

GROUP GAME PROPOSAL: TEAM- BUILDING EXERCISE IN MINECRAFT



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PROBLEM STATEMENT

According to the hiring firm Robert Half and the employers they work with, while creative and information technology (IT) teams are collaborating more closely, barriers to effective partnering persist ([Infographic](#)). One of their clients, OSSCube, wants to improve the effectiveness and efficiency of collaboration and communication between their designers (graphic, UX/UI, etc.) and their developers (web app, mobile app, etc.) to increase productivity in their internally commissioned app projects and in custom app development for clients.

A needs analysis has shown that the collaboration and communication problems are internal; communication between clients and OSSCube's project managers is relatively smooth. Productivity among creative and IT professionals often comes from disputes about priorities—creative professionals champion ideas and aesthetics while IT professionals emphasize functionality and logic.

PROPOSED SOLUTION

We propose a team building exercise in an engaging simulated environment in which creative and IT professionals must work together to create an object that requires both creative and logical thinking. The object to be built will be a house. The participants must work together in real-time and communicate throughout the exercise. This task will be performed in Minecraft, a open-world video game in which players construct objects using blocks patterned to mimic the appearance of various real-world materials, like wooden planks, bricks, stone, stairs, windows, and so on.

Minecraft will serve as an effective platform for this training. Building an object in Minecraft that believably resembles a house will require both logical and creative thinking. Building a house together will require coordination, discussion, and agreement and should yield an understanding, respect, and appreciation for one another's decisions, both creative and pragmatic. Lastly, a team-building exercise can be performed in Minecraft's low-stakes environment so it won't put any company projects at risk.

TECHNOLOGY ANALYSIS

ABOUT MINECRAFT REALMS

Minecraft is game originally developed by a game designer named Markus “Notch” Persson and his company Mojang. After gaining a large user base and monetary success, Mojang was bought by Microsoft in 2014.

One reason Minecraft is successful is due to its emphasis on player created content. By giving players the tools to edit and modify the game, Minecraft allows its players to become game designers. Minecraft Realms is a subscription based expansion that allows players to easily create and share their own Minecraft worlds. Players can select a premade world or easily create their own world. Players can then share what they have created with specific players or with the Minecraft community as a whole. Mojang hosts the games on their own servers for no additional cost.

Realms works well for small groups and makes an excellent solution for small team building exercises. It emphasizes visual design skills as well as logistics and planning skills. Realms is a low cost and interactive solution for a team-building exercise that can be performed in a low-stakes environment without putting any company projects at risk.

MINECRAFT REALMS REQUIREMENTS

In order to play Realms, there are IT requirements that must be met. First, the players must each create a Mojang account. In addition, each player must own a copy of Minecraft. Players will also need access to a high-speed internet connection in order to play with others in real time.

In addition, each participant will also need a personal computer with the following system requirements:

MINIMUM PC REQUIREMENTS

- CPU: Intel Pentium D or AMD Athlon 64 (K8) 2.6 GHz
- CPU SPEED: Info
- RAM: 2 GB
- Operating system:
 - Windows XP or higher
 - macOS 10.9 Maverick or higher
 - Linux: any distribution from 2014 or later
- Video card: (Integrated): Intel HD Graphics or AMD/ATI Radeon HD Graphics with OpenGL 2.1
- Sound card: Yes
- Free disk space: 200 MB

RECOMMENDED PC REQUIREMENTS

- CPU: Intel Core i3 or AMD Athlon II (K10) 2.8 GHz
- CPU SPEED: Info

- RAM: 4 GB
- Operating system:
 - Windows 10;
 - macOS 10.12 Sierra
 - Linux: any distribution from 2014 or later
- Video card: GeForce 2xx Series or AMD Radeon HD 5xxx Series (Excluding Integrated Chipsets) with OpenGL 3.3
- Sound card: Yes
- Free disk space: 1 GB

MINECRAFT REALMS COSTS

Realms is a subscription-based service which is \$7.99 per month for PC/Mac. This is in addition to the Minecraft cost which is \$26.95 per user.

