

About VALUE - D. Melton, 2020 KEEN National Conference, Jan 2-4 2020

Engineering Unleashed Card with Slides and Video



496	better	r
497	difference	n
498	thank	v
499	receive	v
500	value	n



of Engineering, 2017

A shared mission to graduate engineers with an entrepreneurial mindset so they can create personal, economic, and societal value through a lifetime of meaningful work.



CREATING VALUE

IDENTIFY unexpected opportunities to create extraordinary value

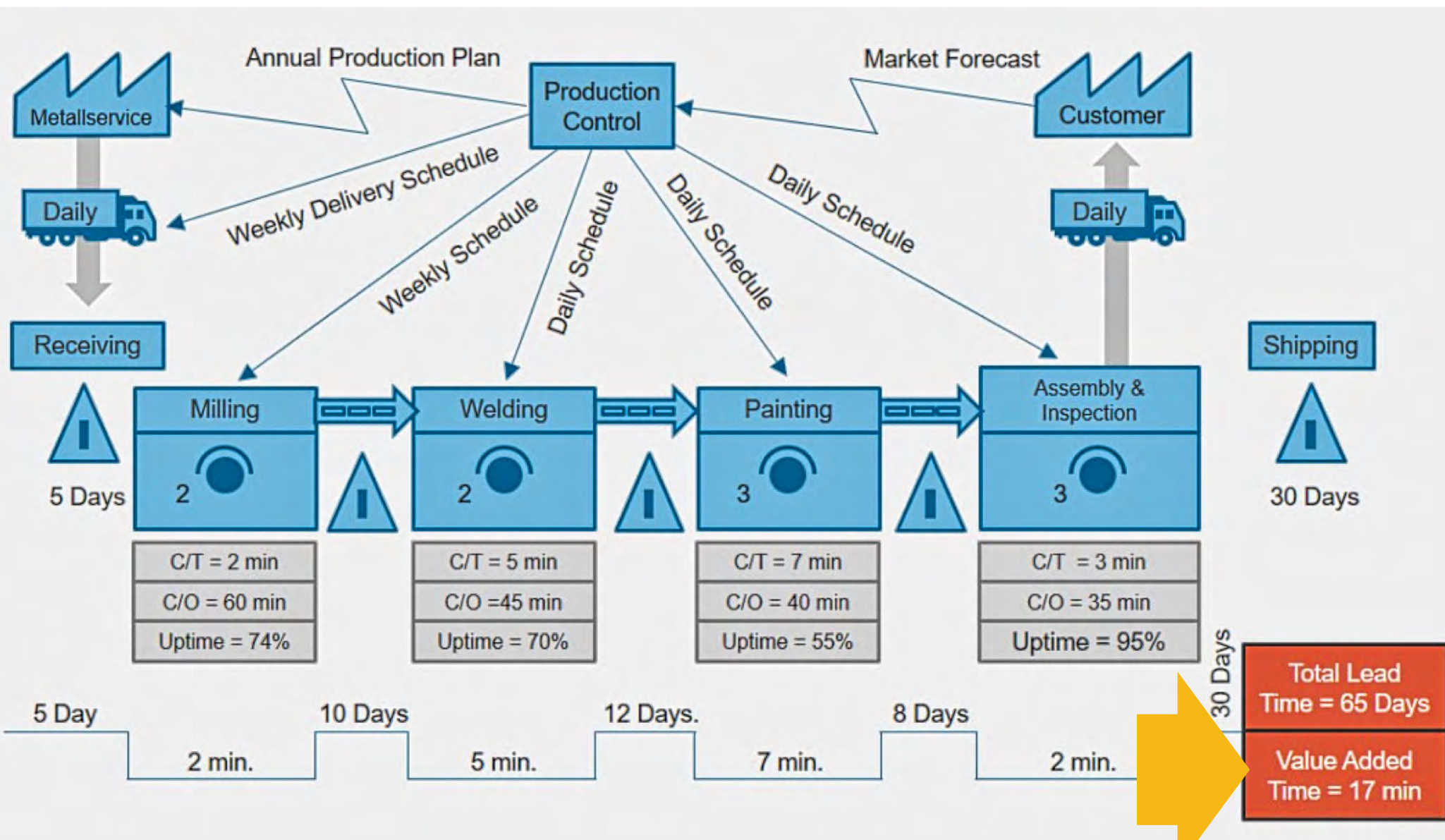
PERSIST through and learn from failure

value
the visual dictionary

Noun
a numerical quantity measured or assigned or computed
the quality (positive or negative) that renders something desirable or valuable
the amount (of money or goods or services) that is considered to be a fair equivalent for something else
relative darkness or lightness of a color
(music) the relative duration of a musical note
an ideal accepted by some individual or group
an attribute of color
the quality that renders something desirable or valuable or useful
a quantity expressed as a number
the idea of something that is perfect; something that one hopes to attain

Verb
fix or determine the value of; assign a value to
hold dear
regard highly; think much of
evaluate or estimate the nature, quality, ability, extent, or significance of
estimate the value of
fix conclusively or authoritatively











VALUE

7	26	45	48	70
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12	25	33	51	75
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2	21	***** FREE *****	50	65
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11	17	37	49	61
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5	19	32	57	64
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START WITH FREE SPACE IN CENTRE
5 NUMBERS IN ANY LINE WINS
12 DIFFERENT WAYS TO WIN

Value-to-Society

Quantification and monetary valuation of BASF's impacts on society



AIAA Space 2010
Sept. 2010, Anaheim, CA

Aligning Perspectives and Methods for Value-Driven Design

