



HEALTH LITERACY AND DESIGN PRINCIPLES

WHAT WE'LL DISCUSS

1. What is design?
2. Designing for health care
3. The design process
4. User-centered design
5. Designing within a system
6. The elements of design
7. Memorable design
8. Iteration and revision

What do we mean when we say
“DESIGN?”

“Make it pretty?”




To use design to impress,
to polish things up, to make
them chic, is not design at all.

This is packaging.

— DIETER RAMS

“Design by Vitsoe”
New York, December 1976



A photograph of Marie Kondo, a woman with dark hair and bangs, wearing a white short-sleeved top. She is smiling and looking towards the right. She is standing behind a light-colored wooden table. On the table, to her left, is a light-colored ceramic vase containing a branch with small white cherry blossoms. To her right, on the table, is a wooden tray holding several small, dark-colored ceramic pots and a white ceramic pot. Further to the right, there is a wooden tray containing several small, light blue ceramic pots. The background is a plain, light-colored wall with a window on the left side.

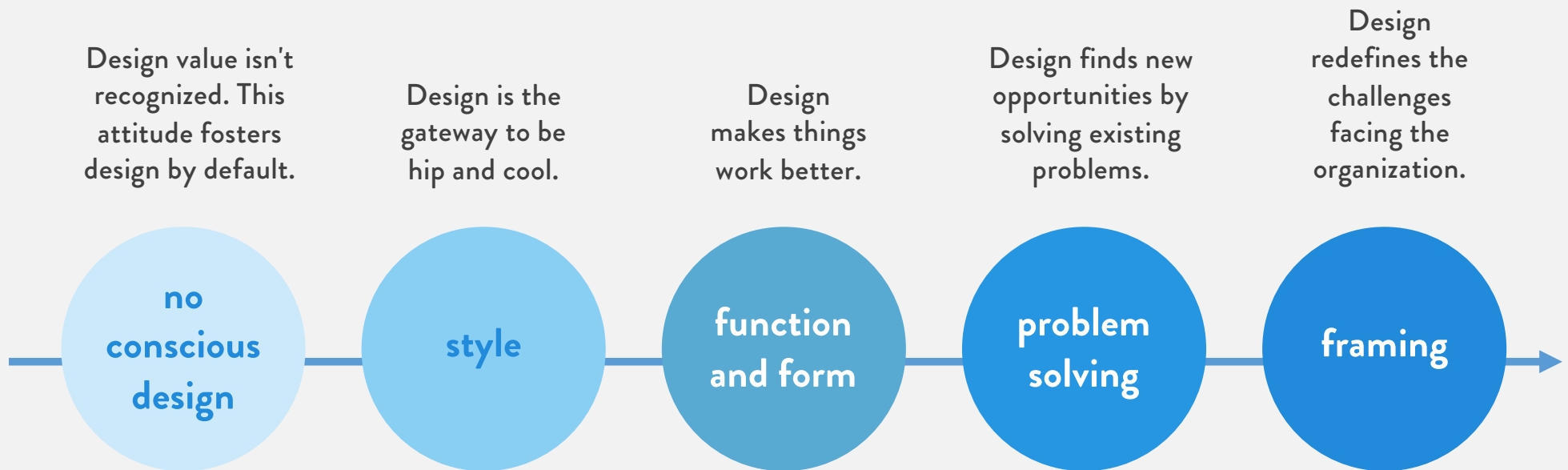
People cannot change
their habits without
first changing their
way of thinking.

— MARIE KONDO
The Life-Changing Magic of Tidying Up



Design is a
CRITICAL EXERCISE.

