Competitive Analysis Assignment
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TC841: Understanding Users
aka Become a Design Wizard
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EXECUTIVE SUMMARY

To assist a Michigan State University graduate game design class with creating a game that increases student motivation and participation in service activity called Project Bamboo, competitive research analysis was conducted. Three games that turn regular daily tasks into a game were analyzed. These games are EpicWin, an iOS app, Chore Wars, an online role-playing game, and HabitRPG, a multi-platform MMO-style game.

Findings showed...
1) All three games offer customizable avatars which help create intrinsic motivation to continue to play the game.
2) Specialized character classes have a significant impact on gameplay, elevating the simple gameplay mechanic and allowing complex player-to-player interactions.
3) Just because the game mechanic is based in real life tasks and habits does not mean that the game interface or the gamified RPG is any easier to grasp. All three games had dedicated FAQ pages and game tutorials.
4) The Dungeons & Dragons character trait system is utilized by all three games. Project Bamboo should think carefully before trying to create a new profile system.
5) Each game has a different approach to categorizing the real world tasks, and Project Bamboo needs to closely examine the types of tasks it will ask players to complete to discover what types of categories would be appropriate.

Four specific recommendations:
1) Project Bamboo needs to examine the costs of different methods of achieving avatar customization. Customization could be costly but may not necessarily increase intrinsic motivation.
2) Administrative roles will allow Project Bamboo to adapt easier to different real world contexts. The roles in Chore Wars could be modified for Project Bamboo.
3) Utilizing different character classes deserves serious consideration as it can significantly increase the challenge and pleasure of gameplay.
4) Project Bamboo should start out small and add multi-platform and extensive avatar customization options only after the game has solidified its core gameplay mechanic.

METHODS

To assist a Michigan State University graduate game design class with creating a game that increases student motivation and participation in service activity called Project Bamboo, competitive research analysis was conducted.

After researching gamification apps, a number of products were discovered. Three that focus specifically on gamifying habits of life were selected. These games are EpicWin, an iOS app, Chore Wars, an online role-playing game, and HabitRPG, a multi-platform MMO-style game. These three were selected because they are all fantasy-themed RPGs yet they provide a range of functionalities,

customization, data accessibility, and styles. Data was collected primarily from the games themselves as well as the official websites built by each game developer.

Common Feature: Core Game Mechanic
These games were selected primarily because they all share the same core game mechanic. A player has to create the tasks that they will complete in real life. These are turned into "quests" or "adventures" in the game that, upon completion, grant the player specific in-game rewards such as experience points, gold, and special items or loot. This is why, for example, the popular gamification app Class Dojo was not analyzed, as the core game mechanic is determined and awarded by the teacher, not the players.

| Game Title	EpicWin	HabitRPG	Chore Wars
Year Published	2010	2012	2007
Cost (as of November 2014)	2.99 USD	Freemium (free to use but gems that can be purchased / earned allow avatar customization; group packages offer more control)	Free (10 USD Gold Account Upgrade unlocks full chore history and custom avatar images)
Multiplayer	No	Yes	Yes
Visuals & Graphics			
Art Style	Cartoony	Retro / Pixelated	Heavily text based
Sound Effects	Yes	No	No
Background Music	Yes	No	No
Animations	Yes	No	No

Game 1: EpicWin

EpicWin is an iOS only application released in 2010. As the screencap below indicates, it relies heavily on the touchscreen capabilities of iOS devices (hold on the rosette; press and hold; swipe left). It also has a cartoon-styled graphic interface. Sound and animation are noticeable features of the app, adding an element of interactivity to every page. EpicWin costs $2.99 USD to download and has no in-app purchases. As will be examined in detail later, it is a single player only game.

