvement and innovation
16. Facilitating transformation
Setting Direction
17. Identifying the contexts for change
18. Applying knowledge and evidence
19. Making decisions
20. Evaluating impact

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Hay Group Future Leaders Trust Competency Framework

- Focus: Leadership
- 13 competencies
- Each competency has four levels which includes
  - Key questions
  - Limiting behaviours
  - Why the competency matters
- 4 categories
  - Basic
  - Effective
  - Complex
  - Exceptional
- 19 page document

Thinking
1. Analytical thinking
2. Conceptual thinking
3. Curiosity and eagerness to learn
Being
4. Self-awareness
5. Resistance and emotional maturity
6. Integrity
7. Personal drive
Leading
8. Impact and influence
9. Inspiring others
10. Holding to account
11. Relating to others
12. Developing others
13. Collaboration

University of London Competency Model

- Focus: Higher Level Education / General
- 12 competencies
- 4 categories
- 4 levels (bands)
- 18 page document

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Personal Effectiveness Competencies
1. Proactivity and planning
2. Working collaboratively with others
3. Organisational commitment
4. Resilience
Cognitive Competencies
5. Problem solving and decision making
6. Creativity and innovation
Improvement Competencies
7. Customer focus
8. Interpersonal understanding
9. Striving for excellence
Leadership and Development Competencies
10. Self-development and commitment to learning
11. Leadership
12. Performance management

KIPP: Leadership Framework and Competency Model

- Focus: K12 Education / General
- 14 competencies
- Empirically derived and heavily research based
- 3 categories which include
    - key behaviours
- 10 page document

Drive Results
1. Achievement orientation
2. Continuous learning
3. Critical thinking and problem solving
4. Decision making
5. Planning and execution
Manage People
6. Direction setting
7. Team leadership

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8. Performance management
9. Talent development
Build Relationships
10. Stakeholder management
11. Communication
12. Impact and influence
13. Self-awareness
14. Cultural competence

Change Management Institute

- Focus: Change Management (targeting practitioners, employers and academics)
- 50 competencies
  - Each competency has at least 2 outlines examples
- 11 categories
- 9 page document

Facilitating Change
1. Principles of change
2. The environment
3. Business focus
4. Change readiness
5. Culture awareness
6. Strategic view
7. Sustainable outcome
Strategic Thinking
8. Vision
9. Assess readiness
10. Strategic view
11. Sustainable outcome
Thinking and Judgement
12. Analytical thinking
13. Holistic perspective
14. Decision making

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Influencing Others
15. Customer / stakeholder focus
16. Professional presence
17. Networking
18. Interpersonal style
Coaching for Change
19. Adult learning principles
20. Change management
21. Needs analysis
22. Organisational capability
23. Role model
24. Champion new skills
Project Management
25. Plan development
26. Monitor and management of progress
27. Cost management
28. Risk and opportunity management
29. Review project outcomes
Communication Skills
30. Relationship building
31. Empathy
32. Oral comminution
33. Written communication
34. Measures effectiveness of communication
Self-Management
35. Personal responsibility
36. Prioritisation and time management
37. Resilience
38. Flexibility
39. Emotional intelligence
Facilitation (meetings and workshops)
40. Design

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41. Participatory environment
42. Structure
43. Process
Professional Development
44. Knowledge
45. Skills
46. Promotion of change management
Specialist Expertise
47. Needs identification
48. Training plan
49. Solution delivery
50. Evaluation

Greater London Authority Competency Framework

- Focus: Mangers and staff
- 12 competencies
- 4 categories
- 4 levels, each include indicators of effective and ineffective behaviour
    - Front line / administrative staff
    - First line managers / team leaders
    - Middle managers / senior professionals
    - Senior management
- 19 page document

Working with Others
1. Building and managing relationships
2. Stakeholder focus
3. Communicating and influencing
Leadership
4. Strategic thinking
5. Managing and developing performance
6. Decision making
Delivering Results
7. Planning and organising
8. Problem solving

