

KEY SUCCESS FACTORS OF MOBILE LEARNING IN 5Ps

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Synopsis

Enterprise Learning has existed for a long time. Learning and Development Departments and In-house Academies have emerged in many enterprises. Yet, performance gaps due to a lack of knowledge and skills still persist.

The first burning question is WHAT should Enterprise Learning address. New buzzwords such as adding “Smart” as a prefix to any noun presents ample opportunities in an increasingly digital world, for example: Smart Office, Smart Nation. Enterprises are seeking to change from being the disrupted to the disruptor. New job roles require new competencies. Curriculum needs to be re-examined.

Today, routine manual jobs are handled by smart machines, thereby raising workforce productivity. Moreover, employees are hired for work, paid to perform. Hence, as they transit to new jobs, they need to be equipped with new competencies in order to be productive contributors. There is a need to continue, even accelerate, one’s learning in order to stay ahead in this dynamic space.

The second burning question is HOW else can Enterprise Learning be conducted. In the past, employees are expected to work for a fixed set of working hours, use the equipment that their enterprises have assigned to them, and rely heavily on email for communication.

Now, employees can choose to work at any time, from anywhere, use their own devices, and communicate through any form of collaborative technology available.

Based on these two questions, a Mobile Learning Project was conducted on fourteen enterprises using the Mobile Learning App, PocketSEED, to promote effective enterprise learning. These enterprises span across industries such as Architecture, Banking, Education, Food and Beverage, Law, Landscaping and Retail.

The key success factors of effective Mobile Learning distilled from the Project can be summarised in 5Ps: People, Performance, Personalisation, Participation and Pervasiveness. The conference participants are invited to discover the 5Ps through the 2 enterprise case studies.

Challenges of Current Enterprise Learning

In a rapidly changing and highly disruptive business world, enterprise learning has become a strategic differentiator. Where business as usual is change, enterprises and their employees need to be equipped and enabled to sustain and scale their successes.

Currently, terminologies such as Training Department, Corporate Academy, Learning and Development, Human Resource Development, Human Capital Development have emerged. Yet, performance gaps, due to a lack of knowledge and skills, persist.

In a digital economy, data and connectedness promote transparency and accessibility. Innovative ways of doing things are preferred by customers and within their reach. Today's customers are empowered! Competition is intensified. Employees need to move from being the disrupted to the disruptor.

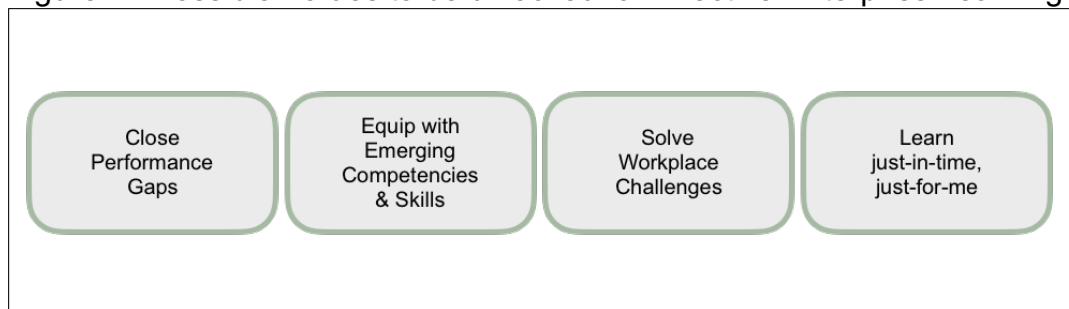
Employees need to unlearn, learn and relearn or risk being obsolete or replaced by machines for performing routine tasks. To improve their performance, employees need to update and upgrade. Careers are no longer built on tasks but continuous learning. Innovative thinking and problem-solving skills that can be applied across enterprises are highly sought after. New workplace competencies and skills need to be identified, facilitated and assessed to increase employees' productivity instead of static curriculum.

Work, when structured right, presents learning opportunities for employees to engage in collaborative learning and discovery. Workplace challenges can be used as learning stimuli for the co-creation of knowledge and development of skills for employees from different disciplines. Just-in-time, multi-disciplinary and interactive learning is preferred over a fixed schedule of conventional didactic teaching and learning.

According to the 70-20-10 Model of Learning and Development, employees learn 70% of their knowledge from their work experiences. Hence, what if enterprises can engage their employees to learn at their workplace? How about leveraging on their current performance challenges to promote just-in-time, just-for-me learning? Why not enable them to convert their lull work periods to productive micro learning moments without having to leave their work sites? Learning no longer needs to be constrained to predetermined times, lessons and places.

