

MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN
MINIMAL PRODUCT DESIGN

DATE: 11/27/2018

By Myles Cagle

EXECUTIVE SUMMARY

OVERVIEW

A DESIGN THINKING TOOLKIT USEFUL IN
CREATING PRODUCTS THAT EMBODY
MINIMALISM.

SIMPLE . FUNCTIONAL . INSPIRING

AUDIENCE

PRODUCT DESIGNERS, CONSULTANTS,
ANYONE INTERESTED IN DESIGN

DISCOVER
DISCOVER DISCOVER
DISCOVER DISCOVER DISCOVER
DISCOVER **DISCOVER** DISCOVER
DISCOVER DISCOVER DISCOVER
DISCOVER DISCOVER
DISCOVER

DISCOVER

BEFORE YOU DIG INTO YOUR IN-CONTEXT RESEARCH, IT'S CRITICAL TO KNOW WHO YOU'RE DESIGNING FOR. YOU'RE BOUND TO LEARN MORE ONCE YOU'RE IN THE FIELD, BUT HAVING AN IDEA OF YOUR TARGET AUDIENCE'S NEEDS, CONTEXTS, AND HISTORY WILL HELP ENSURE THAT YOU START YOUR RESEARCH BY ASKING SMART QUESTIONS. AND DON'T LIMIT YOUR THINKING JUST TO THE PEOPLE YOU'RE DESIGNING FOR.

ONCE YOU'RE IN-CONTEXT THERE ARE LOTS OF WAYS TO OBSERVE THE PEOPLE YOU'RE DESIGNING FOR. SPEND A DAY SHADOWING THEM, HAVE THEM WALK YOU THROUGH HOW THEY MAKE DECISIONS, PLAY FLY ON THE WALL AND OBSERVE THEM AS THEY COOK, SOCIALIZE, VISIT THE DOCTOR—WHATEVER IS RELEVANT TO YOUR CHALLENGE.

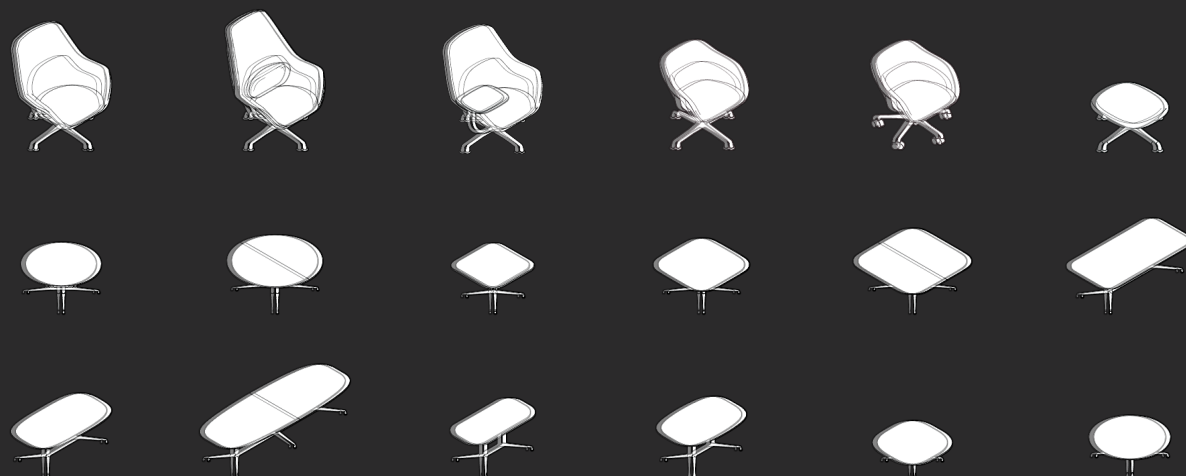
METHOD

1. WITH YOUR TEAM, WRITE DOWN THE PEOPLE OR GROUPS THAT ARE DIRECTLY INVOLVED IN OR REACHED BY YOUR CHALLENGE. ARE YOU DESIGNING FOR CHILDREN? FOR FARMERS? WRITE ALL THE GROUPS DOWN ON POST-ITS AND PUT THEM ON A WALL SO YOU CAN VISUALIZE YOUR AUDIENCE.
2. NOW ADD PEOPLE OR GROUPS WHO ARE PERIPHERALLY RELEVANT, OR ARE ASSOCIATED WITH YOUR DIRECT AUDIENCE.
3. THINK ABOUT THE CONNECTIONS THESE PEOPLE HAVE WITH YOUR TOPIC. WHO ARE THE FANS? WHO ARE THE SKEPTICS? WHO DO YOU NEED THE MOST ON YOUR SIDE? ADD THEM TO THE WALL.
4. NOW ARRANGE THESE POST-ITS INTO A MAP OF THE PEOPLE INVOLVED IN YOUR CHALLENGE. SAVE IT AND REFER TO IT AS YOU MOVE THROUGH YOUR CHALLENGE.

