

# Architectural Innovation

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## Abstract:

This paper contains information about the innovation in architecture. It deals with the technologies used in architecture. It is the only source that helps me compete amongst the world architects. Technology is a treasure given to our generation that helps us to explore many things from one place. It helps me to understand the upgradation in my field and leaves me updated. These programs reduce the time consumption in doing a work; where time management is an important quality expected from an architect. This article also deals with papers submitted by many writers about innovation in architecture.

*Keywords :- Innovation, technology, programming, competitive world, sustainability.*

## INTRODUCTION

Innovation is an important factor for any creator. Being a budding architect it is important for me to be innovative. As innovation is the only keystone that helps me sustain in my field. It is the only source that helps me compete amongst the world architects. Personally being innovative gains me self-satisfaction and self-confidence. It also helps me to bring out my creativity and thus act as a medium to show caste my inner self to the world. Innovation also helps me to increase my income. It also gains me fame and popularity. In our day today routine we hardly get time to explore the world. Art is long and life is short as a result of which we miss to see and experience many things in our life. Technology is a treasure given to our generation that helps us to explore many things from one place. It helps me to understand the upgradation in my field and leaves me updated. The design software programs makes the work of an architect easier. These programs reduces the time consumption in doing a work; where time management is an important quality expected from an architect. Micro Station is a CAD software used to make 2D and 3D designs .Revit (Auto desk Revit) is a building information modeling software that helps architects, MEP engineers and designers to design buildings.

AutoCAD (Commercial computer aided design). It was actually a desktop app running only on micro computers in later part of 19th century but now it is also available as a mobile and web app named AutoCAD 360 .Chief Architect is a software that brings life to home design project . SetchUp is a 3D modeling computer program used for drawing applications. CATIA is a multiplatform software used for CAD, CAM, CAE, PLM, and 3D .Rhinoceros 3D is a 3D computer graphics and CAD application software that uses NURBS mathematical model. MAYA is an application used to produce 3D asserts in architecture. PDMS which is a 3D CAD industry is a multi-user and multi-discipline, engineering controlled design software for engineers and designers. Solid edge is a draft file consisting of 3D model projected to one or more 2D views. ArcGIS is a geographic information system for dealing with geographic information and maps.

## LITERARY SURVEY:

[1]Increasing global emphasis on sustainable approaches to increase cost over the project life cycle. This paper focused on areas of Building Information Modelling (BIM)and sustainability and to develop core competencies n the above subjects.

This paper also deals with internal factors and external factors under AEU disciplines.[2]Susann Maxman says that “sustainable architecture isn’t a prescription ,it is an approach , an attitude .It shouldn’t really have a able .I t should just be an architecture: there is still an existing confusion in ‘green ‘design. Eco technic logic follows techno rational, policy-oriented discourse which gives solution n to environmental problems.[3]This paper is about understanding how existing research can be used to no global architects. This paper also deals with spatiality as well as the interaction with local communities and global architects. As a result local communities become the part of the constellation of global architects. [4]Past twenty years we have been witnessing an increasing economic growth ,social and economic development. This uncoupling has trajectory of innovation to these results . Consideration is also given to growth development in determining the direction of innovation and in the welfare of linages between the globally absolute poor. [5]Becoming “more innovative” has become the psalm for the management gurus ,which is not a sufficient advise. The capture that is insufficient will not only affect the enterprise rather it affects the whole of the society . In a private enterprise economy it is mandatory for the innovators to work over time to earn sufficient capital to start with next research involving innovation.[6]The organizations in todays world are in urgent need to become more innovative as the world markets has become more competitive and dynamic. Innovation holds more importance compared to unique and new ideas. [7]Innovation is an element that is always required for the world . Innovations right from the beginning until now ,the internet that truly makes this world a global village we have always been bounded by proofs of innovative spirit.[8]The vast ideas of innovation produces a difficult background with unpredictable situations . the study reveals that changes in the digital representation can stimulate technological innovations ,work practices and knowledge about multiple communities each of which follows a distinct tempo and path.[9]Architectural knowledge is being destroyed

by the architectural innovation ,and as a result the firms find it difficult to recognize and find it hard to correct as architectural knowledge is embedded in structure and information processing.[10]Creating innovative products and design processes is a vital reality in the modern world .In order to attract the external contributors ,the innovator often gives them access to knowledge about the process.

## **FINDINGS**

Innovation in architecture goes hand in hand. Innovations right from the beginning until now, the internet that truly makes this world a global village we have always been bounded by proofs of innovative spirit. Becoming “more innovative” has become the psalm for the management gurus, which is not a sufficient advice. Creating innovative products and design processes is a vital reality in the modern world. The vast ideas of innovation produces a difficult background with unpredictable situations.

## **CONCLUSION**

According to me innovation is an important factor for any creator .Innovation is playing a very critical role in today’s highly competitive world. To sustain in this field it is necessary to be innovative. Technology is a treasure given to our generation that helps us to explore many things from one place. It helps me to understand the upgradation in my field and leaves me updated .The design software programs makes the work of an architect easier. These programs reduces the time consumption in doing a work; where time management is an important quality expected from an architect.

## **REFERENCE**

1. Becerik-Gerber, B., Gerber, D. J., & Ku, K. (2011). The pace of technological innovation in architecture, engineering, and construction education: integrating recent trends into the curricula. *Journal of Information Technology in Construction (ITcon)*, 16(24), 411-432.
2. Guy, S., & Farmer, G. (2001). Reinterpreting sustainable architecture: the place of

- technology. *Journal of Architectural Education*, 54(3), 140-148..
3. Faulconbridge, J. R. (2010). Global architects: learning and innovation through communities and constellations of practice. *Environment and Planning A*, 42(12), 2842-2858.
  4. chataway, J., Hanlin, R., &apinsy, R. (2014). Inclusive innovation: architecture for policy development, *innovation and development*, 4(1), 33-54.
  5. Pisano, G.P., &Teece,D. J. (2007). Ho to capture value from innovation: shaping intellectual property and industry architecture. *California management review*,50(1), 278-296
  6. Dundon, E. (2002). The seeds of innovation. *American Management Association*.
  7. Dundon, E., &Pattakos, A. N. (2001). Leading the innovation revolution: will the real Spartacus stand up?. *Journal for quantity and participation*, 48-52
  8. Boland Jr, R.J., Lyytinen,K., &Yoo, Y (2007). Wakes of innovation in project networks: the case of digital 3-D representation in architecture, engineering and construction. *Organization science*, 18 (4), 631-647
  9. Henderson, R.M., &Clark,K. B. (1990). Architecture innovation: the reconfiguration of existing product technologies and failure of established firm. *Administrative science quarterly*, 9-30
  10. Henkel, J., Baldwin,C.Y.,& Shih W. (2013). IP modularity: Profiting from innovation by aligning product architecture with intellectual property. *California management review*, 55(4), 65-82.
  11. Karthikeyan, J., & Liu, X. (2017). Global opportunities at indian higher education institutions. *International Journal of Economic Research*, 14(8), 311-320.
  12. ShanmugaSundari, P., Subaji, M., &Karthikeyan, J. (2017). A survey on effective similarity search models and techniques for big data processing in healthcare system. *Research Journal of Pharmacy and Technology*, 10(8), 2677-2684.
  13. Karthikeyan, J., &Rajasekaran, W. C. Role of English teachers in enhancing research thoughts among the Engineering students in the ESL classroom. *Trends and Innovation in Language Teaching*, 93.