Revision 10/06/2010

Adam M. Ross^{*}, M. Gregory O'Neill[†], Daniel E. Hastings[‡], Donna H. Rhodes[§]
Massachusetts Institute of Technology, Cambridge, MA, 02139

Recent years have seen a push to use explicit consideration of societal impacts in design. This paper...

THESIS FOR THE DEGREE OF DOCTOR OF ENGINEERING

Value Creation as Educational Practice

- Towards a new Educational Philosophy grounded in Entrepreneurship?

MARTIN LACKÉUS



A Spiral Approach to Teach Value Propositions Using the NABC Framework in Core Engineering Courses

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Creating Value: An Alternate View of Meaning and Worth

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Session Objectives
As a result of participating in this workshop, instructors will be able to...
Describe a revenue-neutral conception of value.
Develop a matrix model of evaluating value for their students.

tion, financing, and sustainability) (e.g., communication, teamwork, the ability to spot emerging education, therefore, must teach to be entrepreneurially minded so creating value [6].

ded engineer should be curious important problems and explore address those problems. The market requires connecting and including resources, information, and sustainable in the market consumers. Value proposition attract the talent and resources

ulating value propositions.

THE
NICOMACHEAN ETHICS
OF
ARISTOTLE

TRANSLATED BY
F. H. PETERS, M.A.
FELLOW OF UNIVERSITY COLLEGE, OXFORD

TENTH EDITION
Revised and adapted to Bywater's Text



LONDON
KEGAN PAUL, TRENCH, TRÜBNER & CO., LTD.
DRYDEN HOUSE, GERRARD STREET, W.
1906

GENERAL THEORY OF VALUE

ITS MEANING AND BASIC PRINCIPLES
CONSTRUED IN TERMS OF INTEREST

Maslow's B-values
Farther Reaches of Human Nature (1971)

The Farther Reaches of Human Nature, New York:
Psychology. (cf. *Toward a Psychology of Being*, 1962,
in the Peak-Experiences.)

Dimensions of the World Perceived in Peak

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rated completeness).

