THE INFLUENCE OF ANIMATION IN CONTEMPORARY SOCIETY: A REVIEW

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Abstract— As Animation is the emerging area in the field of Education as well as in other area also after reviewing many research papers in an Animation we are going to present our review paper on the topic of Animation in today's scenario. Today, animation industry has become the best among all industries, it is not only limited to films, but it As this is the age of technology every area demands effective working using latest technologies. Animation is helpful in many areas like-In the field of Education (child/adult), in the field of Medical, in the field of Entertainment, in the field of Architecture, in the field of E-Learning, in the field of Advertisement. This animation program will meet the demands of the animation industry.

Keywords: Animation, Education, Business, Entertainment, Architecture, E-Learning.

I. INTRODUCTION

The animation program is developing the sunrise sector and higher for the economy, In the recent period, all the credit for the change that has come in any industry today goes to the animation industry, largely due to digitization, due to media and also driven by higher internet. In this way animation, visual effects, and gaming sector has been a rapidly evolving look. And in the same way, animation industry India is also improving towards the world economy. The motivation and skill improvement are the main benefits. The main purpose of animation is to decrease wasting time, useless efforts of learning, and to make the learning more effective or easy learning through animation.

We use Computer Animation Engineering Diploma to cater to the needs of the animation industry. The objectives of animation at the present time are: Indian animation has a good impact on Indian industry. Impact on employment in the animation industry. And Animation has revived our ancient Indian mythology, epics and the legacy that is supposed to contribute richly.

II. COMPUTER ANIMATION

Animation is the process of making a sequence of motion. Its shows the change in every picture through rapid illusions of images and any character of cartoon etc.[1] Animations are attractive because we see the character involved in different just like human beings. God has created man with the power of reasoning and thinking. Similarly animation cartoons are the creation of human beings. He has used animation technique to make the figures move on screen which really look attractive and interesting. Animations are of many types and techniques, some are as follows as Animation, Traditional Animation, 2D Animation, Motion Graphics, Stop motion.

III. THE WAY TO CREATE AN ANIMATION

Now we will try to study this process completely by creating a short animation. Animation does not require that you make full movies; you can make a few seconds or even minutes. To make this way, the four major steps are given below:

Developing Idea & Story

In the line, the characters and stories are expanded to form the animation based on the idea. It consists mainly of scripts and storyboarding designed by the rules of the production pipeline. Creating a successful animation goes through these critical

stages, as any errors here can be rectified over time, and thus we An excellent animation is done.

Visual Development with sketching

In the second stage, usually all the work can be done easily by computer animation soft-ware. It consists of non-character-based frames, designed with backgrounds, shadows and events in mind, and all pieces of art and pieces are compiled and screened together. In this, sound and music are also recorded in the animation by joining all the scenes together. Sound and music is very important here as it will attract the attention of the viewing audience.

Mixing music and pictures is also a high skill art in itself.

Final Rendering

And thus in the end the film is carefully edited to complete and some editing software is needed to complete it as all the pieces are combined into a scene. And prominently some special effects are also given which the viewers find more popular and at the same end, after all the hard work and struggle, the animated film is ready to be seen by the audience The graphical diagram of this process can be seen in Figure 2



Figure 1: The Way to Create an Animation

ADVANTAGES / DISADVANTAGES

The advantages of animation are as follows:

- Effective.
- Easy Learning
- Attractive

The disadvantages of animation are as follows:

- Time Consuming
- Software Problem

IV. LITERATURE REVIEW

In the field of Education (child/adult) —Animation is the creation for student learning it will help in teaching and make teaching interactive and interesting. For example, PowerPoint is the tool which is used by the teachers to create education contents interactive. It can produce very effective educational animations. It will help to students to learn faster and easier. It is more beneficial for teachers when they want to explain difficult subjects. [2, 3]

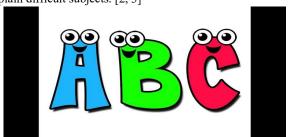


Figure 2:- Learning materials for primary level students

There are different areas in animation and ways in which the animation can be used for learning. For example in Kid's education, Rhymes are designed using animation to make it affective and interesting for the students. It will help students to learn and remember the things easily.

Animation creates interactive learning materials for primary level students or we can say for kid's education. it is shown in fig.1. We used many types of visual animation to create animated learning materials.

E-learning is very effective way to improve skills of student. E-learning are of two types: - visual learning and blending

learning .Visual learning: visual learning is the learning which we learn through internet means to say online. For example: YouTube, nptel. Blended learning:- Blended learning is the learning where the student learns the things with the help of projector with the instructor.

This type of studies is very beneficial for those who want to grab interactive learning.