DEFINE YOUR AUDIENCE

EXAMPLE

WORK HAS BECOME LESS FORMAL AND MORE COLLABORATIVE, AND THUS INHERENTLY SOCIAL. MANY WORK SPACES HAVE ADAPTED THROUGHOUT THE YEARS BUT THE CONFERENCE ROOM HAS LARGELY REMAINED UNCHANGED FOR DECADES. THE SW_1 COLLECTION FOR COALESSE RETHINKS THE CONFERENCE SETTING AND THE NOTION OF LIVE/WORK. THIS BECAME THE FOCUS OF OUR PROJECT FOR COALESSE.



INPUT: PEOPLE, POSITIONS, EXPERIENCES, AND RELATIONS

OUTPUT: PRODUCT BASIS, AND CONCEPTUAL AUDIENCE MAP

MMML DESIGN STUDIOS

1. AS YOU CREATE A PROJECT PLAN, BUDGET ENOUGH TIME AND MONEY TO SEND TEAM MEMBERS INTO THE FIELD TO SPEND TIME WITH THE PEOPLE YOU'RE DESIGNING FOR. TRY TO ORGANIZE A HOMESTAY IF POSSIBLE.
2. ONCE YOU'RE THERE, OBSERVE AS MUCH AS YOU CAN. IT'S CRUCIAL TO RECORD EXACTLY WHAT YOU SEE AND HEAR. IT'S EASY TO INTERPRET WHAT'S IN FRONT OF YOU BEFORE YOU'VE FULLY UNDERSTOOD IT, SO BE SURE YOU'RE TAKING DOWN CONCRETE DETAILS AND QUOTES ALONGSIDE YOUR IMPRESSIONS.
3. A GREAT IMMERSION TECHNIQUE IS TO SHADOW A PERSON YOU'RE DESIGNING FOR FOR A DAY. ASK THEM ALL ABOUT THEIR LIVES, HOW THEY MAKE DECISIONS, WATCH THEM SOCIALIZE, WORK, AND RELAX.
4. IF YOU'VE GOT A SHORTER WINDOW FOR IMMERSION, YOU CAN STILL LEARN A LOT BY FOLLOWING SOMEONE FOR A FEW HOURS. PAY CLOSE ATTENTION TO THE PERSON'S SURROUNDINGS. YOU CAN LEARN A LOT FROM THEM.

EXAMPLE

DISCOVER FIRST HAND WHAT THE PEOPLE WHO USE MAKE AND REPAIR SHOPPING CARTS REALLY THINK. FIND REAL EXPERTS TO LEARN MUCH MORE QUICKLY THAN TEACHING YOURSELF. DISCOVER PSYCHOLOGY AND REASONING BEHIND HOW AND WHY PEOPLE MAKE DECISIONS CONNECTED TO THE USE OF THE SHOPPING CART.



INPUT: EXPERIENCE, EXPERTS, PSYCHOLOGY, USER THOUGHTS

OUTPUT: NEW AND DEEPER UNDERSTANDING OF PROBLEMS AND FOCUS POINTS

IDEO

EMPATHIZE
EMPATHIZE
EMPATHIZE
EMPATHIZE
EMPATHIZE
EMPATHIZE
EMPATHIZE
EMPATHIZE

EMPATHIZE

HUMAN-CENTERED DESIGN IS ABOUT GETTING TO THE PEOPLE YOU'RE DESIGNING FOR AND HEARING FROM THEM IN THEIR OWN WORDS. WHENEVER POSSIBLE, CONDUCT YOUR INTERVIEWS IN THE INTERVIEWEE'S SPACE. YOU CAN LEARN SO MUCH ABOUT A PERSON'S MINDSET, BEHAVIOR, AND LIFESTYLE BY TALKING WITH THEM WHERE THEY LIVE OR WORK.

TO GO BEYOND AN IN-PERSON INTERVIEW TO BETTER UNDERSTAND A PERSON'S CONTEXT, THE PEOPLE WHO SURROUND THEM, COMMUNITY DYNAMICS, AND THE JOURNEY THROUGH HOW THEY USE A PRODUCT OR SERVICE. PHOTOJOURNALS CAN HELP CREATE A FOUNDATION FOR RICHER DISCUSSION AS THEY PRIME AN INDIVIDUAL BEFORE AN INTERVIEW WHICH MEANS THEY START THINKING ABOUT THE SUBJECT A FEW DAYS IN ADVANCE.

1. IDENTIFY THE SORT OF GROUP YOU WANT TO INTERVIEW. IF YOU'RE TRYING TO LEARN SOMETHING SPECIFIC, ORGANIZE THE GROUP SO THAT YOU HAVE THE BEST CHANCE AT HEARING IT.
2. CONVENE THE GROUP INTERVIEW ON NEUTRAL GROUND, PERHAPS A SHARED COMMUNITY SPACE THAT PEOPLE OF ALL AGES, RACES, AND GENDERS WILL HAVE ACCESS TO.
3. IN A GROUP INTERVIEW, BE CERTAIN TO HAVE ONE PERSON ASKING THE QUESTIONS AND THE OTHER TEAM MEMBERS TAKING NOTES AND CAPTURING WHAT THE GROUP IS SAYING
4. COME PREPARED WITH A STRATEGY TO ENGAGE THE QUIETER MEMBERS OF THE GROUP. THIS CAN MEAN ASKING THEM QUESTIONS DIRECTLY OR FINDING WAYS TO MAKE THE MORE VOCAL MEMBERS OF THE GROUP RECEDE FOR THE MOMENT
5. GROUP INTERVIEWS ARE A GREAT SETTING TO IDENTIFY WHO YOU MIGHT WANT TO GO DEEPER WITH IN A CO-CREATION SESSION.

