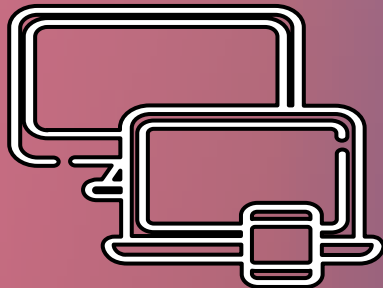

2022



DESIGNING HUMANE TECH



THE TERRORS AND ERRORS OF TECH

Presenters: Lindsey W,
Kate M and Liam D



TABLE OF CONTENTS



01

DESIGN FOR BODIES

INHUMANE TECH CAN TAKE A TOLL ON OUR BODIES - MENTALLY AND PHYSICALLY. THERE ARE SEVERAL WAYS THAT TECHNOLOGY HAS DISRUPTED THE HEALTH OF INDIVIDUALS.



02

DESIGN FOR CULTURE

WHEN WE LOOK AT TECH FROM A CULTURAL PERSPECTIVE THE ISSUE WITH IT BECOME EXTREMELY CLEAR. THIS ISSUE STEM FROM INHERENT RACISM IN THE FOUNDING CODE OF OUR TECHNOLOGY, THE ONLY WAY TO SOLVE THIS IS TO ATTACK IT HEAD ON.

03

DESIGN FOR EARTH

CAPITAL INTEREST, TECH INFRASTRUCTURE, AND NATURAL RESOURCES ARE REQUIRED TO SUSTAIN BIG TECH, CAUSING IRREPARABLE DAMAGE TO OUR EARTH THROUGH INEQUITABLE SUPPLY CHAINS.



2XXX



01

DESIGN FOR BODIES

Lindsey Whiting

DESIGNING HUMANE TECH

2022



PHYSICAL HEALTH

ISSUE: THE RISE IN TECHNOLOGY CAN ALSO ACCOUNT FOR THE RISE IN PHYSICAL INACTIVITY. IN REGARDS TO CAUSES OF PREVENTABLE DEATHS, NO PHYSICAL ACTIVITY IS THE SECOND HIGHEST CAUSE, SECOND TO SMOKING. FOR EXAMPLE, AN AUSTRALIAN STUDY THAT USED CHILDREN AGED 9-16 FOUND AFFIRMED THE LINK BETWEEN TIME SPENT ON SCREENS AND BEING OVERWEIGHT. TECHNOLOGICAL ADVANCEMENTS HAVE SHOWN A GREAT IMPACT ON PHYSICAL HEALTH. EXCESSIVE TECHNOLOGY USE CAN ALSO NEGATIVELY AFFECT ONE'S NECK, BACK, SHOULDERS, AND EYES. ADOLESCENT MUSCLE PAIN IN THE NECK AND SHOULDERS CAN BE ATTRIBUTED TO "THE CONSTANT HUNCHING OVER SMARTPHONES", ACCORDING TO DR. ROBERT BOLASH. IN FACT, DUE TO THE INCREASE OF THESE SYMPTOMS, WHICH ARE DIRECTLY RELATED TO THE OVERUSE OF TECHNOLOGY, HEALTH EXPERTS HAVE BEGUN TO REFER TO THIS CONDITION AS "TEXT NECK". IN ADDITION TO DR. BOLASH'S FINDINGS, THE VISION COUNCIL ALSO DISCOVERED THAT EYE STRAIN IS APPARENT AMONGST 60.5 PERCENT OF AMERICANS WHO SPEND MORE THAN 2 HOURS A DAY ON A DIGITAL DEVICE.



PHYSICAL HEALTH: SOLUTIONS



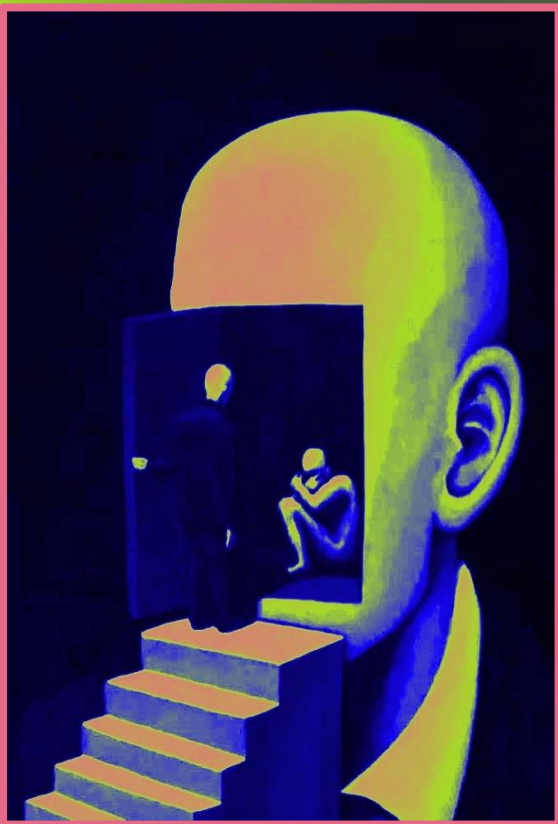
THERE ARE MANY DIFFERENT SOLUTIONS THAT AIM TO COMBAT PHYSICAL INACTIVITY AND OVERALL POOR PHYSICAL HEALTH THAT ARE ACCESSIBLE TO A MAJORITY OF A TECH-USING COMMUNITY.

