HOW I STUMBLED ONTO UX RESEARCH BECAUSE I LOVED MUSIC

DALIA EL-SHIMY

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Queen's
CFRC
101.9 FM
62 Fifth Field Company Lane
cfrc
CFRC
90 YEARS
101.9fm

MUSIC TECHNOLOGY...?
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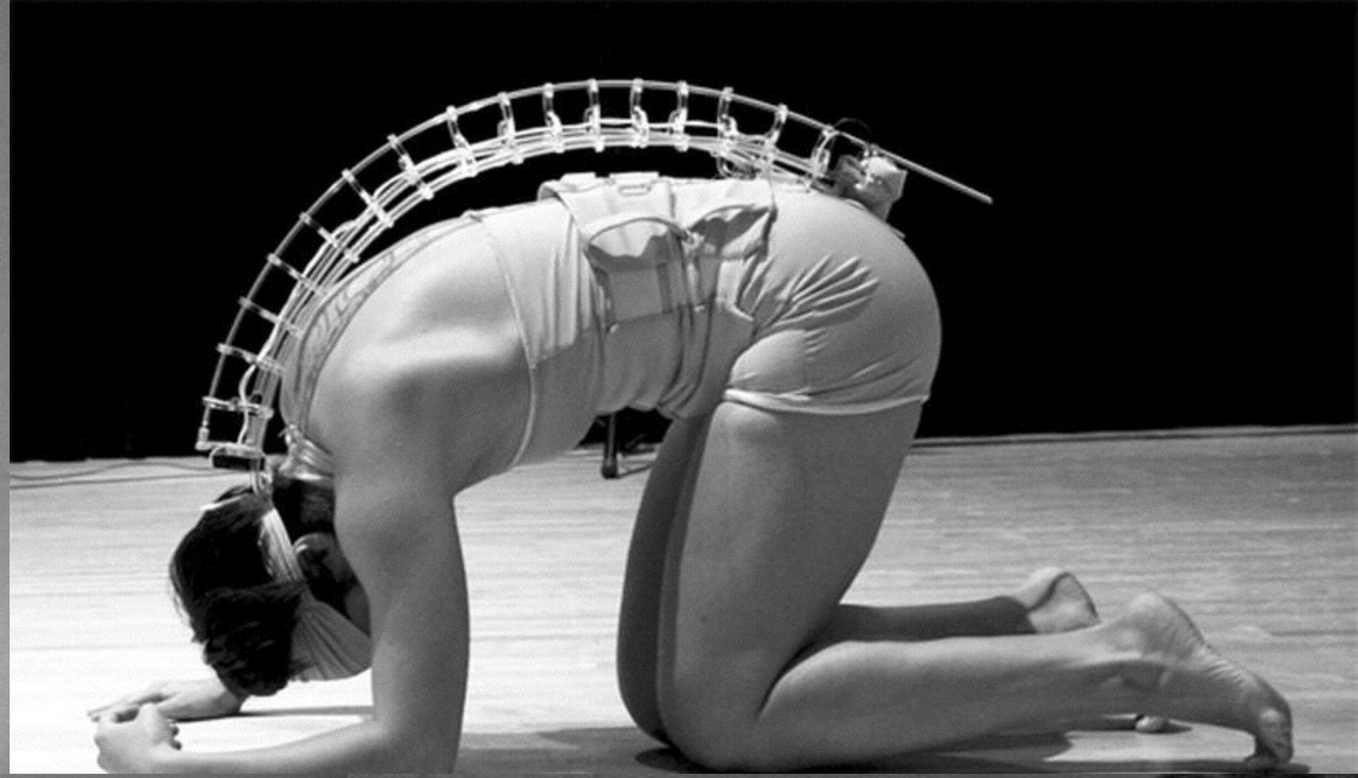

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SO WHY WEREN'T THESE INSTRUMENTS EVERYWHERE?