EXAMPLE

PRODUCT DESIGN FIRMS CAN USE A GROUP INTERVIEW AT MULTIPLE DIFFERENT POINTS IN THE DESIGN PROCESS. IN THE BEGINNING THE GROUP INTERVIEW CAN BE USED TO GAIN AN UNDERSTANDING OF WHAT THE CUSTOMER BASE WANTS OUT OF THE PRODUCT YOUR DESIGNING FOR THEM. IN LATER STAGES GROUP INTERVIEWS CAN BE REDONE IN ORDER TO TEST PROTOTYPES AND GAIN REAL TIME FEEDBACK ON WHAT A TARGETED CONSUMER BASE WANTS OUT OF YOUR DESIGN.



INPUT: USERS, QUESTIONS, PROTOTYPES, ETC.

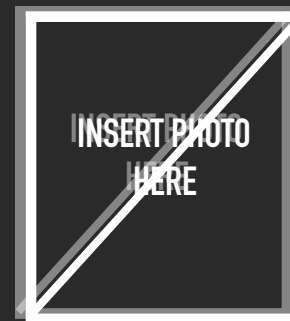
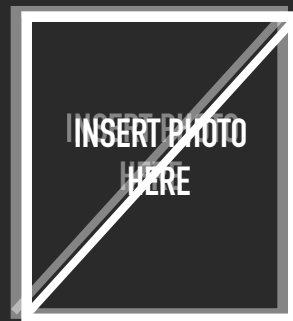
OUTPUT: A MORE FOCUSED AND PERSONAL IDEA OF THE PROBLEM FROM THE TARGETED CONSUMER BASE

THEORETICAL

1. THIS METHOD CAN TAKE A COUPLE OF DAYS TO COME TO LIFE, SO MAKE SURE THAT YOU'VE ALLOCATED ENOUGH TIME IN ADVANCE OF A SCHEDULED INTERVIEW TO MAKE IT WORK. THE GOAL IS TO CAPTURE EVERYDAY MOMENTS AND DYNAMICS.
2. GIVE THE PERSON YOU'RE DESIGNING FOR A CAMERA (IF THEY DON'T HAVE ONE) AND A PROMPT. IF YOU'RE DESIGNING A FINANCIAL SERVICE YOU MIGHT ASK THE PERSON TO TAKE PICTURES OF EVERYONE WHO INFLUENCES THEIR FINANCIAL DECISIONS. OR YOU WOULD ASK THEM TO TAKE A PICTURE OF ALL THE PLACES WHERE THEY HANDLE FINANCES.
3. ONCE THE PERSON YOU'RE DESIGNING FOR HAS TAKEN THE PHOTOS, GET THEM DEVELOPED, OR HAVE THEM SEND IT TO YOU DIGITALLY IN ADVANCE OF THE SCHEDULED INTERVIEW.
4. PHOTOJOURNALS ALLOW YOU TO ACTUALLY PREVIEW A PIECE OF YOUR INTERVIEW, SO SPEND SOME TIME WITH THE PICTURES AND DEVELOP A FEW QUESTIONS YOU'LL WANT TO ASK BASED ON WHAT YOU SEE
5. WHEN YOU'RE TOGETHER, ASK THE PERSON TO WALK YOU THROUGH THE PHOTOS THEY TOOK, AND WHAT THEY MEAN. PROBE INTO THE "WHY" BEHIND EACH PHOTO DIG INTO HOW THEY FEEL ABOUT THE PHOTOS, AND DON'T FORGET TO ASK WHAT THEY DECIDED TO LEAVE OUT AND WHY.

EXAMPLE

PRODUCT DESIGN FIRMS CAN USE PHOTOJOURNALS TO SEE THROUGH THE EYES OF THEIR CUSTOMERS. THIS CAN HELP FIND AND FOCUS THE PERSPECTIVE OF THE PROBLEM AND SHOW DIRECTION FOR THE DESIGN. BY SEEING A VISUAL REPRESENTATION OF A CLIENTS PERSPECTIVE IT AIDS THE FIRM IN CREATING A PRODUCT THAT IS SIMPLE AND FUNCTIONAL FOR THEIR CLIENT.



INPUT: CAMERA, PHOTOS, CLIENT, TIME, EXPERIENCES

OUTPUT: SEEING THE PROBLEM FROM THE CLIENTS PERSPECTIVE, UNDERSTANDING OF INTERACTIONS AND EXPERIENCES

THEORETICAL

DEFINE

/də'fɪn/

VERB

1. STATE OR DESCRIBE EXACTLY THE NATURE, SCOPE OR MEANING OF.
2. MARK OUT THE BOUNDARY OR LIMIT OF

DEFINE

TAKE A GOOD LONG LOOK ACROSS YOUR INTERVIEWS, ANALOGOUS INSPIRATION, AND OTHER LEARNINGS. HAVE ANY PATTERNS EMERGED? IS THERE A COMPELLING INSIGHT YOU HEARD AGAIN AND AGAIN? A CONSISTENT PROBLEM THE PEOPLE YOU'RE DESIGNING FOR FACE? WHAT FEELS SIGNIFICANT? WHAT SURPRISED YOU? THESE THEMES ARE BOUND TO CHANGE, BUT AS YOU MOVE THROUGH EACH PHASE, CONTINUE LOOKING FOR THEMES AND SORTING OUT WHAT THEY MEAN.