The above challenges suggest potential values that can be unlocked to make enterprise learning more effective (Figure 1).

Figure 1: Possible Values to be unlocked for Effective Enterprise Learning



Project Objective

Can mobile learning unlock the above-mentioned values of enterprise learning?

Methodology

A Mobile Learning Project was conducted with fourteen enterprises spanning across Architecture, Banking, Education, Food and Beverage, Law, Landscaping and Retail over the course of 14 months from 17 July 2017 to 30 September 2018. These enterprises are existing clients of Bootstrap's proprietary mobile learning application, PocketSEED, which has been deployed as a job aid to promote enterprise learning.

Figure 2: PocketSEED Learning Journey



The PocketSEED Learning Journey is as follows:

1. **Search**

Learners are able to search through a curated Knowledge Repository of modules with the knowledge relevant to their performance challenge at hand to learn at anytime, anywhere, delivering the convenience of just-in-time and just-for-me learning.

2. **Enquire**

Learners are able to ask their questions or seek feedback from their colleagues and/or experts within their enterprise through a chat, delivering the convenience of just-in-time and just-for-me learning.

3. **Evaluate**

Through the dashboard, the enterprise is able to evaluate the learning effectiveness through setting quizzes and assignments, and monitoring the chats on PocketSEED. They are also able to provide the needed and targeted coaching intervention and recognition based on the learning analytics, delivering just-in-time support.

4. **Develop**

Based on learners' chats and quiz scores, the enterprise is now better able to identify the knowledge and skills based on the workplace challenges that learners face. New modules can then be developed and pushed out to the Knowledge Repository for learners, delivering the convenience of just-in-time and just-for-me learning.

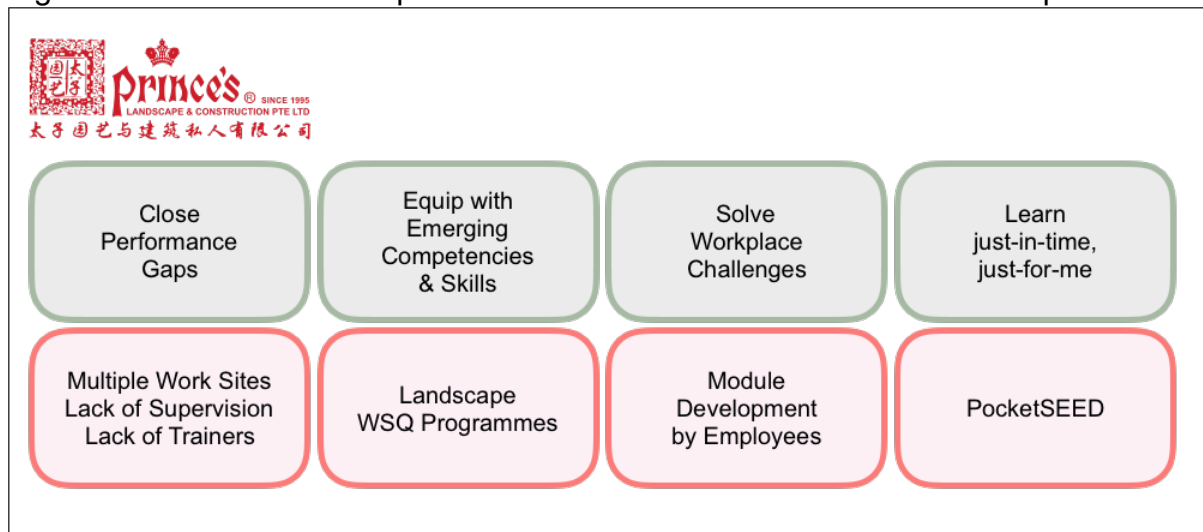
The evidence for the Mobile Learning Project was based two enterprises located in Singapore, namely: Prince's Landscape & Construction Pte Ltd (Prince's) and Salvatore Ferragamo (Ferragamo).

The data collection on Prince's was conducted for 14 months, from 17 July 2017 to 30 September 2018 with 160 learners. These learners include Landscape Technicians, Project Managers, employees across Finance, Human Resources and Marketing Departments, and Top Management.

The data collection on Ferragamo was conducted for 3 months, from 9 July 2018 to 30 September 2018 with 20 learners. These learners are the Retail Front-liners, Store Managers, Head of Retail Operations, Head of Human Resources and the General Manager.

