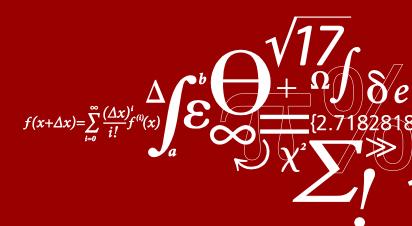
Additive Manufacturing

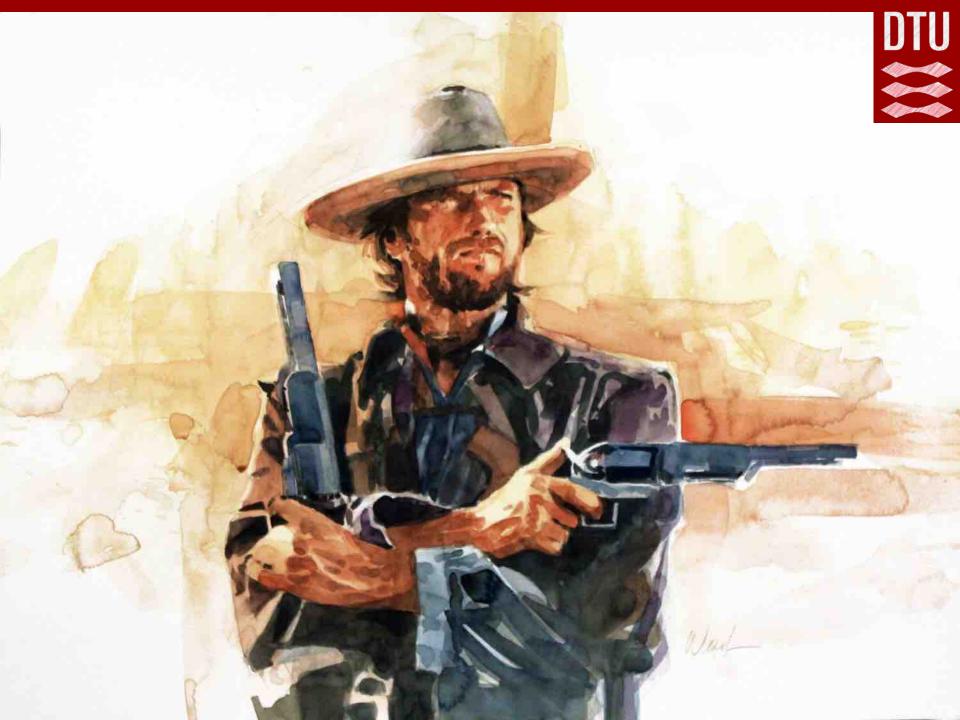
Beyond the hype



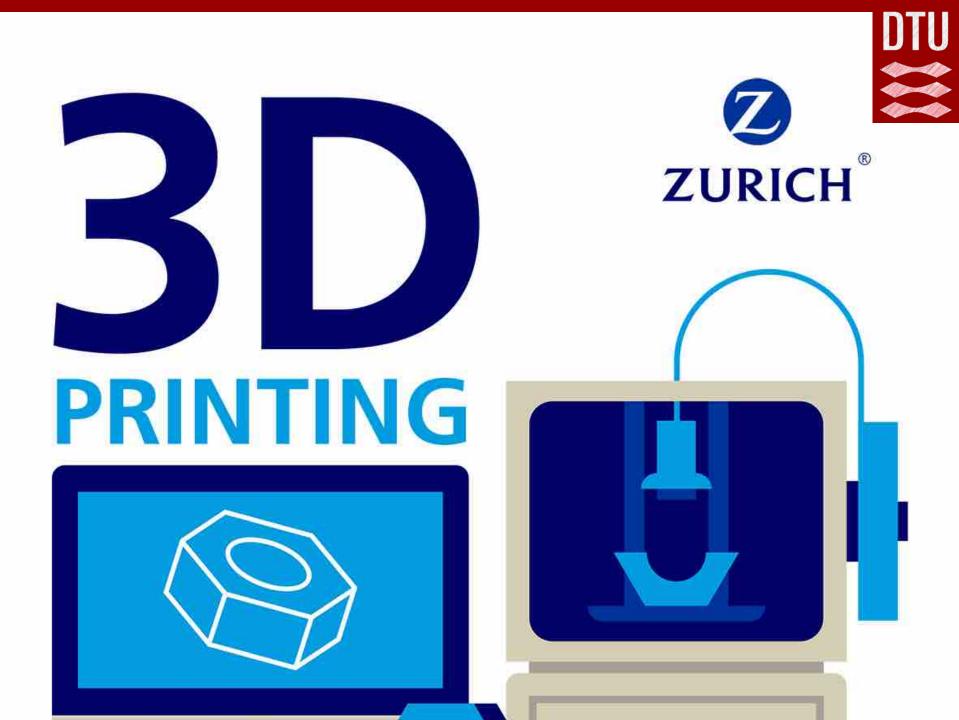
David Bue Pedersen,



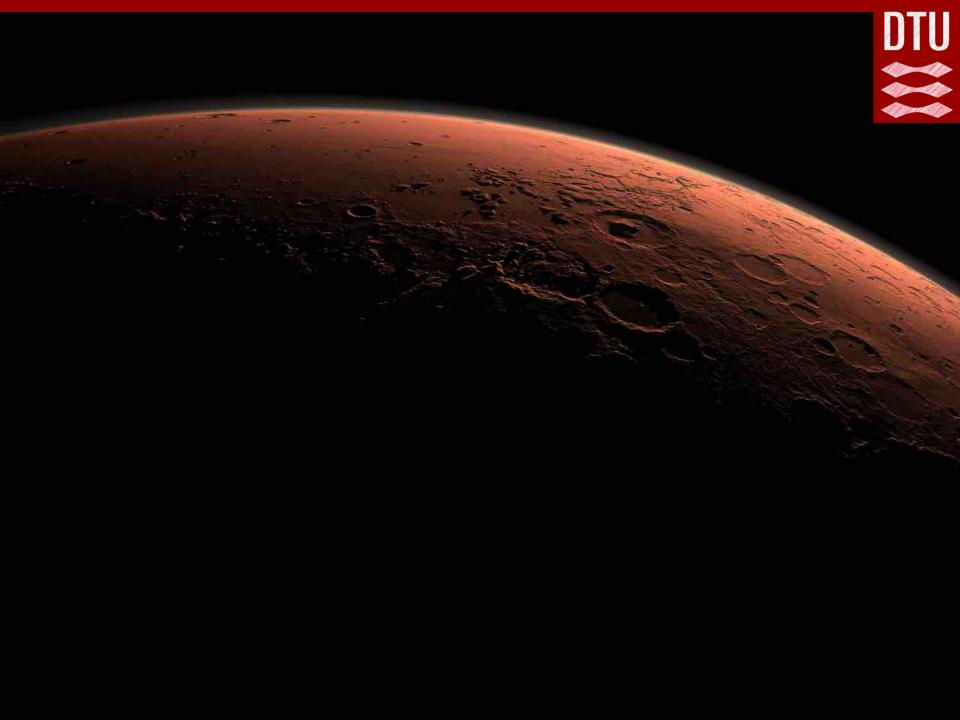




























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TORING YOUR BOXEMENTS!

'Revolutionary'

Machine makes 3-D objects from drawings

By Kathleen Sullivan

Removement Anahassmann Gircust

Wedged into the corner of an unused photo bib at the University of Texas is an ungarnly machine that can transform a computer drawing into a three-dimensional model at the touch of a button.

Sometime next year, the machine, which was developed by a UT graduate student, will make its way out of the lab and into the componential areas. It will leave with the blessing of the UT Board of Regents, which Thursday gave an Austin company exclusive licensing rights to the "revolutionary" new technology embodied in the machine

The liveneing pact power the way turitim first transfer of technology from the University of Texas at Adutio to a commercial venture.

The company that was the right. to market the invention is Nove Automation Corp., whose principal shareholders are an Austin consishing engineer and Nova Graphice International Corp., an Austinbased computer graphics software firm.

The agreement represents a hard fought" victory for UT's fledgling Center for Technology Development and Transfer, said Meg Wilson, coordinator of the center, which was given life during the last Texas Legislature and got See Inventor, A11

Associate Professor Joe Beaman shows some three-dimensional plastic models made by the "selective laser centering" device developed by Carl Deckard, left.