METHOD

1. GATHER YOUR TEAM AROUND THE POST-ITS. MOVE THE MOST COMPELLING, COMMON, AND INSPIRING QUOTES, STORIES, OR IDEAS TO A NEW BOARD AND SORT THEM INTO CATEGORIES.
2. LOOK FOR PATTERNS AND RELATIONSHIPS BETWEEN YOUR CATEGORIES AND MOVE THE POST-ITS AROUND AS YOU CONTINUE GROUPING. THE GOAL IS TO IDENTIFY KEY THEMES AND THEN TO TRANSLATE THEM INTO OPPORTUNITIES FOR DESIGN.
3. ARRANGE AND REARRANGE THE POST-ITS, DISCUSS, DEBATE, AND TALK THROUGH WHATS EMERGING. DON'T STOP UNTIL EVERYONE IS SATISFIED THAT THE CLUSTERS REPRESENT RICH OPPORTUNITIES FOR DESIGN.
4. IDENTIFYING THESE THEMES WILL HELP YOU CREATE FRAMEWORKS AND WRITE DESIGN PRINCIPLES.

FIND THEMES

EXAMPLE

IN IGOODEA WHEN WE ARE DESIGNING SOMETHING OR SOLVING A PROBLEM WE WILL TAKE THE INFORMATION WE HAVE OR NEED AND PUT THEM ONTO POST-ITS SO THAT THE IDEAS CAN BE GROUPED BY A GENERAL THEME. DOING THIS ALLOWS US TO CREATE A FRAMEWORK FOR OUR SOLUTION AND ALSO MAKES IT EASIER TO UNDERSTAND KEY POINTS AND CONTINUE EXPANDING ON THEM.

IGOODEA
CREATIVES

INPUT: POST-ITS, IDEAS, CONCEPTS, INFORMATION, ETC

OUTPUT: FRAMEWORK FOR THE PRODUCT, THEMES, FOCUS POINTS, AND A BROADER UNDERSTANDING OF THE PROBLEM

PERSONAL

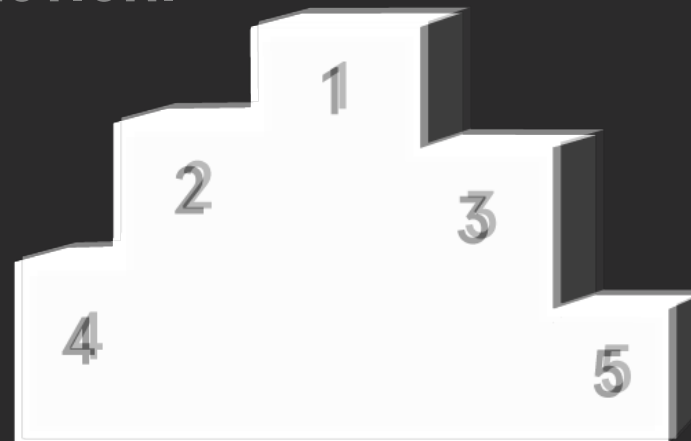
METHOD

1. GATHER YOUR TEAM AND HAVE EVERYONE WRITE DOWN THE TOP FIVE IDEAS JUMPING OUT TO THEM.
2. SHARE YOUR TOP FIVES AND CLUSTER SIMILAR IDEAS. THIS IS A GREAT WAY TO REVEAL WHAT'S MOST INTERESTING OR IMPORTANT AT A GIVEN TIME.
3. CONSIDER DOING THIS EXERCISE OFTEN AND VARY THE TIMEFRAME. WHAT'S YOUR TEAM'S TOP FIVE FOR THE DAY? HOW ABOUT FOR THE WEEK? YOU CAN ALSO USE THIS TOOL TO PULL OUT THE TOP FIVE BIGGEST CHALLENGES YOU FACE, OR THE TOP FIVE CRAZY IDEAS YOU WANT TO TRY.
4. KEEPING AND DISPLAYING THE POST-ITS WITH YOUR TOP FIVES IS ALSO A GREAT WAY TO WATCH YOUR PROJECT EVOLVE AND TO REMIND YOURSELF OF YOUR PRIORITIES.

TOP FIVE

EXAMPLE

CREATING A TOP FIVE CAN BE USED IN MANY DIFFERENT CIRCUMSTANCES, FROM INDIVIDUAL IDEAS, TO THEMES OR GROUPS AND EVEN PROTOTYPES. IN MINIMALIST DESIGN AND IGOODEA CREATING A TOP FIVE IS AN ESSENTIAL STEP AS IS ALLOWS US TO CUT UNNECESSARY IDEAS FROM OUR FRAMEWORK IN ORDER TO CREATE THE MOST SIMPLE AND FUNCTIONAL SOLUTION.