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order, no

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BY
PH BARTO
PROFESSOR OF
HARVARD UNI

“The value of a thing is just
as much as it will bring.”
— Samuel Butler

“As values, all commodities
are only definite masses of
congealed labour time.”
— Karl Marx

Theory of Valuation

John Dewey

I. Its Problems

A skeptically inclined person viewing the present state of the
discussion of valuing and values might find reason for conclud-
ing that a great ado is being made about very little, possibly
about nothing at all. For the existing state of discussion shows
not only that there is a great difference of opinion about the
proper theoretical interpretation of the existing state of things,
but also that the existing state of things is itself a result of the
existing state of opinion.

**GARAGE
SALE**

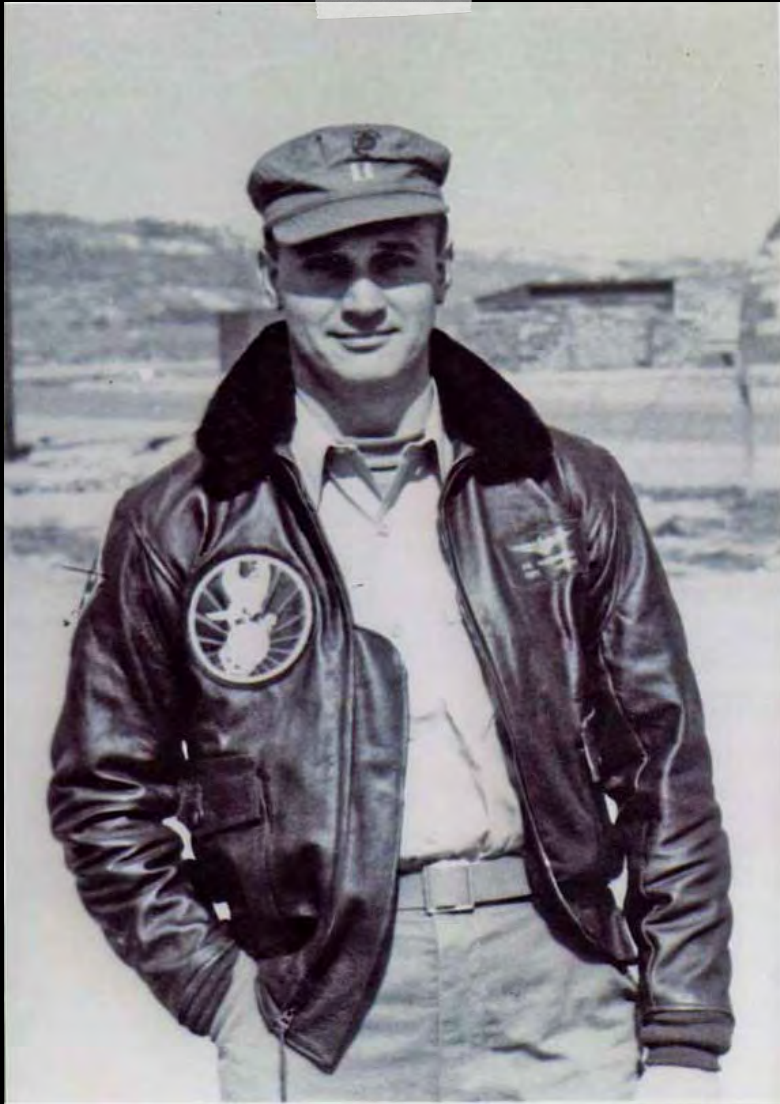












VALUE

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VALUE



VALUE

Exchange

A small circular icon representing a speaker, with a central dot.

48

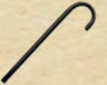


VALUE

Exchange



Instrumental





FEIPIN G. CAINA 1946 F4U-4

VALUE

Exchange



Instrumental



Intrinsic

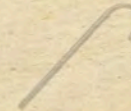


VALUE

Exchange



Instrumental



Intrinsic



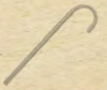


VALUE

Exchange



Instrumental



Intrinsic



Symbolic, etc.