Game 2: HabitRPG

HabitRPG began as an online-only game in 2012, but after a successful Kickstarter campaign that raised over $40,000 USD it was expanded to the iOS and Android mobile platforms. On none of the platforms does HabitRPG offer audio or animations, and the visual style is intentionally retro and pixelated. HabitRPG follows the freemium payment structure: the app is free to download and play, but by purchasing in-game "gems" with real money players can achieve extra customization. HabitRPG is an MMO-RPG (massive multiplayer online) and its wide player base plays an active part in maintaining the HabitRPG wikia.
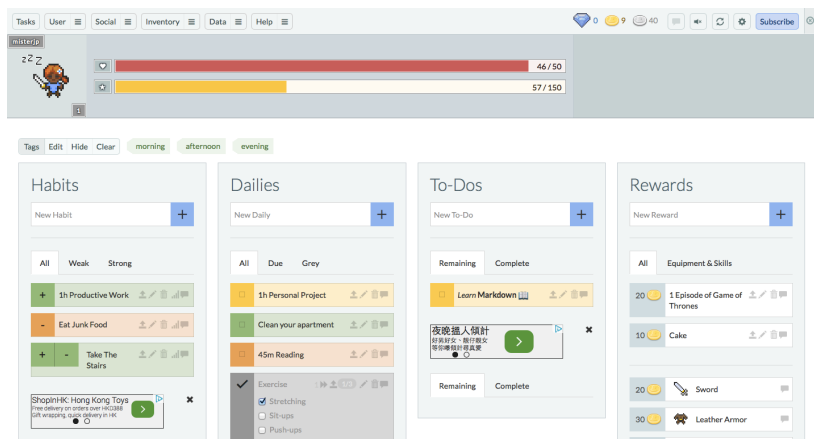
Game 3: Chore Wars

Chore Wars is a simple online-only game that has been around since 2007. The visual style of the game is sparse and mostly text-only, with a few images here and there. Chore Wars is free to play, but ads can be removed, and extra group functions unlocked, with a one-time payment of $10 USD. An ironic sense of humor is embedded in the game; the screencap below shows one such example, in which a zombie is encountered after the hero "bravely venture(s) forth to attempt grocery shopping".
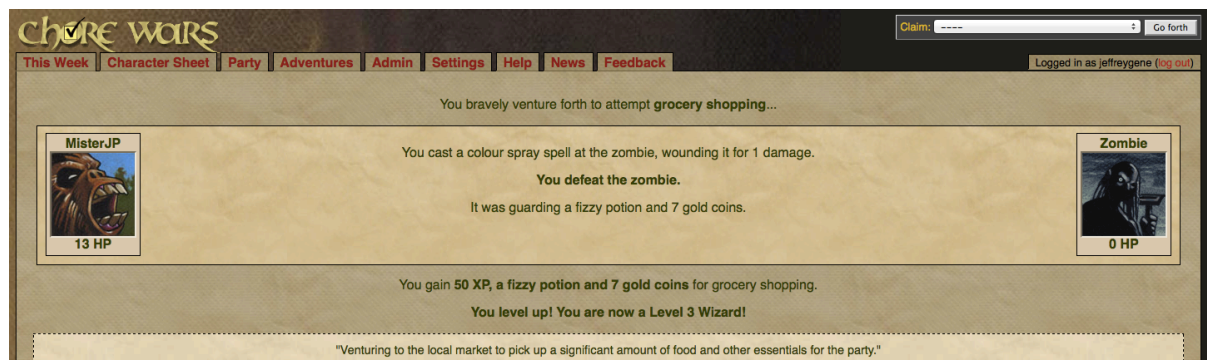
This competitive analysis examines in close detail the following categories:

1) Avatar Customization / Specialization
2) Teach the Game
3) Core Game Mechanics
4) Data Never Sleeps

FINDINGS

Finding One:
Avatar Customization / Specialization

A varying degree of avatar customization and specialization is available in the three games. This ranges from superficial differences in the five EpicWin avatars to four unique character classes in HabitRPG. Two of the three games, HabitRPG and Chore Wars, also offer varying degrees of administrative accounts, allowing for wider use in groups like families or school classes.