Design maturity continuum

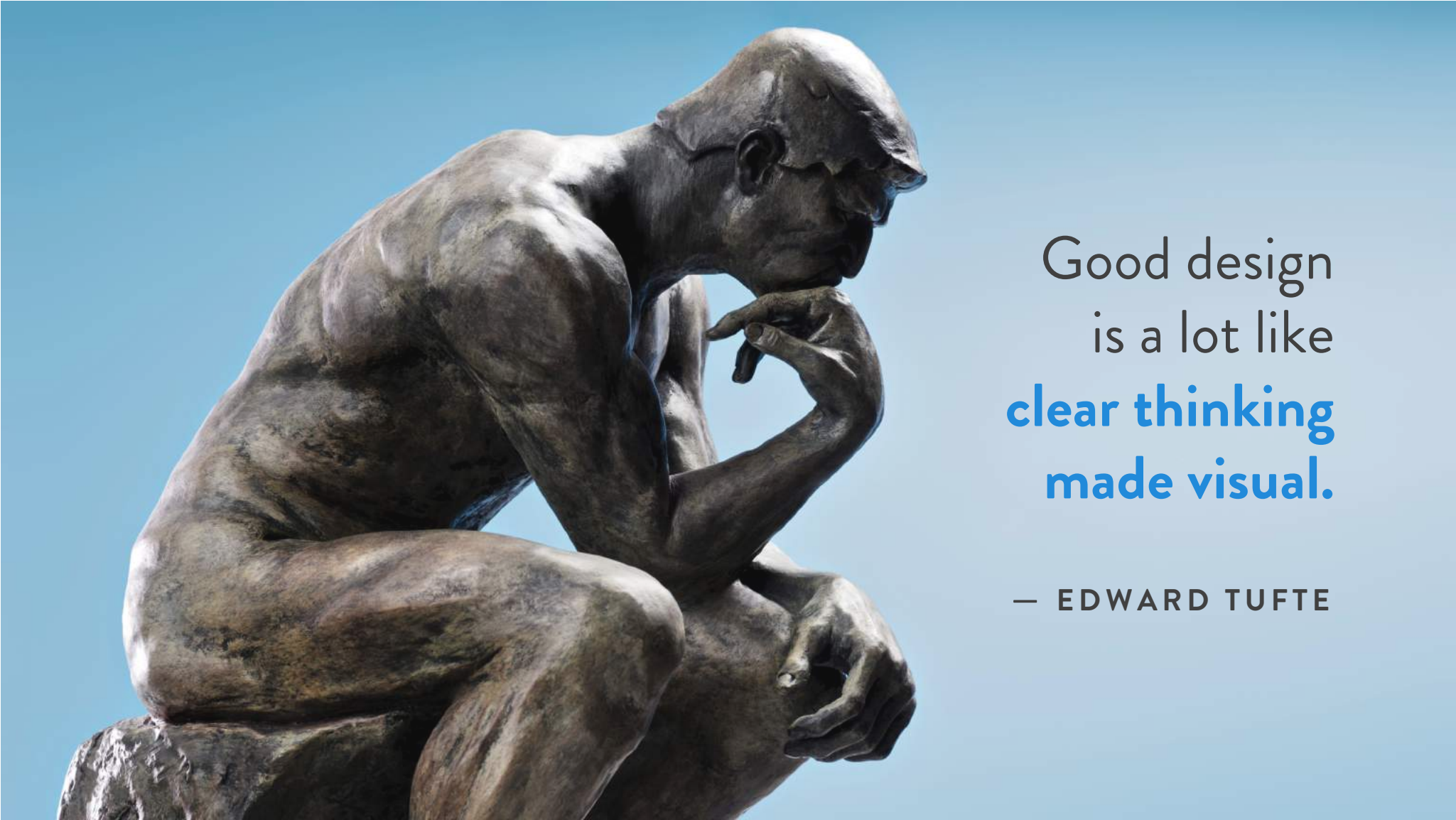


Jess McMullin, 2005

Some questions knock down the walls that have been constraining a problem-solver's thinking. They remove one or more of the 'givens' in a line of thinking and **open up space for inquiry** that has been closed off.

— HAL GREGERSEN

Questions Are The Answer



Good design
is a lot like
**clear thinking
made visual.**

— EDWARD TUFTE

Why is design important in
HEALTH CARE?

The charge of helping someone make
**a mental connection with critical
information in a time of crisis**
is rare in education, but is a normal
occurrence in healthcare.