BLUELIGHT GLASSES: BLUELIGHT GLASSES ARE DESIGNED TO PROTECT AGAINST THE HARSH BLUE LIGHT IN TECHNOLOGY THAT CAUSES A MULTITUDE OF EYE PROBLEMS INCLUDING EYE STRAIN AND POOR VISION. BLUE LIGHT FROM SCREENS INTERFERES WITH SLEEP SCHEDULES, AND WITH THAT, BLUELIGHT GLASSES CAN ALSO IMPROVE SLEEP QUALITY.

APPLE WATCH FITNESS: IN THE DESIGN OF AN APPLE WATCH, THERE IS AN ACTIVITY FEATURE WHERE IT NOT ONLY TRACKS YOUR ACTIVITY ON A DAILY BASIS, BUT IT ALSO ENCOURAGES YOU TO REACH A DAILY FITNESS GOAL! FOR INSTANCE, THE APP LOGS YOUR DAILY ACTIVITY WITH THREE CIRCLES THAT GET CLOSER TO CLOSING AS YOU PROGRESS WITH YOUR DAILY ACTIVITY, SUCH AS STANDING MINUTES, STEPS, AND ACTIVE CALORIES THAT YOU'VE BURNED. IF YOUR ACTIVITY LOG IS SCARCE FOR THE DAY, YOUR WATCH WILL BUZZ AND DING WITH ENCOURAGEMENT AND REMINDERS TO CLOSE THE DAILY FITNESS CIRCLES.



MENTAL HEALTH



ISSUE: SOCIAL MEDIA IS A HUGE COMPONENT IN THE REALM OF TECHNOLOGY. THERE ARE MANY GREAT ASPECTS OF SOCIAL MEDIA, HOWEVER, SOMETIMES IT CAN DO MORE HARM THAN GOOD. SOCIAL MEDIA APPS HAVE PROVEN TO CONTRIBUTE A GREAT DEAL OF DEPRESSION, SLEEP DEPRIVATION, ISOLATION, SELF ESTEEM, AND OTHER MENTAL HEALTH ISSUES AMONG TEENS. IN 2017, A STUDY FOUND THAT IN A GROUP OF HALF OF A MILLION 8TH-12TH GRADE STUDENTS, DEPRESSION SYMPTOMS INCREASED BY 33% BETWEEN THE YEARS OF 2010 AND 2015. WITH THAT, IT IS WORTH NOTING THAT 92% OF TEENAGERS OWNED A SMARTPHONE DEVICE BY THE YEAR 2015. IN THE CHILD MIND INSTITUTE ARTICLE WRITTEN BY CAROLINE MILLER, SHE NOTES THAT, “WHILE WE DON’T YET HAVE CONCLUSIVE EVIDENCE THAT SOCIAL MEDIA USE ACTUALLY *CAUSES* DEPRESSION, WE DO HAVE PLENTY OF WARNING SIGNS THAT IT MAY BE AFFECTING OUR KIDS NEGATIVELY.” (2). SOCIAL MEDIA USE CAN ALSO DEPRIVE INDIVIDUALS OF FACE TO FACE INTERACTION. THIS ISSUE EVEN PRESENTS ITSELF IN A FAMILY SETTING, WHERE TECHNOLOGY CAN TAKE AWAY FROM FAMILY BONDING, SOCIAL INTERACTION, AND RELATIONSHIP SKILLS.





MENTAL HEALTH: SOLUTIONS

SOLUTIONS TO POOR MENTAL HEALTH RELATED TO SOCIAL MEDIA CAN BE IMPROVED BY IMPLEMENTING NEW HABITS. THE FOLLOWING SOLUTIONS DON'T HOLD THE ABILITY TO CURE DEPRESSION, RATHER THEY ARE MORE TARGETED TOWARDS WAYS TO USE SOCIAL MEDIA IN A HEALTHY MANNER.

