



Social learning through continuous formative peer assessment of transversal competencies

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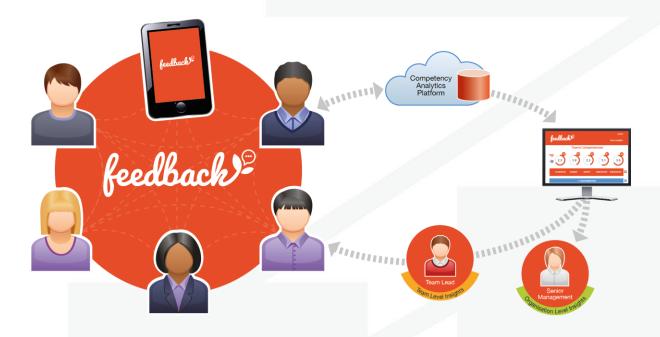
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1 The mobile peer feedback app: What it does

Our mobile peer feedback app offers an agile peer feedback process that allows for **continuous formative peer assessment of transversal competencies** based on near to real time on-the-job performance.

The process fits into current workflows and supports more evidential feedback methods to reduce subjectivity in the data. This is done through a flipped competency capture process where you can map feedback about day-to-day activities to behaviours, which are then mapped to competencies. The app uses behavioural anchors instead of more subjective ratings, ensuring more objective peer assessment. More truthful data on transversal competencies is not only helpful for employees but also delivers more accurate data to organisations. Through the feedback, competency data is captured regularly, analysed and visualised and gives relevant, timely, and actionable insights to the employee.



High Level Use Case Diagram of the Mobile Peer Feedback App

Our mobile peer feedback app truly supports informal social learning; critical in today's agile workplace. It also acknowledges that this type of learning is highly contextualised (Tynjällä, 2008, Eraut 2007, 2004) as the feedback is always event-based; for example it can be based on a meeting or presentation that just took place.



Peers can request feedback from and offer feedback to each other. The in-app feedback process acknowledges the many ways employees might (want to) develop their competencies. For example, they might want to focus on certain competencies for a certain period of time and request very focussed feedback on those. On the other hand, they might have strengths or weaknesses that they are not aware of. Peers can offer feedback at their own initiative to increase that awareness.

Peers explain what their team member did well or could improve in a free text field. This makes feedback more concrete and transparent. It supports an open learning culture. The app also includes a **scaffolding model to support effective feedback**. After all, feedback needs to be done 'right' to help someone learn and improve (Hattie, 2007).

2 The challenge

Companies are changing and becoming more agile to address modern business needs. As a consequence, employees must also change. **Transversal competencies**, such as communication and collaboration are critical to move across this fast-paced and continuously evolving work environment.

Our <u>industry partners</u> have expressed the challenge to capture and objectively assess, analyse and visualise employees' transversal competencies as performed on the job. Our additional research has confirmed that current approaches, such as talent and performance management systems, LMSs, and 360^o feedback generally lead to **insufficiently accurate data about day-to-day employee performance** (Akram et al., (2014), Aguinis et al., (2012), Saba, (2015)).

Assessing transversal competencies is complex for many reasons. For example, in order to get accurate insight in these competencies, they need to be assessed through a process that is integrated in the natural workflow. Currently, that is commonly done through periodic self-rating and rating by others. One of the problems with rating is that it can be quite subjective. For example, a 3 on a 1-5 scale or labels such as 'strongly agree' or 'seldom' are open to wide ranging interpretations.

In addition, supporting employees in the development of their transversal competencies is complex as well as they are difficult to acquire and change. One reason is that transversal competencies mean different things depending on the context (Robles, 2012). Furthermore, Eraut (2004) points out that they cannot likely be learned in formal training settings.

3 The peer feedback app: Ins and outs

We have concluded from our research that a mobile peer feedback app used within functional and/or cross-functional teams supports employee transversal competency assessment and development and provides accurate business performance analytics.



A mobile peer feedback app recognises the **social significance of learning from your peers** in the workplace (Eraut, 2004). That is *provided that* an organisation supports an open feedback culture and allows the individual employee to *own* their feedback data so that they will be more open to improving their performance. This is a critical assumption for our trials.

Because this is not just about the individual's transversal competency assessment and development but also about business performance analytics, we have identified **three user types** with different needs. They will therefore receive different types of analytics.



Analytics Are Tailored For Each User Type

Employees need to be able to improve their performance based on peer feedback. Therefore, they need detailed insights into the feedback they receive with regards to their behaviours. **Team leads** need to be able to act on identified competency gaps within their team and therefore need analytics on their team's competencies. The **business unit owner** (e.g. HR) needs to see organisational competency patterns and gaps.

The app also offers analytics to support conversations, for example between team members and their team lead. Because the feedback is highly contextualised, there should never be a focus on 'numbers' only.

The quantity and quality of the data is increased by flipping competency capturing (feedback about day-to-day events or activities is mapped to behaviours, behaviours are mapped



to competencies) which reduces subjectivity and acknowledges the context dependent nature of feedback. The app delivers **high quality UX/UI** to support more continuous use as well as **an in-app scaffolding model** to support *effective* feedback. This model, as well as the open and transparent feedback process support an open learning culture.