Case Study 1: Prince's Landscape & Construction Pte Ltd

Figure 3: Prince's Landscape & Construction Pte Ltd's PocketSEED Adoption



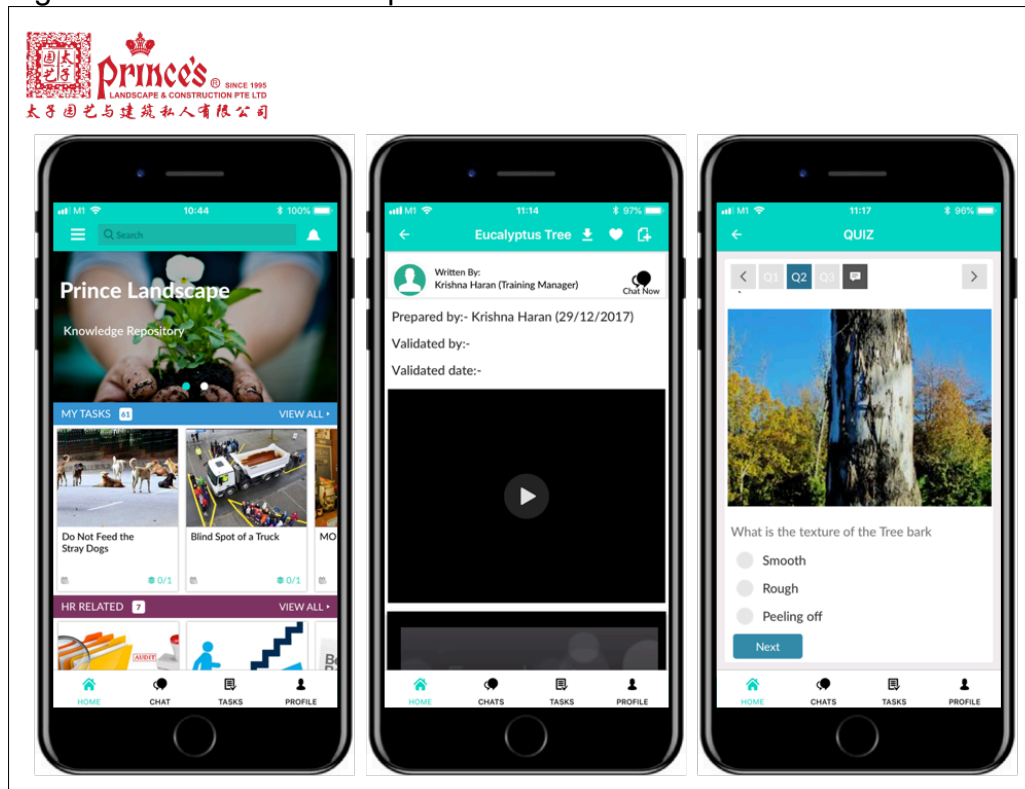
Prince's is one of Singapore's oldest nurseries, specialising in Landscape Design and Installation. They design, develop and maintain huge on-site assets island-wide.

As per the nature of Prince's business, their Landscape Technicians are scattered across multiple work sites with minimal supervision from their Supervisors. Hence, Prince's require their Landscape Technicians to be independently productive.

Due to the lean manpower, it is difficult to pull the Landscape Technicians from their various work sites for classroom training back at their head office. Trainers become mobile-based and travel across the different work sites to provide work-site training. Additionally, they also face a shortage of Trainers available to provide the necessary guidance.

PocketSEED was conceptualised to complement Prince's existing in-house Approved Training Organisation (ATO) in equipping the Landscape Technicians with the necessary skills that are aligned to the Landscape Workforce Skills Qualifications (WSQ) by SkillsFuture Singapore (SSG).

Figure 4: Prince's Landscape & Construction Pte Ltd's PocketSEED



Prince's PocketSEED adoption comprises the following:

1. Identified critical job tasks with high frequency of occurrence and high impact to be developed as micro learning modules. For example, Watering, Workplace Safety, Onboarding.
2. Supported each micro-learning module with a 90-second video, infographic and quiz.
3. Assigned relevant micro-learning modules to the Landscape Technicians and supported their learning based on their learning analytics.

The productivity of Prince's Landscape Technicians has increased as they learn on-the-job, just-in-time, and just-for-me whenever they encounter a performance challenge. For PocketSEED's continuous improvement and sustainability, the Landscape Technicians are also encouraged to develop content documenting best practices for existing and new modules. This reduces the reliance on classroom training.