TURN OFF NOTIFICATIONS: NOTIFICATIONS ARE A CONSTANT REMINDER ON WHAT YOU ARE “MISSING OUT ON” AND THEY CAN INSTALL A SENSE OF FOMO. TURNING OFF NOTIFICATIONS ALLOWS FOR ONE TO USE SOCIAL MEDIA AT THEIR OWN DISCRETION INSTEAD OF HAVING IT SHOVED DOWN ONE'S THROAT. THIS WOULD BE A GREAT EXAMPLE OF A HEALTHY WAY TO USE SOCIAL MEDIA; AT YOUR OWN RATE.

NO SCREEN TIME BEFORE BED: SOCIAL MEDIA AND TECHNOLOGY USE BEFORE BED CONTRIBUTES TO SLEEP DEPRIVATION. STUDIES HAVE SHOWN THAT 60% OF THOSE WHO USE THEIR PHONE JUST BEFORE BED, GET AN HOUR LESS SLEEP ON AVERAGE THAN THOSE WHO DON'T USE THEIR PHONE BEFORE BED (2). BY ELIMINATING LATE NIGHT SCREEN TIME, YOU ARE LESS LIKELY TO FACE THE MENTAL HEALTH REPERCUSSIONS THAT SOCIAL MEDIA AND INHUMANE TECHNOLOGY CAN IMPLY.

02

DESIGN FOR CULTURE

Kate Mackey

DESIGNING HUMANE TECH

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FAMILIES: DIGITIZATION



2022

ISSUE - DIGITIZATION STARTS TO SHOW NEW THREATS WITHIN THE FINANCIAL SECURITY OF FAMILY. IT MAKES THEM MUCH MORE VULNERABLE TO SUVALLIENCE DISCRIMINAITION IN THE WORK PLACE. FOR EXAMPLE “AUTOMATED PREDICTION AND TARGETING: CREDIT UNIONS AND BANKS ARE USING AUTOMATED COMPUTER DECISION SYSTEMS TO REMOTELY DISABLE THE CARS OF PEOPLE WHO OWE MONEY ON SUBPRIME LOANS, SOMETIMES STRANDING BORROWERS IN THE MIDDLE OF THEIR DRIVE TO WORK OR SCHOOL” (4).



SINCE ALL FAMILY MEMBERS, YOUNG AND OLD, ARE NOW USING THE INTERNET DURING THE MAJORITY OF THEIR DAY, THEY HAVE STARTED TO BECOME “PREY TO ALL SORTS OF NEW ISSUES AND ARE NOW FALLING PREY TO TECHNOLOGY’S THREATS WHILE MISSING ITS OPPORTUNITIES”(4).

HOW TO FIX - THIS TYPE OF PROBLEM IS BY TRYING TO BE AWARE OF HOW YOU ARE USING THESE NEW PRODUCTS IN A SAFE AND RESPONSIBLE WAY. THIS CAN BE DONE BY EDUCATING YOURSELF ON THE MANY DANGERS OF TECH AND LEARNING ABOUT WAYS ADJUST YOUR WAY OF USING IT.

SINCE THERE ARE SO MANY RESOURCES AT YOUR DISPOSAL THIS TYPE OF EDUCATION IS JUST ONE SEARCH AWAY.





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DIVERSITY AND INCLUSION : BIASED DATA SETS



ISSUE - AI LEARNING HAS SHOWN A WHOLE NEW SIDE OF RACISM IN THE BASIC LEARNING OF OUR AI. MOST AI THAT IS USED TO IDENTIFY PEOPLE IS GIVEN A DATA SET OF 100 FACES AND ONLY AROUND 10% OF THOSE PHOTOS ARE FACES OF PEOPLE OF COLOR. THIS CAUSED A PREDISPOSITION IN AI THAT MAKES IT GENERALLY ONLY RECOGNIZE WHITE FACES MUCH MORE THAN FACES OF PEOPLE OF COLOR.



HOW ITS FIXED - THE ONLY WAY TO FIX THIS IS TO CREATE DATA SETS THAT ARE DIVERSE AS POSSIBLE OR ELSE THIS CASE OF EMBEDDED RACISM IS ONLY GOING TO GET WORSE THE FURTHER ALONG AI ADVANCES.