Avatar Customization / Specialization			
Game Title	**EpicWin**	**HabitRPG**	**Chore Wars**
Specialized Roles	No	Yes – group plan allows for admin roles. Also see character classes below	Yes (Dungeon Master, Henchling, Apprentice, Exile, NPC, Adventurer)
Character Classes	5, but superficial differences only (Dwarf, Warrior Priestess, Skelly, Warrior, Treeman Berzerker)	4, unlockable after level 10 (Warrior, Healer, Rogue, Mage)	No
Preset Avatar Image Options	5	Numerous mix & match parts, thousands of possibilities	30
Able to upload own avatar image?	No	No	In paid version

Detailed Observations

EpicWin lets players rotate between five different character classes: Dwarf, Warrior Priestess, Skelly, Warrior, and Treeman Berzerker. However these character classes do nothing to change the way the game is played; the difference is purely aesthetic.


HabitRPG offers a vast range of customizable avatars. The player can choose a slim or wide body size, add a flower in their hair, and spend gems to unlock other costume features such as beards or holiday-themed outfits. Additionally, there are four distinct character classes related to each of the core character traits unlockable after level 10 has been reached. These character classes still operate

on the same core game mechanic, that is, a player creates a task, completes it in real life, and then earns the rewards in the game. But the nature of the in-game adventures changes based on the character class.

Class	Warrior	Mage	Healer	Rogue
Image				
Description	• Deals high damage to tasks (reducing redness). • Moderate defense against damage. • Can buff players' STR & CON. • Useful in boss battles and for players with many red tasks.	• Deals moderate damage to tasks. • Gains high experience. • Can buff players' INT, restore MP, and freeze streaks. • Useful in Boss battles and for players who want to level up quickly.	• High defense against damage. • Can heal themselves and party members. • Can buff players' CON. • Useful in parties in general and for players with many Dailies.	• Finds more drops and gold. • Higher chance of dealing critical hits, which grant large GP & XP bonuses. • Can avoid damage from uncompleted Dailies. • Useful in Collection Quests and for players who want to upgrade equipment quickly, level quickly, and find many items.
Primary Attribute	Strength	Intelligence	Constitution	Perception

Lastly, Chore Wars offers a selection of 30 avatar images to choose from. Character specialization happens in the many different group roles offered, such as the Dungeon Master, the player who designs tasks and can promote / demote other adventurers, such as the teacher of a class.
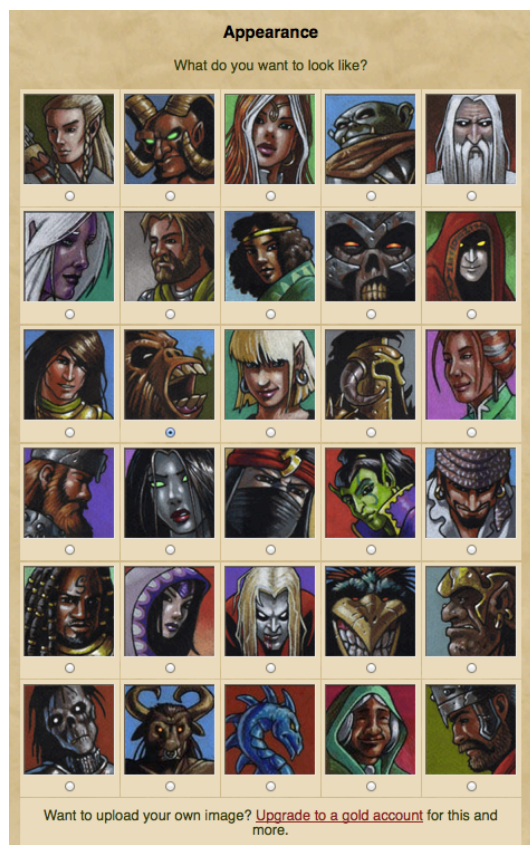
<u>Design Implications</u>