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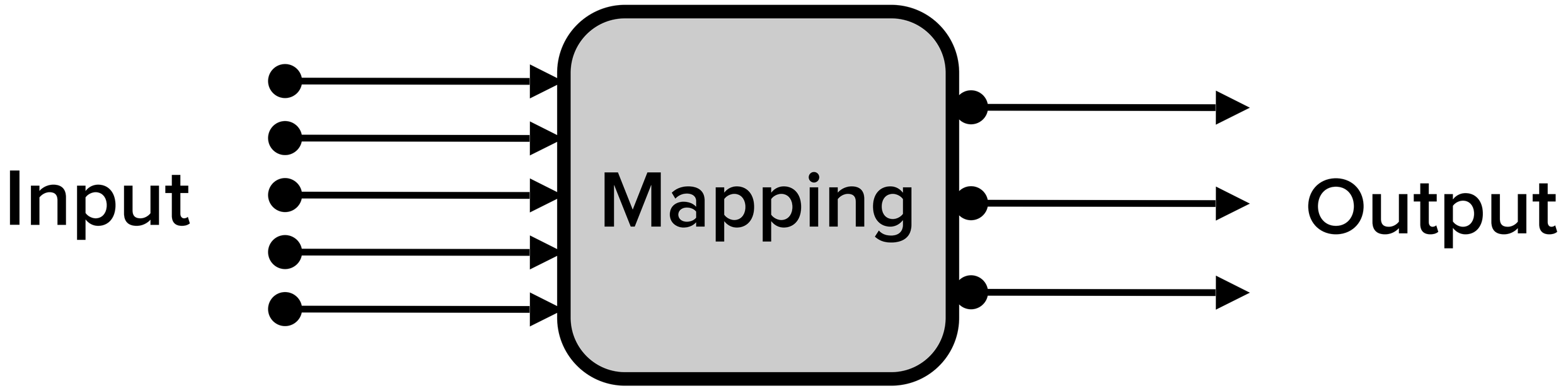
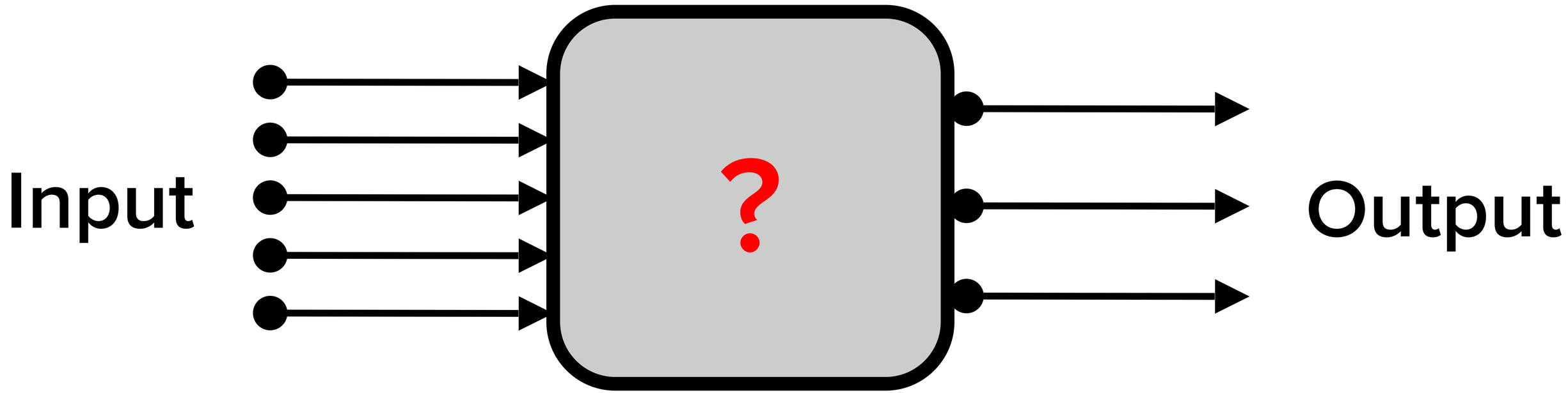
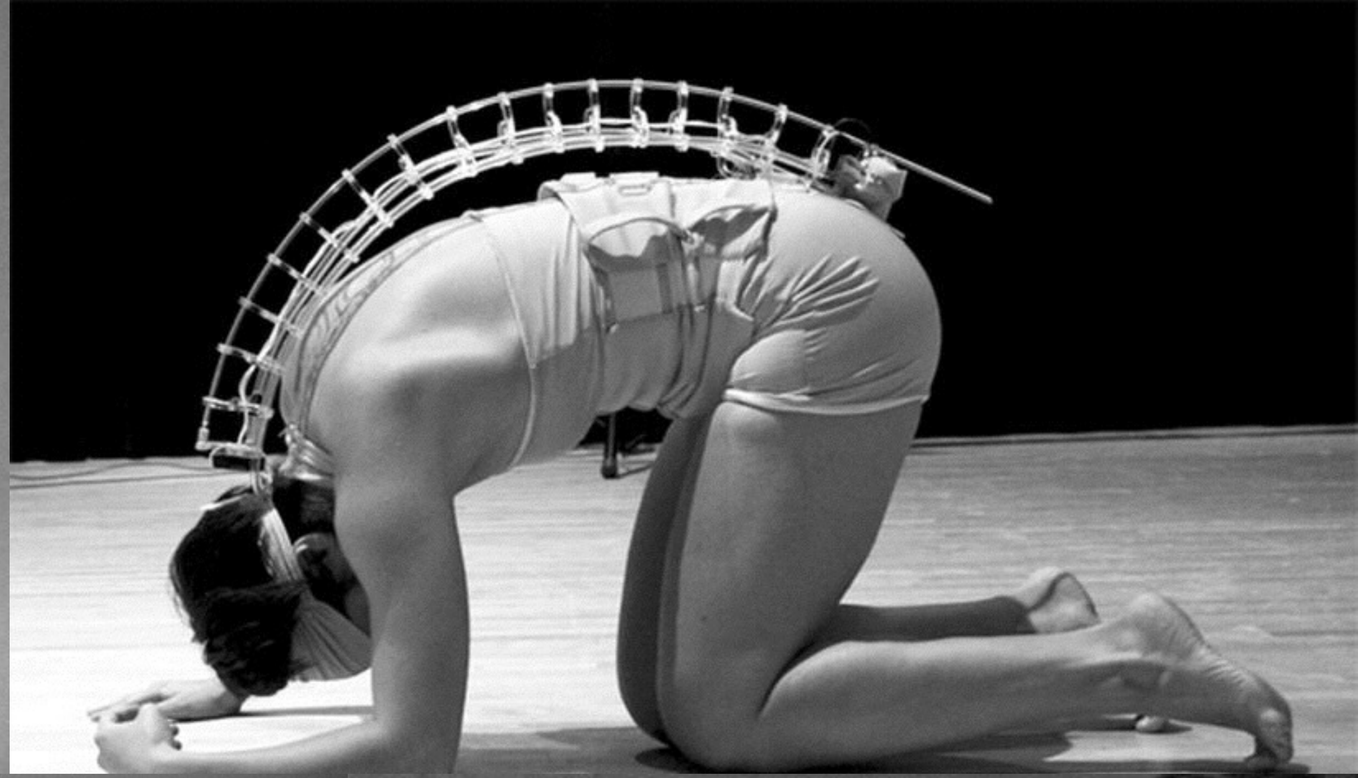