VALUE

Exchange



Instrumental



Intrinsic



Symbolic, etc.





This is an optometrist in sub-Saharan Africa.
And the 1 million people they serve.



D N R V P

**Over one billion people
would see their lives change
if they had glasses**

**P D V H Z
K F U E R
V P D C N
E Z H K U
H D P V C
K N U F R
Z K H E P
L Y P E N**



Joshua Silver

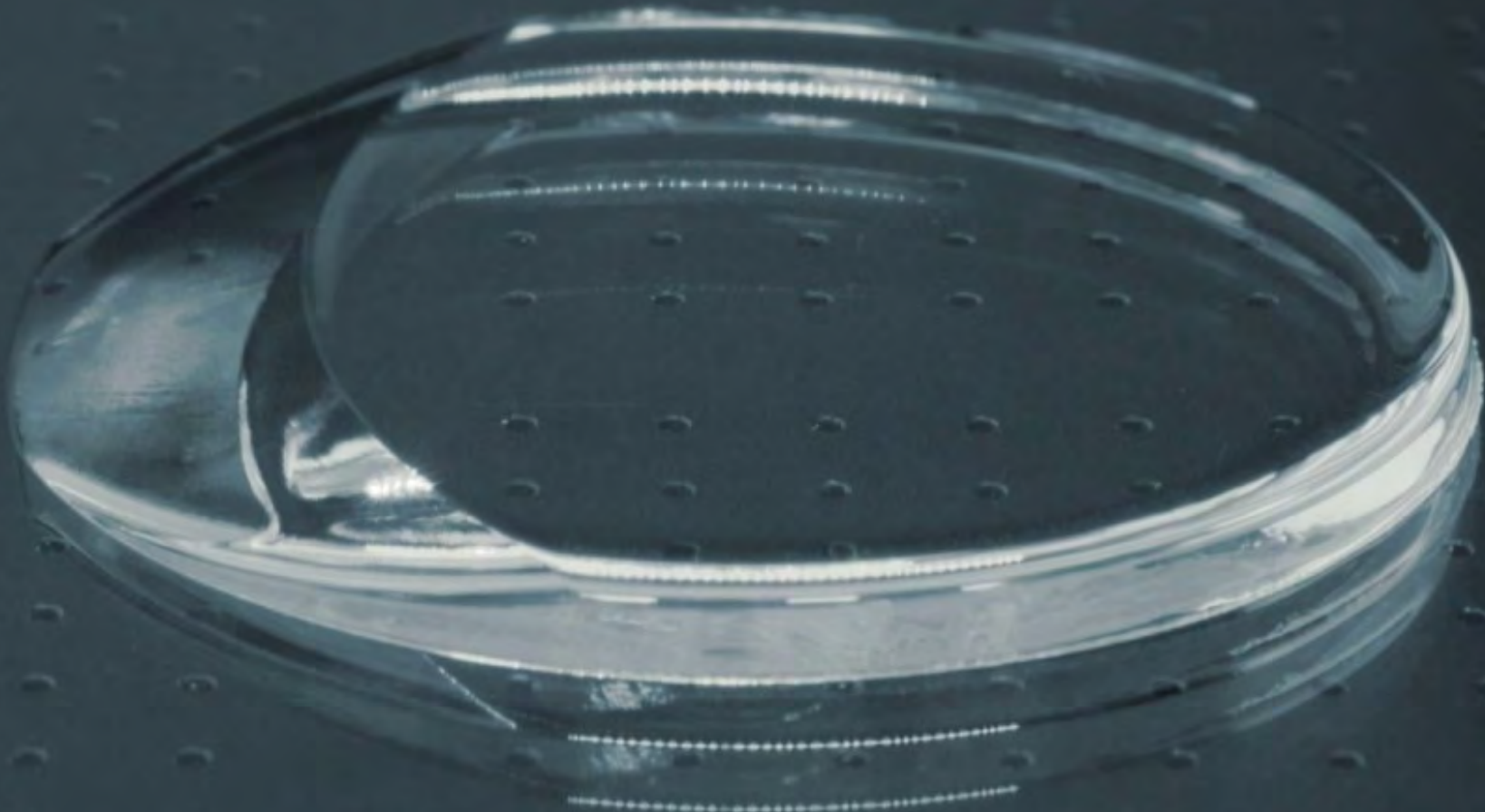


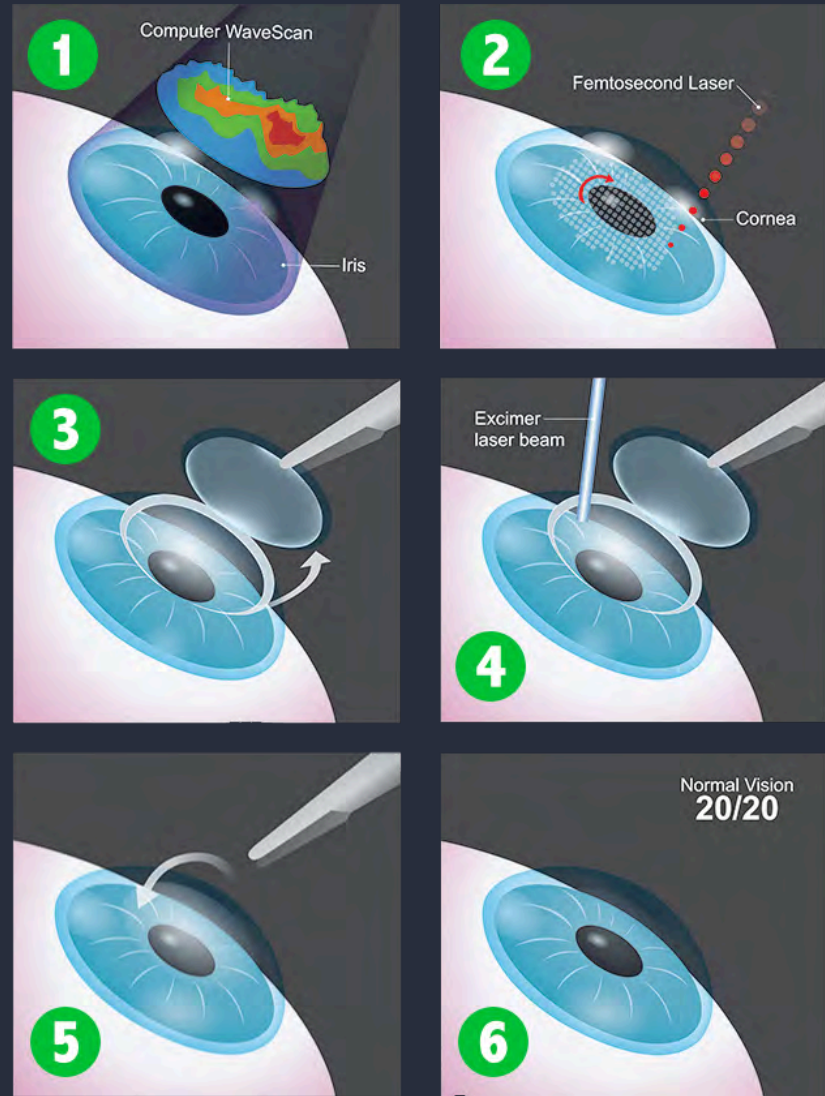
Centre for Vision
in the Developing World

Source

Source









- **120 US Patents**
- **879 Technical Papers**
- **Hall of Fame of Ophthalmology**
- **National Medal of Technology and Innovation**





- **120 US Patents**
- **879 Technical Papers**
- **Hall of Fame of Ophthalmology**
- **National Medal of Technology and Innovation**
- **Inventor of LASIK Corrective Refractive Eye Surgery**

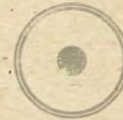


One thing I could not tolerate is to see somebody suffer.

