THE SUBSCRIBER ERA

The Subscriber Era of 2032 follows Lloyd, director of UC Berkeley Museums, as he recalls events that shaped the present.

A faint beeping begins to permeate the darkness. The beeping gains volume and breaks through revealing a white wall peppered with glimmering lights. Lloyd yawns and rolls over to set his alarm on snooze state. After bringing himself to, he looks at the snooze options on his ceiling. He thinks 20 minutes should be a good snooze time and raises his arm to point at the option. But before he can finish the gesture, he notices the date—9:00am, August 28, 2032. Adjacent the date window is a list of ToDos and Notifications. Today's top priority is to prepare his presentation for ICOM and National Museum Venture. He thinks about everything he has to tell them and he could feel adrenaline-soaked fear pulse through his body. With his hand frozen in the air, he remembers all that this presentation entails. He rips the covers from his body and rushes to the shower.

As he adjusts the LED dials for water temperature, the 18x24 interface on his shower wall interrupts him and again reminds him of his ToDos and Notifications. After dismissing them Jillian, his digital assistant who follows him wherever he goes, says, "Good morning! You have a busy day, sir. I've noticed two of your ToDos have been ranked highest priority. Would you like me to notify anyone?" Lloyd thinks about his assistants. Natalie, the Academic Director, maintains a list of schools and colleges to which the museum offers content. She also successfully implemented the Museum-Academia Personal Learning Environment (MAPLE)—a personal learning environment, accredited and used by a handful of universities worldwide, and numerous K-12 schools. Wendell, the Technology Director, has created and implemented numerous educational media projects. One of which was the award-winning "Who should I know?"—a discovery module, linked to WikipediaU's database, introducing students to historical figures and artists. Tanya, the Financial Director, successfully merged tuition from MAPLE to the museum's revenue stream. With a long list of successes in mind, he's rather proud of himself. With an opportunity to remind his staff via VeriCloud, he speaks a message that will be passed on to his staff. Moments later as he's meditating under the gentle, flow-

controlled water he receives responses from each of his directors. They all say the same thing, "We're on top of it, Lloyd. I've been preparing my content for a while, now." Amidst the massive system of his museum's network, he thinks about how all of this came to be.

More museums close, admission becomes expensive, and international organizations formed.

He closes his eyes and remembers his childhood. His first museum visit was in 2013. His mother took him to the Smithsonian Museum. This collection of museums was the best in the world. He remembered seeing wax figures representing early man. He saw massive screens displaying data collected from user profiles on Facebook, Youtube, Twitter, Instagram, and many others. He saw highly knowledgeable people guiding classes through each exhibit. Some people seemed to know more about the exhibit than the guide. Just a couple years later, he asked his mother if they could return to see some of the art. She said they don't have the money to make the trip right now. Lloyd wondered how it was possible, since they lived just a short drive away. Lloyd had to ask, "Why, mommy? It's really close to us!" She said entry fees were too expensive for her to afford.

Lloyd learned how this came to be. When Lloyd entered high school in 2017, he watched the news everyday. The ongoing story was that museums were closing and selling their collections to larger acquisition programs. This story became all-too familiar when two of his local museums closed their doors. His friend's dad worked at one of these museums. So, Lloyd asked his friend, Tim, what happened. Tim said his dad's museum sold a collection of their paintings in order to pay their workers. Losing these paintings catalyzed a loss of accreditation and attendance. People came to that museum to see that specific exhibit. Since the exhibit was no longer there, people were less interested in visiting.

Museums form firmer ties with schools and institutions of higher education.

His senior year in High School, 2019, Lloyd saw new classes being offered. There were classes such as, Following Isaac Newton, Visiting Vincent Van Gogh, Conversations with American Presidents, and others. He noticed that like many other classes, they were offered online. The teachers were not very happy about the growing popularity of online classes because more students preferred to take them, rather than in-class lectures. Lloyd asked his mother why this was happening. She told him that schools are having trouble making it through state and federal evaluations. Since the schools need help in improving their test scores, the museums have begun to help by offering classes. Museums were able to offer interactive experiences much better and faster than public schools. All of Lloyds friends wanted to take classes online because they didn't have to sit in a boring lecture. He heard from seniors, just a year before, these classes were really cool because you could use them on your iPad and Apple TV. They also had games that let you explore missions of Alexander the Great and participate in the Boston Tea Party. Moreover, students in these classes were not graded on A-F scale. They could pick which projects they wanted to do, based on the list of acceptable projects for the class. And in some classes, the students could evaluate themselves!

