



## SECOND LIFE: WHY DOES IT MATTER IN PROJECT MANAGEMENT?

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The virtual reality (VR) is no more a fad or a gimmick, but a way of life. Multiple reports on the growth of VR market landscape substantiate such an assertion. An Orbis research report predicts strong growth for VR market, suggesting it could surpass USD40 billion by 2020 (Reuters, 2017). Correspondingly, VR is being used in a variety of industries including consumer products, aerospace & defense, medical, and other light-to-heavy industrial segments. The business applications of VR are wide and varied such as: gaming, education, healthcare, tourism, live entertainment, and real estate, just to mention a few.

VR is a mechanism to create virtual world for entertainment, business, and research and education. Second Life, Open Wonderland, and Active Worlds are some examples of VR platforms that allow mimicking the physical environment in which objects and users interact with each other (<http://educares.net/support/BlendedLearning.pdf>). For the purpose of the discussion here, we use *Second Life* as an example VR platform.

*Second Life* was developed by a US-based firm “Linden Lab” and was launched in 2003. Since its launch, *Second Life* has grown to become a popular virtual world for users to embrace a second life (kind of a pseudo life) by creating *avatars* for themselves, which reside in virtual world. Avatars personify the real-world users and allow them to have another identity (a second identity) in the way they like to be seen/perceived by others in the VR world (or perhaps in the real world). Users of *Second Life* thus maintain two existences at the same time: (1) one real world physical existence, where degree of control on their lives often depends on various elements in the ecosystem they (users) exist, and (2) second virtual world existence which is fully under their control (within the perimeters of VR platform).

VR platform like *Second life* facilitates a multi-interaction environment where the virtual world characters (e.g. *avatars*) interact with each other for entertainment, gaming, business networking and social needs, just to mention a few. These interaction capabilities (that are typically user driven and controlled) provide a powerful mechanism to simulate complex problems and real world experiences, and educate/train the real-world users on how to solve those problems.

Given VR platforms’ capabilities to simulate complexities and emergence and enable users to gain first-hand experience of managing real-world issues (while enjoying second life in a virtual world) raise the question: what role does VR platforms, such as, *Second Life* can play in project management? And why does *Second Life* matter in project management (PM)?

To find an answer to the above question and develop some understanding, we propose below some of the possible ways in which VR platforms such as *Second Life* can be used for PM effectiveness. The utilities discussed below are an endeavor to offer an initial thought on the subject.

### POSSIBLE USES OF VR PLATFORMS FOR PM

#### (1) Improved scenario-based planning

The use of VR platform such as *Second Life* could be vital at the planning stage of projects. Teams involved in planning could simulate multitude of scenarios and use avatars personifying various

stakeholders to gain an understanding of how relevant stakeholders will act and react in a particular scenario? What would be the level of stakeholders' decision-making quality? What criteria they may possibly use for their decision-making?

While the simulation of scenarios will be user driven, yet it will help planning teams understand the potential issues, problem triggers, things that could lead to poor or good quality decision-making, reaction time to resolve problems and possible stakeholders' behaviors, just to mention a few.

By using VR platform such as *Second Life*, the planning teams can create optimized project plans, reduce project risks and have a better control of things when they actually go wrong in real world projects.

#### *(2) Improved skills to deal with emergence*

One of the key challenges in projects is to deal with emergence and changes. Particularly, in large-scale complex and capital-intensive projects, such as: space exploration, defense, science and technology, oil and gas, mining, and nuclear sciences, the emerging environment and changes could have a make-or-break effect on the project outcome.

Using a VR platform like *Second Life* can help project staff gain new skills or sharpen their existing portfolio of skills in dealing with emergence. The learning could include gaining skills on handling the pressure situations, responding to changes, making informed decisions within the parameters of time and information available during the course of emerging events, know how to find and contact the key people for troubleshooting and escalation, understand responsibilities better, and exercise self-leadership.