— MELISSA N. STEWART
Practical Patient Literacy: The Medagogy Model



...the onus of interpreting the information should be shifted toward the information provider when **the skill level of the users are lower, when the common decision errors are known and can be countered, and when the stakes involved in the choices are high for individuals or society.**

— MELISSA G. FRENCH, ET AL

*Health Insurance and Insights from Health Literacy: Helping Consumers Understand
Proceedings of a Workshop*

LabCorp Lab Report

Name..... PUGMIRE, MEGAN Sex..... Female
 Drawn Date..... Birth Date.....
 Received Date... Patient Code...
 Report Date.... Specimen.....

Test Name	Results		Unit Of Measure	Reference Range
	In-Rng	Out-Rng		
Cholesterol, Total	133		mg/dL	100-199
Triglycerides	61		mg/dL	0-149
HDL Cholesterol	79		mg/dL	>39
VLDL Cholesterol Calc	12		mg/dL	5-40
LDL Cholesterol Calc	42		mg/dL	0-99
T. Chol/HDL Ratio	1.7		ratio	0.0-4.4

T. Chol/HDL Ratio

	Men	Women
1/2 Avg. Risk	3.4	3.3
Avg. Risk	5.0	4.4
2X Avg. Risk	9.6	7.1
3X Avg. Risk	23.4	11.0



CANCER RISK

Cancer is a term to describe diseases where the normal cell growth process goes out of control. There are over 100 types of cancer named for where the abnormal cell growth starts in the body. The overgrowth of these cells can form a mass or tumor. Cancer may vary in speed of development, may metastasize or spread to other parts of the body, and may even be life-threatening. Research shows that some people have a greater risk for certain cancers, and much of that risk can be avoided. Prevention is the first step in the fight against cancer.

What are the risk factors?

Behavioral factors are ones we can control. They include tobacco use, poor diet, physical activity, obesity and over exposure to direct sunlight.

Environmental factors include exposures to second-hand smoke and chemical exposure. Chemicals that are known to increase the risk for cancer include Asbestos and Formaldehyde.

Uncontrollable factors include increasing age, family history, and race. Age is an important risk factor for many cancers.

Cancer warning signs may include:

- Change in bladder or bowel habits
- Unusual bleeding or discharge
- Lump or thickening in the breast, lymph nodes, or elsewhere
- A sore that does not heal
- Cough or hoarseness that persists
- Change in a mole or wart
- Chronic indigestion or trouble swallowing

How do I prevent cancer?

Understand the risks for different cancers. Consult with your doctor about which screenings (tests for early detection) you need to have, when, and schedule them accordingly. Listed below are some recommended common cancer screenings for individuals with average risk.

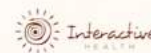
SCREENING or TEST	RECOMMENDED SCREENING GUIDELINES
Wellness Checks	Starting around 20 years old, see your health care provider and follow-up based on health care provider's recommendation. Age and risk factors will determine how often follow up is needed.
Cervical Cancer Screening (Pap test)	Women between ages 21-29 – pap every 3 years. Women between ages 30-65: Pap test plus HPV testing every 5 years or Pap test alone every 3 years. Testing not recommended before age 21. After age 65 testing may not be needed, depending on previous results history.
Mammography/Clinical Breast Exam (Breast Cancer)	Age 20-39: Clinical Breast Exam (CBE) every 1-3 years. CBE and Mammogram annually starting at age 40 (earlier if certain risk factors). Self-exam: Start at age 20. Every month or as recommended by healthcare provider.
Colonoscopy (Colon Cancer)	Start at age 50 or earlier based on risk factors. Includes: colonoscopy every 10 years, sigmoidoscopy or double-contrast barium enema or CT colonography every 5 years, or fecal (stool) for occult blood testing annually.
Prostate cancer screening (PSA, DRE)	Discuss with your physician screening benefits and risks. Consider starting age 50 with average risk; Age 45 for African Americans and first-degree family history, or even earlier with specific risk factors (including certain family history criteria) or concerns.

The American Cancer Society encourages healthy lifestyle choices to help prevent cancer. Those recommendations include: maintaining a healthy body weight, being physically active, consuming a healthy diet with an emphasis on plant sources, limiting alcohol use, avoiding exposure to tobacco products and sun protection.