Input
Mapping
Output


Input
?
Output



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MUSIC-ORIENTED HCI

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USER-CENTERER DESIGN

EVALUATION TECHNIQUES AS PART OF AN ITERATIVE DESIGN PHILOSOPHY

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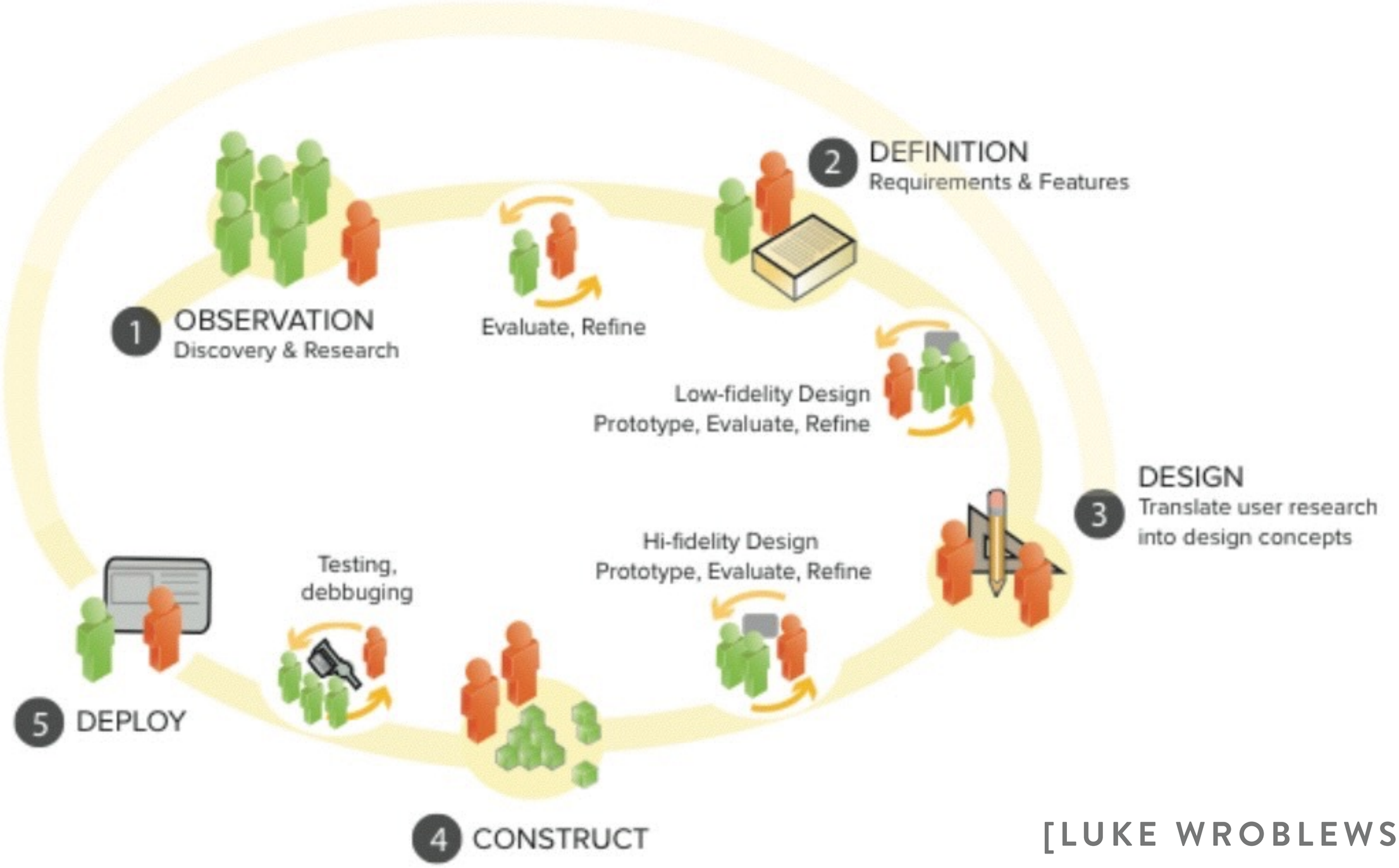
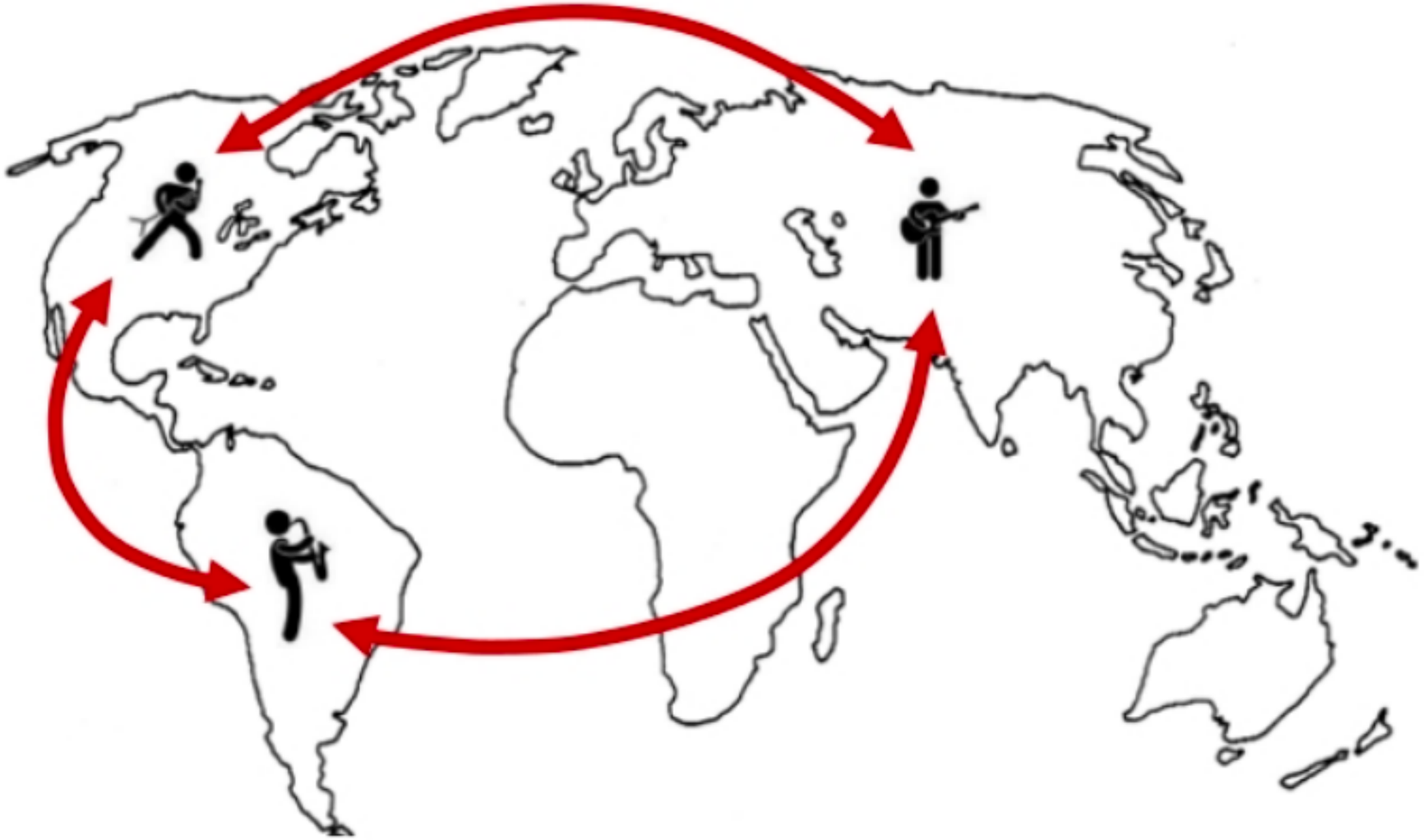


[LUKE WROBLEWSKI]

