

NICE

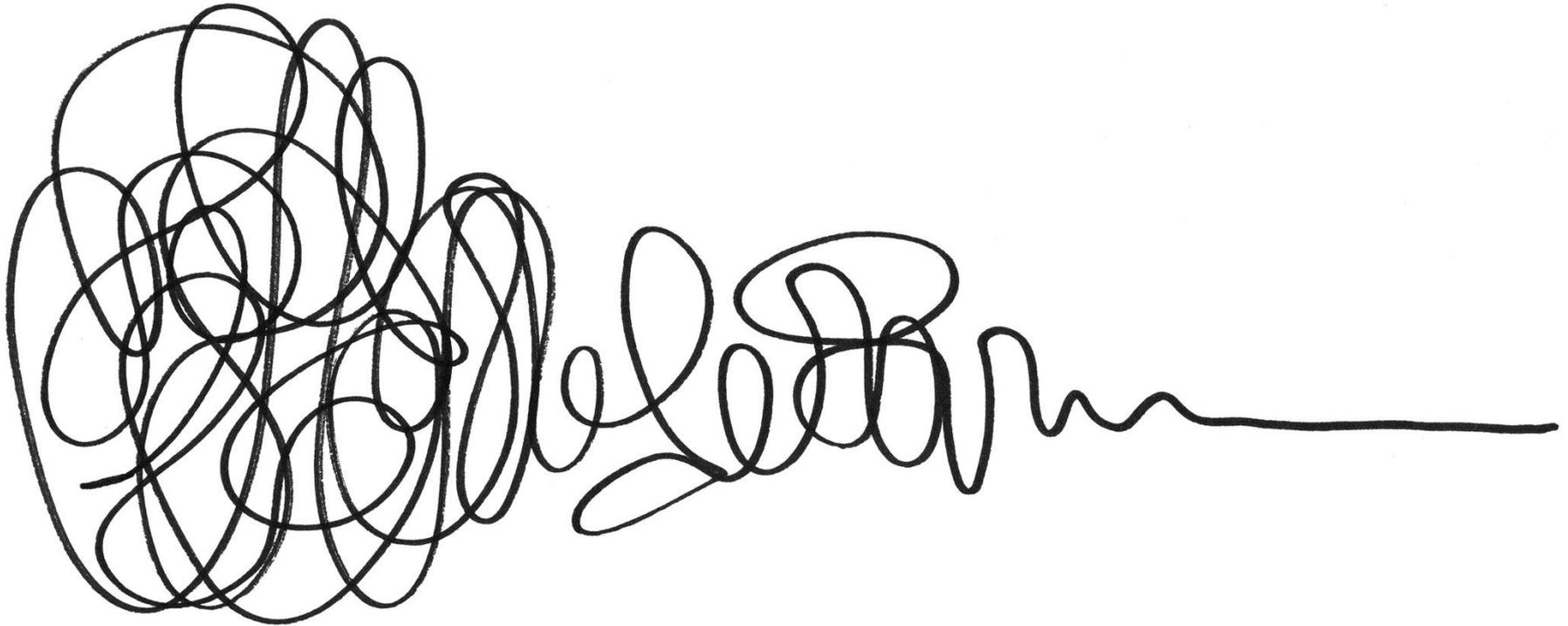
NATIONAL INITIATIVE FOR **CYBERSECURITY** EDUCATION