INPUT: IDEAS, THEMES, FRAMEWORK, OR PROTOTYPES, PEOPLE

OUTPUT: A CLEARER PROBLEM / SOLUTION, MORE REFINED, FOCUSED, AND FUNCTIONAL PRODUCT

PERSONAL

IDEATE

BY DEFINING THEMES AND INSIGHTS, YOU'VE IDENTIFIED PROBLEM AREAS THAT POSE CHALLENGES TO THE PEOPLE YOU'RE DESIGNING FOR. NOW, TRY REFRAMING YOUR INSIGHT STATEMENTS AS HOW MIGHT WE QUESTIONS TO TURN THOSE CHALLENGES INTO OPPORTUNITIES FOR DESIGN. WE USE THE HOW MIGHT WE FORMAT BECAUSE IT SUGGESTS THAT A SOLUTION IS POSSIBLE AND BECAUSE THEY OFFER YOU THE CHANCE TO ANSWER THEM IN A VARIETY OF WAYS. A PROPERLY FRAMED HOW MIGHT WE DOESN'T SUGGEST A PARTICULAR SOLUTION, BUT GIVES YOU THE PERFECT FRAME FOR INNOVATIVE THINKING.

METHOD

1. START BY LOOKING AT THE INSIGHT STATEMENTS THAT YOU'VE CREATED. TRY REPHRASING THEM AS QUESTIONS BY ADDING "HOW MIGHT WE" AT THE BEGINNING.
2. THE GOAL IS TO FIND OPPORTUNITIES FOR DESIGN, SO IF YOUR INSIGHTS SUGGEST SEVERAL HOW MIGHT WE QUESTIONS THAT'S GREAT.
3. NOW TAKE A LOOK AT YOUR HOW MIGHT WE QUESTIONS AND ASK YOURSELF IF IT ALLOWS FOR A VARIETY OF SOLUTIONS. IF IT DOESN'T, BROADEN IT. YOUR HOW MIGHT WE SHOULD GENERATE A NUMBER OF POSSIBLE ANSWERS AND WILL BECOME A LAUNCHPAD FOR YOUR BRAINSTORMS.
4. FINALLY, MAKE SURE THAT YOUR HOW MIGHT WE'S AREN'T TOO BROAD. IT'S A TRICKY PROCESS BUT A GOOD HOW MIGHT WE SHOULD GIVE YOU BOTH A NARROW ENOUGH FRAME TO LET YOU KNOW WHERE TO START YOUR BRAINSTORM, BUT ALSO ENOUGH BREADTH TO GIVE YOU ROOM TO EXPLORE WILD IDEAS.

HOW MIGHT WE

EXAMPLE

AT A PRODUCT DESIGN FIRM SUCH AS IDEO, HOW MIGHT WE IS USED TO KICKSTART IDEATION. BY REPHRASING PREVIOUS INFORMATION INTO QUESTIONS IT ALLOWS THE COMPANY TO QUICKLY BEGIN BUILDING IDEAS DIRECTLY RELATED TO THE PROBLEMS THEIR CLIENT IS FACING. USING HOW MIGHT WE STATEMENTS ALLOWS THE FIRM TO BUILD AND BRANCH OFF OF THEIR FRAMEWORK AND PREVIOUS RESEARCH.



INPUT: POST-ITS, IDEAS, QUESTIONS, PROBLEMS, PEOPLE

OUTPUT: POSSIBLE SOLUTIONS / PROTOTYPES, NEW IDEAS, INNOVATION

IDEO

1. THIS IS MORE OF A GENERAL APPROACH THAN A ONE-OFF ACTIVITY, SO ALWAYS KEEP POST-ITS, PAPER, AND PENS HANDY IN CASE THE URGE STRIKES TO DRAW, GRAPH, CHART, OR MAKE.
2. DRAWINGS MAY NEED A BIT OF ADDITIONAL EXPLANATION, SO TAKE TIME TO TALK THROUGH YOUR VISUALS WITH THE TEAM.
3. IF YOU'RE HAVING TROUBLE EXPLAINING AN IDEA, CONSIDER DRAWING IT. YOU'LL BE SURPRISED AT HOW QUICKLY IT COME INTO FOCUS.

EXAMPLE

AT A PRODUCT DESIGN FIRM SUCH AS IDEO, GETTING VISUAL IS AN IMPORTANT STEP IN IDEATION. IT ALLOWS EVERYONE TO QUICKLY SEE WHAT YOUR IDEAS ARE EVEN IF YOU CANT DESCRIBE THEM. FOR EXAMPLE WHEN IDEO WAS DESIGNING A NEW SHOPPING CART EVERYONE ON THE TEAM BEGAN DRAWING THEIR IDEAS SO IT WAS EASIER TO UNDERSTAND AND THEY COULD SEE WHICH IDEAS WOULD BE POSSIBLE TO PROTOTYPE IN ONE DAY.