Distributed musical performance



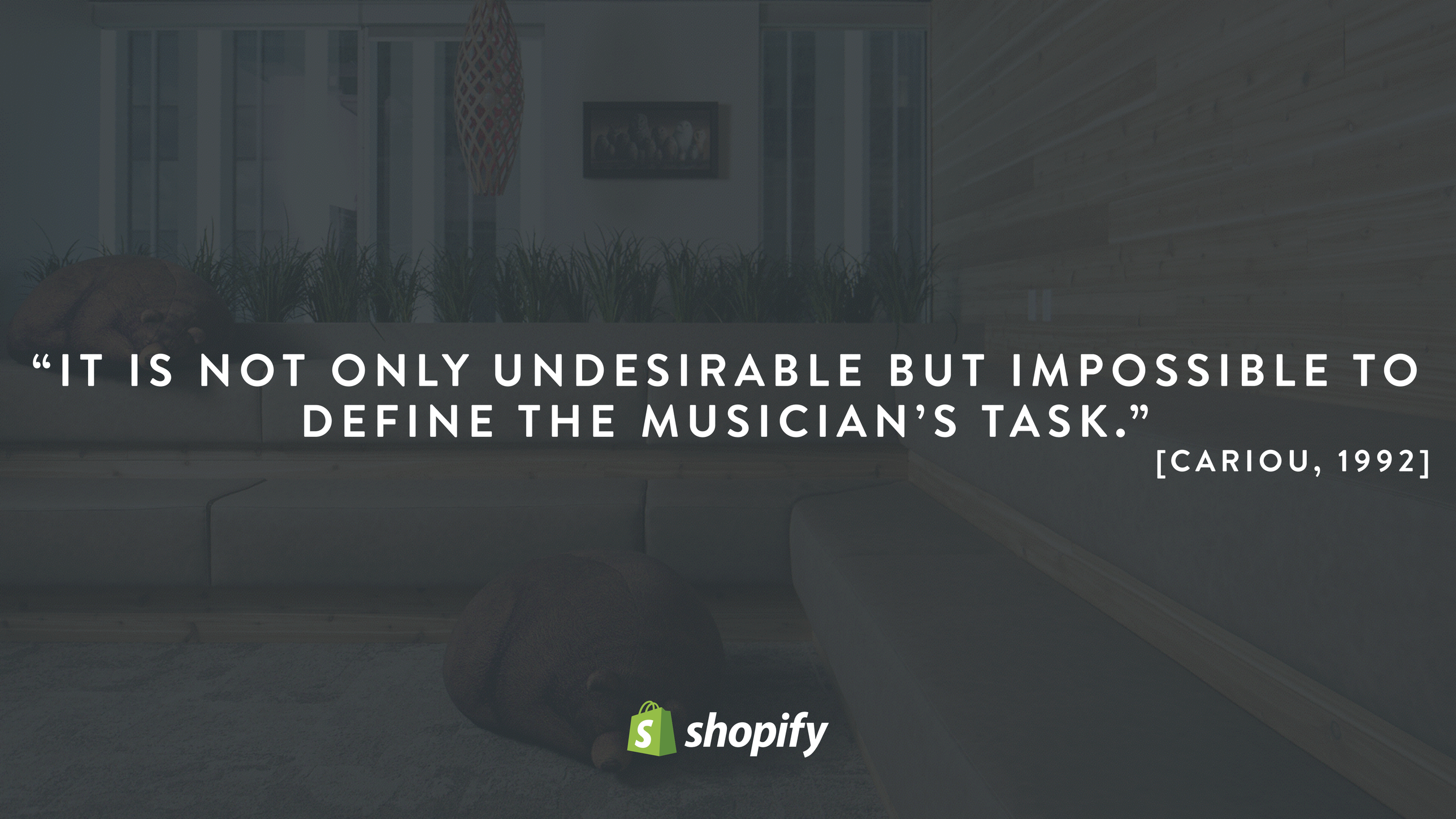
Design goals

- Capitalize on computing technology inherent to the distributed context
- Increase the level of interaction between the distributed musicians
- Apply a user-centerered methodology throughout the process

Key principles of usability

- Early focus on users and **tasks**
- Empirical measurement
- Iterative design

[Gould and Lewis, 1985]



“IT IS NOT ONLY UNDESIRABLE BUT IMPOSSIBLE TO DEFINE THE MUSICIAN’S TASK.”

[CARIOU, 1992]

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TRADITIONAL USER-CENTERER DESIGN IS A TASK-BASED APPROACH

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Task-based evaluation

- Time to complete
- Task completion rate
- Accuracy
- Error rate
- Satisfaction

USABILITY... FOR MUSIC?

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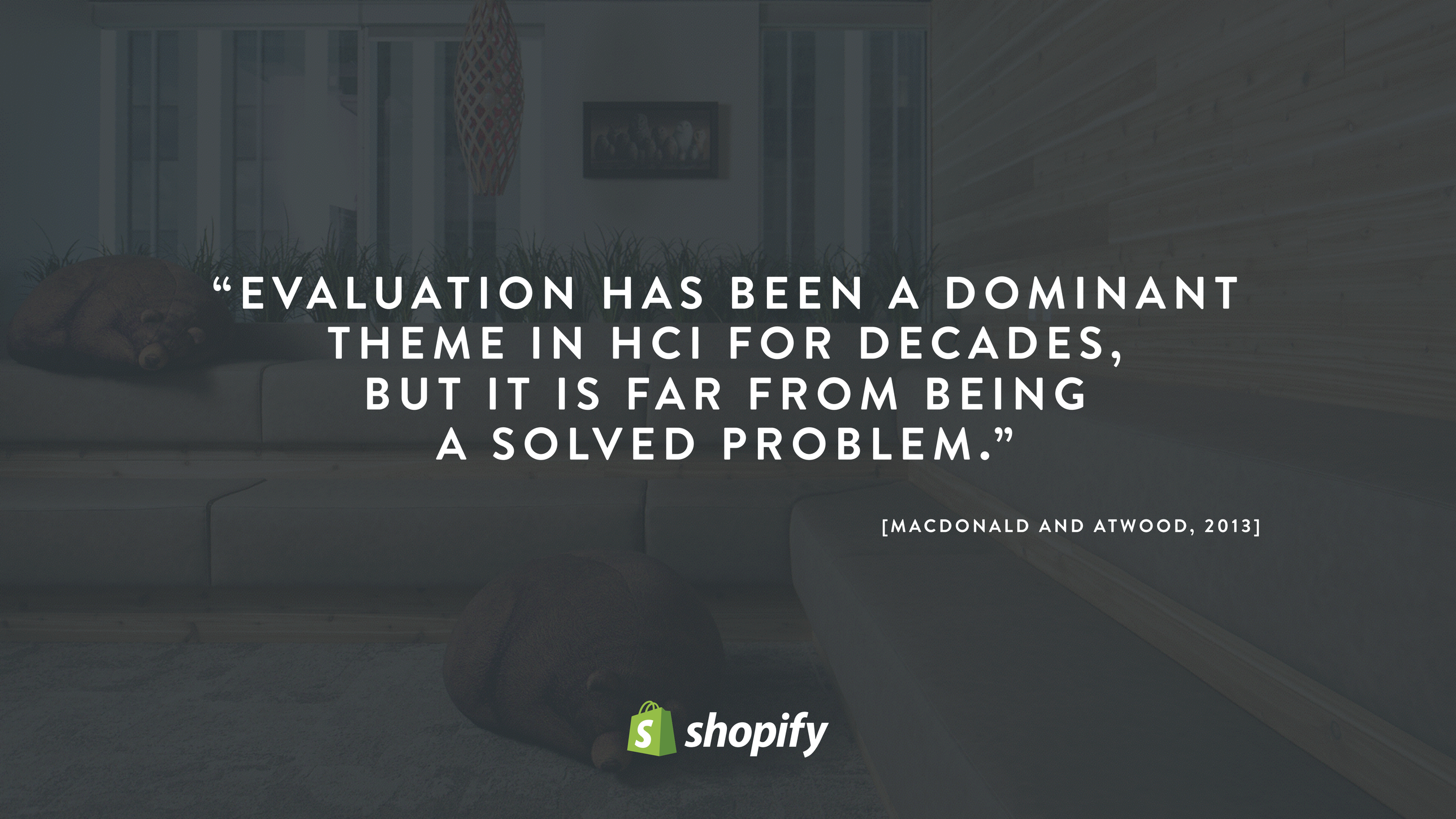
Limitations

- Feedback is narrow
- Difficult to test small, iterative changes
- Difficult to isolate novelty factor
- Difficult to determine long-term impressions



“EVALUATION HAS BEEN A DOMINANT THEME IN HCI FOR DECADES, BUT IT IS FAR FROM BEING A SOLVED PROBLEM.”

[MACDONALD AND ATWOOD, 2013]

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A BRIEF HISTORICAL OVERVIEW OF USER RESEARCH

AKA WHERE DID UX COME FROM?