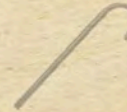
For me, value was not necessarily money.

VALUE

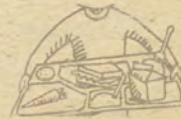
Exchange



Instrumental



Intrinsic



Symbolic, etc.



Societal/Personal



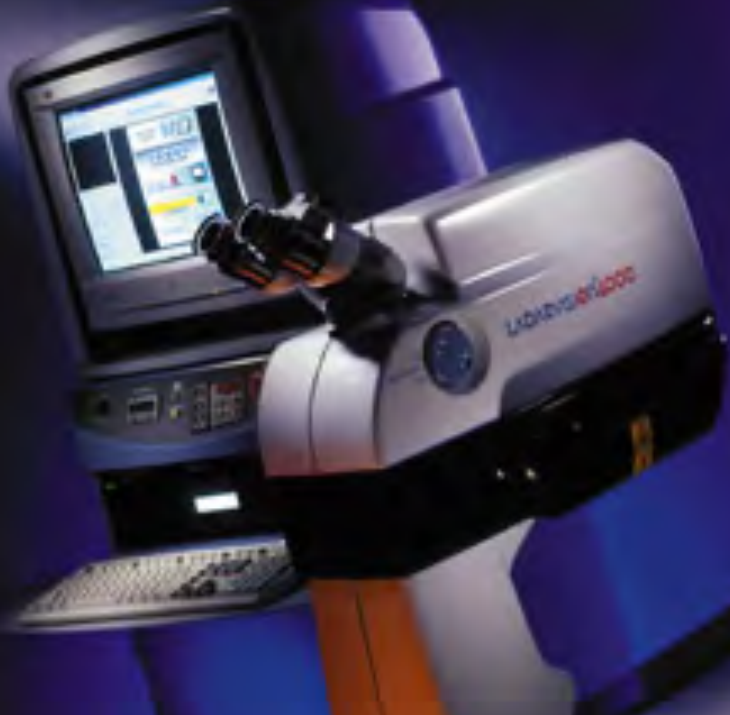
Future

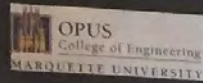


NASA SPINOFF



**NASA TECHNOLOGY
TRANSFER PROGRAM**





Re-Curve Assistive Plates



Lesley Arant, Andres Flores, Blake Miller, Krystal Smith

Problem Statement

In the elderly population, inefficient scooping of food from a plate makes eating a time-consuming and burdensome task. This problem is pertinent in those with diminished fine motor skills, and a solution would give the customer back some of their autonomy and self-sufficiency.

Customer Needs

- practical size and weight
- built with a material that is durable, non-toxic, and dishwasher safe
- grips to the surface it is on
- easy to pick up and balance in the hands of those with diminished fine motor skills
- reduces the chances of spills
- aesthetically appealing
- affordable

Existing/Competing Solutions



- Drawbacks**
- Lack an upper rim to stop food overflow
 - All edging on one side decreases accessibility
 - Not as comfortable and natural to hold
 - Attachable parts do not always fit
 - Expensive
 - Embarrassing

Target Specifications

- Diameter of plate (on rim) = 15-20 cm
- Height of plate = 2.5 - 6 cm
- Weight of plate = 250-450 grams
- Material for plate = Injected Plastic
- Material for grip = Soft rubber
- Surface area of grip = 300-350 cm²
- Center of mass of plate = 1-3 cm or less
- Overhang distance of rim = 2-3 cm
- Cost = \$15

Final Concept

Front View



Top View



Right View



- Injected Plastic
- Polypropylene
- Curved edges on rim
- Rubber grip on bottom
- Walls fit to hand
- Mass = 390.8 grams
- Volume = 411.4 cm³
- Surface Area = 1828.3 cm²