Resources and Support: American Cancer Society (www.cancer.org), Interactive Health (www.mindbodyactivehealthinc.com), The U.S. Preventive Services Task Force (www.uspreventiveservicestaskforce.org), The American College of Obstetricians and Gynecologists (<http://www.acog.org>)

Last Reviewed: June 2017

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BENEFITS OF EXERCISE

Being physically active on a regular basis may be the most important thing we can all do for the health of our bodies and minds. From preventing chronic diseases to improving mood and confidence, the advantages of keeping our bodies tuned up are hard to ignore.

Why is physical activity important?

If you are physically inactive, you are putting yourself in danger of future health problems and disability. Simply getting up and moving your body has been shown to help prevent and control high blood pressure, cholesterol, blood sugars and weight problems. Exercise plays a major role in preventing heart disease and type 2 diabetes. It also maintains the health of our muscles, bones, and joints, which will help keep us active and independent as we get older.

What if I'm not already physically active?

It's never too late to start being active! Not only will you improve your health by becoming more active, you will improve your level of fitness (heart, lungs and circulation), performance and strength simply by doing it on a regular basis. That means that physical activity will get easier for you over time. So, don't fret if it's been a while since you've moved your muscles. Start out slowly 5-10 minutes of activity and gradually increase the time and intensity. It doesn't take much to reap the health benefits of exercise.

What if I don't know how to exercise?

Physical activity is anything that gets your body moving. Beginning an exercise program does not need to be difficult or cost a lot of money. Two key points to remember are: (1) find activities you enjoy and (2) keep your commitment to yourself to be active on most days of the week.

- **Aerobic activities** condition the heart and lungs, and improve circulation. They're one of the best ways to lower blood pressure, manage diabetes, burn calories to lose or maintain weight and manage stress. Aerobic activities include brisk walking, jogging, stair climbing, dancing, swimming, biking and hiking. The greater the intensity, the greater the benefit, but listen to your body. You should be breathing harder than when at rest and likely be sweating. You should be able to talk and should not be in pain.
- **Strength-building exercises** build and maintain muscle and increase metabolic rate. They are one of the best ways to fight the aging process. These activities should work the major muscle groups: legs, hips, back, chest, abdomen, shoulders and arms. To gain the health benefits, do activities that work these muscles until it's hard to continue without help.
- **Flexibility exercises** make it easier to do activities of everyday living. Stretching the major muscles and joints on a regular basis will improve and maintain the range of motion through which they can extend. Stretching is a great way to start the day or to reduce stress at work. Try stretching your neck and shoulders when you take a break at work. Join a tai chi, yoga, martial arts or a stretching class to learn more techniques for the whole body.

How much exercise is enough?

To gain the important health benefits, adults need at least 150 minutes of moderate-intensity aerobic activity (e.g. brisk walking) or 75 minutes of vigorous-intensity (e.g. running) activity every week. They should also do muscle strengthening activities that target all the major muscle groups at least 2 days a week. Activity is best when spread throughout the week, and it can be done in small chunks of time. Try walking for 10 minutes 3 times a day at moderate intensity. Find ways to add activity into your daily routine like taking the stairs, walking or biking when possible and find parking in the farthest spot.

If you have a chronic health condition consult your doctor to find out whether your condition limits the activities you should do. Even an hour a week of moderate-intensity aerobic activity is good for you.

Resources and Additional Support: American College of Sports Medicine (www.acsm.org) Centers for Disease Control and Prevention (www.cdc.gov), Interactive Health (www.mindbodyactivehealthinc.com), U.S. Department of Health and Human Services (www.fitness.gov), American Heart Association (www.heart.org), Interactive Health Personalized Fitness health coaching course – To sign up call (800) 840-6100