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System Reliability Phase (1950s and before)

- Large machines were operated by switches, lights and plugs
- Major concerns were minimizing system fault time and quickly repairing errors
- **Evaluation concern:** How long it would function without failure?
- **Users/evaluators:** Engineers and technical experts

System Performance Phase (1950s-1960s)

- Computers became more stable/reliable, but still large
- New methods of operation: magnetic tapes, punch cards, keyboards
- Introduction of programming languages
- **Evaluation concern:** How quickly can it perform?
- **Users/evaluators:** Programmers and computer scientists

User Performance Phase (1960s-1970s)

- Time-sharing machines
- Machines grew in popularity
- Became used for non-programming tasks
- **Evaluation concern:** The speed of the user rather than the speed of the system
- **Users/evaluators:** The “non-specialist”

Usability Phase (1980s-2000s)

- Improvement in processing speed
- Graphical user interfaces (GUI) and windows, icons, menus, pointers (WIMP) paradigm
- Software could be used without extensive training
- **Evaluation concern:** Ease of use (usability)
- **Users/Evaluators:** The novice

Task-based evaluation

- Time to complete
- Task completion rate
- Accuracy
- Error rate
- Satisfaction

“WHAT OF TECHNOLOGY NOT FOR ACCOMPLISHING TASKS BUT FOR HAVING EXPERIENCES, FOR EXPRESSING ONE’S IDENTITY, FOR FLIRTING AND ARGUING AND LIVING?”

[KAYE ET AL., 2007]

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FROM TO TASK-BASED TO EXPERIENCE-BASED DESIGN

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FROM USER-CENTERED TO PEOPLE-CENTERED DESIGN

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THIRD-WAVE HCI

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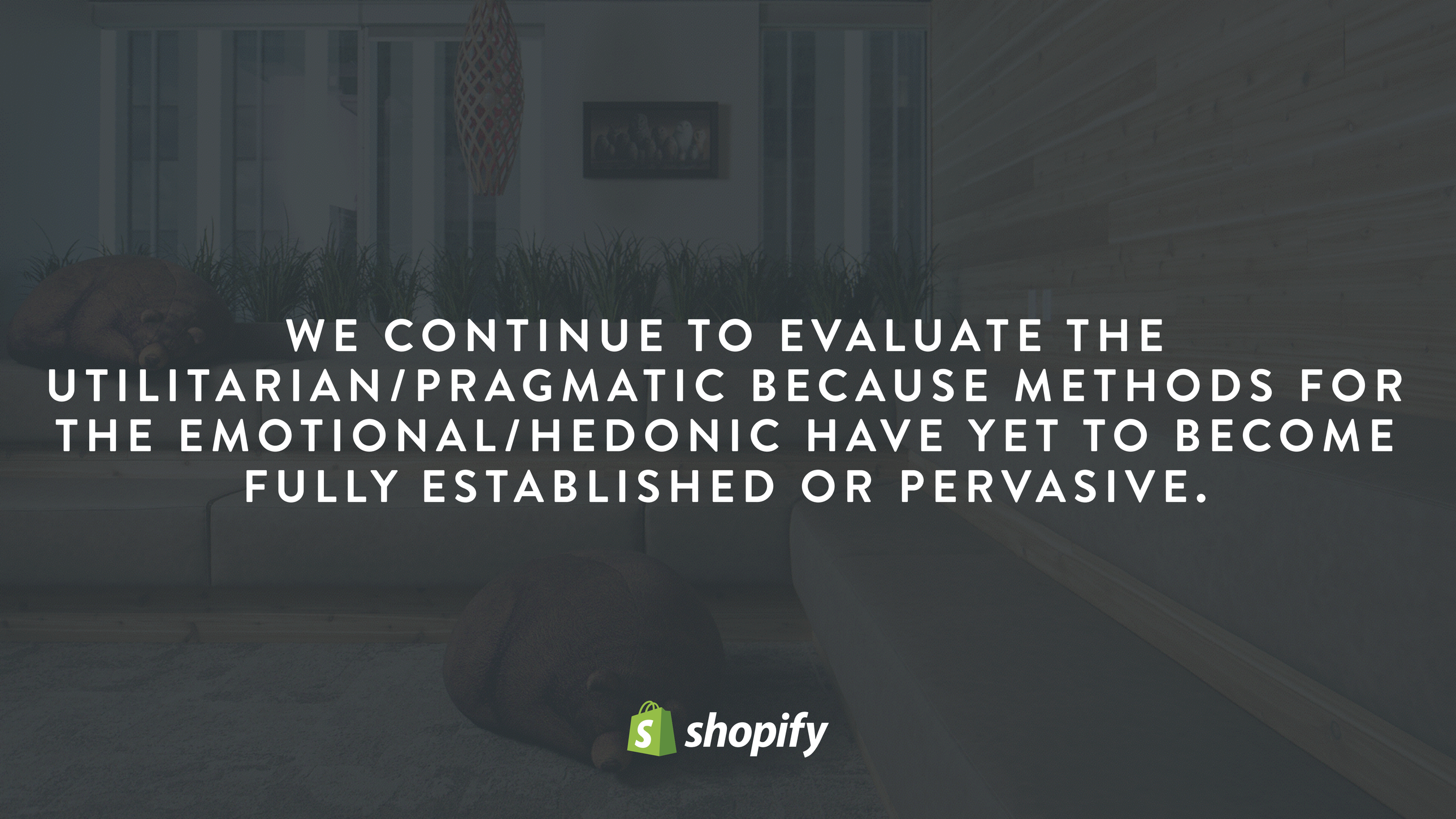
User Experience (UX) Phase (2000s-Present)

- Personal, social, cloud, mobile computing
- Contexts are broader
- Technology is more pervasive
- Shift from the utilitarian/pragmatic to the emotional/affective

User Experience (UX) Phase (2000s-Present)

- **User testing methods:** Usability testing with think aloud, post-test questionnaires
- **Inspection methods:** Heuristic evaluation, cognitive walkthrough
- **Traditional research methods:** Surveys, interviews, focus groups
- **Field methods:** Observations, Diaries, A/B Testing


WE CONTINUE TO EVALUATE THE UTILITARIAN/PRAGMATIC BECAUSE METHODS FOR THE EMOTIONAL/HEDONIC HAVE YET TO BECOME FULLY ESTABLISHED OR PERVASIVE.
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How do we evaluate...

- Creativity
- Enjoyment
- Self-expression
- Interpersonal interaction

HOW DO WE DESIGN FOR THE CREATIVE, ARTISTIC, NON-TRADITIONAL END USER?