AUDIENCE & CONTEXT ANALYSIS

Learners will consist of creative professionals (graphic designers, UX/UI designers) and IT professionals (software developers and analysts)

GENERAL DEMOGRAPHIC INFORMATION

<i>Information Categories</i>	<i>Learner Characteristics</i>
<i>Age</i>	Mid 20s to early 40s
<i>Sex</i>	Designers predominately female; developers predominately male
<i>Health or Special Needs</i>	N/A
<i>Ethnic/Cultural Background</i>	All raised in the US
<i>Language</i>	English

ACADEMIC/EDUCATIONAL INFORMATION

<i>Information Categories</i>	<i>Learner Characteristics</i>
<i>Education completed</i>	Bachelor degree or higher
<i>Previous related training completed</i>	N/A
<i>Reading levels</i>	College

SPECIFIC CHARACTERISTICS

<i>Information Categories</i>	<i>Learner Characteristics</i>
<i>Previous or current knowledge of/experience with topic area</i>	About half the participants have played Minecraft before and are proficient enough to guide others.
<i>Attitudes toward content</i>	Gamers are overrepresented among both creative and IT professionals.
<i>Attitudes toward organization and training division</i>	Neutral to somewhat positive
<i>Attitudes toward potential delivery system</i>	Positive attitude toward video games

INSTRUCTIONAL ENVIRONMENT/CONTEXT

<i>Information Categories</i>	<i>Learner Characteristics</i>
<i>Availability of needed technology (hardware, software, etc.)</i>	All employees have access to a computer that meets the technical requirements.
<i>Physical aspects of site for implementation</i>	On-site employees will complete the exercise on site; remote employees will complete the exercise remotely.
<i>Social aspects of site</i>	Learners will communicate through voice over the internet in real-time during exercise.
<i>Relevance of skills to workplace</i>	Collaboration and communication are necessary for these employees on all projects.