Last Reviewed: February 2016

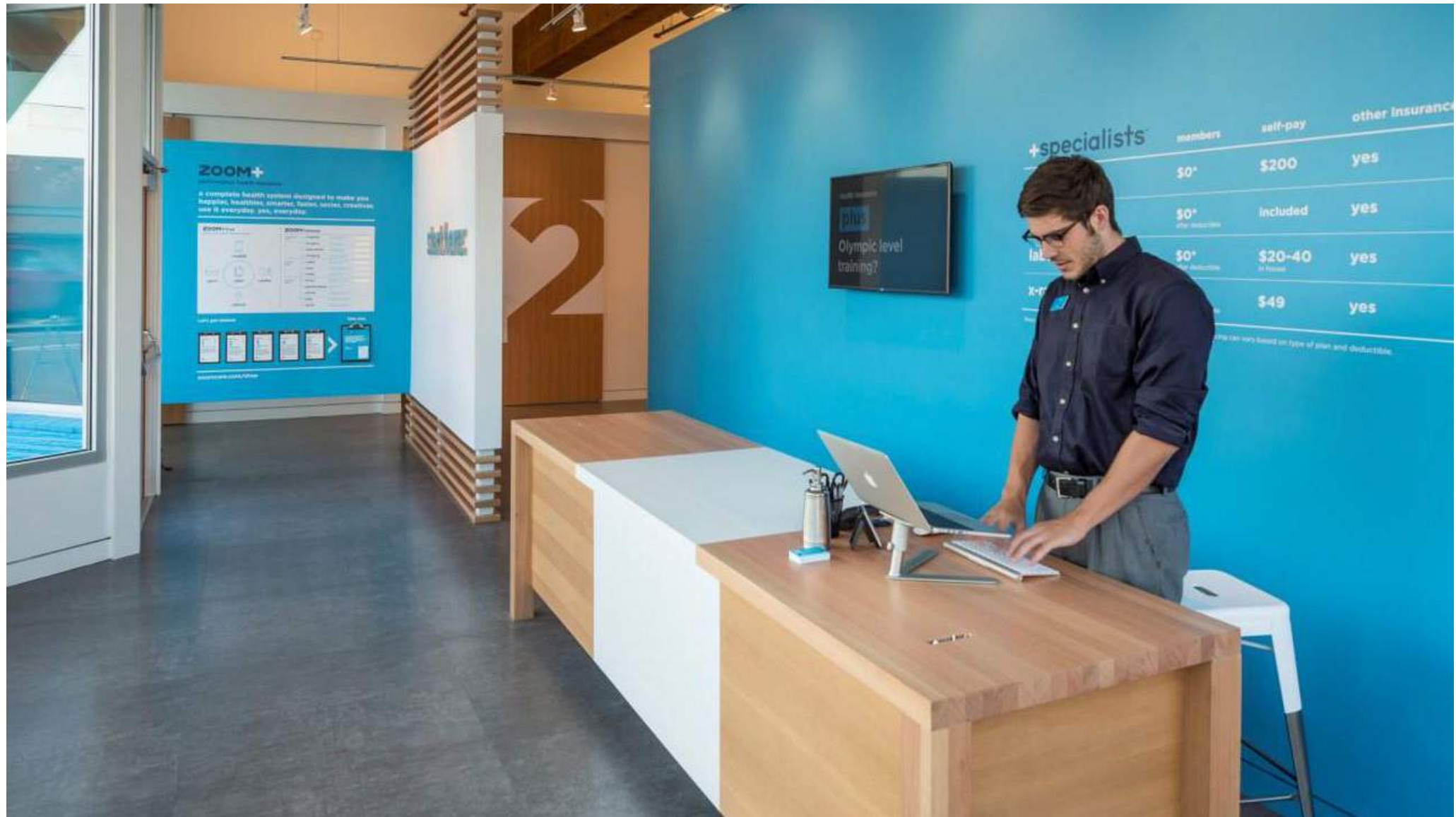
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Two decades of research indicate that today's health information is presented in a way that **isn't usable by most Americans.**

— NATIONAL ACTION PLAN TO
IMPROVE HEALTH LITERACY

U.S. Dept. of Health and Human Services, 2010

Much of health care design reinforces
the perception that health care is
COMPLEX AND OUTDATED.





08.27.15

Zoom Wants Health Care to Be More Like Visiting An Apple Store

The Portland, Oregon-based company has a plan to redesign the “full stack” of medical services and health insurance.