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WHILE UX MIGHT NOT PROVIDE ALL THE ANSWERS, A MULTIDISCIPLINARY APPROACH MIGHT

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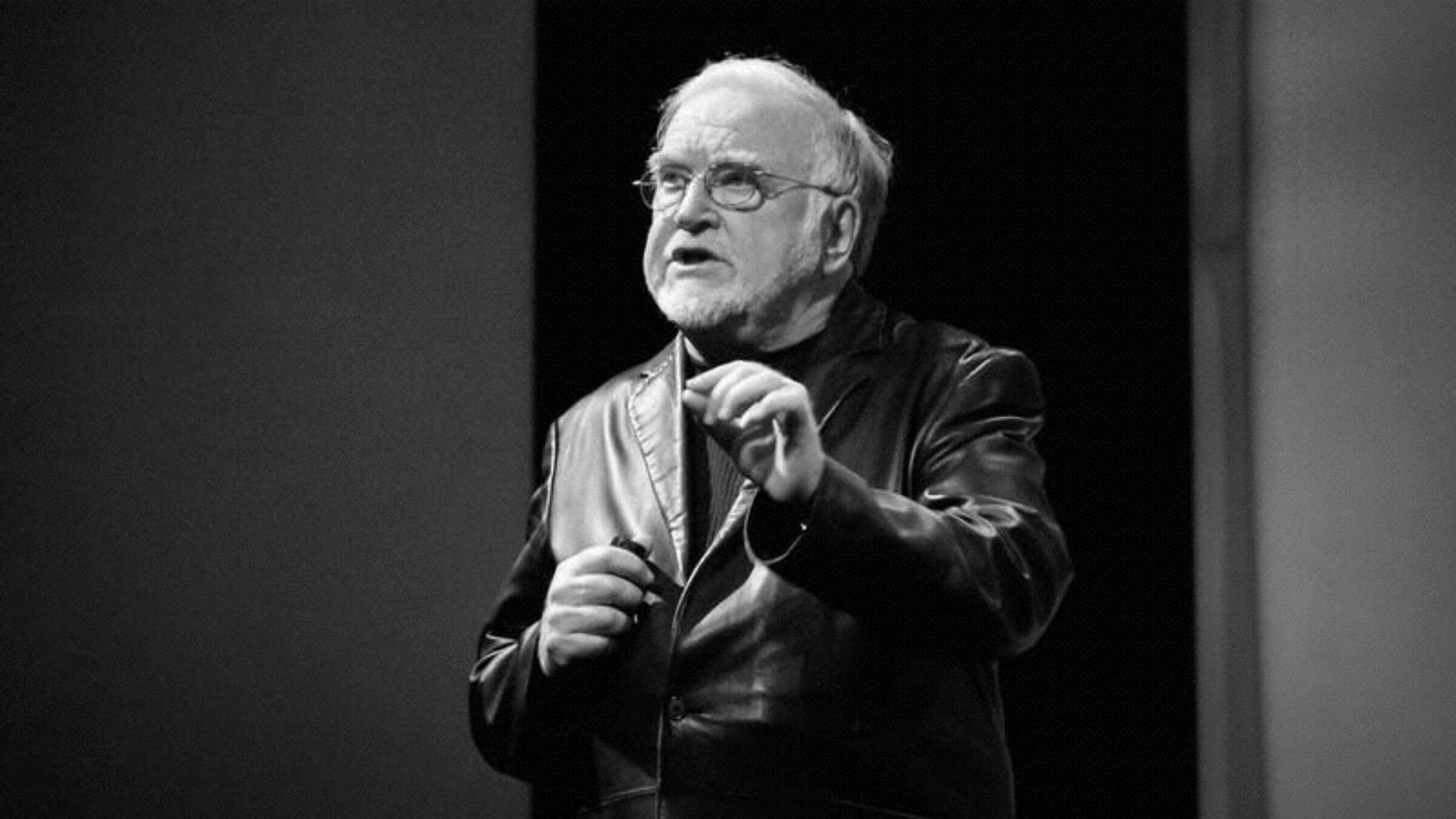
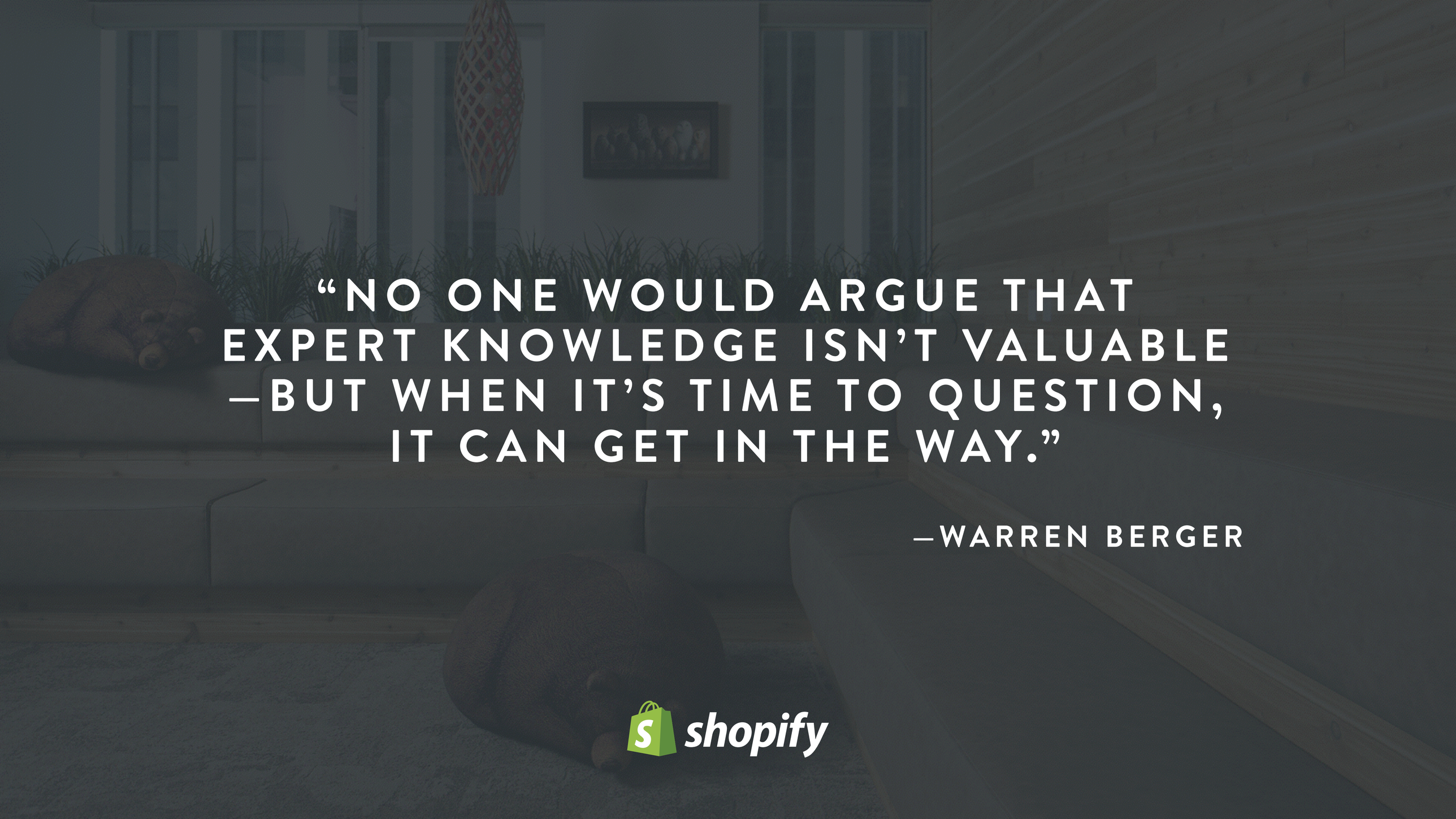


