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UAT MS503

Report: The Four C’s

Project Elephants

Introduction

Project Elephants is the working title of a UAT Game Studios project contracted by Junior Achievement of Arizona, a charity focused on furthering financial literacy education among schools throughout Arizona from elementary through high school. The game is a simulation in which the student plays the role of the citizen in a medieval fantasy world and learns firsthand lessons about savings, loans, interest, taxes, and other financial topics.

The Four C’s of entertainment is a concept discussed in Al Lieberman’s and Pat Esgate’s book *The Definitive Guide to Entertainment Marketing: Bringing the Moguls, the Media, and the Magic to the World* which covers four roughly-distinct segments of the development, distribution, and marketing of an entertainment product. The first C, content, defines the actual end-product that the customer interacts with, such as a book, movie, or game. The second C, conduit, defines the method by which the content is distributed to the customer, such as through a disk, the internet, or via live performance. The third C, consumption, defines the means by which the customer interacts with the content, such as via a phone, tablet, or television set. The final C, convergence, defines how the first three C’s interact both within a single product and across multiple disparate products, such as the characters from a movie appearing in a book or game.

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This report will attempt to further break down and define the Four C’s proposed by Lieberman and Esgate, as well as discuss how each C corresponds to aspects of *Project Elephants.* Additionally, this report will offer advice to the project team for *Project Elephants* based on the Four C’s as well as my experience in the game development industry.

Content

According to Lieberman and Esgate, the concept of content refers to the “actual entertainment product that is ultimately delivered to the customer” (Lieberman & Esgate, 2013). For a game project, like *Project Elephants,* the content can safely be interpreted as the whole of the distributed, playable build. In addition to the actual executable, any corresponding files, documentation, and messaging can also be considered content. For example, the readme.txt and license.txt included in a deployed build are not generally read by the end user but are still content designed for the end user and should be treated as such.

In addition to the easily understood concept of content as it refers to external deliverables, content can also refer to internal products as well. For example, the documentation, tools, and code that function to create an external deliverable are generally never delivered to the external customer but are still part of the content that makes up a project. Without this internal content backing it, there would be no external product to be sold to the users.

Project Elephants is a game project, and as such its main executable is the primary content that would be delivered to the end user, but there are many more

aspects of the content that should be valued as well. The codebase and toolchain used to create the build, if managed properly, could easily be used in the future for content updates and possibly for wholly new products focusing on different facets of student education. The tools that designers use internally to design, modify, and test in-game curriculum could someday be bundled as a product deliverable of its own, allowing educators to modify an existing *Project Elephants* build to better suit the specific needs of their students and classroom. A well-maintained codebase, in the long run, is content of at least as high a value as the product delivered to the customer.

Conduit

Per Lieberman and Esgate, the conduit of a project is “the actual process by which a product is distributed” (Lieberman & Esgate, 2013). For a game project like *Project Elephants*, this means the publishing, download, and installation process that gets the game into the hands of the end user. For years this meant cartridges, disks, and going to the store, but now the majority of games are sold and distributed purely online through markets like Steam, Epic, GOG, Itch.io, and the various console- and platform-specific stores. The pipelines facilitating physical releases are still in place, but the majority of game projects released now don’t have the historical developer-publisher dependency wherein a developer was entirely reliant on a publisher to take their product to market, meaning now games can go directly from the developer to the player much quicker and with more open communication.

Another aspect of the game project conduit in the modern age is download speed and bandwidth caps. Until this last decade it was faster for most consumers to drive to a

store and buy a physical game release than it was to download that same game digitally. Now a game project that would have had to be crammed onto multiple disks just a few years ago can be downloaded in under an hour for most consumers, depending on their bandwidth. This means that for many game projects, the *content* is no longer as tightly constrained in size as it used to be in the era of physical releases. Though this is all true for console and PC games, mobile games still pose conduit problems for the game projects, as mobile devices generally have much smaller capacity and relatively much slower download speeds, at least until 5G is fully adopted.

Project Elephants, as a game project, can take advantage of the slew of available digital distribution platforms to reach its target audience. In addition, as a project built using the Unity game engine, *Project Elephants* can easily take advantage of WebGL deployment to distribute the game through a web browser to reach an even wider audience. It would be advantageous to the project as a whole to control the *content* in such a way that it is as easy as possible to deploy effectively using multiple *conduits*. Limiting the overall download size and minimum system requirements is a relatively straightforward way to achieve this.

Consumption

As defined by Lieberman and Esgate, the consumption of a project is the point in which the consumer is "paying for and consuming the product" (Lieberman & Esgate, 2013). The concepts of *consumption* and *conduit* are intrinsically tied together, two sides of the same interaction, especially on a game project. The *consumption* of a game project encompasses where, when, and how it is played, and those factors greatly affect

how the *conduit* and *content* for the project are designed and developed. For example, for a game to be consumed on a PS4 the *conduit* must either use a publisher to distribute physical disks or use Sony’s own digital store interface, and the *content* of the product must be developed and packaged appropriately for the PS4 console’s specifications.

Game projects are uniquely affected by their intended *consumption,* when compared to legacy modes of entertainment because of their interactivity. Whereas a film or eBook can be expected to just scale appropriately to fit on a user’s screen, a game is generally expected to fit itself to and function properly on the user’s device regardless of screen dimensions, size, and aspect ratio. This further complicates the *content* of a game project meant to be consumed across disparate platforms, as the modes of user interaction may vary wildly. Adjusting the *content* of a game project to be properly deployed to a wide variety of platforms often means building in the appropriate handling for mice, keyboards, touch input, gyroscopic input, and various types of controllers.