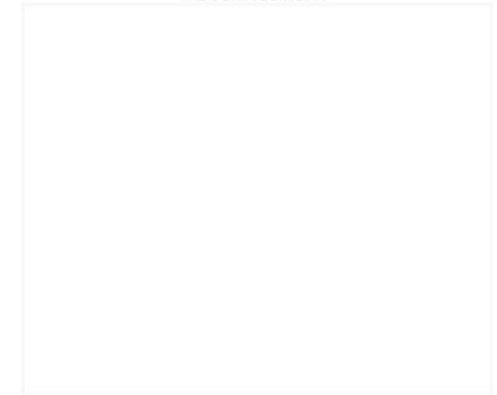


BY JOHN PAVLUS 7 MINUTE READ

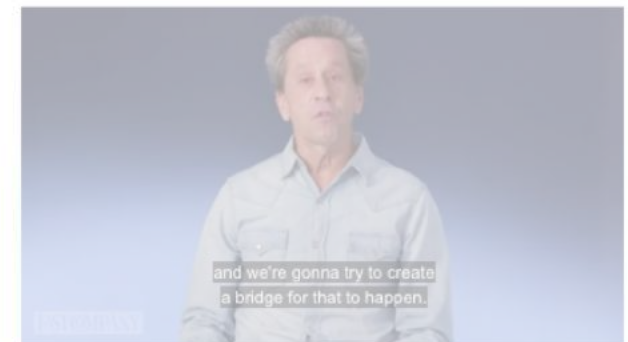
There's one reliable way to get on-demand health care in the United States: have (or wait for) something medically serious to happen to you, and then [haul yourself up the triage desk at your local ER](#). Sure, you'll be competing for resources with other patients suffering from gunshot wounds and heart attacks, but you [can't be turned away](#). But in the 21st century, why can't quality, non-life-threatening medical care be “on demand” in the same way that taxis and takeout are? I know, I know: because, like, [regulations and infrastructure and path dependence and stuff](#). Right?



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FEATURED VIDEO



Brian Grazer wants to democratize the content



1. CREDIBILITY BEGINS WITH AESTHETICS.

In late 2014, ZoomCare hired former Ziba executive creative director Steve McCallion to lead its rebranding into Zoom. He and his team updated everything you'd expect, from the typeface of the wordmark to the precise shade of blue in the company's branding. But they also rethought the physical user experience of primary care. What if, instead of a forbidding concrete complex full of beige walls and depressing pamphlets, a medical facility looked like someplace you'd want to visit, with inviting colors and natural light, spacious interiors and even amenities—like upscale food and enrichment activities for kids?

Steve McCallion, a former executive creative director at Ziba and now Zoom's creative director, wants Zoom clinics to feel as different from other medical facilities as Apple Stores do from Best Buy, or Ikea does from Sears. "It's all about making it accessible," he says. "Many of our advanced care studios are sort of modeled after co-working spaces, where the specialists work not just with each other but with you."

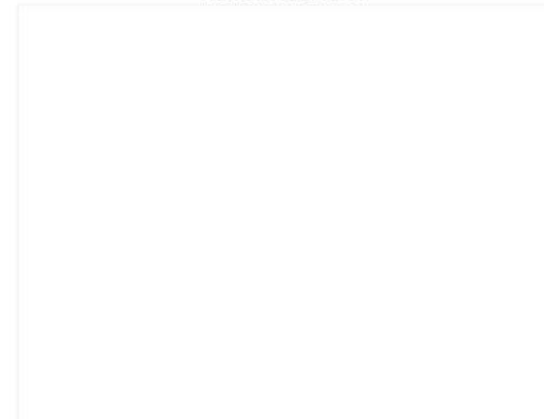


FEATURED VIDEO



Brian Grazer wants to democratize the content business

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We found a strong correlation between high MDI [McKinsey Design Index] scores and superior business performance. Top-quartile MDI scorers increased their revenues and total returns to shareholders (TRS) substantially faster than their industry counterparts did over a five-year period....”