Beta Space
beta_space
B

There is no “one-size-fits-all” solution

- Uncover what to evaluate
- Tailor how to evaluate it
- **Fluidly change the user’s role**
- **Leave your ego at the door**


“NO ONE WOULD ARGUE THAT EXPERT KNOWLEDGE ISN’T VALUABLE —BUT WHEN IT’S TIME TO QUESTION, IT CAN GET IN THE WAY.”
—WARREN BERGER
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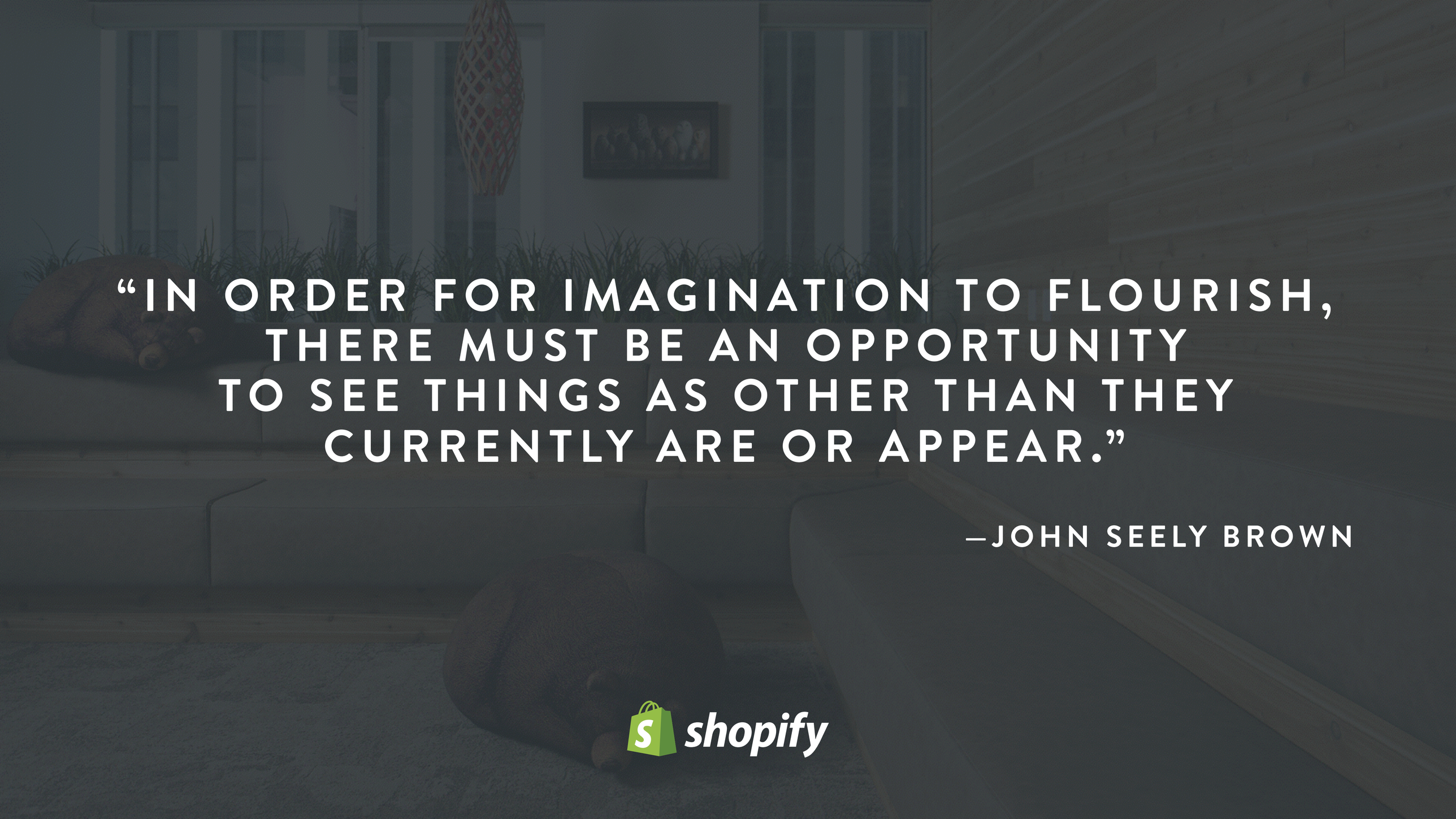
“IN ORDER FOR IMAGINATION TO FLOURISH,
THERE MUST BE AN OPPORTUNITY
TO SEE THINGS AS OTHER THAN THEY
CURRENTLY ARE OR APPEAR.”
—JOHN SEELY BROWN
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The outsider’s perspective

- Our brains categorize and file away information so we don’t have to constantly re-evaluate it
- It is difficult to perceive familiar information without labels or categorization, or with a new perspective
- This makes it difficult to ask questions from an outsider’s perspective

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Sales Channels Pricing Blog More

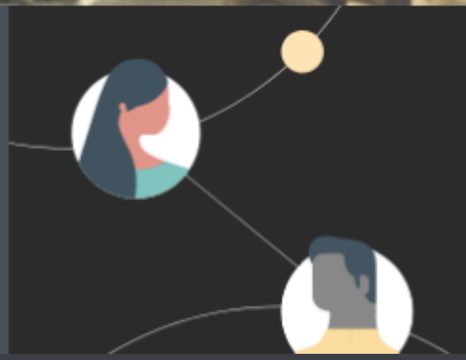
Log in Get started

Every great business starts with an idea

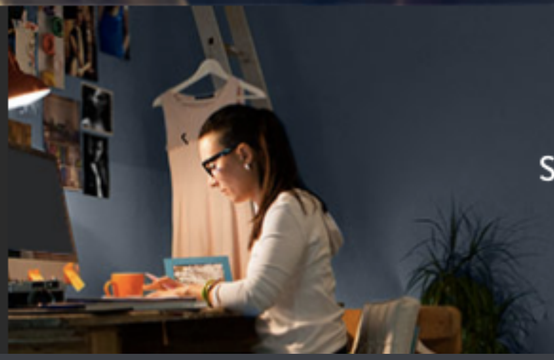
Shopify is the one platform you need to build the business you've always dreamed of

Start your free trial

Build your brand with your very own online store



Sell your products everywhere, from websites to mobile apps



See how people just like you succeed with Shopify

UX Research at Shopify

- Understand behaviours/needs/expectations around the product
- Make recommendations accordingly
- See those recommendations through
- Ask questions, find answers, share knowledge
- Encourage empathy across all practices

FROM WORKING WITH MUSICIANS TO WORKING WITH MERCHANTS

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KIGURUMI.CA
KIGURUMI.CA

CAFE SAINT-HENRI (PHOTO BY EATER.COM)

