

## Abstract

In today's fast growing world, the need for our products and operations to be faster, smarter, smaller, and cheaper is the craze. Engineers frequently make changes to their drawings as potential buyers make modifications; i.e., game of "creative ping-pong".

Years ago the only way to perform these tasks was blueprinting. Now we have Computer Aided Drawing of CAD which, if you ask anyone who's only previous option was to blueprint, the response is that technology and computers have come a long way!

## What is Virtual Prototyping and its Benefits

Use of a computer and software to build and test a prototype

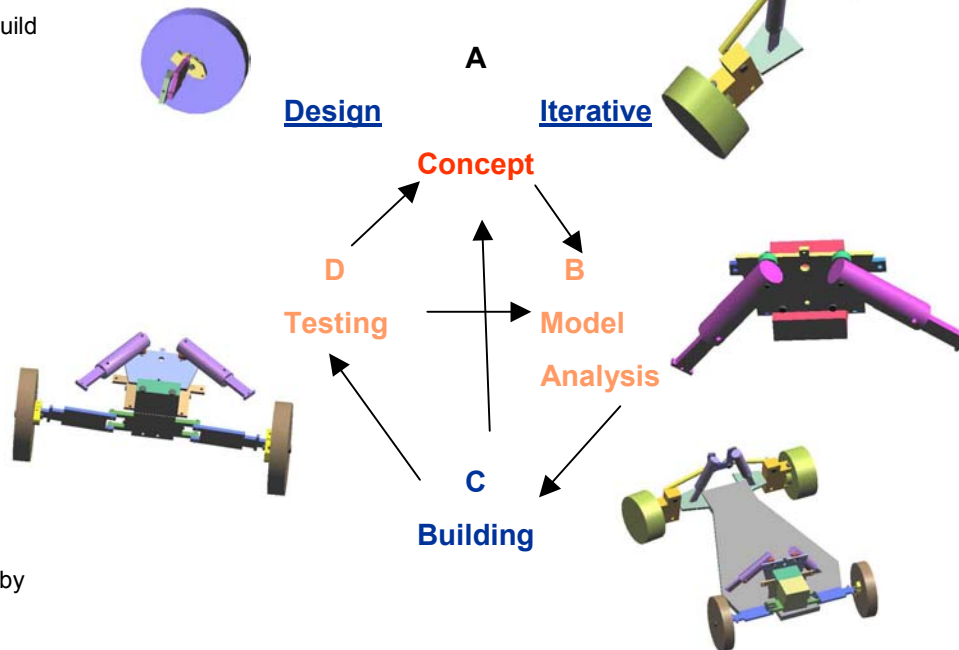
This method:

- Cuts cost
- Reduces development time
- Improves quality

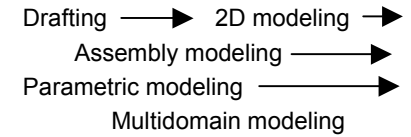
## Why is it so Popular?

- Need for Visualization
- PC based tools have arrived
- PC speeds have increased
- Software performance is better
- Application potential is being driven by requirements for new products

# Virtual Prototyping With CAD



## CAD Development



## CAD Programs

- Solid edge
- Pro Engineer (Pro E)
- Catia
- Microstation
- Solid Works
- Autocad

## Future of Virtual Prototyping

- Virtual Prototyping is headed in all different directions:
  - Computer Animation, Design and Modeling
  - Architecture
  - Artificial Intelligence
  - Computer Aided Manufacturing (C.A.M.)