INPUT: PAPER, IDEAS, CONCEPTS, DRAWING MATERIALS,
PEOPLE

OUTPUT: VISUAL REPRESENTATION OF IDEAS, UNDERSTANDING
OF THINGS NOT REPRESENTABLE THROUGH WORDS

IDEO

P
P R
P R O
P R O T
P R O T O
P R O T O T
P R O T O T Y
P R O T O T Y P
P R O T O T Y P E

PROTOTYPE

SO FAR YOU'VE COME UP WITH, SHARED, AND EVEN DISCARDED SCORES OF IDEAS. YOU FURTHER REFINED THINGS AS YOU BUNDLED YOUR IDEAS AND NOW IT'S TIME TO TURN THEM INTO A CONCEPT. A CONCEPT IS MORE POLISHED AND COMPLETE THAN AN IDEA. IT'S MORE SOPHISTICATED, IT'S SOMETHING THAT YOU'LL WANT TO TEST WITH THE PEOPLE YOU'RE DESIGNING FOR, AND IT'S STARTING TO LOOK LIKE AN ANSWER TO YOUR HOW MIGHT WE QUESTION. THIS IS THE MOMENT WHERE YOU MOVE FROM PROBLEM TO SOLUTION AND IT DRIVES EVERYTHING THAT COMES NEXT.

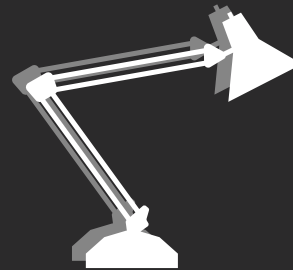
METHOD

1. TAKE THE IDEAS THAT YOU'VE BUNDLED IN BUNDLE YOUR IDEAS AND PUT THEM UP ON THE WALL ON POST-ITS.
2. NOW MIGHT BE A GOOD TIME TO CREATE FRAMEWORKS OUT OF THOSE BUNDLED IDEAS. START TO VISUALIZE WHERE YOUR BUNDLES ARE POINTING, BUT THINK ESPECIALLY HARD ABOUT MAKING THEM INTO A SYSTEM.
3. DON'T WORRY TOO MUCH ABOUT ALL THE DETAILS OF YOUR SOLUTION NOW—YOU DON'T NEED A FINELY TUNED FUNDING STRATEGY YET. THE GOAL IS TO GET A ROBUST, FLEXIBLE CONCEPT THAT ADDRESSES THE PROBLEM YOU'RE TRYING TO SOLVE.
4. KEEP REFERRING TO YOUR HOW MIGHT WE QUESTIONS. ARE YOU ANSWERING IT? ARE THERE ELEMENTS MISSING IN YOUR SOLUTION? WHAT ELSE CAN YOU INCORPORATE TO COME UP WITH A GREAT SOLUTION?
5. LIKE THE REST OF HUMAN-CENTERED DESIGN, THERE'S A BIT OF TRIAL AND ERROR HERE. AND CREATING A CONCEPT MEANS YOU'LL PROBABLY CREATE A COUPLE THAT DON'T WORK OUT.

CREATE A CONCEPT

EXAMPLE

CREATING A CONCEPT IS AN IMPORTANT STEP INTO PROTOTYPING AS IT REPRESENTS MOVING FROM IDEAS TO ACTUAL SOLUTIONS. AN EXAMPLE OF A DESIGN FIRM CREATING A CONCEPT WOULD BE THEM TAKING THEIR HOW MIGHT WE STATEMENTS THAT THEY'VE CREATED FROM PREVIOUS STEPS AND START DESIGNING THE BEGINNINGS OF A PRODUCT THAT SOLVES THE PROBLEMS THAT CAN BE TURNED INTO A PHYSICAL SOLUTIONS.



INPUT: HOW MIGHT WE STATEMENTS, PROBLEMS, FRAMEWORKS, DESIGN PRINCIPLES

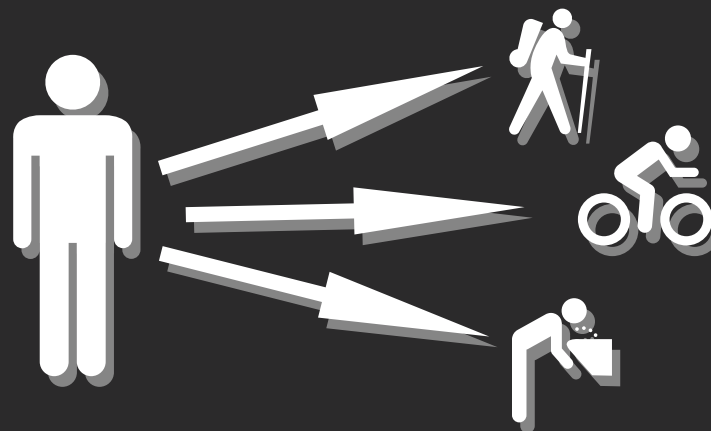
OUTPUT: ROUGH VERSIONS OF SOLUTIONS, TESTABLE PRODUCTS