Validation

- Upper rim redirects food back to the spoon
- Two access points allow a more natural use of utensils regardless of hand dominance
- Maintains similar features/characteristics of a traditional plate while enhancing performance
- Strong and durable material
- Ergonomic grip that allows easy handling

Value Proposition

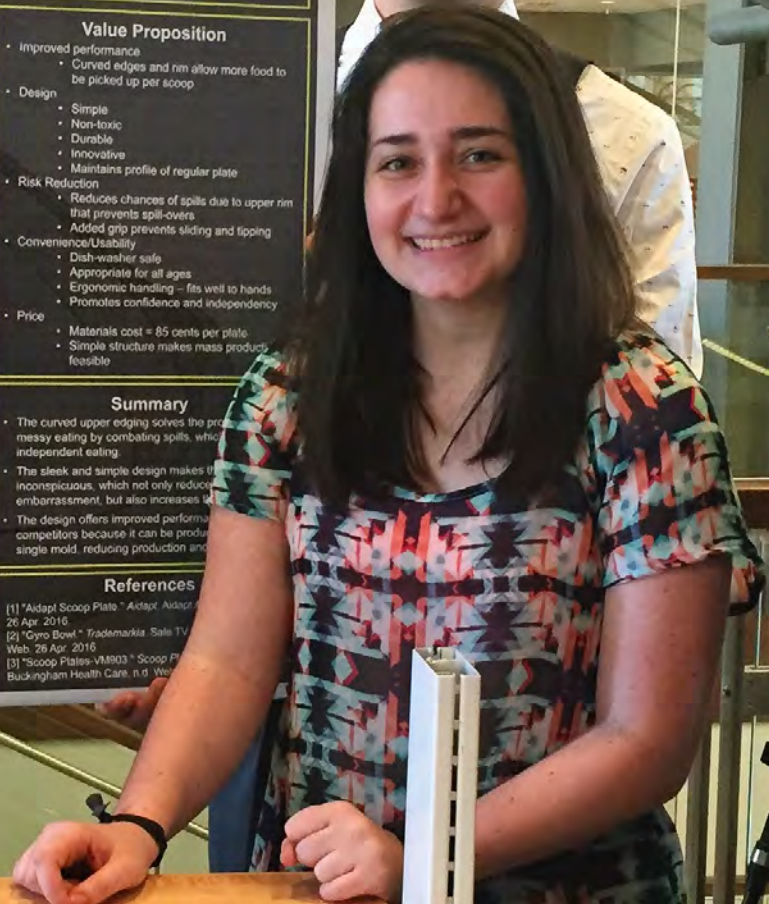
- Improved performance
 - Curved edges and rim allow more food to be picked up per scoop
- Design
 - Simple
 - Non-toxic
 - Durable
 - Innovative
 - Maintains profile of regular plate
- Risk Reduction
 - Reduces chances of spills due to upper rim that prevents spill-overs
 - Added grip prevents sliding and tipping
- Convenience/Usability
 - Dish-washer safe
 - Appropriate for all ages
 - Ergonomic handling – fits well to hands
 - Promotes confidence and independence
- Price
 - Materials cost = 85 cents per plate
 - Simple structure makes mass production feasible