Based on the evaluation, 100% of the learners indicated that they would recommend this way of learning to their peers, and they also rated PocketSEED on the following:

- | | |
|--|---------------------------------|
| 1. Learning Engagement: | Average score of 4.9 out of 5.0 |
| 2. Relevance of Content: | Average score of 4.9 out of 5.0 |
| 3. Application of learning back at work: | Average score of 4.8 out of 5.0 |
- Note: Based on a scale of 1.0 – Strongly Disagree to 5.0 – Strongly Agree

Mr Alson Tan, Director of Prince's, also emphasised that a *“trained workforce is critical for the Management. This will ensure smooth flow of projects. PocketSEED provides a great platform to achieve a trained and prudent workforce.”*

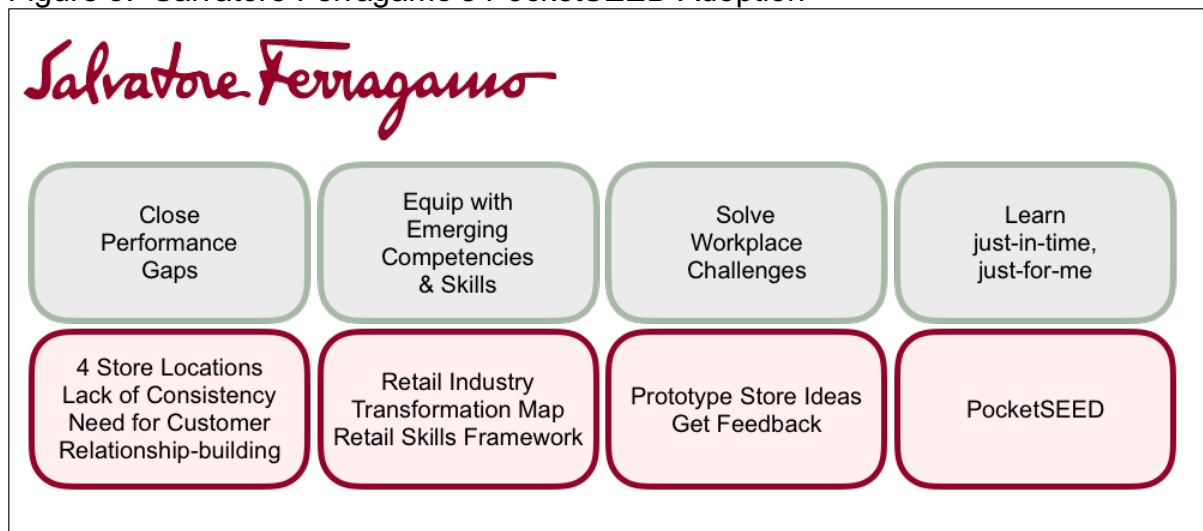
Currently, Prince’s has expanded the use of PocketSEED beyond their in-house ATO’s Landscape WSQ courses to incorporating it as a Workplace Productivity tool and Onboarding Tool.

As a Workplace Productivity Tool, Prince’s has developed Workplace Safety modules. Learners have to go through the learning, and then pledge that they will adhere to the Workplace Safety regulations. By doing so, learners are now aware of Workplace Safety and assume the responsibility to ensure Workplace Safety.

As an Onboarding Tool, newcomers have to complete the modules on Prince’s Mission, Vision and Core Values as part of their Onboarding Programme.

Case Study 2: Salvatore Ferragamo

Figure 5: Salvatore Ferragamo’s PocketSEED Adoption



As one of the world’s leading luxury retailers, Ferragamo has strong brand equity associated with high quality products. With the emergence and convenience of online retailing, brick-and-mortar retailers are turning to customer experiences to engage their customers. In order to stay ahead, there is a need for Ferragamo to reimagine their human touch at the shop floor to build stronger relationships with their customers.

In their new job role as Relationship Builders, Ferragamo’s Front-liners have to build up new Service Leadership competencies and address the lack of consistency in service levels across their 4 stores in Singapore. As such, Ferragamo incorporated the Retail Industry Transformation Map (ITM) as well as the Retail Skills Framework when addressing their Front-liners’ performance gaps.

Figure 6: Salvatore Ferragamo's PocketSEED



Ferragamo's PocketSEED adoption comprises the following:

1. Leveraged upon actual workplace challenges Front-liners face at the shop floor.
2. Brainstormed for solutions to solve these workplace challenges as a team.
3. Prototyped solutions on the shop floor.
4. Sought feedback and developed improvement ideas through chat.