1. Project Bamboo needs to consider how to create intrinsic motivation through avatar customization, as this is offered by all three games. Customization helps create a feeling in the player that they are unique and increases intrinsic motivation to continue to play the game. However it also clearly requires significant time and expertise to create a wide variety of unique options. Project Bamboo should consider how necessary this is for intrinsic motivation. If avatar customization is not the only source of intrinsic motivation, the simple approach of Chore Wars could suit fine.
2. Specialized roles could allow Project Bamboo to suit more real world contexts and character classes could extend the gameplay opportunities. The character classes in HabitRPG have a significant impact on gameplay, elevating the simple gameplay mechanic and allowing complex player-to-player interactions. And the varied administrative role of Chore Wars allows the game to be adapted to a number of real world contexts.

Finding Two
Teach the Game

As the table below makes clear, all three games implement a variety of methods to teach the game to the player. The specific format and platform varies, from a basic FAQ page for EpicWin and Chore Wars to the more complicated user-driven wikia of HabitRPG.

Tutorials			
Game Title	**EpicWin**	**HabitRPG**	**Chore Wars**
Help Manual	Yes (on Facebook)	Yes (online wikia site, not available in mobile app)	Yes (on website under "help")
Pre-loaded quests / adventures	Yes	Yes	Optional
Nature of pre-loaded quests / adventures	Focused explicitly on learning how to use the app	Authentic examples	Authentic examples (15 most common tasks)

<u>Design Implications</u>
However it is done, Project Bamboo needs to teach players how to play the game and provide a resource to find out more information. Just because the game mechanic is based in real life does not mean that the game interface or the gamified RPG is any easier to grasp.

Finding Three
Core Game Mechanics

As all three games rely on the same principle, there is much overlap in the gameplay. The statistic categories are largely synonymous, reminiscent of classic

Dungeons and Dragons character sheets. Tasks, called quests or adventures, reward the player with a mix of experience points, gold, and special items. However there are subtle but key differences worth investigating. The games approach the task categories in distinct ways, from character trait used to type of task to real world location of the task.

Core Game Mechanics			
Game Title	**EpicWin**	**HabitRPG**	**Chore Wars**
Character Statistic Categories	Strength, Stamina, Intellect, Social, Spirit	Strength, Intelligence, Constitution, Perception	Strength, Dexterity, Constitution, Charisma, Intelligence, Wisdom
Task Categories	Strength, Stamina, Intellect, Social, Spirit	Habit, Daily, To-Do	Customizable by Location (eg Bedroom)
Able to view task history	Yes	Yes	Complete history only available in paid version
Earned from each quest / adventure	Gold, EXP, Miles Traveled	EXP, gold, special items	Gold, EXP, randomized items / monsters
EXP per task	Customizable by user (on a level of "epic-ness" from 25 to 300)	Determined by game algorithm, linked to how long the task lies uncompleted	Customizable by user (site suggests making EXP equal to minutes each task takes in real life)