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9. Research and analysis
Organisational Context
10. Responsible use of resources
11. Organisational awareness
12. Responding to pressure and change

Civil Service Competency Framework

- Focus: Civil Servants
- 10 competencies
- Each competency has five or six associated levels which include
  - Director General and Director
  - Deputy Directors
  - Grade 7 and 6 or equivalent
  - Higher Executive Officer / Senior Executive Officer or equivalent
  - Executive Officer or equivalent
  - Administrative Assistant or Administrative Assistant or equivalent
- Each competency has effective and ineffective behaviour
- 3 categories
- 46 page document

Strategic Cluster – Setting Direction
1. Seeing the big picture
2. Changing and improving
3. Making effective decisions
People Cluster – Engaging People
4. Leading and communicating
5. Collaborating and partnering
6. Building capacity for all
Performance Cluster – Delivering Results
7. Achieving commercial outcomes
8. Delivering value for money
9. Managing a quality service
10. Delivering at a pace

Department for International Development Core Competency Framework

- Focus: Department for International Development employees
- 9 competencies

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- 5 levels
- 3 categories
- 15 page document

Work Related Competencies
1. Analysis and use of information
2. Decision making
3. Planning and delivery of work
People Related Competencies
4. Working with others
5. Communicating with others
6. Influencing
Organisational Competencies
7. Organisation awareness
8. Managing change
9. Continual improvement

University of Nottingham Competency Framework

- Focus: University of Nottingham employees
- 15 competencies
- 5 categories
- Page total not available (webpage format)

Achieving and Delivery
1. Drive for results
2. Serving the customer
3. Quality focus
4. Integrity
Personal Effectiveness
5. Planning, organising and flexibility
6. Confidence and self-control
7. Problem solving and initiative
8. Critical information seeking
Working Together

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9. Communicating with clarity
10. Embracing change
11. Collaborating with others
12. Influencing and relationship building
Thinking and Innovation
13. Innovation and creativity
14. Conceptual and strategic thinking
Managing, Leading and Developing Others
15. Managing and leading the team

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Appendix 2: Example of Biodata scale

Content Area	*A priori* Group	Target Situations and Behaviors
Quitting	Quitting behavior	Quit a job because of being tired Quit school project or assignments because are too difficult or take too long Quit school because it has nothing to offer me Quit a job because it didn't go as expected Quit activities because they don't go as desired Quit a job before having another job lined up
Not following through	Risk factor	Agree to help friends with something (i.e., give them a ride, help them move) but then didn't show up Sign up for school activities (i.e., clubs, sports teams, committees) but don't go because they aren't interesting
Personal goals	Protective factor	Start saving for something but then quit Make personal goals (i.e., work out more, give up a bad habit) but then give up because it is too difficult Make educational goals (i.e., get a diploma or certificate) and stick to it
Reactions to stress	Risk factor	Dwelt on negative situations that interfered with daily life Denied that bad things were happening Did other things to avoid thinking about problems Put less effort into a situation when facing difficulty
Active coping	Protective factor	Came up with a plan to solve a problem when it came up Focused attention and effort on solving a problem Sought help from other resources to solve a conflict or problem Had someone to talk to when I had a problem
Avoidant coping	Risk factor	Made first priority to get out of the situation (i.e., boss, girlfriend/boyfriend, family) when there was conflict
OCB	Protective factor	Helped coworkers/schoolmates Encouraged others to stick to the task when things got difficult Saw a problem as a challenge to be overcome Did more than what is needed for a project
Dedication	Protective factor	Stuck to task/project until completion
Commitment	Protective factor	Followed through on projects to prevent letting others down Worked on tasks/activities even when they were not enjoyable Completed a goal even if others thought it was okay to quit
Theft/cheating	Risk factor	Cheated because a test was too difficult Took property from work or school and didn't return it
Property damage	Risk factor	Didn't take care of things that weren't personally owned
Absenteeism	Risk factor	Didn't go to work because felt like deserved a day off Cut class to do something more fun with time

Biodata scale of quitting behaviour (Fluckinger et al., 2009).

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