

**UNIVERSITY OF WATERLOO**

Faculty of Mathematics

IMPLEMENTING MODERN CODING STRATEGY RATHER THAN  
PRIMITIVE ONES

Universe Experiences Inc.,

A Division Of Live Nations Entertainment

Toronto, Ontario

Prepared By

Kritin Singhal

1B Computer Science

ID 20731264

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## **Summary**

The report entitled “Implementing Modern Coding Strategy Rather Than Primitive Ones” focuses on using modern coding elements while building up applications for startups, new companies and other existing ones. The report focuses on the negative effects of using primitive coding strategies and its implication on the working development system of Universe.

Founded in Toronto in 2011, Universe is a platform for people to discover and create events all over the world. Following unprecedented growth in 2014, Universe has expanded their offices from Toronto to San Francisco and doubled the size of our team that’s dedicated to serving the needs of our organizers and fans. In 2015, Universe was acquired by Live Nation Entertainment and has continued its rapid growth, doubling the size of the team since the acquisition. In 2016, the company expanded to open offices in New York City and London England, to cover Europe. Together, we’ve built a community of over 32,000 event organizers and hundreds of thousands of fans who are the heart of our company.

## **1.0 Introduction**

Since the advent of twenty first century, we have seen technology evolve in a drastic way. With this change, we have also noticed the shift of our Operating Systems from Linux to MacOS and Microsoft. We also hear about thousands of frameworks evolving each day. Now the big question is, which platform and library stack should we use while building our application or enterprise? Answers can be diverse but this report is going to focus on how to select the right framework and library for you and your project.

The Universe Experiences Inc, under Ticketmaster and Livenation is one of the many startups that have been suffering from the effects of using native coding languages which have now become obsolete. As a result of which, the coding experience of the developer is completely shattered as it takes hours to fix a bug because of poor abstraction and multiple platforms. The modern library stacks have a common arena for all the platforms meaning, code once written can be supported in all the systems which basically

dumps the requirement of writing a similar set of code multiple times for different platforms.

To dive within the current system of Universe, Universe has all its code for the web written in EmberJS which has become obsolete as stronger frameworks like ReactJS have evolved with time. As a result, the need to shift the coding platform from one element to the other has become a necessity. For the mobile, Universe currently operates four different applications, two which runs on iOS and the other two which runs on Android to host two applications that are identical on both the platforms. With native code, the developers had to write separate lines of code to implement the same application under iOS and Android. While if they had used systems like React-Natives earlier, they could have worked it out with just a single set of code and could used it for all the systems, iOS, web, Android, etc.

Even though the issue seems quite much of a personal choice, it is extremely beneficial to be on the right track from the very start. And to help

entrepreneurs and developers, I would like to address this issue for my work term report.

## **2.0 Effects of Primitive Coding**

The negative effects of using primitive coding strategy are plenty. With Universe, one of the worst effects was the debug system. It takes at least one hour to fix even the smallest of issue while working with the primitive code while with the translated ones, it takes just a few minutes.

Secondly, the page loading time increases with the age of the frameworks. The modern frameworks have the capability to load pages faster. Google Search is going to start to penalise websites that takes time to load from July 2018. Universe has most of its platform developed with the primitive code as a result the page loading time is 285384ms which is huge. As a result, the need to translate the code into a modern framework has become a matter that requires urgent action.

### **3.0 Conclusion**

When we started translating the code into a modern framework, we noticed that the loading time has dropped to 2614ms which was ten times faster than before. The page loaded faster and on top of that, the dynamic quality of the page magnified. Thus, we should stick to modern methods of coding with modern frameworks.

### **4.0 References**

1. (Yet to do in APA format)