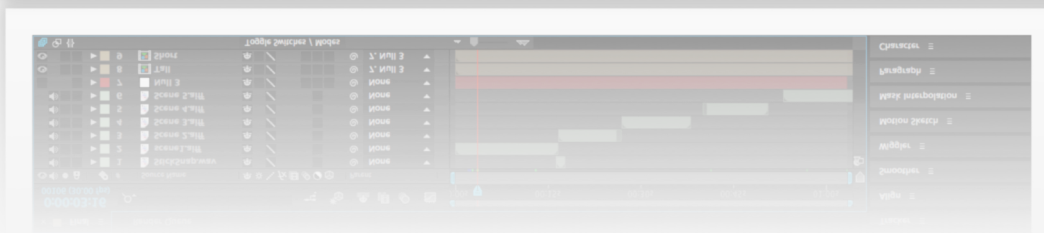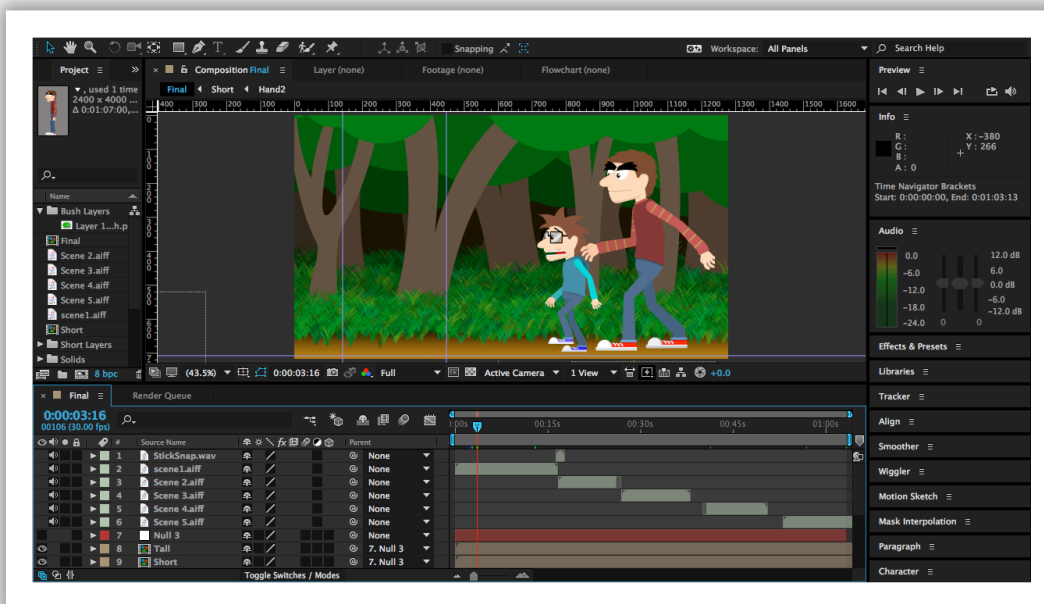# 2D ANIMATION SOFTWARE

Which is Best?

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Introduction

   Man's desire to tell stories has been around since the beginning of the human race. Story telling is deeply rooted in all civilizations and cultures around the world. Over the course of time, the methods of story telling have evolved from simple cave drawings, to what we know today as the motion picture or animation. The contemporary method for creating animation consists of hand drawn images of each individual frame, and then displaying those image sequences in rapid succession. These methods have evolved further into animated footage produced on desktop or laptop computers using software such as Adobe After Effects, Adobe Animate, Autodesk Maya and Toon Boom.

   The focus of the following study will be on two-dimensional animation. While there are many programs for producing two dimensionally animated video content, designers struggle to answer the following question: **which animation program(s) best enable designers to efficiently develop two-dimensionally animated projects?** The purpose of this paper will be to investigate the importance of this question by discussing the importance of creative freedom, why a designer needs an efficient workflow, the competitive nature of the industry, and how animation can be effective in a business environment.

Creative Freedom and the Big 12

   The single most important thing all designers in the field of animation desire is to maximize their creative freedom. Animation and the software provided today allow designers to bring just about anything to life. The only thing that should be limiting the potential of a designer's abilities should be their imagination. The key to creating successful animation is being able to effectively develop creative and captivating

animated footage that can clearly communicate the client's message to their customers. For example, Walt Disney's twelve principles of animation theory references specific elements that are typically required for creating high quality animations; these principles include squash and stretch, anticipation, staging, straight ahead action and pose to pose, follow through and overlapping action, slow in and slow out, arcs, secondary action, timing, exaggeration, solid drawing and appeal (openculture.com, 7 May 2014). All animation programs should be able to equip the designer with the appropriate tools to maximize creative freedom and minimize technological limitations. In other words, animators need software that fully enables them to develop animation that utilizes most if not all of these twelve principles of animation.