National Institute for Cybersecurity Studies (NICS) Portal

Presented by Anne Connell

Human-Centered Design Process

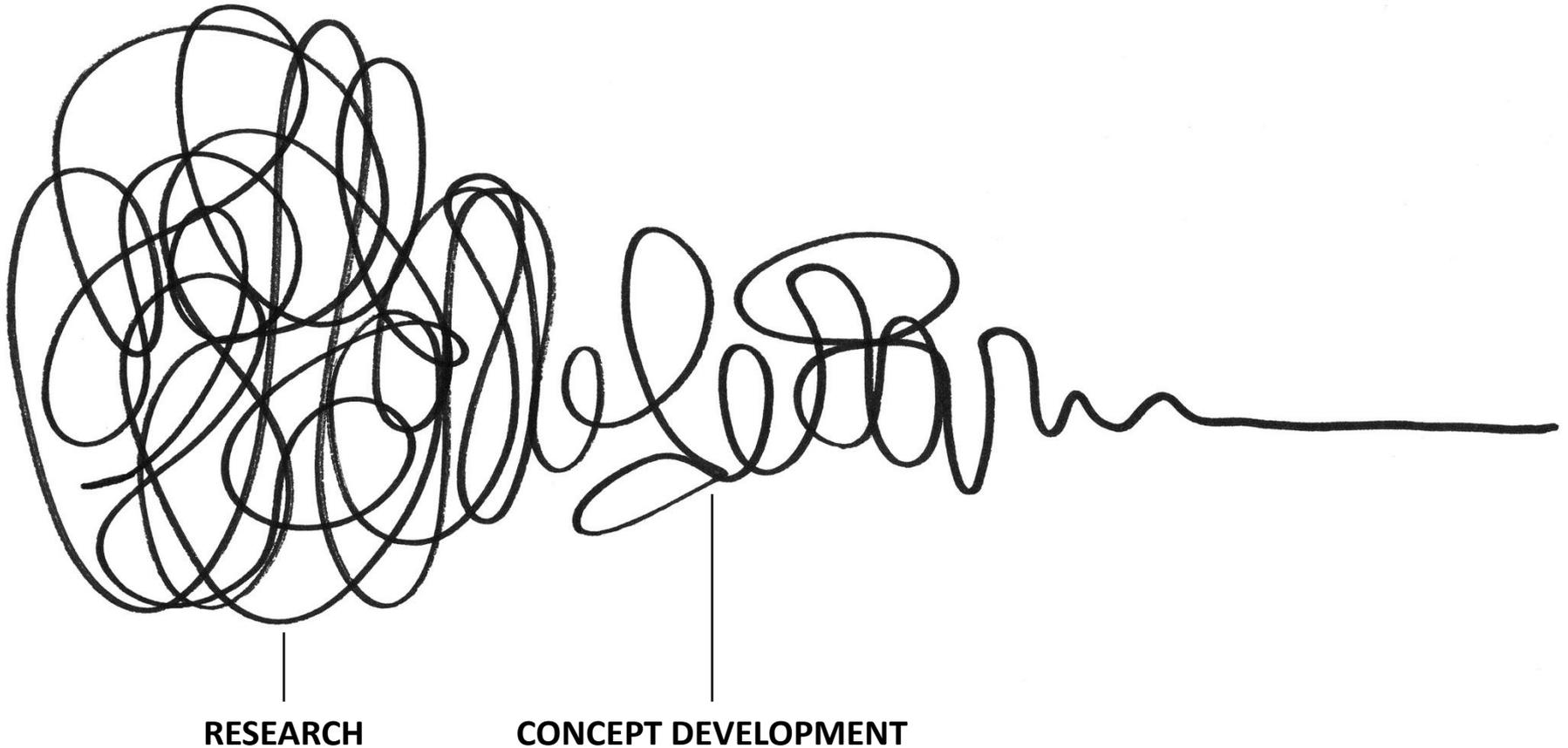


Human-Centered Design Process

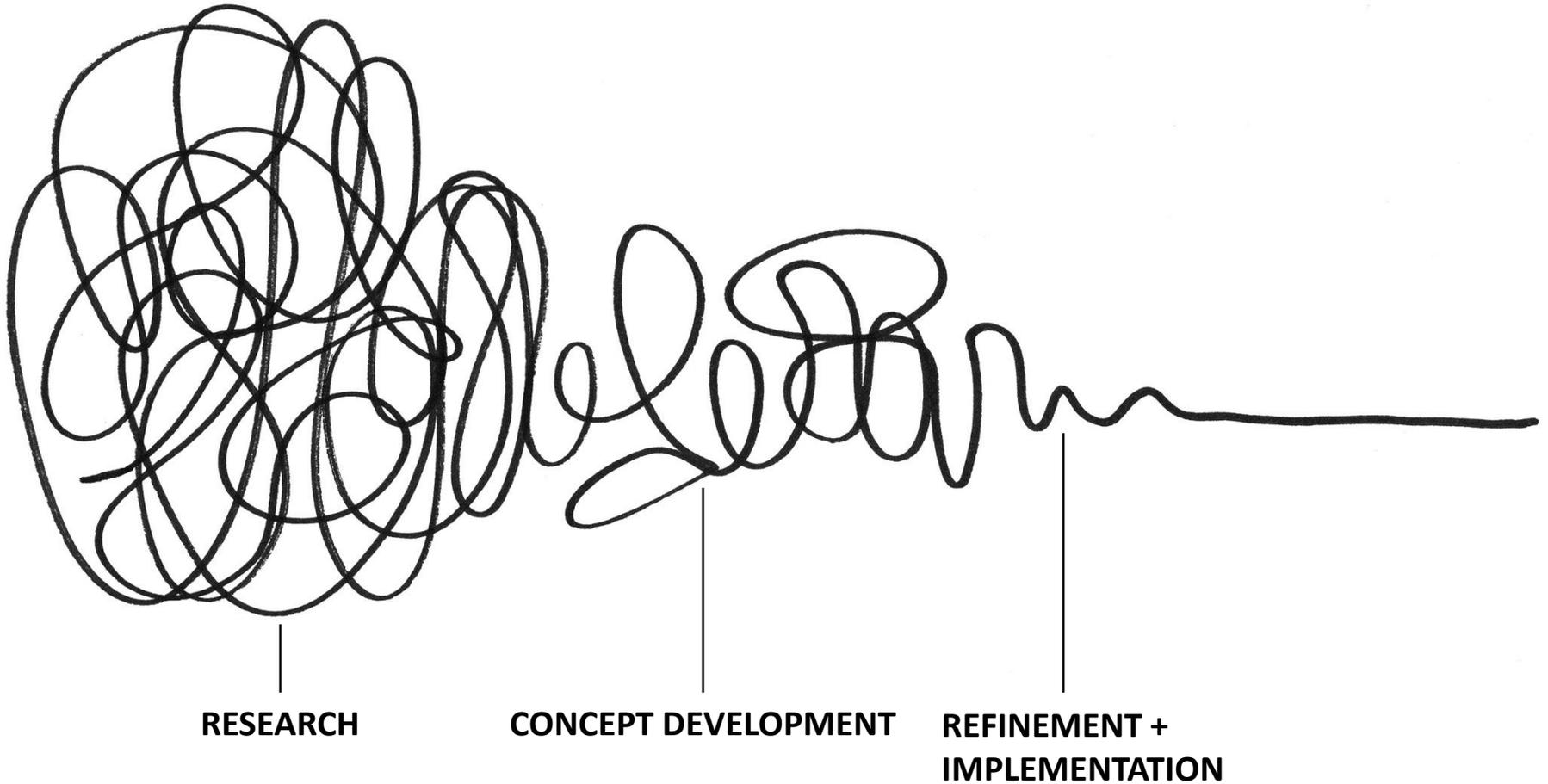


RESEARCH

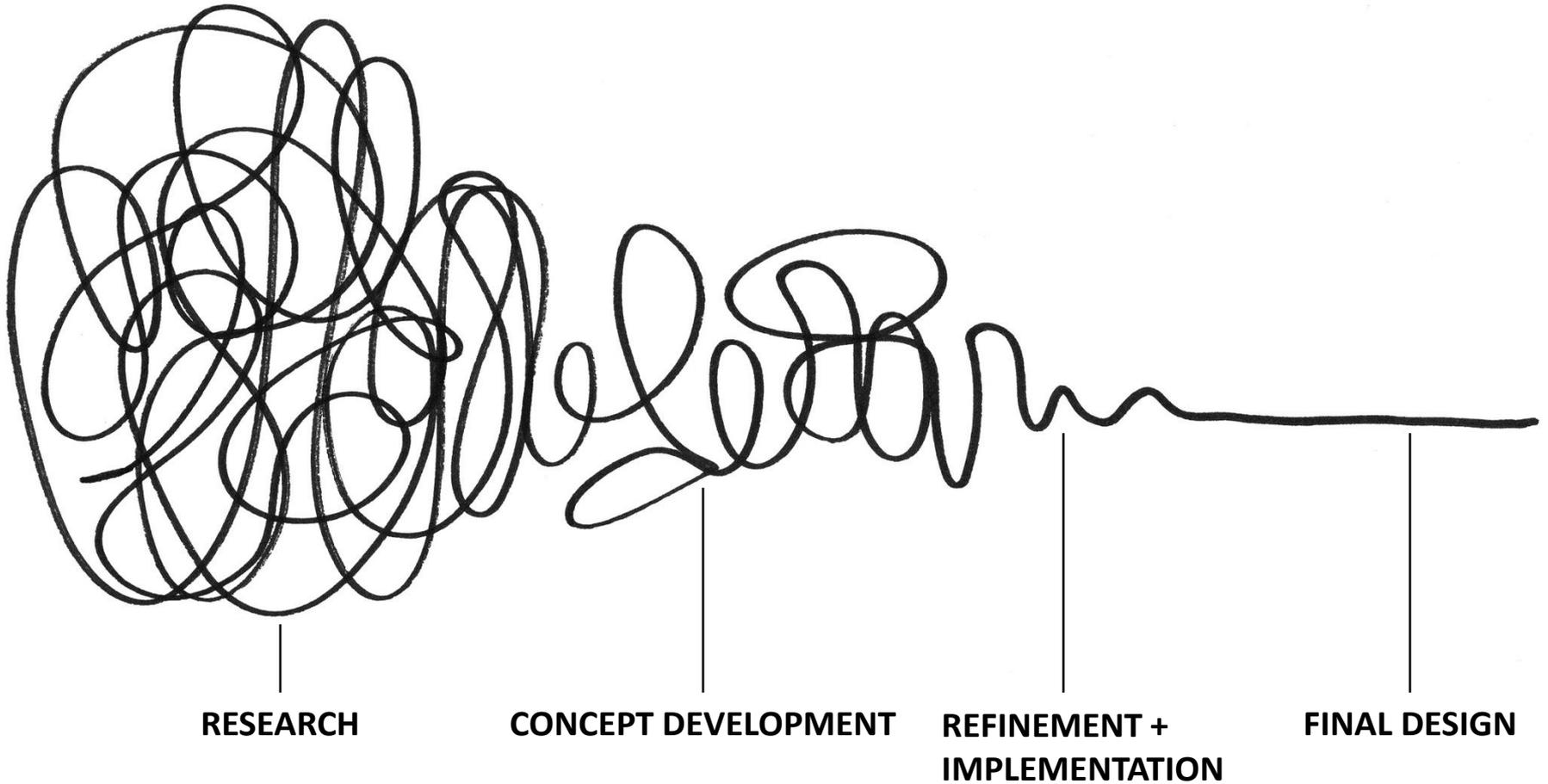
Human-Centered Design Process



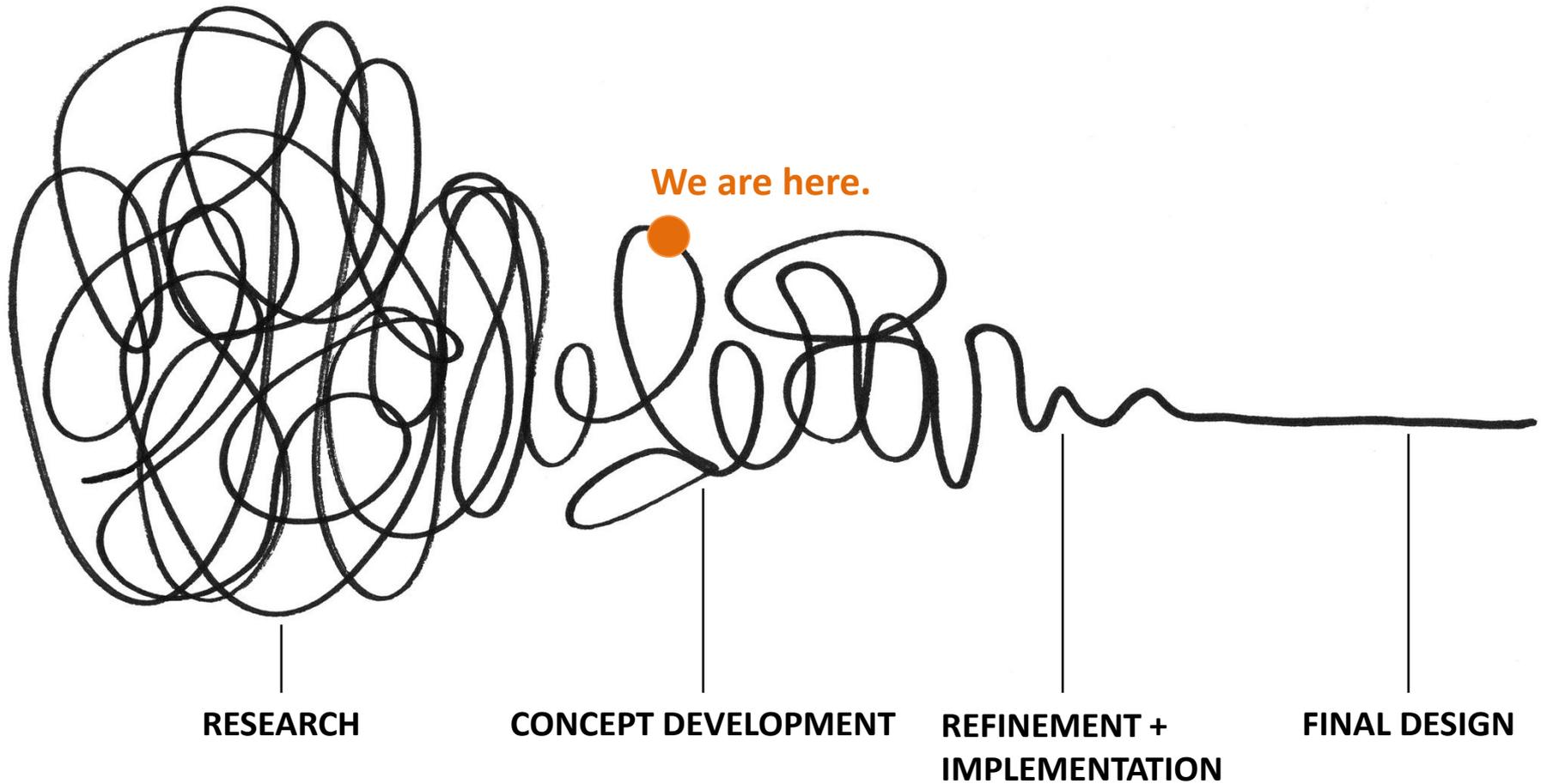
Human-Centered Design Process



Human-Centered Design Process



Human-Centered Design Process



Methods & Deliverables



RESEARCH

Market Analysis
Online Surveys
Contextual Interviews

Personas

Methods & Deliverables



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CONCEPT DEVELOPMENT

Affinity Diagramming
Brainstorming Sessions
Content Strategy
Usability Testing

Information Architecture
Wireframes
Prototype

Methods & Deliverables



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REFINEMENT + IMPLEMENTATION