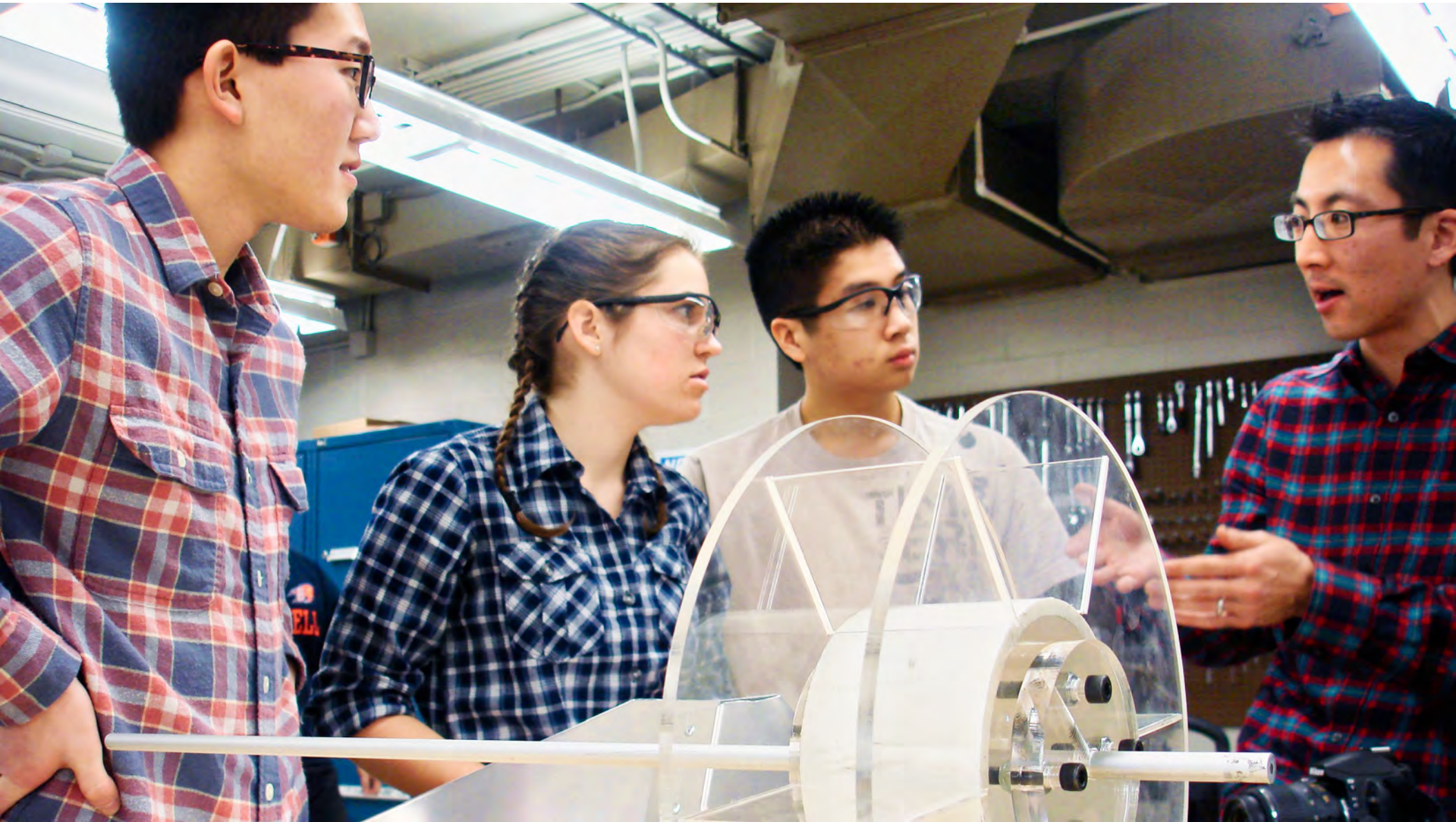
Summary

- The curved upper edging solves the problem of messy eating by combating spills, which is independent eating.
- The sleek and simple design makes the plate inconspicuous, which not only reduces embarrassment, but also increases usability.
- The design offers improved performance over competitors because it can be produced in a single mold, reducing production and distribution costs.

References

- [1] "Aidapt Scoop Plate." Aidapt. Assistive Technology. 26 Apr. 2016.
- [2] "Geo Bowl." Trademarkia. Sale TV. Web. 26 Apr. 2016.
- [3] "Scoop Plates-VM903." Scoop Plates. Buckingham Health Care. n.d. Web.









of Engineering, 201





of Engineering, 201

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Exchange



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Symbolic, etc.



Future