AVES time, labor, material, and expense.

the Public Department of the Department of the Section of the Sect

OBJENT SAFETY LAMPS Statistically of metal, are the outy broad, load, nor orplode. Are ornamental and shoup. A dayt-

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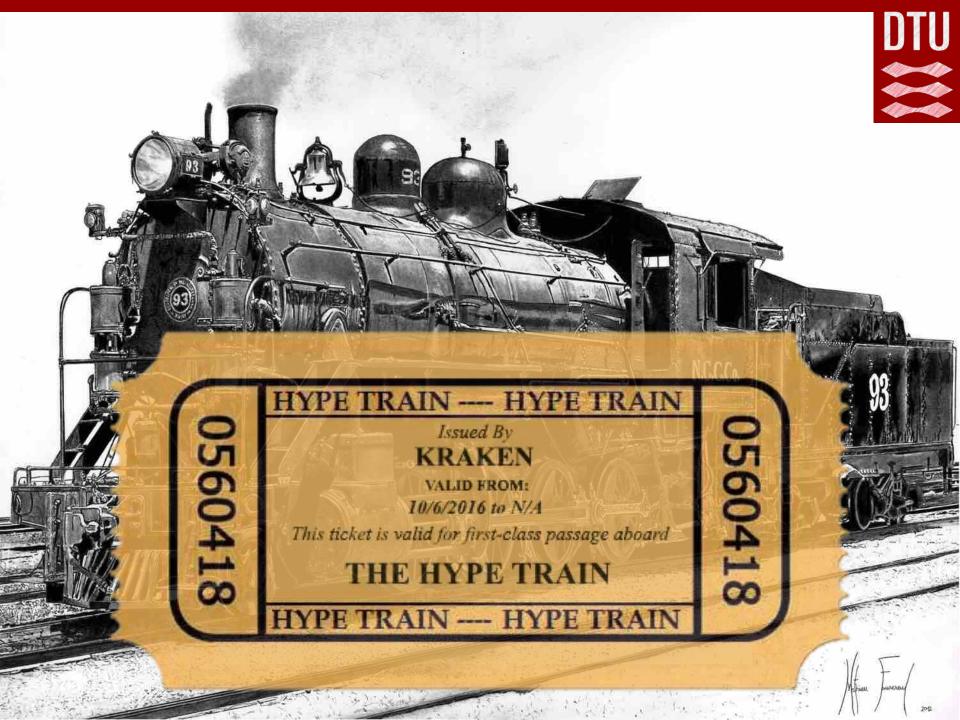
THE PEW, POPULS, AND LATRY DEVELTY,

SILVER FOX.

Ours is the COLLY HOUSE in the city where the struits SILVER FOX is to be found, and we have some fiels of this elegant Fur which can not be surcased abserters in this country.

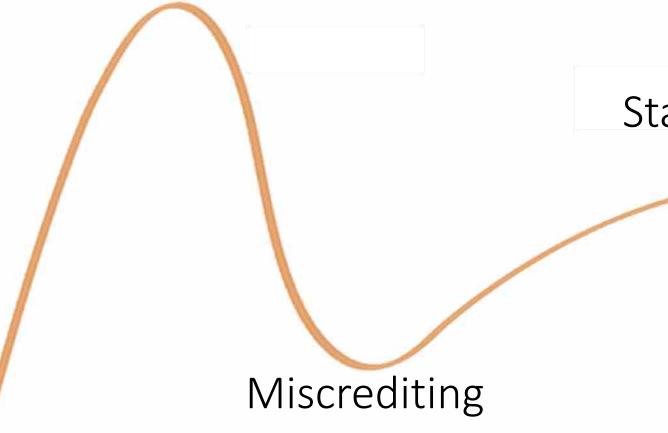
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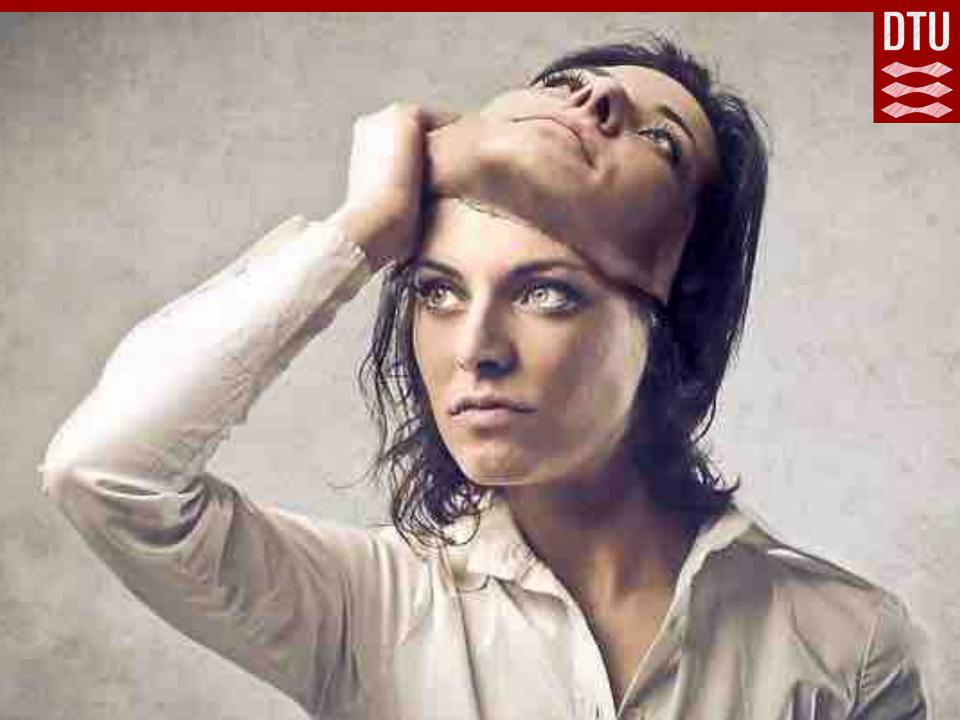


