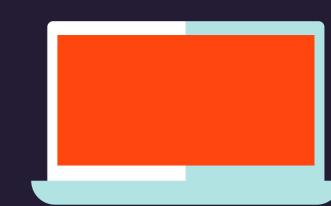
# INDUSTRIAL DESIGN AND MANUFACTURING



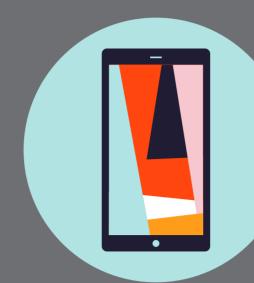
The National Endowment for the Arts supports a wide range of design fields and industries, including industrial design, through grants, research reports, and more. Industrial design involves developing innovative solutions to company- and product-related challenges. It is integral to increasing company value and growing market share in small- to medium-sized manufacturers.



## WHY USE INDUSTRIAL DESIGN?



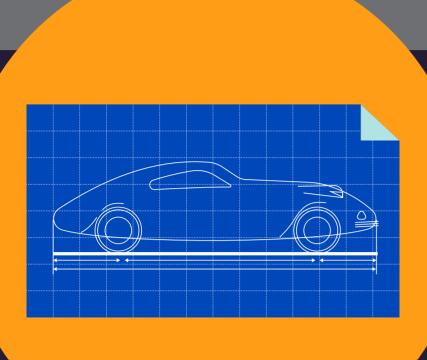
Intensifying global competition among firms



Product success heavily influenced by social media



Integral to user experience and satisfaction



"Awareness of the value of good design is at an all-time high. Good design is recognized as a major differentiator in ensuring product success in a crowded global market. Evidence abounds that more people in business or society understand that."

- Paul Hatch, DesignHouse and Deana McDonagh, University of Illinois

BENEFITS OF INDUSTRIAL DESIGN TO MANUFACTURERS

Lowered cost through improved manufacturing and minimized productto-market time

 $UP~T0~95\%_{\text{of production costs occur at the design stage}}$ 

design patents awarded by the US Patent and Trademark

**INCREASED REVENUE AMONG SMALL MANUFACTURERS** 

17.5% average sales on improved goods and services

165,108

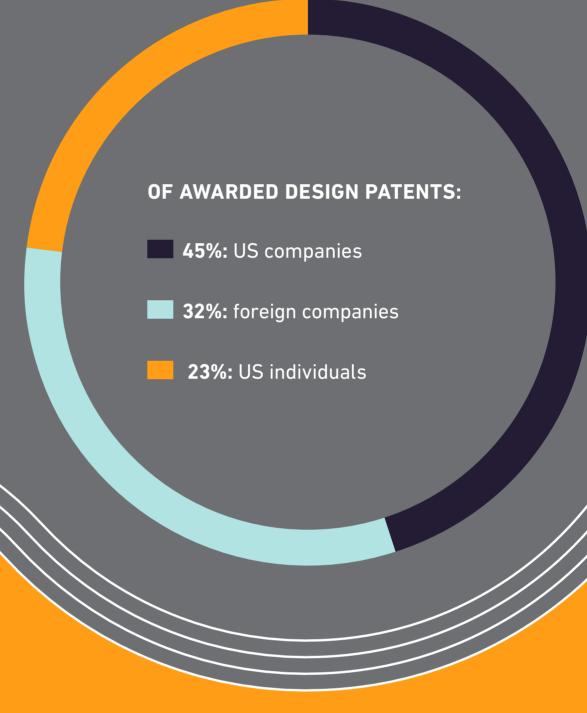
Office between 1998 and 2012

**INCREASED INTEREST IN INNOVATION** 

**INCREASED CORPORATE VALUE** 

between 2004 and 2014

Some design-led companies outperformed the S&P by 219%



**NOTABLE INDUSTRIAL DESIGN PARTNERSHIPS** 



# D-Rev and worldwide manufacturers

**HEALTHCARE:** 

**PRODUCT:** ReMotion Knee, a prosthetic knee joint

**ECONOMIC DEVELOPMENT:** 

Rhode Island Department of Economic



## Development, US Department of Defense, and Rhode Island School of Design

**PRODUCT:** Defense supply-chain enhancements

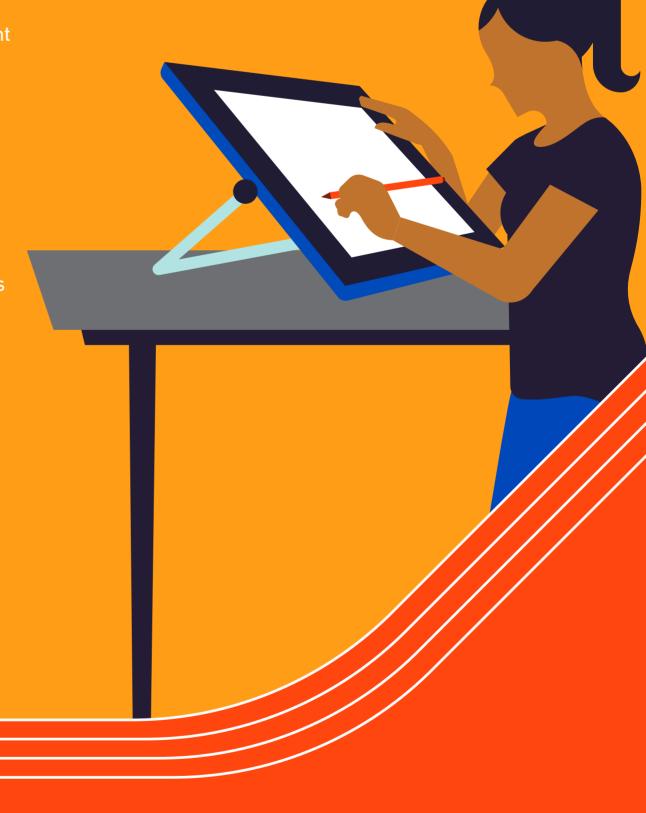
**ENTERTAINMENT:** Frog Design and TouchTunes



# **PRODUCT:** Virtuo, an interactive jukebox

TRANSPORTATION:

TechHelp and BOB Trailers **PRODUCT:** Bike trailers (now owned by Britax)



**EXAMPLE RESOURCES FOR SMALL- TO MEDIUM-SIZED MANUFACTURERS** 



Cleveland Institute of Art; University of Cincinnati College of Design, Architecture, Art, and Planning; Rochester Institute of Technology College of Imaging Arts and Sciences; University of Texas at Austin Center for Integrated Design; Arizona State University Herberger Institute for Design and the Arts

# Labs at Boise State University and Oklahoma State University

DesignHouse Jams

**NETWORKING/EDUCATION EVENTS** 

**National Endowment** for the Arts arts.gov

**ARTS.GOV** 