Look & Feel Design
CMS Implementation
Usability Testing

*Screen Designs
Final Prototype*

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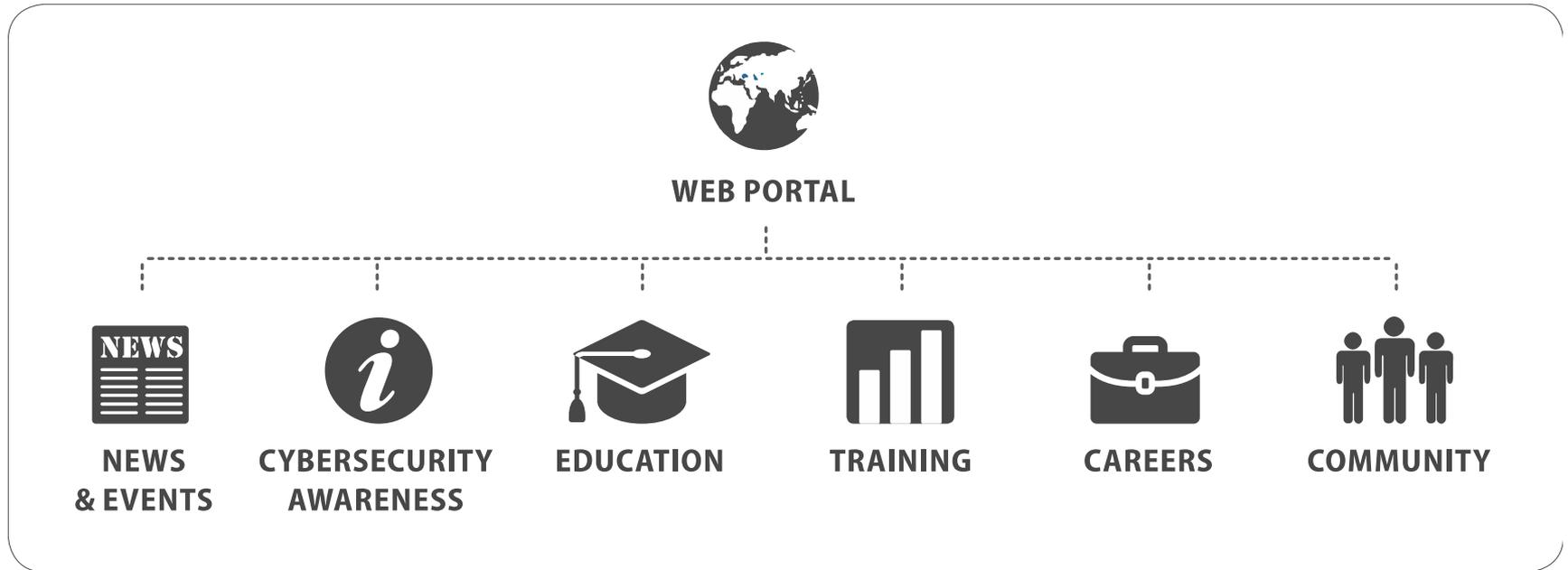


FINAL DESIGN

Deployment

Functional Website

Site Overview



Personas



Julie Benson



Mason Jones



Alicia Lippert



Peter Mitchell

- represent the intended visitors of the portal
- synthesize research into core needs
- clarify how the system might be used

Julie Benson

Cybersecurity Workforce Entrant



Age: 21

Job Title: College Student - Junior

Major Responsibilities: Completing her degree

Education: Penn State University

Family Status: Single

Quote

Julie wanted to supplement her academic career with classes in cybersecurity since her degree program did not offer this topic in the disciplinary core.