Top of the hype



Stable Growth

Technology Trigger



The Hype of 3D Printing



2011 – Media Picks Up

2009 – Desktop Printing

2017 - Today

2006 – Patents Expire

The Niche of Additive Manufacturing



1995 – Attempts on end-use grade manufacture

Today

1992 – Competing industrial solutions

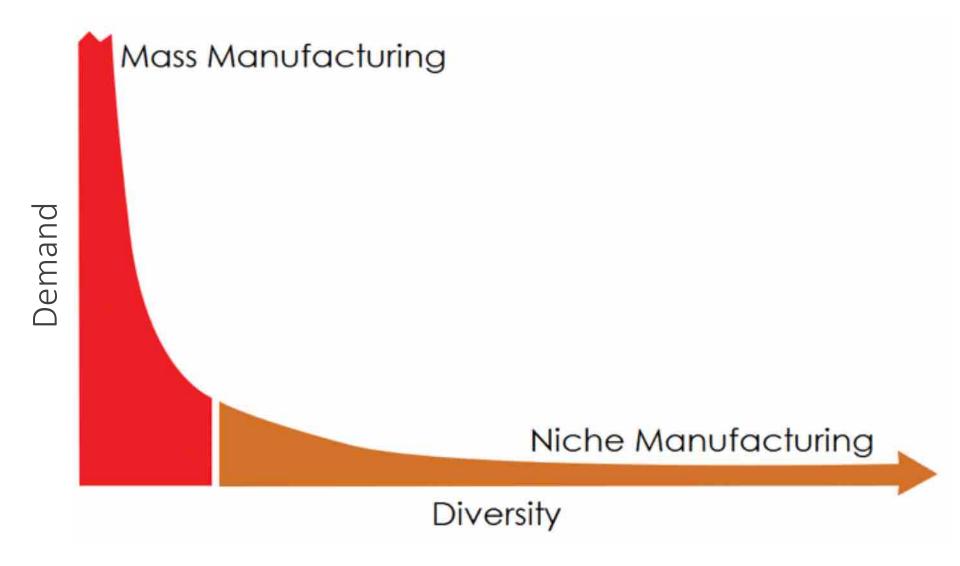
2010 – Aerospace, med-tech

2005 – Early adopters

1989 – First industrially available printer

The Long Tails of Manufacturing







Aerospace

Med-tech