4 Our research to date

Throughout the process we ran **2 functional tests** (6 and 20 participants respectively) and **4 focus groups** (varying from 2 to 8 participants). The team also has conducted research using the **Q methodology** to evaluate an early version of the prototype (6 participants). The statements in the Q-set are formed by designers' intentions. End-users test the application and rank the statements, according how well they think the statement is realised in the corresponding feature. The results show the different points of view. This methodology helped the team to understand what features were best and worst implemented and why, and also what features were seen as more critical by users. These insights facilitated prioritisation in next design iterations.

In order to be able to run various trials, our team completed a **University ethical approval process**. We have set up **one functional trial** (to make sure that everything is technically ready for full trials) and **three full trials** so far (see table below for details).

Trial details - organisation size, number of participants, duration of the trial, and trial status

	Functional trial	Trial 1	Trial 2	Trial 3
Organisation	SME; ± 25 employees	SME; ± 50 employees	Large multinational; ± 5,000 employees	SME; ± 25 employees
Participants	Sales team: 4 team members; 1 team lead.	11 team members; 1 team lead	10 team members; 1 team lead	10 team members; 1 team lead
	Dev team: 6 team members; 1 team lead			
Duration	3 weeks	3 months	3 months	3 months
Status	Complete	In progress	In progress	In progress

All participants from the functional trial and Trial 1 have completed the pre-trial survey. We conducted 3 post-trial interviews (1 team member, 2 team leads) with the completed functional trial organisation.



5 Impact & results

Preliminary findings around the impact of using the Feedback app were positive and favourable in regards to the design premise. More specific initial results on **learning and performance improvement** and **feedback perception** are outlined below.

Learning and performance improvement

In the pre-trial surveys the majority of team members (2 different organisations) indicate that the current performance review process does not help them to understand their strengths and weaknesses. One of the team leads in the post-trial interview confirms this. He indicates that current performance reviews are basically salary reviews; there is no support for professional development or performance improvement. Both team leads see the feedback app as an opportunity to move from task- and results-oriented feedback to behaviour-focussed feedback. They believe that the app can function as a catalyst for conversations between peers on their competencies and that it will be an enabler for having accurate and focussed discussions on professional development opportunities. All interviewees clearly interpret the feedback app as a learning and development tool instead of a performance review tool.

Feedback perception

Both pre-trial surveys indicate that the current feedback process is perceived as unstructured and team members do not give each other focussed feedback. The majority of team members indicate that they feel capable giving peers feedback and almost everyone likes receiving it. All interviewees strongly felt that the feedback app would work in their culture of 'speaking up' and helping each other. They also said that the app is very quick and easy to use so it will not distract for day-to-day activities. They indicated that the structure of the app made it easy to use and made them feel more comfortable giving the feedback.

Envisaged impact by industry

We have asked our trial partners to share their vision on the envisaged impact of the peer feedback app on individual employees, organisational performance, and the learning culture.

What impact do you expect the mobile peer feedback app to have for individual employees?

"We want to move from results-oriented feedback to behaviour-focussed feedback so that we can have accurate conversations about performance."

Team Lead – TEKenable



"We think this app can help create an open and honest feedback culture, which can increase an individual employee's learning."

Team Lead – WBT Systems

What impact do you expect the mobile peer feedback app to have for organisational performance?

"Instead of doing performance reviews that don't usually offer true data, you can spend less time on this app and get more accurate data. Win-win."

Team Lead - TEKenable

"Using the feedback app, we expect to improve team communication, collaboration, and build leadership skills - all of which are essential in a fast-paced agile environment."

Team Lead – WBT Systems

How do you envision that the mobile peer feedback app will help to create or enhance the overall learning culture?

"The continuous and seamless nature of the app will help the learning culture without putting strain on individuals."

Team Lead, TEKenable

"With this app, we will have an implicit focus on professional development which will help us to have a learning culture without spending the time explicitly."

Team Lead, WBT Systems

Our full trials are all in progress at the moment. In addition to research on the app usability, the trials intend to determine if first, the variance of the behaviour ratings will become narrower over time (narrower variance could indicate that peers' views on a team member's behaviours become more consistent). Second, we will analyse in-app feedback patterns as they are going to reveal temporal, usage, or networking effects throughout the usage of the app. Furthermore, we want to explore if the app helps to gain more insight in behaviours/competencies and can support performance improvement. Last but not least, we will research if team members' perceptions on giving and receiving feedback will change over time when they regularly use the feedback app.



We use a combination of qualitative (pre-trial competency assessment; pre-trial/post-trial surveys; and post-trial interviews) and quantitative (in-app usage) data methods to ensure a complete capturing of various aspects of the app usage.

6 Next steps

- We currently have 3 full trials in progress. They will all be completed end of September 2016.
- There has been keen interest to license the feedback app. 10 Learnovate members and associated companies are currently discussing licence options with us. These organisations vary in size and include EdTech consumers, technology providers, and content providers.
- The Learnovate research team who has designed and developed this feedback app is planning on writing several research articles in the next 6-12 months.

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