Detailed Observations

In EpicWin, task categories directly correlate to character traits. The player decides what character trait the quest requires (see circled image below). And items discovered are cartoony and quirky.
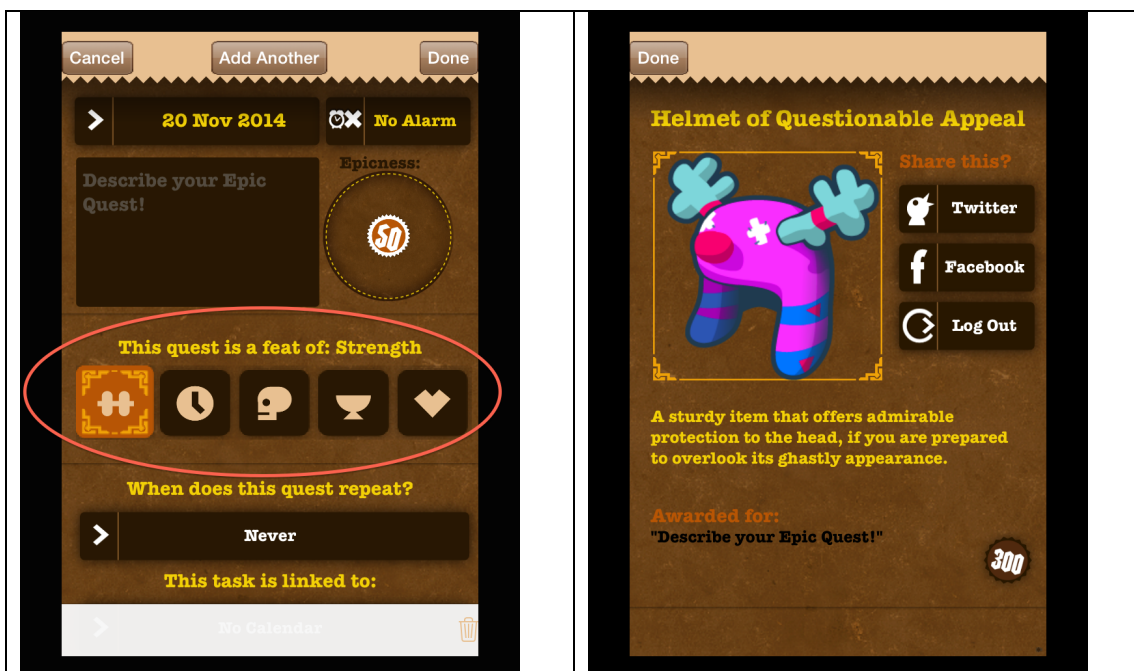
The tasks in HabitRPG, on the other hand, are divided into Habits, Dailies, and To Dos. In the screencap below, sample tasks have been input to illustrate the different categories.
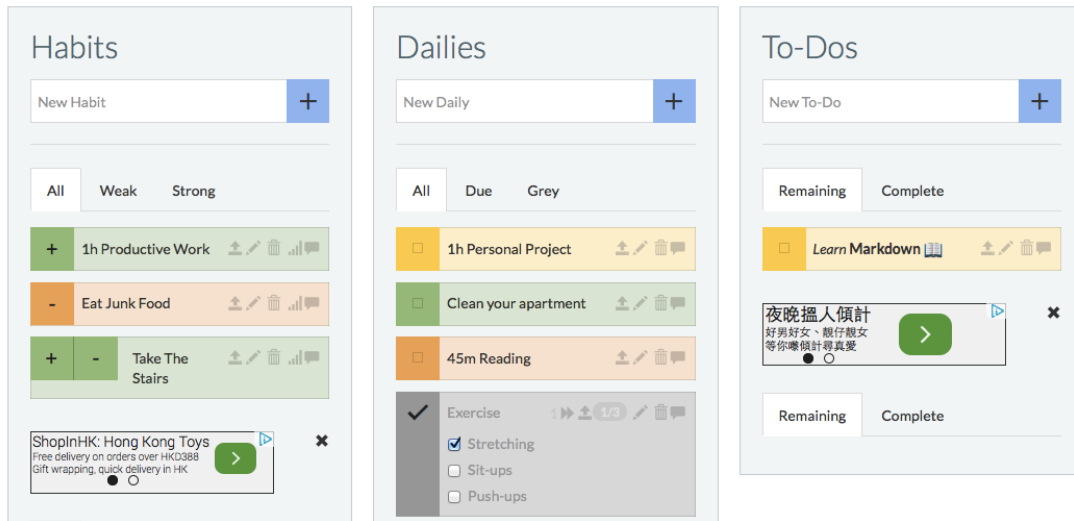
And in Chore Wars, tasks are completely customizable. The game suggests organizing them by real world location, but that's up to the user.

Design Implications

1) If it ain't broke, don't fix it. The Dungeons & Dragons character trait system has been working for decades. Project Bamboo should adopt it or perhaps simplify it, but should think carefully before trying to create a new system.

2) Each game has a different approach to categorizing the real world tasks. Project Bamboo needs to closely examine the types of tasks it will ask players to complete. Are there different categories that would be appropriate for a game based around service?