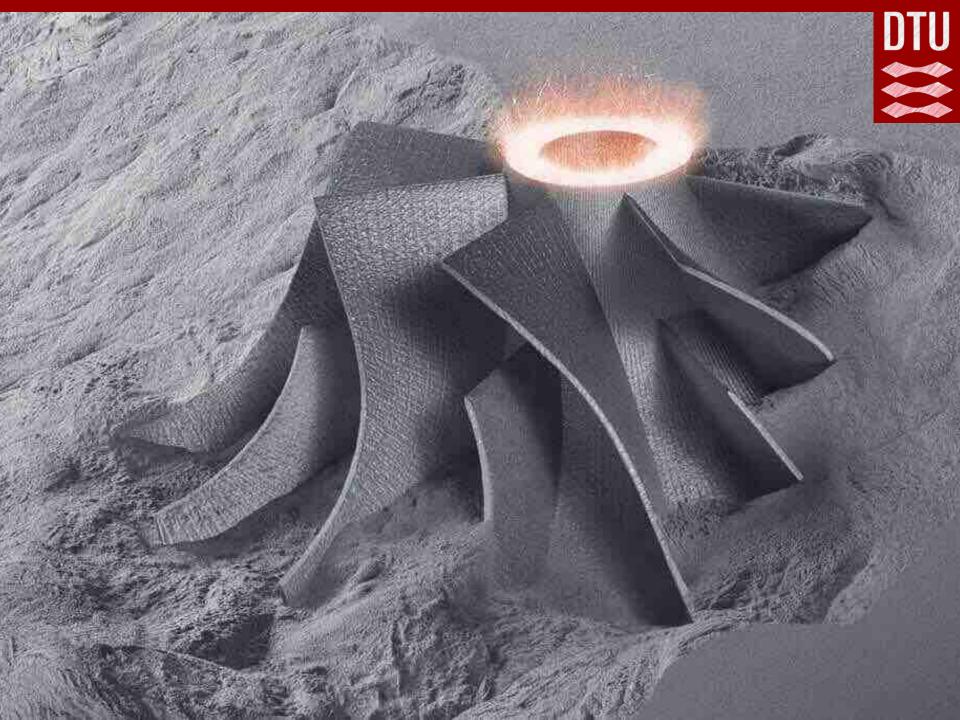
Tooling systems

Small Series Components















Aerospace

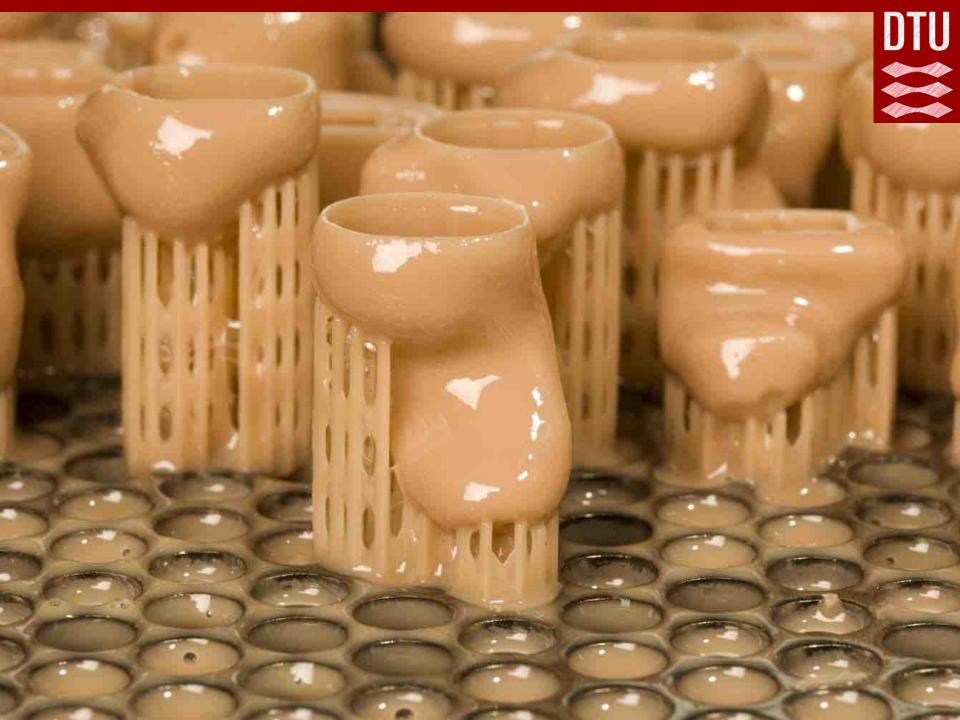
Med-tech

Tooling systems

Small Series Components









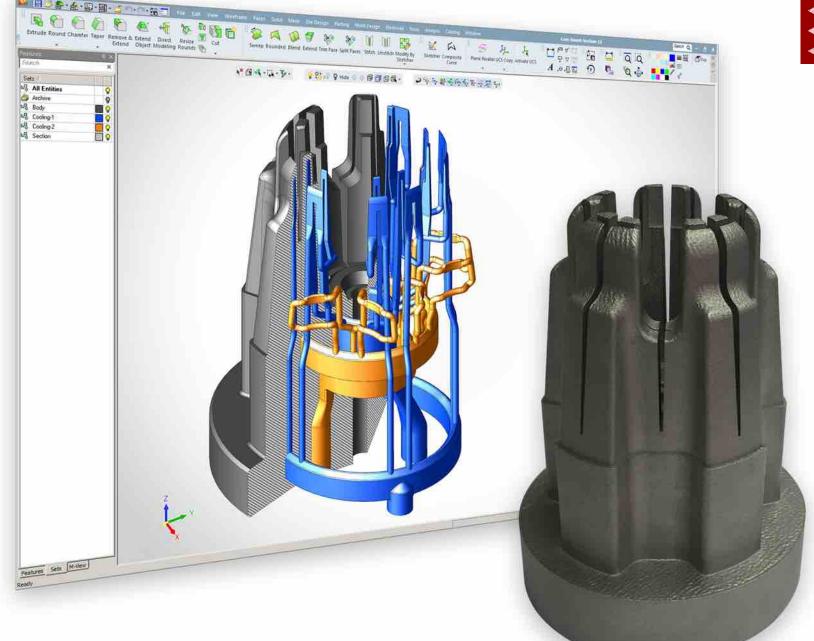
Aerospace