E-learning means computer-based learning system which is very beneficial to the learning students' actions by presenting contents such as texts, graphics, animation, video, audio etc. [4] We give a example of interactive learning in fig.1



Figure 3 Playing interactive learning materials along with verbal instructions in front of third group of students [11]

The new educational measures new creation in the course of different research projects which are dealing with technology-intensive learning environments which are perfect for increasing the educational in this environments. E-learning is very effective in present time study. The objective of this learning was to expand the knowledge/education; it is all about the effects of teaching and learning with animations. Animation learning is also helpful for the adult students as they are more interested in digital learning compare to traditional learning, so through animation learning means E-learning the students are taking more interest in their studies. [6]

IN THE FIELD OF ENTERTAINMENT

Entertainment is an ideas or a thought that pull the attention and create interest or givers pleasure and delight to the audience, Entertainment is an initial level of using the animation. Animation is used in different areas like movie, games and cartoon etc.

First of all animation was used in entertainment by Disney films, where the cartoons and cartoon animation are made for kids and adult people. In the early times traditional animation is used which is created by frame-by-frame animation. but at present time animation is mostly created by computer animation, through computer animation the animation is created more realistic.

Television channels taking more interest in animated programs now a days and yes, these programs are entertaining as well as we are getting educational messages from these programs. For children, animation programs are more entertaining or by these programs they get more attract compare working in advertising agencies, and few animator are free lance working. Animation technique used

to adults and they grab easily the educational message which is mostly given in animated programs. Although animated shows and short films goal to entertain older audience through the ways of dramatic, comedy or themes. In present time it becomes easy to make animated movies, videos, films etc because of new digital technology. In Some animated movies the animator used commercial music. Many videos and moving picture are used or made by the animator through animation.

IN THE FIELD OF ADVERTISMENT

Advertisement is everything that emphases on a specific product or service. Advertisement is an audio and video communication. Its goal is to enhance the sell and profit.

Animated advertisement to a enjoy of reality. It also promotes the product or service of audience with visual communication. When we create a animated advertisement so the impact comes of that product is benefitted and because of animation the customer take more interest in that advert. One of the most important merit of using animation in creating an advertisement is, it create an atmosphere that can't be created in live action movement, the other advantage of animated advertisement is that it helps in making a long lasting impact on the audience so how the audience remember about that product for a long time.[5]

To making an Advertisement we need some key points which are as follows:-

- It should be attractive.
- It should get Attention of the audience.
- It should have a grabbing power.
- It should be memorable
- It should have an appealing power.

And Animation has the ability to fulfill all the needs what a good advertisement needs. Therefore, most of the work of advertisement is completed in the animation industry that promotes products or service for client companies. Although few animator are

in different areas like animated banners, animated web banner, animated web design, animated tv

commercial but also as a regular feature of website design.

Animation has already established its position in the industry of advertisement. Nowadays it's very common that Animation is probably used in every industry Like - Mobile phone l (Vodapone) Drinking (Frooti, cold tea, fanta), Amul, Cadbury dairy milk, Duracell Cartoon Advertisement.

IN THE FIELD OF ARCHITECTURE

From the last 1980s, 3D computer graphics provide a facility of emergence architecture animation. Animation is used in creating buildings structure in architecture such as CAD tools involves in it and 3D max etc., modules for 3D modeling and rendering (using lights, colors, textures, and camera positions to make images).

Architectural animations are commonly useful for conversation about the space information. Similarly, it can use for showing the natural happening like the movement of light and wind shear. [9, 10]

IN THE FIELD OF MEDICAL

In medical field animation is very useful. The new technology and research developed through animation. In medical techniques there is a problem through which we could not able to understand live action and not even able to understand through traditional way of media but now this problem is solved because the introduction of animation in medical field.

Therefore, the 3d animation stands out in medical sites. Animation is conveying all technologies, science, research etc but among all these it also relate with the new ideas. The interaction between scientists and the animators create the proper and well maintained nice digital story-telling. Through Animation the medical services easily grasp the viewer's point views and then they get their thoughts. Creating Long-Term Brand Visibility & Awareness Day-by-day, the medical healthcare products and services are increasing their sell, but to make our products "brand" attractive and efficient so, we have to develop a strategy to build a long lasting consumers relationships and faith. So, with the help

of 3D medical animation, we can achieve a long time visibility and awareness of our brand.

The use of 3D medical animation in medical field is to make the healthcare communication famous medium. The 3D medical animation shows the broadcasting, websites and many other mini sites. An Animation in medical creates a short medical educational films through which the people understand or know about the physiology or surgiology topics. It's also helpful for creating more interest in audience for medical and it should be increase as an instructional factor for medical professions and with their customers or patient. [10]

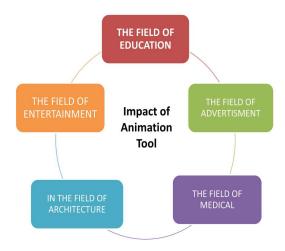


Figure 4 Impact of Animation Tool [Self]

Table 1. Brief comparison to previous work done in the field of animation.