Efficient Workflow

One thing that gives animators a competitive edge is having an efficient and effective workflow. Having an animation program that is compatible with other programs is necessary for developing and implementing a good workflow. Graphic elements, developed in other programs should be able to easily be imported into the animation program for animation. Just as important as importing is, exporting capabilities should support a variety of file formats.

Animation for Business

Aside from animated movies, animation has a wide range of uses. The uses for animated video content has expanded to cover not only the film and gaming industries, but the business-marketing sector as well. "Over the last twelve months we've seen a 40% increase in businesses using animation." (threemotion.co.uk, 26 September 2013). The author continues to state that businesses' other primary uses for animation include

animated ads for websites, character animation, engaging animated infographics, 2D animation and 3D animation. Most companies desire to communicate to prospective customers using advertising mediums and methods that appeal to a large target market. As a result, these companies are seeking out engaging, animated content for advertising purposes. "It is widely acknowledged that motion attracts attention in human-computer interaction [and that]... human attention is more sensitive to motion." (Kuisma, Simola, Uusitalo, Öörni, 2010). Advertisement methods that align with the popular trends of today's culture, and therefore gain viewers' attention, are more likely to be successful at attracting new customers.

Competitive Industry or Conclusion

Given the dramatic growth of the digital media industry and the availability of online information, anyone can be an animator. What does this mean for animators? This means it is increasingly becoming more difficult to get a job as an animator. Therefore it is necessary for animators to set themselves apart by having a versatile skillset, efficient workflow, and a healthy knowledge of animation principles and programs.

Conclusion

Adobe Flash Professional is no longer the elite animation software in the industry. Animators across the world are using a variety of different animation programs to complete animated projects. In order to become and remain a competitive and valuable asset in this competitive industry I believe that research must be done to investigate which animation programs have the most to offer animators in order to promote their creative freedom and streamlined workflows. This research should be conducted by interviewing professionals in the industry to find out what software they use, what kinds

of projects they work on, and how well their chosen animation software aids them in the successful completion of those projects. As a student seeking a degree in Digital Media at the University of Houston I believe that it would be highly beneficial to know as much as I can about animation due to the increasing demand and ferocious competition. Animation is my passion. I absolutely love being able to tell a story or idea in the form of an animated video. It is so fascinating to be able an idea or story come to life and to know that people enjoy what I make.

Works Cited

Threemotion.co.uk. (2013, September 26). Top 5 Reasons why and how Businesses use Animation. Retrieved November 2, 2015, from http://threemotion.co.uk/5-reasons-to-use-animation/

Arizan, C. (2014, April 23). The Future of Animation Design is Optimized for Mobile. Retrieved September 26, 2015, from http://blog.visual.ly/the-future-of-animation-design-is-optimized-for-mobile/

Openculture.com. (2014, May 7). Disney's 12 Timeless Principles of Animation. Retrieved November 21, 2015, from http://www.openculture.com/2014/05/disneys-12-timeless-principles-of-animation.html

Kuisma, J., Simola, J., Uusitalo, L., & Öörni, A. (2010). The Effects of Animation and

Format on the Perception and Memory of Online Advertising. *Journal of Interactive

Marketing, 24*(4), 269-282. Retrieved November 27, 2015, from eLearning One Search.

Appendix A: Terminology Definitions

- Squash and Stretch: Used for exaggerated movement or to show weight.

- Anticipation: leads to and prepares viewer for action about to occur.

- Staging: guides viewers attention and conveys the mood of the environment and/or characters.

- Straight Ahead Action/Pose to Pose: Motion that has been broken down into individual poses. A characters key actions happen one after the other.

- Follow Through/Overlapping Action: conveys weight and realism using reactive motion of arms, head, etc. after an action has stopped.

- Slow-In/Slow–Out: a motion starts off quick, slows down in the middle, and speeds up right before it ends to give a realistic, non-robotic motion.

- Arcs: realistic human or animal motion that appears natural.

- Secondary Actions: used to add interest to common movements (head bobbing while walking, hand and body motion while talking.

- Timing: using the right amount of time for each action for realism and emotion.

- Exaggeration: used to aid in deciphering of an action or motion. This can also give a comedic effect.

- Solid Drawing: well drawn/developed characters with well defined and unique

features that. Helps to add interest and entertainment value and brings animation to life. Modeled to work with program rigging.

– Appeal: characters, environment is appealing to look at. Isn't poorly drawn, is easy to look at. Viewer will lose interest in animation that is either overcomplicated or poorly designed.

– 2D Animation: characters and environment appear to be on a single, flat plane and have either little or no depth.

– 3D Animation: characters and environment appear in a three-dimensional space and have well defined depth and thickness.