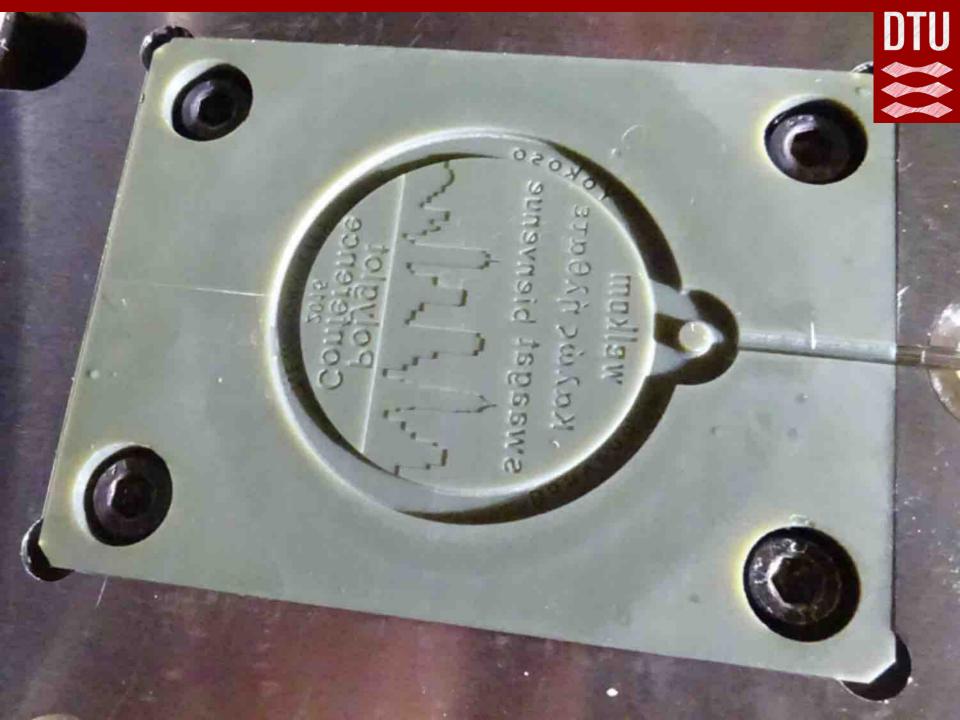
Med-tech

Tooling systems

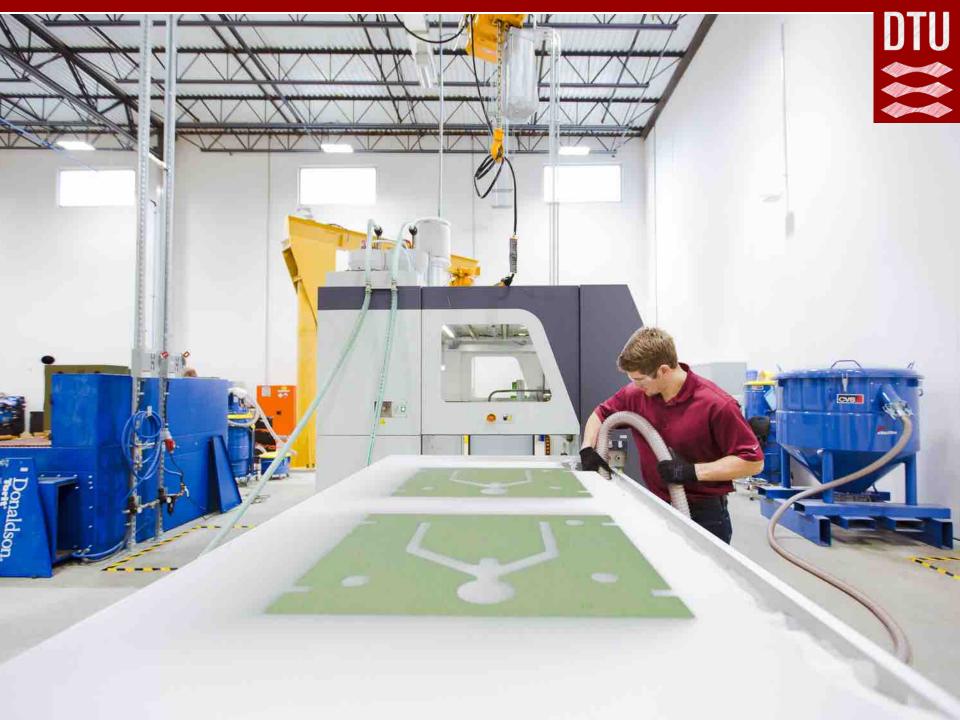
Small Series Components

















Aerospace

Med-tech

Tooling systems

Small Series Components





Aerospace

Med-tech