THEORETICAL

1. THE MAIN GOAL OF PROTOTYPING IS TO MAKE AN IDEA JUST TANGIBLE ENOUGH TO ELICIT A RESPONSE, WHETHER FROM YOU, YOUR TEAM, A PARTNER, OR WHOMEVER YOU ARE DESIGNING FOR.
2. DECIDE WHICH OF YOUR IDEAS YOU WANT TO ROLE PLAY AND ASSIGN THE NECESSARY ROLES TO YOUR TEAM MEMBERS.
3. TAKE ABOUT 30 MINUTES TO DETERMINE THE NECESSARY ROLES, WHO WILL PLAY THEM, AND WHAT IT IS THAT YOU'RE LOOKING TO TEST—IS IT A TYPE OF INTERACTION, WHETHER A PERSON WILL RESPOND TO A TYPE OF PRODUCT, THE EFFECTIVENESS OF A SALES PITCH?
4. COSTUMES AND PROPS CAN BE HIGHLY EFFECTIVE TOOLS IN BRINGING YOUR ROLE PLAYING TO LIFE. DON'T SPEND AGES ON THEM, BUT CONSIDER MAKING YOUR PROTOTYPE THAT MUCH MORE REALISTIC. YOU'D BE SURPRISED HOW FAR JUST A FEW DETAILS CAN GO TOWARD MAKING A ROLE PLAY FEEL REAL.

EXAMPLE

ROLE PLAYING WAS AN ESSENTIAL PART OF IDEO'S PRODUCT DESIGNING WHEN CREATING THE NEW SHOPPING CART. THEY USED ROLE PLAYING TO PORTRAY THE ROLES OF BOTH CUSTOMERS AND STAFF OF A GROCERY STORE IN ORDER TO BOTH UNDERSTAND HOW THESE USERS INTERACTED WITH THE CARTS AND TO SHOW OTHERS HOW THEIR NEW DESIGNS WOULD EFFECT THE WAY THE NEW CARTS WOULD BE USED.



INPUT: PEOPLE, IDEAS, CONCEPTS, ROLES, TESTING

OUTPUT: A DEEPER UNDERSTANDING OF THE INTERACTION BETWEEN CONSUMER AND PRODUCT, VISUAL REPRESENTATION OF PRODUCT USE

IDEO

TESTING...

TESTING

SOLICITING FEEDBACK ON YOUR IDEAS AND PROTOTYPES IS A CORE ELEMENT OF THE IDEATION PHASE, AND IT HELPS KEEP THE PEOPLE YOU'RE DESIGNING FOR AT THE CENTER OF YOUR PROJECT. IT'S ALSO A DIRECT PATH TO DESIGNING SOMETHING THAT THOSE SAME PEOPLE WILL ADOPT. IF THE POINT OF A PROTOTYPE IS TO TEST AN IDEA, THEN COLLECTING FEEDBACK FROM POTENTIAL USERS IS WHAT PUSHES THINGS FORWARD.

ITERATION IS THE NAME OF THE GAME IN HUMAN-CENTERED DESIGN, AND THOUGH YOUR SOLUTION IS NOW NEARLY READY TO GET OUT INTO THE WORLD, YOU NEED TO KEEP ITERATING. WHAT ARE THE WAYS IN WHICH YOUR SOLUTION COULD BE JUST A LITTLE BIT BETTER? CAN YOU TWEAK YOUR COMMUNICATION STRATEGY, MAYBE YOU'LL NEED TO EVOLVE YOUR REVENUE PLANS, OR PERHAPS YOUR DISTRIBUTION PLAN NEEDS A TWEAK. AS SOON AS YOU GET YOUR SOLUTION OUT INTO THE WORLD START TO NOTICE WHAT COULD BE BETTER AND ASSESS HOW YOU CAN MAKE IT SO.

1. NOW THAT YOU'VE GOT A PROTOTYPE TO SHARE, GET IT IN FRONT OF THE PEOPLE YOU'RE DESIGNING IT FOR. THERE ARE LOTS OF WAY TO DO IT: RECONVENE A GROUP INTERVIEW, INTERCEPT PEOPLE IN MARKETS FOR INTERVIEWS, DO ANOTHER EXPERT INTERVIEW WITH YOUR PROTOTYPE OR PERHAPS RUN A CO-CREATION SESSIONS DESIGNED TO SOLICIT FEEDBACK.
2. CAPTURING HONEST FEEDBACK IS CRUCIAL. PEOPLE MAY PRAISE YOUR PROTOTYPE TO BE NICE, SO ASSURE THEM THAT THIS IS ONLY A TOOL BY WHICH TO LEARN AND THAT YOU WELCOME HONEST, EVEN NEGATIVE FEEDBACK.
3. SHARE WITH LOTS OF PEOPLE SO THAT YOU GET A VARIETY OF REACTIONS. REFER BACK TO EXTREMES AND MAINSTREAMS TO MAKE SURE YOU'RE CAPTURING A CROSS SECTION OF POTENTIAL USERS.
4. WRITE DOWN THE FEEDBACK YOU HEAR AND USE THIS OPPORTUNITY WITH THE PEOPLE YOU'RE DESIGNING FOR TO ASK MORE QUESTIONS AND PUSH YOUR IDEAS FURTHER

EXAMPLE

GETTING FEEDBACK IS AN INCREDIBLY IMPORTANT STEP TO ANY PRODUCT. IDEO MADE SURE TO GET FEEDBACK FROM MULTIPLE DIFFERENT GROUPS AT DIFFERENT POINTS IN THEIR DESIGN PROCESS. FROM GETTING COWORKER FEEDBACK ON IDEAS AND DESIGNS TO GETTING CUSTOMER FEEDBACK ON PROTOTYPES AND CASHIER FEEDBACK ON THE PROCESS, IDEO USED THE FEEDBACK THEY RECEIVED TO FURTHER UNDERSTAND THE PROBLEM AND TWEAK THE SOLUTION.