Author/Year	Paper Title	Aim of the Paper	Concise View of the Study (Findings/Problems)
Md Baharul Islam-2014	Child education through animation :An Experimental Study	Importance of animation in Child Education	To develop methods of teaching and learning in the traditional education system. Along with this interactive learning, students can improve their learning, catching, and remembering abilities.
Maha Zeini Al-Saati	The Emergence of Architectural Animation	Importance of animation in architecture	So also, the points of interest of CAD support certain ways of considering and instructing. But questions emerge, like the cinematic depiction of space isn't in itself the experience of space, so would the disregarded methods and suppressed qualities offer assistance cinematic spatial encounter to coordinate the richness of genuine involvement of building space? To help answer this address, we looked at the development of architectural activity from the viewpoint of Marshal McLuhan's media impacts [16]. We looked at what is suppressed, enhanced, and restored, and what takes on diverse meaning. [7]
D. Goel-2017	Effectiveness of use of Animation in Advertising: A Literature Review	Importance of animation in advertisement	How cartoons are replacing human celebrities in advertisements due to the use of technology known as animation to images and objects, and not only that people are getting attracted to animated characters and about animation in it and its type in advertising and Benefits are also discussed
Min Zong- 2020	Research on Character Expression Shaping in Animation Movies	Importance of animation in Entertainment	The most impressive part of an animated film is not only the facial expression but also the soul of the film. That's why the joy, anger, sorrow and joy expressed by the character in the animation work will make people feel equal. That is why it is very important to shape the expressions of the character in it. This article explores expression shaping and case analysis.
Bernhard Preim 2017	Medical animations: a survey and a research agenda	Importance of animation in Medical Animation	Movements, be that as it may, are complex visualizations that can depict a huge number of changes over a brief period of time. Hence, they ought to evaluate their capacity to really provide data. In this paper, we grant a study of transient and non-temporal energized visualizations centered on restorative applications and examine the investigate potential that emerges. To be more broadly utilized, cognitive impediments, e.g. Visual deficiency ought to alter. The need of complexity in worldly movements is an fundamental subject to empower the discovery and elucidation of changes. Pushed procedures can direct client consideration and progress discernment of basic highlights.
Pubrica Acedemy 2019	The Impact of 3D Medical Animaion in the Healthcare Industry Industry	It facilitates communication between doctor and patient	In this, the time taken by the doctor to explain about the disease or medicines to the patients and today he is explaining through medical animation. Because there is a better view than audio for communication. It is known by many studies that people remember 80% of what they hear. For this reason, more than 65% of people who learn visualization, the result of video in medical animation is 19% higher than standard surgical video.

V. RESULT

The data collected is based on a comparison of animation by industry to market. In the various areas mentioned in Table 1, how the animation has been appreciated, similarly the effect of

the animation is also shown in the market, which in Table No 2 gives you is shown.

Table 2. The development of Indian Animation industry

Dollars	0.31	35.3	39.7	44.9	51.1	54.1	66.6	<i>79</i>	95	112	156
Years [–]	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021*	2022*

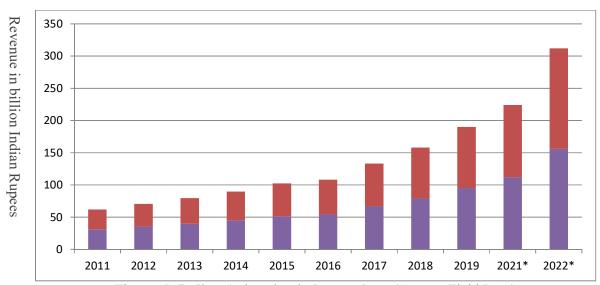


Figure: 5- Indian Animation industry chart (Source: Field Data)

Table 2: India's liveliness and animation industry was esteemed at around 95 billion Indian rupees in 2019, with appraisals of development up to 156 billion rupees by 2022. This was a compound yearly development pace of around 18 percent for the business in the deliberate timeframe.

VI. CONCLUSION

All the Work is done in many industries have are related to animation. So it has been proved that animation is very useful for us in today's growing world. It has a bright scope in educational purposes. For an instance animated videos have proved to increase better grabbing so it is necessary for us to increase and improve the sector of animation. Animated field does not restrict itself to just these; they are also used in the field of advertisement, entertainment like cartoons, gaming etc. Through animation it is easy to represent text in a comprehendible manner for children who are learning at a small age. We accept that this think about is likely to have wide benefits within the field of instruction. Designing educational materials with the assistance of specified program

could be a truly promising opportunity to progress the learning process, considering the sorts of students' miens. Instructors will be able to feel more sure within the introduction of their lessons, additionally, they will ended up more competitive and proficient.