By using actual workplace challenges at the shop floor as learning stimuli, the learners are naturally motivated to brainstorm for solutions to solve these challenges. During the prototyping phase of their ideas at the different stores, the learners used PocketSEED to share and seek feedback, just-in-time, without having to leave their work sites. They made revisions based on the feedback received and continued to solicit more feedback on their revised ideas. In this way, PocketSEED serves as a job aid for the other learners to refer to and learn from.

Based on the evaluation, 100% of the learners indicated that they would recommend this way of learning to their peers and they also rated PocketSEED on the following:

- | | |
|--|---------------------------------|
| 1. Knowledge before PocketSEED: | Average score of 2.3 out of 5.0 |
| 2. Knowledge after PocketSEED: | Average score of 4.7 out of 5.0 |
| 3. Application of learning back at work: | Average score of 4.9 out of 5.0 |
| 4. Overall Satisfaction: | Average score of 4.9 out of 5.0 |
- Note: Based on a scale of 1.0 – Strongly Disagree to 5.0 – Strongly Agree

Reflection

Based on the insights gathered from the two case studies, the authors would like to posit the following 5Ps as key success factors for effective mobile learning in enterprises (Figure 7):

1. People

Learning should always start with the learners in mind such as the profile of the learners, desired learning outcomes and learning resources.

Given that employees are hired for work, paid to perform, job-related matters such as the learner's job roles, responsibilities, work competencies and performance targets are important inputs when formulating the individual's Learning Plan.

Others who can support the learning such as Coach and Reporting Officer should be identified and enabled.

2. Performance

For enterprises, begin with the end in mind by determining their business targets based on the business outlook and future plans: What the enterprises must ACHIEVE.

Next, translate their business targets to their employees' performance targets: What their employees must DO.

Finally, translate their employees' performance targets to their employees' work competencies targets: What their employees must LEARN and be able to PERFORM at the desired level in order to achieve business targets.

In this manner, the enterprises' business targets, and the employees' performance targets and work competencies are aligned. Learning becomes motivating due to the strong relevance and high transfer of learning to the workplace. The WHAT and HOW of learning is workplace-focused, therefore employees are now learning at work, for work, through work.

3. Personalisation

Adult learners have prior knowledge. They learn based on the Principle of Constructivism by engaging their prior knowledge to connect and then construct their new knowledge. Often, learning is triggered by their knowledge gap based on their personal need. When this happens, the learners are interested to find answers to this gap only, resulting in just-for-me learning.

With the digital advancement, learning is no longer a linear experience where learners have to hold out until they reach their topics of interest. Instead, they can now search and discover knowledge at their own pace and place. They also expect the search engines to remember their search history and refer new sources of the topics of their interests to them – make it relevant to me! Learning is now personalised and just-for-me.

4. Participation

The digital advancement builds communities and connections. Sharing of sorts from data to discussions emerged. Apart from the search function, learners can now use the chat function to discuss and seek advice from the others. They use their “voices” to contribute their contents, share their perspectives and promote cross-learning. They click “like” to demonstrate their endorsement. Learning is now interactive, social and viral!

5. **Pervasiveness**

Beyond space and time, learning is now lifestyle-based. Digital advancement makes learning possible at anytime, anywhere. From structured classroom to on-the-job training to online learning to mobile learning, today’s learners are empowered and in control of how they want to learn. This flexibility allows learners to convert any block of their lull periods to productive learning moments.

Figure 7: 5Ps of Effective Mobile Learning

People	Learner-first
Performance	Workplace Learning
Personalisation	Just-for-me Learning
Participation	Social Learning
Pervasiveness	Anytime, anywhere Learning

Conclusion

In any enterprise, it is the employees and their ideas that differentiate.

In a highly disruptive world, enterprise learning that keeps these employees change-ready is the game-changer that truly matter.

For enterprises that believe in enterprise learning, the 5Ps of effective mobile learning serves as a reference guide on how to jumpstart.

First, align the enterprise learning to the **People’s** needs. Design the learning to aid employees to achieve their **Performance** targets based on the business outlook and future enterprise plans. Enable workplace learning where employees can learn at work, for work, through work. **Personalise** learning based on their needs. Build a community for learning through sharing perspectives and cross-learning. Encourage **Participation** in learning. Finally, make learning **Pervasive** by embracing different devices such as mobile technology to promote learning that is just-in-time, just-for-me and on-the-go.

Careers are built on learning, not jobs, in a disruptive world. Seamless enterprise learning is a game-changer that matters.

- Lynda Wee and Audrey Kang -

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