INPUT: PROTOTYPES, CLIENTS, CONSUMERS, COWORKERS, ETC

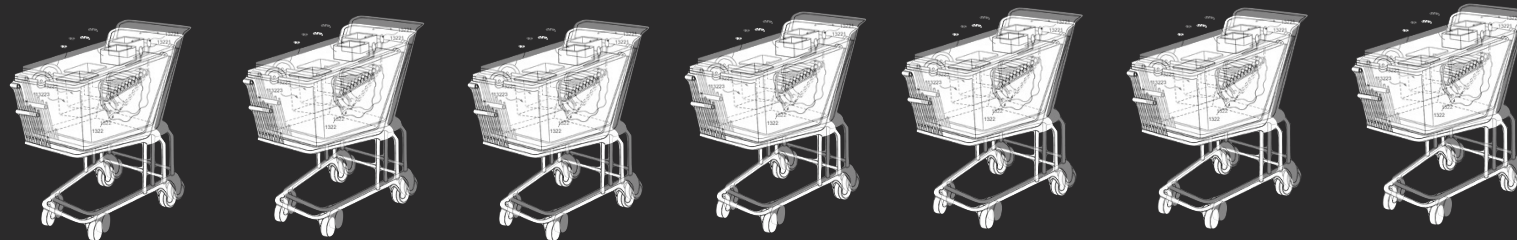
OUTPUT: NEW PROBLEMS, HOW SUCCESSFUL THE PROTOTYPE WAS, WHAT WAS IMPORTANT (GOOD OR BAD)

IDEO

1. DON'T LOSE SIGHT OF THE ITERATIVE APPROACH THAT YOU'VE TAKEN SO FAR. AS COUNTERINTUITIVE AS IT MIGHT SEEM, YOUR SOLUTION IS NEVER TRULY FINISHED. EVEN WHEN YOU'VE GONE TO MARKET YOU CAN ALWAYS IMPROVE.
2. EVEN IF YOUR PRODUCT, SERVICE, OR EXPERIENCE IS IN A GOOD PLACE, THINK ABOUT HOW YOU'RE MARKETING IT, IF YOU HAD THE RIGHT TALENT ON STAFF, IF YOU COULD DELIVER YOUR SOLUTION MORE EFFECTIVELY. THESE ARE ALL OPPORTUNITIES TO ITERATE.
3. RAPID PROTOTYPES AND LIVE PROTOTYPING ARE GREAT OPPORTUNITIES TO ITERATE ON THE FLY AND QUICKLY TEST YOUR IDEAS IN THE MARKETPLACE.

EXAMPLE

ITERATION IS NECESSARY WHEN TESTING PROTOTYPES AS THE FIRST TRY WILL NEVER BE PERFECT. WHEN IDEO WAS CREATING THE NEW SHOPPING CART THEY SPLIT INTO TEAMS TO EACH CREATE A PROTOTYPE AND AFTER THEY HAD CREATED MULTIPLE IDEAS THEY REVIEWED WHAT WAS CREATED AND STREAMLINED THE BEST PARTS OF EACH PROTOTYPE INTO A NEW IDEA. AFTER TESTING THIS PROTOTYPE WITH CONSUMERS AT THE GROCERY STORE THEY THEN FOUND NEW PROBLEMS THAT THEY COULD CONTINUE WORKING ON.



INPUT: PROTOTYPES, CLIENTS, CONSUMERS, COWORKERS, ETC

OUTPUT: NEW PROBLEMS, HOW SUCCESSFUL THE PROTOTYPE WAS, WHAT WAS IMPORTANT (GOOD OR BAD), REVISIONS

IDEO

CLOSING STATEMENT

THIS DESIGN THINKING TOOLKIT SHOULD BE HELPFUL TO THOSE INTERESTED OR WORKING IN PRODUCT DESIGN. THIS TOOLKIT SHOWS THAT MINIMAL DESIGN DOES NOT MEAN EASY BUT RATHER FUNCTION AND HUMAN FOCUSED, MAKING THE PRODUCT EASY TO UNDERSTAND AND INCREDIBLY USEFUL. FOR FUTURE STEPS CONTINUE REPEATING AND ITERATING THIS PROCESS MAKING SURE TO FOCUS ON CREATING THE MOST FUNCTIONAL AND TRANSPARENT PRODUCT.

REFERENCES

DESIGN THINKING METHODS: [DESIGNKIT.ORG](https://www.designkit.org/)

IDEO: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=M66ZU2PCICM](https://www.youtube.com/watch?v=M66ZU2PCICM)

IGOODAEA: [HTTPS://WWW.LINKEDIN.COM/COMPANY/IGOODAEA/](https://www.linkedin.com/company/igoodaea/)