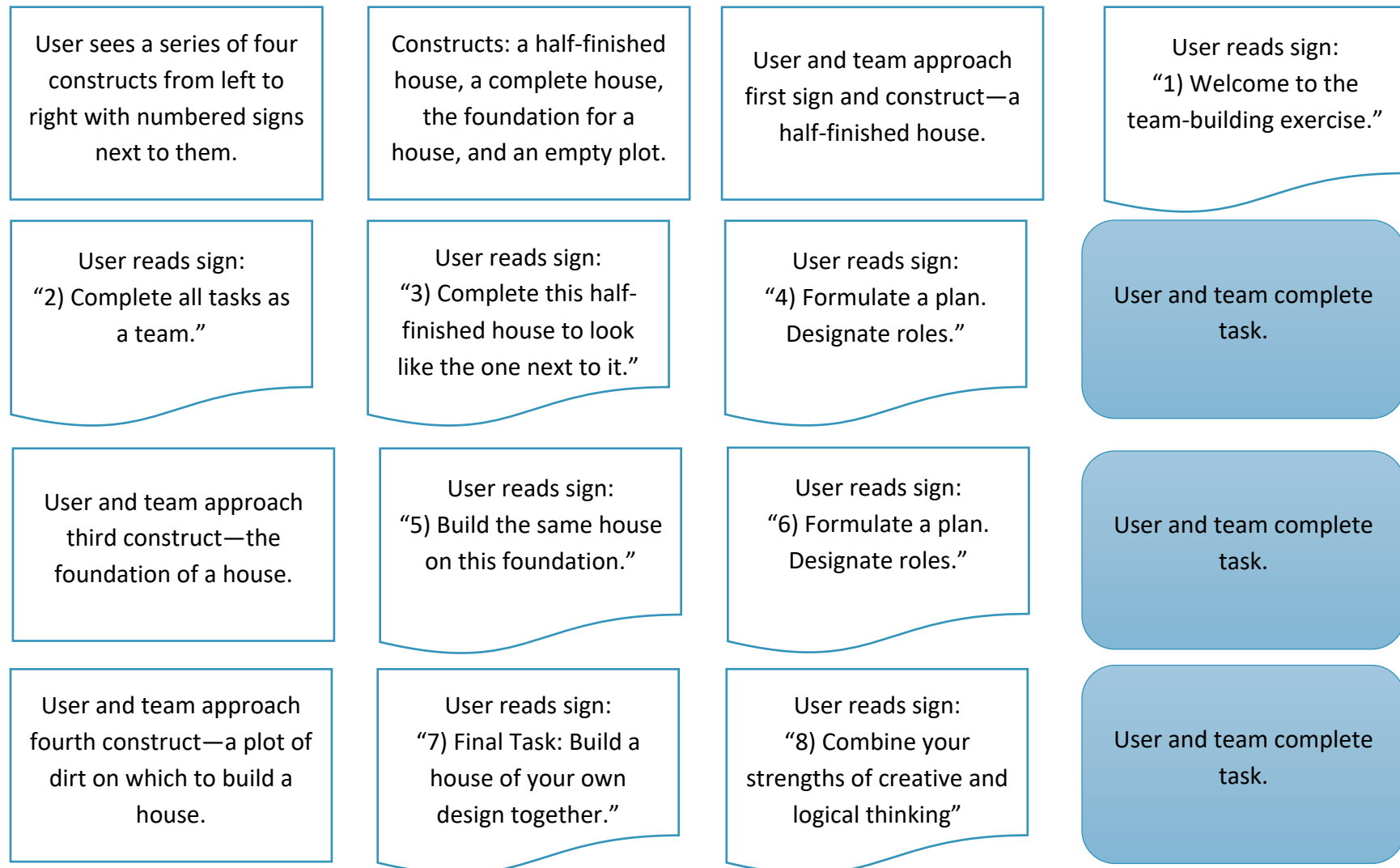
BUDGET AND TIMELINE

Designing and implementing this Minecraft teamwork building exercise will span five hours, 3 instructional designers @ \$100.00 X 5 X 3, subscription to Minecraft @\$27.00 X 3, as well as Minecraft Realms @\$7.99 , totaling \$1589.00.

LEARNING OBJECTIVES

- Using the tools available in Minecraft, Creative and IT professionals must successfully build a house to completion through cooperation and compromise.

FLOW CHART



User reads final sign:
"9) Congratulations!
Submit a reflection of
your collaboration to
your instructor."

User and team rejoice
and report success to
instructor.

INSTRUCTIONAL STRATEGY

LEARNING THEORIES

An improvement in collaboration and communication addresses attitude skills in Gagné's taxonomy of learning or the affective domain in Bloom's taxonomy. The Experiential Learning Theory is the method we have selected to enhance teamwork effectiveness for OSSCube employees. Several attributes of experiential learning theory apply to the subject matter of team building and to the game simulation activity we have chosen.

In experiential learning theory, effectiveness and appeal are prioritized over efficiency, experience works as a means for achieving abstract learning goals (e.g. attitude skills), the experience should not be "too neat," the experience should encourage social constructivist approaches, and learner should be largely self-directed. Our learning exercise meets all of these qualifications.

APPLICATION & STRATEGY

In our Minecraft Realms game, team building is strengthened through both content and design choices building each level of house together as a team. Focusing the experience around a problem or project is highly recommended in experiential learning. Thus, in our game, the task of completing the building is clearly stated in the beginning of the game. Establishing relationships and expectations for behavior is key to experiential learning, so our game sets the expectation that users will collaborate to accomplish all tasks and learners are advised to formulate a plan and designate roles for each mini project. Players are at various levels of Minecraft skill, with some being expert enough to guide others.

The instructional environment is flexible, allowing each employee to participate either in the office or at a remote location. Timing, however, must sync to effect real-time interactive collaboration and communication. We address this constraint by establishing a schedule for training. The experience of interacting with fellow employees in an atypical way allows each player to experience another employee's choices as well as communicating in an unfamiliar, unpressured environment. This experience provides valuable connections and joy in a casual situation. This allows employees to create, interact, and strengthen work relationships. This exercise offers a new dynamic of interaction between coworkers.

After the task of building the house is complete, each team is asked to reflect upon their experience, prior assumptions, and what they can share to build community going forward.

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