LOWELL MTL

NEOTENY
OR BEGINNER'S MIND

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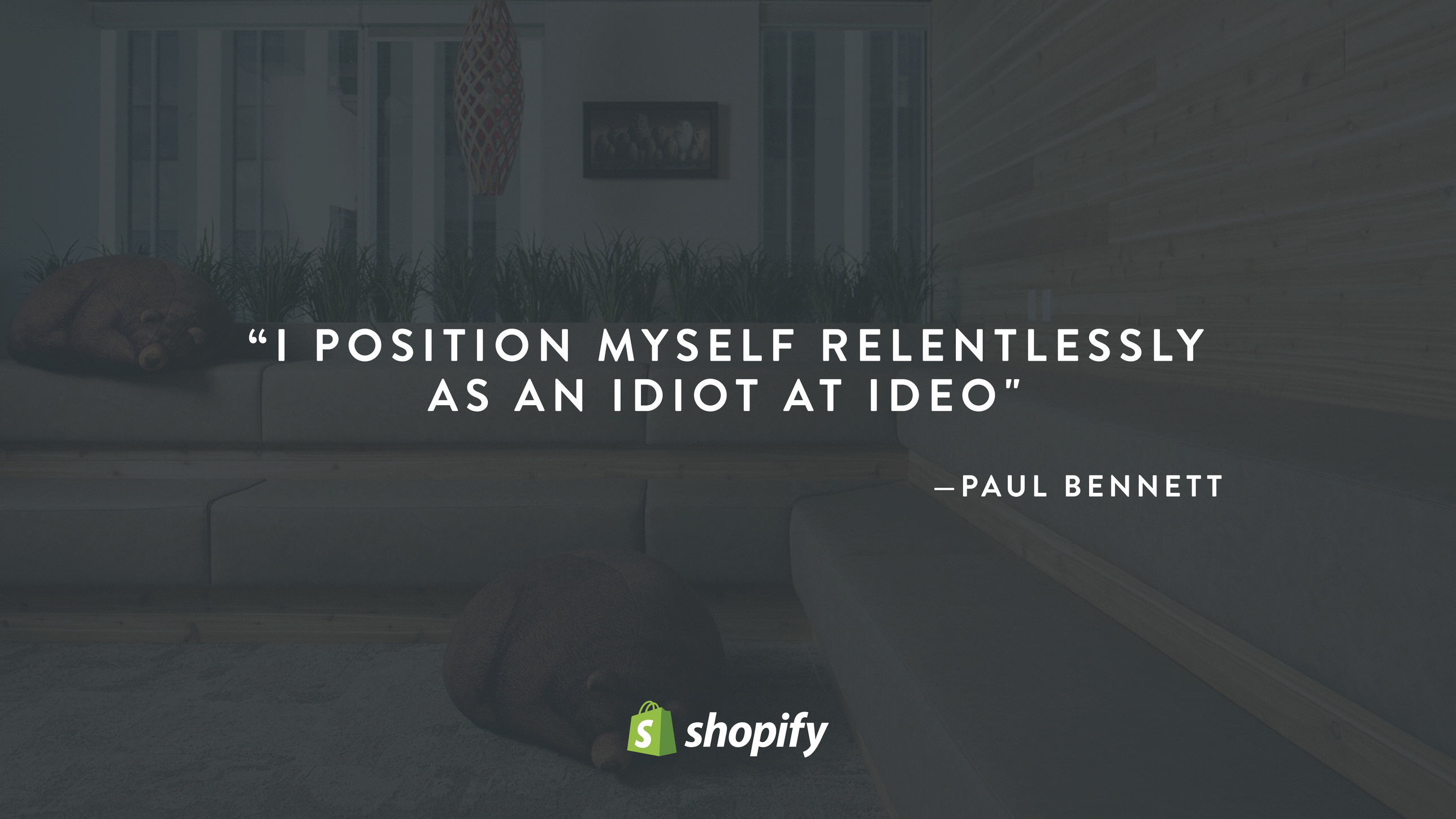

"I POSITION MYSELF RELENTLESSLY AS AN IDIOT AT IDEO"

—PAUL BENNETT

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There is no “one-size-fits-all” solution

- Uncover what to evaluate
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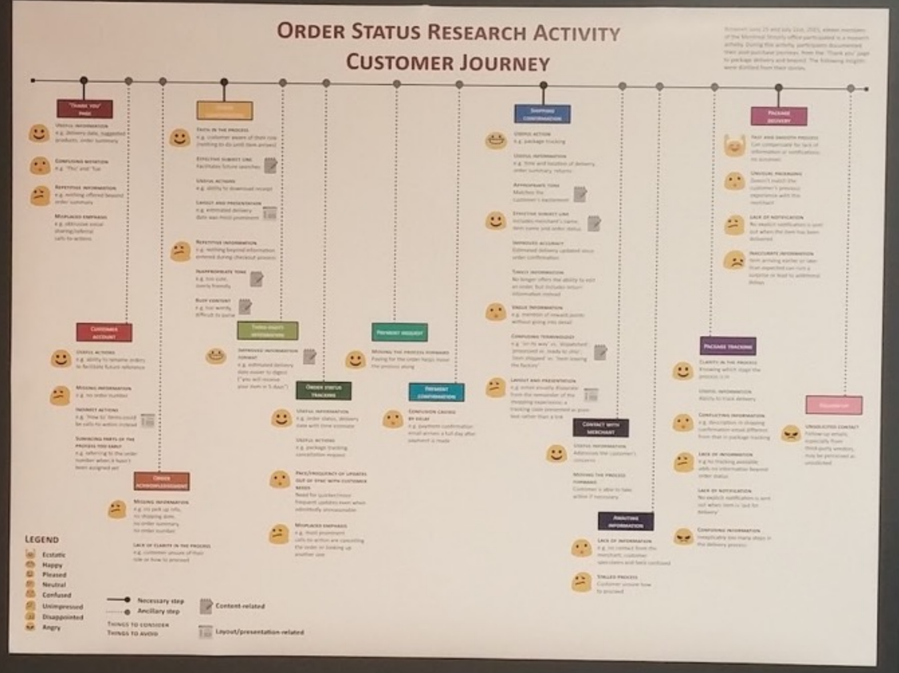
- Payment Gateway
- Checkout Flow
- Additional Checkout buttons
- Credentials
Google
promotions
11:18
ALAN

Sweet Delights
There Will Be Cake
CONGRATS, DR. EL-SHIMY!!
Red Velvet Cupcake
$2.75
Sweet Delight
Cotton Shirt
Dapper Gents
STORE


ORDER STATUS RESEARCH ACTIVITY
CUSTOMER JOURNEY
LEGEND
Ecstatic
Happy
Pleased
Neutral
Confused
Unimpressed
Disappointed
Angry
Necessary step
Ancillary step
Content-related
Layout/presentation-related
THINGS TO CONSIDER
THINGS TO AVOID

Why "mobile first"?
"I can have it with me in the storage room or wherever I am to prepare orders."
Shopify Mobile survey
Shopify Mobile wish list
"Check pending balance, view dropped carts, engagement overview."
Shopify Mobile survey
"Mobile first" facts
It's fractured the consumer journey into hundreds of real-time, intent-driven micro-moments.
Find out more:
goo.gl/U5HP32

UX research as more than usability

- Usability doesn’t address the full user experience
- UX combines the pragmatic and emotional in a holistic manner
- Design/create/adapt evaluation techniques for each context
- Regard users as people, and allow them to be experts

THANK YOU
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