VII. FUTURE SCOPE

In Animation there is a great scope. The Animation industry is developing in a very rapid face. It is now a multibillion dollar industry generated a great deal of employment for those who have the passion for it. Big International studios and companies like Sony pictures, Walt Disney etc. We'll propose the essential factors in making instructive livelinesss. The fundamental standards of plan are partitioned into plan standards (arrangement, adjust, accentuation, solidarity, vicinity, cadence) and plan components (color, line, shape, area, texture, value). Utilizing these center standards and creating sequences of pictures to make the dream of stylish development, that's , magnificence drawn by so-called impartial bends (course A bezier bends, pseudo specific, super

spiral, monotonic ebb and flow capacities with quadratic factorial bends). Development of objects along the way. Hodograph's winding), we expected to form instructive substance considering diverse sorts of understudy miens and inclinations. [12] In this consider we utilize plan and

ToonBoom, to donate an perfect demonstrate of instructive movement. CorelDraw Illustrations Suite X6 is comprehensive computer program for realistic plan, page format and picture altering.

movement program such as CorelDraw Design Suite X6 and

REFERENCES

- [1] The Oxford English Dictionary (Oxford University Press, 1971, Vol 1 pp. 213–4) gives Latin and French origins for the word, including inter (among) + tenir (to hold) as derivations, giving translations of "to hold mutually" or "to hold intertwined" and "to engage, keep occupied, the attention thoughts or time (of a person)". It also provides words like "merry-making", "pleasure", "delight", as well as "to receive as a guest and show hospitality to". It cites a 1490 usage by William Caxton.
- [2] Salomon, G. (2002). Technology and pedagogy: Why don't we see the promised revolution? Educational Technology, 42(2), 71-75.
- [3] Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Disposition, skills, structure training, and met cognitive monitoring. American Psychologist, 53, 449–455.
- [4] Y. Roger, H. Sharp and J. Preece, (2011) "Interaction Design: Beyond Human-Computer interaction" John Wiley & Sons, Inc.
- [5] Sajid Musa, Rushan Ziatdinov, Carol Griffiths "INTRODUCTION TO COMPUTER ANIMATION AND ITS POSSIBLE EDUCATIONAL APPLICATIONS" https://arxiv.org/ftp/arxiv/papers/1312/1312.1824.pdf
- [6] Md. Baharul Islam, Arif Ahmed, Md. Kabirul Islam "Child Education Through Animation: An Experimental Study" International Journal of Computer Graphics & Animation (IJCGA) Vol.4, No.4, October 2014
- [7] Maha Zeini Al-Saati, David Botta, and Robert Woodbury "The Emergence of Architectural Animation" International Scientific Journal Architecture and Engineering http://architecture.scientific-journal.com
- [8] R. Flanagan, "Fantasy, reality & animation, factors in design. in constructing the digital space". SIGRADI, 2000. [9]

- [9] J. Bermudez, "Designing architectural experiences: Using computers to construct temporal 3d narratives". In ACADIA. Seattle, WA, 1995, pp. 139-149
- [10] Laslie Dalisay "polygon Medical animation" http://www.polygonmedical.com/how-3d-medical-animation-benefitsthe-healthcare-industry
- [11] International Journal of Computer Graphics & Animation (IJCGA) Vol.4, No.4, October 2014
- [12] WILSON .T. SEBASTIAN A STUDY ON THE IMPACT OF COMPUTER ANIMATION ON CHILDREN IN THREE CITIES OF KERALA (SYNOPSIS) https://shodhganga.inflibnet.ac.in/bitstream/10603/3286/15/15 synopsis.pdf
- [13] Alan Beesley Animation A Study and Comparison of Concepts and Software Issue https://www.researchgate.net/publication/254591310 Animation_A_Study_and_Comparison_of_Concepts_and_Software_I ssues
- [14] D. Goel1*, R. Upadhyay2 (2017)Effectiveness of use of Animation in Advertising: A Literature Review, Int. J. Sc. Res. in Network Security and Communication IJSRNSC https://www.ijsrnsc.org/pub_paper/IJSRNSC/ 26-IJSRNSC-0228.pdf
- [15] The Impact of 3D Medical Animation in the Healthcare Industry https://pubrica.com/academy/2019/10/12/the-impact-of-3d-medicalanimation-in-the-healthcare-industry/
- [16] M. McLuhan and E. McLuhan, Laws of media: The new science, Toronto: University of Toronto Press, 1988
- [17] abc alphabet songs collection vol. 1" learn the alphabet, phonics songs, nursery rhymes, beavers https://www.youtube.com/watch?v=R-3nQX8EE80