In a simulated *Second Life* space, project staff can work on various scenarios in which changes into scope, time, cost, risks, quality, stakeholders' preferences and project eco-system occur. By simulating and studying varying degree of emergence, project staff can learn to cope with it and be ready for real-life project-based emergence.

#### *(3) Engaged human management*

Another aspect where VR platform like *Second Life* can help PM is to train project staff on people engagement. Human engagement is naturally the difficult skill to learn, because human behavior is dynamic in nature and hard to predict with accuracy and thus hard to simulate with accuracy. But given the predictive nature of large part of project work (roughly 50-60%), simulating human engagement in VR (e.g. *Second Life*) environment (particularly for predicable part of project work) can help project staff learn how to deal with emotions, behavioral patterns, attitude issues, and exercise engaged control.

The unpredictable part of project work including changes, internal and external events, risks becoming issues, and staff behaviors could be simulated by considering hypothetical events to improve the overall human engagement skills of the project staff, should things go wrong.

#### *(4) Improved problem-solving and issues management capabilities*

*Second Life* based VR environment can enable staff to simulate problems and issues on project-by-project basis. By developing scenarios in the context of specific project eco-system, project team members can assess their capabilities to deal with problems and issues, identify gaps in skills and acquire trainings to be able to deal with the problems and issues should they occur.

Understanding of specific reaction time to deal with problems and issues could help prepare for trouble shooting and escalation procedures, plan better and put in place control measures to contain risks before they become issues.

Improvements in problem and issues management can improve quality of output, and reduce cost and time variations leading to successful delivery of projects. The benefit-to-cost ratio of using a VR environment to simulate the problem and issues management as against an un-simulated management will be high, ultimately benefiting the project organization.

*(5) Tragile project management (Ta-PM)*

The increased use of agile methodologies necessitates combining both, traditional and agile project management (Tragile = Traditional + Agile) to develop a best-of-breed approach. It will help avoid overloading people with learning too many varieties of skills to stay relevant in the job marketplace. It is also a fact that traditional project management is and will remain relevant even when agile approach is being used widely. So, the best way forward is to take a meshed-up best-of-breed approach.

*Second Life* environment can help project staff simulate instances and tasks that should be done with traditional, or agile or Tragile approaches. It will help bring clarity about 'what, how and when to do', and there is nothing more important than having clarity in an uncertain project environment. To say the least '**Clarity is power**' and with the use of VR based platforms, PM can achieve clarity in many aspects related to project output from initiation-to-delivery.

[Note: the term 'Ta' in Ta-PM should not be confused with an Australian informal expression/slang 'Ta' used for saying 'thank you']

*(6) Improved competencies in new project methodologies/techniques development*

The use of VR world platform such as *Second Life* can also help in project management knowledge creation; testing of newly recorded best practices; development of new tools/techniques; feasibility testing of tools/techniques, processes and methods borrowed from other disciplines; and impromptu development of new techniques while simulating project-based environments.

Given the digital nature of VR world, all the simulation can be recorded and over a period of time the data can become very useful repository for furthering research in PM and development of new methodologies, tools/techniques and processes.

## CONCLUDING THOUGHTS

The VASB age developments entail opportunities and challenges for PM in general. It is also a fact that PM has the capabilities to remain a vibrant knowledge discipline that is open to embracing changes with the changing times. VR platforms offer true opportunities for PM to enhance its human, technological, and methodical capacities and broaden its horizon. 3D virtual environment such as *Second Life* has the potential to be used for simulating project environments of all types of projects.

On a positive note, there are studies that have investigated use of VR such as *Second Life* for PM effectiveness. What it means is that seeds have been sown and now may be all we need to do is to check whether the seeds have grown roots and whether the roots are strong enough? With the **VASB age** developments, certainly time is ripe to sow some new VR based seeds with the hope that early plants will break through the PM soil to become a big tree at some point.

## REFERENCES

Reuters, (2017). Global Virtual Reality Market Forecast 2020 by Major Players such as Sony, Microsoft, Facebook, HTC, Google, Samsung Electronics, GoPro, etc, <https://www.reuters.com/brandfeatures/venture-capital/article?id=4975>