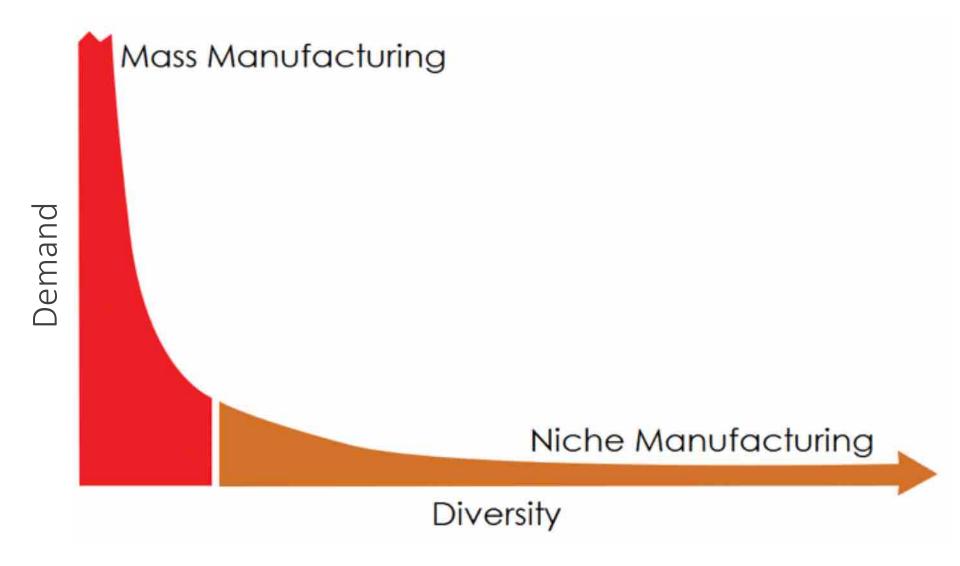
Tooling systems

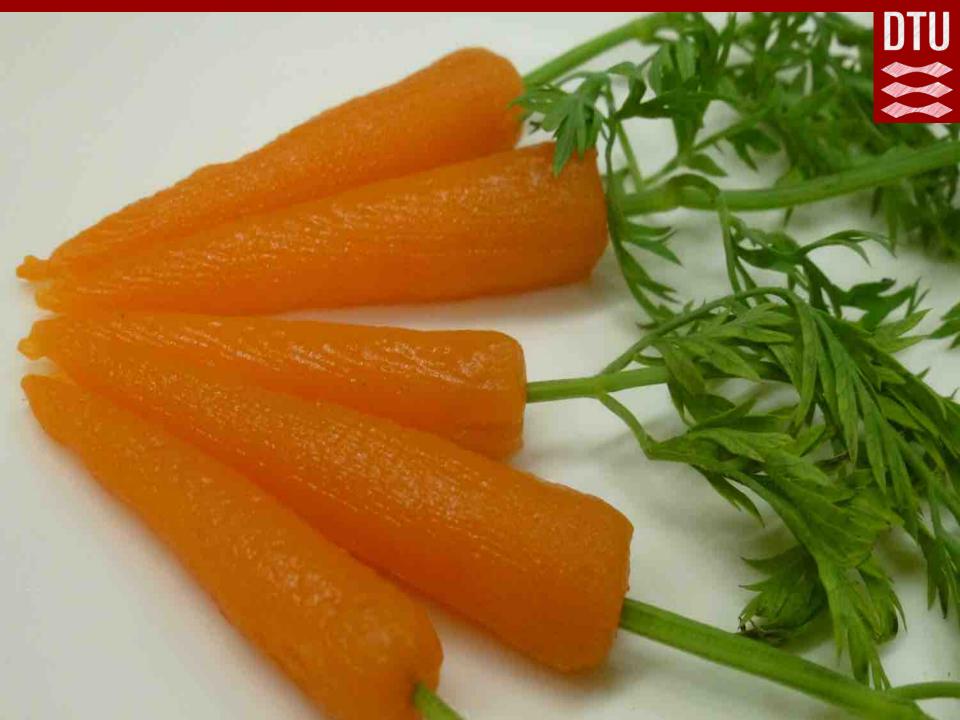
Small Series Components

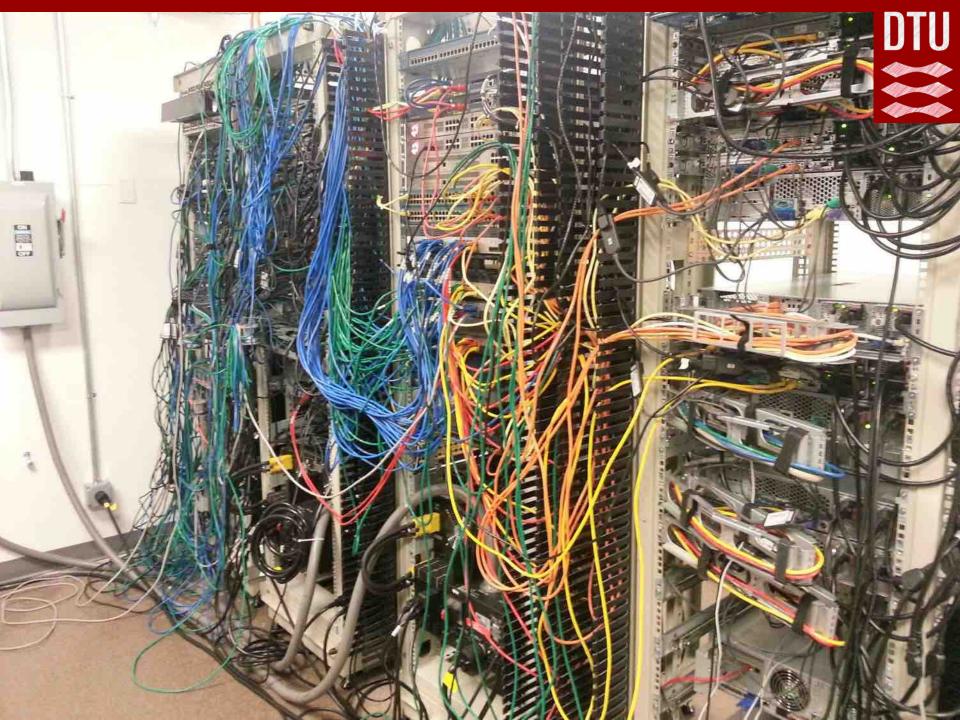


The Long Tails of Manufacturing









Additive Manufacturing

Beyond the hype



David Bue Pedersen,



