

# Technological Innovation in Architecture

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## Abstract:

The concept of technological innovations in the field of architecture is presented in this article. Here we will see how technology helps to develop one's innovative skills. Here we will come across the surveys undertaken by AEC. This will explain the shifting of BIM from CAD. Here we will discuss about the two forces of technological innovation, difference between incremental and radical innovation. It explains the steps to develop and improve the infrastructure and innovative outcomes. It will also praise the uniqueness of enterprise architecture.

**Keywords :- Innovation in architecture, role of technology in architecture , forces of innovation , AEC survey, CAD to BIM , enterprise architecture (EA).**

## INTRODUCTION

Innovation is necessary to me as an architect to think and come up with new ideas and also to show uniqueness to my work from others .To develop innovation now a days technology plays an important role .With the help of technology one may design his/her idea and represent it. Technology will also help architects to design the structures which they really wanted to design .There are several software which help architects to interpret their ideas. Some of the software are Sketch up , Revit , 3 D studio max, Auto CAD,V-RAY, Photo shop, In design ,Rhino 3 D, archi CAD , Chief architect. Sketch up is an architectural software is used to design 3 D forms . Revit plays a dual role in designing both 2 D and 3 D forms .3 D studio max is used to in architectural visualization studios. Auto CAD is an old dominant player in architectural software industry ,is used to produce representational drawings and 3 D modeling .V- ray is used for realistic visualization . Photo shop is used to design sections ,elevation and plan. In design is used for document creation such as resumes and portfolios . Rhino 3 D is recommended for structural engineering and fabrication to prepare

your 3 D file and 3 D printing . Archi CAD is a tool for architects to do 2D and 3D drafting .Chief architect is CAD software created for home design project.

## LITERARY SURVEY

[1]Architecture, Engineering and Construction (AEC) is facing technological and institutional transformation. This industry is embracing models of sharing, adopting, emerging and fast growing such as Building information modeling (BIM). This survey is of three levels. Level of BIM integration, sustainability and research collaboration. The shifting of CAD to BIM by professional architects, engineers and managers. This creates more challenges and opportunities.[2]Technological innovation is common for innovator those who first introduce a new design. Firms without related capacities fail though the innovation is good. Basic building blocks for profiting from innovation are appropriability, valuable assets and design. This analysis has attempted to undertake[3] recent researches in industrial organization and strategic management. The term innovativeness is the degree

of newness. It is used in new product development. It plays an important role in engineering, marketing management and economics. There are two forces of technological innovation. They are marketing direction and technological direction. It should be developed by many researchers to acquire knowledge. It is preferred for the profit and competitive growth.[4] Innovation is the thing which we can develop from exposure to the whole world. The innovator must receive complement for his work. This complement is necessary for one to do much better. Intellectual property and technology shapes the innovative skills. [5]The two different categories of innovation are incremental and radical innovation. Incremental innovation deals with capacities of organization. Radical innovation induces one to raise a set questions to a new design. The difference between these also involves in designing. This makes the work of architects more challenging. It also useful in technical variety of designs.[6] We find many platforms in many industries. Microsoft is the building block of technological system. These are some of the outcome of ambitious programs. To create standards of the infrastructure and innovative outcomes technical community plays an important role. More innovation is the moto used by many management.[7]Empirical work has three reasons to participate in technical communities. It acts as a vehicle to develop new technologies. The technological changes leads to development in construction of complex pattern in 3 D representation. Each innovation is a practice of a new attempt.[8] AEC creates many zones such as building trading zone with 3 D tools. It strengthens the architectural projects in designs and construction.[9] The term architecture is known for context of building architecture. It also involves the art and science of designs in environment. No other enterprise is as valuable as architecture. Architect are supposed to make changes in planning.[10]The term Enterprise Architecture (EA) is used and explained in different meanings and different terms. But they implies the same meaning. The three major believes are enterprise wide IT platform, enterprise architecture and enterprise environment.

## **FINDINGS**

The term "innovativeness" may be considered as the degree of newness. The two forces of technological innovation are marketing direction and technological direction. Innovation is one which we cannot gain from any technologies but we can develop it from technologies. It helps us to develop our innovative skills. Architecture, engineering and construction (AEC) conducts many surveys regarding recent trends. Building information modeling (BIM), sustainability and virtual learning application are such trends. Incremental innovation and radical innovation are two types of innovation. The difference between incremental and radical innovation is, incremental innovation deals with the capacities of organization where as radical innovation raises a set of questions to a new design. This brings many challenges in the field of architecture. This also creates a opportunity for the young architects to reveal and realize their talents. AEC also provides building trading zones with 3 D tools to improvise the standard of architecture. Architecture enterprise is the only enterprise which provides valuable assets.

## **RECOMMENDATION AND CONCLUSION**

This article is attempted to provide a overview of the technological innovation in the field of architecture. This article explains how innovation and technology plays a vital role in architecture. Architecture is the field in which innovation matters a lot. This innovation can be developed through technologies now a days. This article may be useful for the young aspiring architects to know more about the technologies and software available for architects. This article also explains about Architecture, Engineering and construction (AEC) helps the young architect to face the challenges in their field. Many young aspiring architects has been shifted from CAD to BIM. The other topics it covered were profits from innovation and different forces of innovation. The special case which is covered by this article is that enterprise architecture (EA). Each and every person has own innovation, each and every innovations must be respected and encouraged. AEC should furnish changes in technological innovation and

undertake many surveys to develop the standard of architecture.

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