— BENEDICT SHEPPARD, ET AL

*“The business value of design”
McKinsey Quarterly, October 2018*

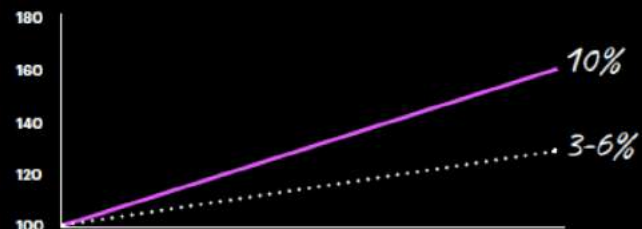
Exhibit 1 / 5

Companies with top-quartile McKinsey Design Index scores outperformed industry-benchmark growth by as much as two to one.

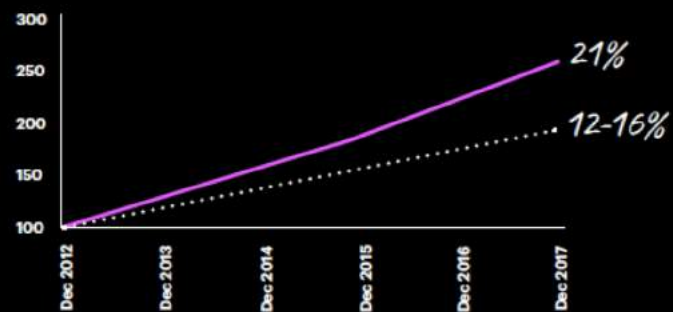
Annual growth (normalized) %

- Top-quartile McKinsey Design Index performers
- ⋯ Industry benchmarks¹

Revenues



Total returns to shareholders



¹ The envelope was set by the minimums and maximums of three independent data sets: MDI 2nd, 3rd, and 4th quartiles, the S&P 500, and a McKinsey corporate database of 40,000 companies.

*"Design is more than a feeling:
it is a CEO-level priority for growth
and long-term performance."*

Where does design
BEGIN?

The two main ways to approach a design brief are to use **linear reasoning** and **lateral thinking**. These are virtually opposites — the first focused and methodical, the second diffuse and expansive — but both are equally useful as research and development tools.

— DAVID DABER, SANDRA STUART, ERIC ZEMPOL

Graphic Design School: The Principles and Practice of Graphic Design









POST-IT NOTES

1. Practice your clear thinking skills — write your answers in one succinct sentence
2. When explaining to group, do with as few words and as clearly as possible.

DISCUSS

1. What is one design project you're working on this year?
2. What *one* problem is it trying to solve?

Good design requires
CREATIVITY.



All together now:
“I AM CREATIVE.”*

* I mean it. If you solve problems, you're creative.



TUMMY—
color— FAVORITE THINGS TO EAT

FAVORITES: ORGAN, FOOD, GAME,
BOOK, SHOW, COLOR

IT'S THE PERSONAL
ASPECT OF ALL CARE?
— DEDICATION

WE ♥ KIDS

LIKE BACK CARDS — FILL IN UNIQUELY
THE INDIVIDUAL

INTERACTIVE —
SOMETHING THE
PROVIDER FILLS
IN? FABRIC
PENS

HAROLD
ILLUSTRATOR

♥ HAND-DRAWN
FUN MAP
OF DOERNBECHER?

VALUES

MY BEST DAY AT WORK
WHY I ♥ DOERNBECHER

KIDS WAY
OF DESCRIBING
...
WE FIX BRAINS

BUILDING
KIDS #1
CARE
BEST

SEEKING
WHAT'S
POSSIBLE



HALF
HAND-DRAWN
HALF
ANATOMIC?

OPTIMISM

LEVEL OF
CARE

- HEART
- BRAIN
- LUNGS

DIFFERENTIATOR
— BRAINS

①

KIDS CAN
SIGN TEES?

TONE ON
TONE — w/WHITE PEN









Quick Find




797



Inbox 12

 Today 4

 Next 7 days 13

▼ Projects +

- Brand Ideas 7
- Creative Team Ideas 5
- Health Literacy 7
- Vendors 1
- Manifesto 5