<u>Finding Four</u>
Data Never Sleeps

In the days of Web 2.0, social media links are everywhere. Where should the data of Project Bamboo connect? How easy does it need to be to share game information on Facebook or Twitter? The three games analyzed in this study present a range of options, from the basic RSS feed offered in Chore Wars, to Facebook and Twitter links in EpicWin, and lastly a plethora of data push options in HabitRPG.

Data			
Game Title	**EpicWin**	**HabitRPG**	**Chore Wars**
Link to Social Media	Yes (Facebook & Twitter)	Yes (Tumblr, Twitter, Facebook)	No
Link to other non-social applications	No	Open Source, Evernote, Google Tasks / Calendar	RSS Feed for groups available
Privacy Settings	App initiates request to post updates on Social Media (Twitter, Facebook) after you find a new item	Private is the default setting	Private is the default setting
Mobile Support	Yes (iOS)	Yes (iOS & Android)	No
Available Offline	Yes	Yes	No

<u>Design Implications:</u>
1) Adding data push options and multiple platforms makes a game more robust. However it's also extremely expensive. Project Bamboo should strongly consider developing the game online only first, and then pursue a second round of funding after working out initial issues.

OVERALL RECOMMENDATIONS

While this analysis has noted a number of design implications, the three below are the most significant.

1) Build customization into the core of the game
2) Consider different character classes and administrative roles
3) Start small

1) Build customization into the core of the game
RPGs offer intrinsic motivation by allowing the player to customize their avatar to suit their own tastes. Project Bamboo needs to examine the costs of different methods of achieving this customization. Customization could be costly and animated, like in EpicWin, but as the customization is superficial it may not increase intrinsic motivation.

2) Consider different character classes and administrative roles
Administrative roles will allow Project Bamboo to adapt easier to different real world contexts. The roles in Chore Wars could be modified for Project Bamboo.

Utilizing different character classes is a much more complicated step, but deserves serious consideration as it can significantly increase the challenge and pleasure of gameplay.

3) Start small

HabitRPG once looked quite similar to Chore Wars. It was a simple mostly text-based dashboard interface. The multi-platform and myriad avatar customization options only took place after the game had solidified its core gameplay mechanic. Project Bamboo should start out small. EpicWin appears to have aimed for a game that had many bells and whistles but missed a number of the core features that make Chore Wars and HabitRPG more robust games.

APPENDICES

Appendix 1: Raw Coding Forms

Game Title	EpicWin	HabitRPG	Chore Wars
Year Published	2010	2012	2007
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Multiplayer	No	Yes	Yes
Visuals & Graphics			
Art Style	Cartoony	Retro / Pixelated	Heavily text based
Sound Effects	Yes	No	No
Background Music	Yes	No	No
Animations	Yes	No	No
Avatar Customization / Specialization			
Specialized Roles	No	Yes – group plan allows for admin roles. Also see character classes	Yes (Dungeon Master, Henchling, Apprentice, Exile, NPC, Adventurer)
Character Classes	Yes but superficial differences only (Dwarf, Warrior Priestess, Skelly, Warrior, Treeman Berzerker)	Yes - after level 10 (Warrior, Healer, Rogue, Mage)	No
Preset Avatar Image Options	5	Numerous mix & match parts, thousands of possibilities	30
Able to upload own avatar image?	No	No	In paid version
Data			
Link to Social Media	Yes (Facebook & Twitter)	Yes (Tumblr, Twitter, Facebook)	No
Link to other non-social applications	No	Open Source, Evernote, Google Tasks / Calendar	RSS Feed for groups available
Privacy Settings	App initiates request to post updates on Social Media (Twitter, Facebook) after you find a new item	Private is the default setting	Private is the default setting
Mobile Support	Yes (iOS)	Yes (iOS & Android)	No
Available Offline	Yes	Yes	No

Tutorials			
Help Manual	Yes (on Facebook)	Yes (online wikia site, not available in mobile app)	Yes (on website under "help")
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