SURVEILLANCE: SURVEILLANCE CAPITALISM



2022

ISSUE - THE WAY THAT THE INTERNET WATCHES US IS BY USING A METHODOLOGY TO KEEP US IGNORANT. THIS TYPE OF MISDIRECTION IS USED TO “SELL PEOPLE ON THE IDEA THAT THE NEW ECONOMIC PRACTICES ARE AN INEVITABLE CONSEQUENCE OF DIGITAL TECHNOLOGY”(6). IT HAS STARTED TO TEACH US THAT IT IS WRONG TO STOP THE PROGRESS OF TECHNOLOGY EVEN IF IT MIGHT END UP PUTTING US IN MORE DANGER THAN WE BELIEVE. IT HAS STARTED TO SLOWLY GET RID OF OUR FREE WILL. TECHNOLOGY WILL USUALLY ONLY SHOW YOU THINGS THAT YOU WANT TO SEE, IT MAKES YOU ONLY SEE ONE SIDE OF THE ARGUMENT.



HOW ITS FIXED - THE FIRST WAY TO FIX THIS PROBLEM IS BY THE PUBLIC SAYING NO TO SURVEILLANCE AND MAKING IT KNOW THAT WE ARE NOT OK WITH THIS. BY DOING THIS WE CAN START THE LONG TREK TO FINDING AND CREATING MORE LAWS THAT HELP PROTECT OUR DATA.



03

DESIGN FOR EARTH

Liam Dworkin

DESIGNING HUMANE TECH

2022





THE ECONOMIC RAMIFICATIONS OF SURVEILLANCE CAPITALISM

OUR ENVIRONMENT AND FISCAL EQUITY SUFFERS UNDER CAPITAL INTERESTS. SURVEILLANCE CAPITALISM IS NO DIFFERENT. AS GLOBAL ECONOMIES SWAP FROM THE PETRODOLLAR TO THE DATA-DOLLAR, SURVEILLANCE AND DATA COLLECTION OR SHARING IS QUICKLY BECOMING A MASSIVE GLOBAL INDUSTRY. (7)

THE GOAL IS TO AUTOMATE US. TURNING PEOPLE AND THE USERS OF MEDIA AND TECH INTO THE PRODUCT, EXTRACTING DATA AND MINIMIZING PERSONAL SECURITY AND AGENCY. (8)

USERS DATA IS BEING ACCESSED AS A SEEMINGLY 'FREE' RESOURCE BY BIG TECH COMPANIES, RESULTING IN DIGITAL COLONIZATION OF DATA. (8)



HOW IT'S FIXED

IDEALLY, CAPITALIZATION OF USERS DATA SHOULD NOT BE AN ISSUE. HUMAN EMOTION AND COMMUNICATION ARE NOT A PRODUCT OF INDUSTRY. (7)

IF CAPITAL INTEREST CAN NOT BE REMOVED THE NEED FOR OPEN SOURCE ALGORITHMS AND TO PROVIDE GREATER TRANSPARENCY IS A STEP IN THE RIGHT DIRECTION. OUR DIGITAL SPACES ARE BECOMING OUR PUBLIC SPACES AND SHOULD BE LEGISLATED AS SUCH. (8) (9)



ANNIE LEONARD'S "HOW 'STUFF' IS MADE" (10)

2022

STEP 1

STEP 2

STEP 3

STEP 4

STEP 5

EXTRACTION

PRODUCTION

DISTRIBUTION

CONSUMPTION

DISPOSAL

DEPLETING THE EARTH, PRODUCING JUNK, DISTRIBUTING THE TOXIC JUNK, CONSUMING IT, AND INEVITABLY WASTING IT IS A 5 STEP PROCESS OF ENVIRONMENTAL AND ECONOMIC INEQUITY. (10)



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THE ENVIRONMENTAL IMPACT OF MAKING, BREAKING, AND DISPOSING OF TECH

“THE ‘STORY OF’ STUFF” DISCUSSES THE WASTEFUL SYSTEM OF HOW WE CONSUME ‘STUFF’. (10)

WE’VE EXTRACTED $\frac{1}{3}$ OF OUR NATURAL RESOURCES IN THE LAST 3 DECADES. PRODUCTION ENTAILS TOXICS IN AND TOXICS OUT. DISTRIBUTION SELLS TOXIC JUNK, EXTERNALIZING COSTS ONTO CHEAP LABOR AND THE ENVIRONMENT.