In 2020, Lloyd was making a choice of which college he wanted to attend. Many of the colleges identified themselves based on which local museums were partnered with them. And some colleges, he noticed, were actually museums! He had always been interested in art, so he applied to NYU-Guggenheim. After he was accepted, he met with his Advisor, James, who helped him create his program. James stressed that he would need to know a few things about business. Lloyd's reluctance carried a tinge of curiosity, so he realized it would be a good idea to make money with art. Around this time, the IMF and ICOM formed the International Association for Museum Growth (IAMG). This organization formed a set of initiatives, dedicated to helping museums survive, to each category of museums. Also formed this year, was the International

Council on Intellectual Advance (ICIA). The ICIA was formed–in light of worldwide cuts to education–to support educational institutions' and schools' efforts to deliver accurate information, learner-centered activities, and ways to improve their test scores. Many schools and higher ed institutions leaped to become members of ICIA because they could become part of a larger network to offer innovative programs and increase their access to available funds. In the infancy of the ICIA, it became a prudent issue that in order for education institutions to survive, it needed to be more closely associated with museums—where the educational content was delivered at better quality and significant learning outcomes. After all, the curators and docents often knew more about an artist or historical figure than the K-12 educator. University professors, versed in art and history, found it beneficial for their research if they were directly connected to their subject.

While Lloyd attended NYU-Guggenheim he took classes from NYU's professors of business. His business professors hosted their classes entirely online. Any one-on-one interaction with the professor took place in a university-based videoconferencing software. He took a series of finance classes such as, Financial Management in Facebook and Annuities in Google Analytics. He also took some elective courses such as Crediting Creators: Applications for Creative Commons Licensing and Lessons Learned from the Euro: Macroeconomics. To play with his passion for photography, he purchased an the iSnap–Apple's latest DSLR–and took a class titled, *Marketing your Photography in Instagram*

[T H E U N R A V E L I N G]

The year is 2032. There are many events that formed this scenario. Among them are:

1) With the proliferation of open courseware and free, higher education, institutions put intellectual growth over profit. Governments and institutions around the world have set up programs that enable free education to individuals who subscribe.

2) Through Facebook, Google+, and Crowdfunding programs, museums are able to generate profits to sustain themselves; though those are not the sole means. International organizations are formed to guarantee museums' financial survival and there's a catch—they have to become much closer to schools and institutions of higher education. As a result of this marriage, we see university titles such as "NYU Guggenheim."

3) Museums now have their own server architectures because the data they acquire and need to analyze is profoundly complex. To manage this data they use artificial intelligence.

4) Touch and gesture-based interaction is the dominant method for all platforms.

5) The proliferation in number of collections brought an increase in websites. Each collection presented new opportunities for displaying and marketing it. To make themselves known, museums form firmer partnerships with higher education and K-12 schools.

6) While so many museums closed, they were forced to sell—or surrender—their collections to acquisition programs. These acquisitions built over time and became so large that something had to be done. International organizations are formed (as the scenario states, IAMG is one of these) to reallocate the collections to museums that survived the extinction. The logical connection is that these artifacts would be distributed to museums that have a vested interest in the objects. Since each university will have a focus, their respective museum does, too.

7) As we progress into the next decade, more technological literacy is presumed. People will have the abilities to customize programs and distribute them via numerous outlets for download or to be run online.

DRIVERS

[EDUCATION] Post-Industrial

- Personal Learning Environments
    - Allow the student (subscriber) to take control of their learning, while guided by museum professionals and/or educators.
- Gaming takes center stage for educational simulations.
    - This becomes particularly useful for K-12 schools
- Augmented Reality enhances learning on a broader scale.
- Much of learning takes place online. Degree programs are offered for free.
- Touch and gesture-based interactions are dominant

[FUNDING] Earned

- International organizations established to reallocate artifacts from closed museums and private collectors.
- Facebook, Google+, and other Crowdfunding sources, along with state and local governments provide financial security to museums/universities based on the number of subscribers.