+ Add Project

Archived projects

> Labels +

Inbox



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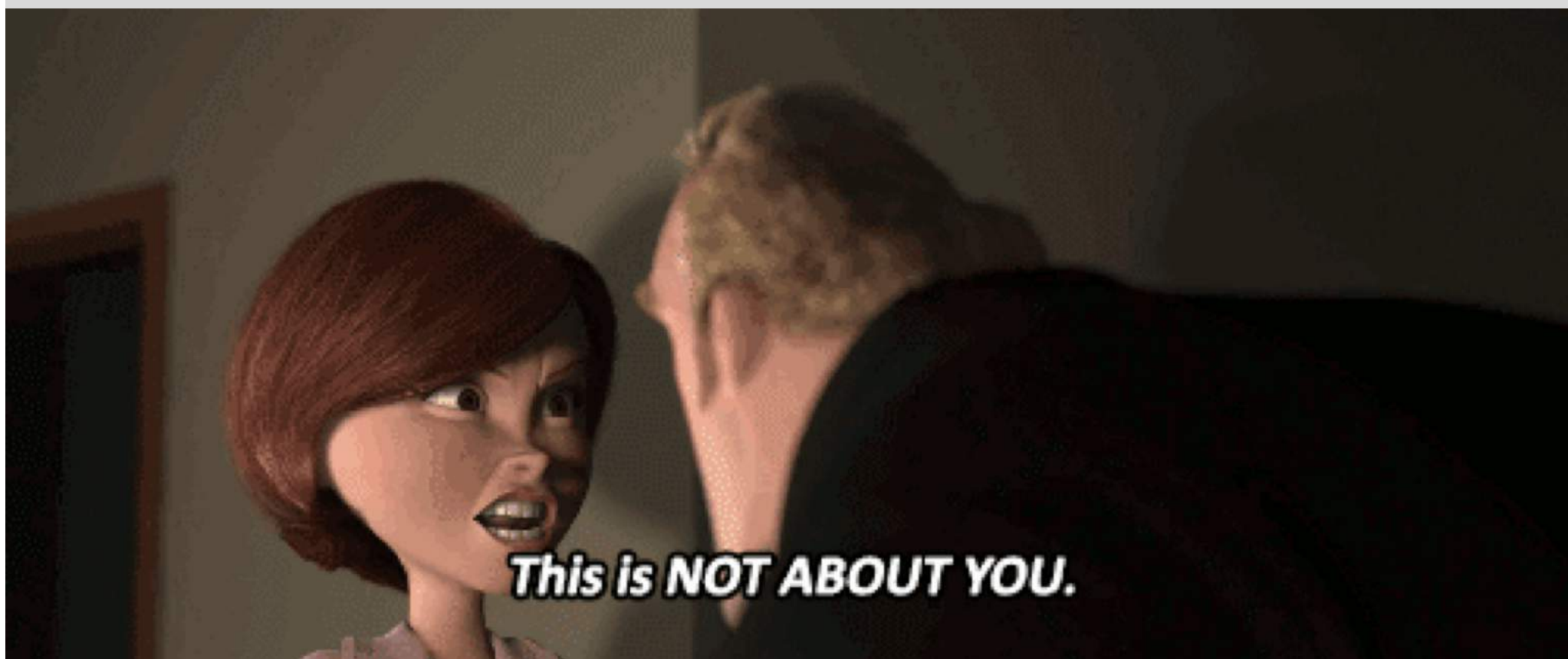
- ☐ Ask Eric about bariatrics guide and which budget it comes out of Tomorrow
- ☐ Get victory lap PPT done Friday
- ☐ Follow up with Daniel about James templates Today
- ☐ Send Design Moment e-mail on Friday mornings Friday
- ☐ Start gathering materials for brand wall? Tomorrow
- ☐ Make audiology appt Tomorrow
- ☐ Write \$19 check for Biztown Tomorrow
- ☐ Call OHSU about invisible account Tomorrow
- ☐ Return Evie's Statement of Intent Today
- ☐ SOW for DELTA Today

DISCUSS

1. Where do you have your best ideas or moments of lateral thinking?
2. How do make sure they're not lost?

Design is for
THE USER.*

* I mean it. Don't get attached.



A health literate organization makes it easier for people to **navigate, understand, and use** information and services to take care of their health.

— **BRACH C. ANDRULIS**

“Integrating literacy, culture, and language to improve health care quality for diverse populations.”

American Journal of Health Behavior

User-oriented design is
EMPATHIC.