Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy

Kate S. Whitefoot, Steve Olson, National Academy of Engineering



Click here if your download doesn"t start automatically

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy

Kate S. Whitefoot, Steve Olson, National Academy of Engineering

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy Kate S. Whitefoot, Steve Olson, National Academy of Engineering

Manufacturing is in a period of dramatic transformation. But in the United States, public and political dialogue is simplistically focused almost entirely on the movement of certain manufacturing jobs overseas to low-wage countries. The true picture is much more complicated, and also more positive, than this dialogue implies.

After years of despair, many observers of US manufacturing are now more optimistic. A recent uptick in manufacturing employment and output in the United States is one factor they cite, but the main reasons for optimism are much more fundamental. Manufacturing is changing in ways that may favor American ingenuity. Rapidly advancing technologies in areas such as biomanufacturing, robotics, smart sensors, cloud-based computing, and nanotechnology have transformed not only the factory floor but also the way products are invented and designed, putting a premium on continual innovation and highly skilled workers. A shift in manufacturing toward smaller runs and custom-designed products is favoring agile and adaptable workplaces, business models, and employees, all of which have become a specialty in the United States. Future manufacturing will involve a global supply web, but the United States has a potentially great advantage because of our tight connections among innovations, design, and manufacturing and also our ability to integrate products and services.

The National Academy of Engineering has been concerned about the issues surrounding manufacturing and is excited by the prospect of dramatic change. On June 11-12, 2012, it hosted a workshop in Washington, DC, to discuss the new world of manufacturing and how to position the United States to thrive in this world. The workshop steering committee focused on two particular goals. First, presenters and participants were to examine not just manufacturing but the broad array of activities that are inherently associated with manufacturing, including innovation and design. Second, the committee wanted to focus not just on making things but on making value, since value is the quality that will underlie high-paying jobs in America's future. *Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy* summarizes the workshop and the topics discussed by participants.

Download Making Value: Integrating Manufacturing, Design, and In ...pdf

<u>Read Online Making Value: Integrating Manufacturing, Design, and ...pdf</u>

Download and Read Free Online Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy Kate S. Whitefoot, Steve Olson, National Academy of

Engineering

Download and Read Free Online Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy Kate S. Whitefoot, Steve Olson, National Academy of Engineering

From reader reviews:

Edward Foland:

Are you kind of stressful person, only have 10 as well as 15 minute in your time to upgrading your mind ability or thinking skill actually analytical thinking? Then you have problem with the book compared to can satisfy your short period of time to read it because pretty much everything time you only find reserve that need more time to be learn. Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy can be your answer as it can be read by you who have those short spare time problems.

Duane Sills:

Reading a book to be new life style in this yr; every people loves to go through a book. When you study a book you can get a lot of benefit. When you read guides, you can improve your knowledge, mainly because book has a lot of information into it. The information that you will get depend on what types of book that you have read. If you want to get information about your research, you can read education books, but if you want to entertain yourself read a fiction books, such us novel, comics, as well as soon. The Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy will give you a new experience in examining a book.

Carey Gilliam:

A lot of e-book has printed but it is different. You can get it by net on social media. You can choose the most effective book for you, science, comic, novel, or whatever by simply searching from it. It is identified as of book Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy. You can contribute your knowledge by it. Without making the printed book, it can add your knowledge and make a person happier to read. It is most crucial that, you must aware about reserve. It can bring you from one place to other place.

Gary Campbell:

Reading a e-book make you to get more knowledge from this. You can take knowledge and information from the book. Book is prepared or printed or descriptive from each source that will filled update of news. Within this modern era like right now, many ways to get information are available for a person. From media social like newspaper, magazines, science e-book, encyclopedia, reference book, story and comic. You can add your knowledge by that book. Are you hip to spend your spare time to spread out your book? Or just seeking the Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy when you required it?

Download and Read Online Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy Kate S. Whitefoot, Steve Olson, National Academy of Engineering #XF70W8E4QCB

Read Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering for online ebook

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering books to read online.

Online Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering ebook PDF download

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering Doc

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering Mobipocket

Making Value: Integrating Manufacturing, Design, and Innovation to Thrive in the Changing Global Economy by Kate S. Whitefoot, Steve Olson, National Academy of Engineering EPub