Project Elephants, which according to the design document, is targeting consumption on both Chrome OS and iOS. Chrome OS is Google’s operating system that powers the Chromebooks used by many schools. It supports mice, keyboards, touch, and pen input, as well as many types of removable controllers. iOS, Apple’s operating system that powers the iPads used by many schools, supports touch input as well as Bluetooth controllers. As times change and different school districts adopt different technology standards, it is likely that these two target platforms will not

adequately provide coverage for the intended end users, and as such it would greatly benefit the project to not couple its *content* too tightly to any one mode of *consumption.*

Two key factors in achieving a reliable and unified experience across disparate modes of consumption are setting up an appropriate interface and abstraction of user interactions. Adopting a unified interface pattern that can appropriately scale to fit any screen size and aspect ratio, and making sure that all new UI/UX designs pass a rigorous compatibility overview prior to their implementation, will go a long way to saving time and stress for the project team when it comes to deploying on different platforms and devices. Setting up a strong abstraction layer for user input will also greatly benefit the project team when targeting different devices, as devices with new modes of input will only require relatively small changes to the abstraction layer instead of all new plumbing throughout the project.

Convergence

Lieberman and Esgate define *convergence* as “the coming together of technology that enables the consumption of entertainment across multiple screens and venues” (Lieberman & Esgate, 2013). This idea takes the concepts of *conduit* and *consumption* and multiplies them together with the power of modern-day technologies, which can result in a near-limitless number of modes of interaction that the customer can have with a single product. In the world of game development, this means preparing the product for delivery through all supported modes, for consumption on all supported platforms, and for marketing to players that fall into each intersection of *conduit* and *consumption*.

The idea of *convergence* also covers nearly everything else related to a product that is not directly the *content, conduit,* or *consumption.* Licensing and merchandising can be large aspects of the *convergence* of a product, using the ideas from the *content* in a new way to create an added revenue stream in addition to providing effective marketing. Products also benefit from *convergence* with outside brands and organizations, such as a retailer benefiting from a successful product launch, which in turn leads for better sales for the product or future products as that retailer now has a larger reach and more resources.

The marketing for *Project Elephants* needs to cover all possible intersections of user and market, treating each based on their needs. Children, as primary consumer, need the fun aspects of the game marketed to them. Parents, teachers, and school districts, as the primary purchasers, need the educational and cost-benefit rewards marketed. *Project Elephants* has no unique, marketable characters but could benefit from them. In addition to the game itself benefiting, Junior Achievement of Arizona would benefit from *Project Elephants* having a unique, stand-out character that could be used in advertising and on the website.

Conclusions

Project Elephants is an educational game product designed for children to learn the basic concepts of financial literacy through play. As such it needs to appeal to children, their parents and teachers, and the school districts that will use it as a teaching tool. It also needs to function properly on the disparate devices used by various school

districts, as well as accommodate students of varied ages and ability. Lastly, it needs to have the staying power to not only remain in schools but grow to new markets.

Children need to be able to easily recognize the game as interesting, and parents, teachers, and staff need to be able to easily recognize the game as beneficial to learning. One such way to gain appeal for both sets of consumers is to have a clear, consistent, and striking presentation. If a static image of the game is appealing, it will be that much easier to catch the attention of customers whether through direct pitches or indirectly through advertising campaigns. This focus on presentation goes deeper than just the hook as well, visual elements are proven to be more effective at teaching than just text, so the game itself should strive to use visual cues where possible to anchor certain ideas into the minds of users.

School districts and individual schools frequently use underpowered and outdated hardware, as it is much cheaper to buy and replace, and as such *Project Elephants* needs to be prepared to run on any platform that the consumer has available. The project should strive for a user interface and experience that are adaptable to many different display sizes and orientations, in addition to being prepared to handle input from any number of different devices. The game should also focus on being as small and efficient as possible, allowing it to be run effectively on any hardware available to the consumer.

Project Elephants’ longevity is directly tied to its success, and that longevity can be increased through a variety of means. Making the actual content of the game more adaptable, by allowing customized lesson plans by teachers, the product’s lifetime and how widely it might be adopted can both be increased. Having a strong, identifiable icon

as a part of the project would also increase the longevity of the product. Since the project is fairly far from completion, there is still time to design and workshop a mascot or some other identifiable figure for the product.

Overall, the team for *Project Elephants* have a lot of options available to create an effective and marketable product. By improving the UI and UX to accommodate more varied consumers and devices, they can expand their target market a great deal. By improving the appeal and recognizability of the game, they can more easily advertise to consumers and further market the product. By creating a means through which teachers and faculty can tailor the lessons of the game to their specific students and classes, the game can extend its lifespan and widen its adoption through the word of mouth of those teachers and through the results of those students.

References

- Junior Achievement of Arizona. (2020, March 26). Retrieved July 05, 2020, from https://www.jaaz.org/
- Lieberman, A., & Esgate, P. (2013). *The definitive guide to entertainment marketing: Bringing the moguls, the media, and the magic to the world*. Upper Saddle River, NJ: Pearson Education.
- Taylor, C. (2019, January 8). *Project Elephants GDD*.