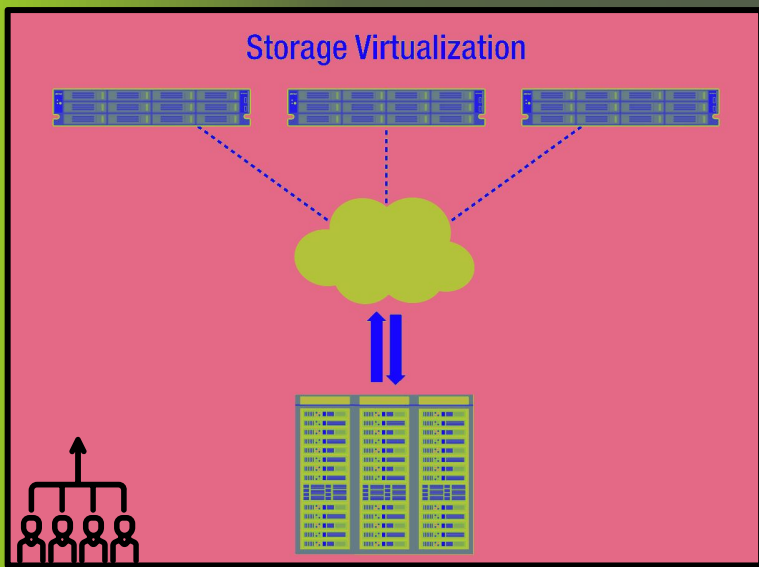
ONLY 1% OF CONSUMED ITEMS IN NORTH AMERICA REMAIN IN ROTATION AFTER 6 MONTHS. DISPOSAL REQUIRES THE VAST MAJORITY OF GOODS END UP IN A LANDFILL. RECYCLING ISN’T *ENOUGH!* (10)

HOW IT’S FIXED

FOCUSING ON SUSTAINABILITY NOT IMMEDIATE PROFIT, EXTERNALIZING COSTS TO WORKERS AND THE ENVIRONMENT IS KEY. LEGISLATION MAY BE KEY IN INFLUENCING CHANGE.

MINIMIZE TOXIC AND NON-RENEWABLE RESOURCE CONSUMPTION. BUY WITH LONGEVITY IN MIND AND DEMAND CORPORATE GOODS SHED THEIR WASTEFUL PERCEIVED AND PLANNED OBSOLESCENCE MODELS. (10)





HOW IT'S FIXED

EQUITY FOR THE ENVIRONMENT MAY MEAN LESS ENERGY CONSUMPTION IN GENERAL. HOWEVER, GREENER INFRASTRUCTURE AND MORE PROGRESSIVE APPROACH TO *WHAT WE STORE* IS IMPORTANT AS WELL. [11]

WITH A ECONOMIC MODEL OF CONSUMPTION, DRIVEN BY DATA IT'S HARD TO ENVISION LOWER DATA CENTER IMPACT IN THE FUTURE. HERE CHANGE EITHER NEEDS TO COME SYSTEMICALLY TO OUR WASTEFUL AND OBSOLESCENT APPROACH TO DATA, SERVER AND SOFTWARE STORAGE IN RELATION TO ENERGY CONSUMPTION. [12]

THE UNSEEN IMPACT OF SOFTWARE AND ENERGY CONSUMPTION

SERVER FARMS FOR CRYPTO, CLOUD STORAGE, NFTS, AND THE GREATER NON-LAN INTERNET INFRASTRUCTURE REQUIRES A MASSIVE AMOUNT OF POWER. HUGE AMOUNTS OF ENERGY FROM NON-RENEWABLE GRIDS ARE EXPENDED TO KEEP THEM RUNNING. [11] [12]

ENERGY CONSUMPTION FROM DATA CENTERS DOUBLED BETWEEN 2017-18 AND AGAIN IN 2018-19. [12]

POW "PROOF OF WORK" FOR NFTS/CRYPTO SPECIFICALLY, REQUIRES ENERGY EXPENDED FOR INTRINSIC VALUE. A GROSS WASTE OF PRECIOUS RESOURCES. [11]



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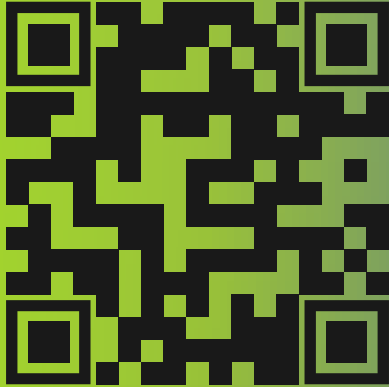




**THANK YOU FOR ALL OF YOUR TIME, I HOPE
YOU ENJOYED OUR EVENT!**



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RESOURCES

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DESIGNING HUMANE TECH