“After having my Amazon account hacked and my password compromised, I wanted to make information systems that would prevent this from happening to anyone else.”

Environment

Spending most of her time on a college campus, Julie lives in a dormitory. She has many friends and is a member of a sorority. She does her work and personal computing via the computer labs and her laptop in her room using a Dell with Firefox via wireless connection. She is technically savvy.

Key Attributes

Julie is a bright, initiative-driven person with a strong work ethic. Her belief systems and morals are not often discussed; she is rather private. She is apt and affable. Her conduct is very reasoned and she is extremely likable.

Mason Jones

Information Technology Support Specialist



Age: 28

Job Title: Information Technology Support Specialist

Major Responsibilities: Provide technical support

Education: University of Maryland, Baltimore County

Family Status: Married

Quote

Mason wanted to transition from technical support into vulnerability analysis, but could not afford graduate school. He is interested in vulnerability analysis due to the multiple times he was involved in incident response of a certain protocol.

“I believe if we were more proactive in testing software before release we could prevent more breaches.”

Environment

Mason works for Naval Academy in Annapolis, Md. He is married and has many social activities related to his church.

He does his work on a “managed” machine and personal computing via his home laptop. He is currently taking courses on IP6 via computer-based training on his laptop at home.

Key Attributes

Being a veteran, Mason is eager to receive continuing education credits and take advantage of any training in the area, in which he is interested and enjoys.

He is an active member of his church community and helps people when they have computer issues. He is well-liked and well-respected both at work and in his personal life.

Alicia Lippert

Cybersecurity Workforce Entrant



Age: 41

Job Title: Business Analyst

Major Responsibilities: Completing her degree

Education: BS, The Ohio State University

Family Status: Married

Quote

Alicia wants to advance her career by going for a graduate degree in cybersecurity.

“I’m looking for a trusted source of information that will show me possible education and career options, as well as providing a place where I can post questions to knowledgeable experts.”

Environment

Alicia is a 41-year-old business analyst. She has a Bachelor’s degree in business and 9 years of professional experience in addition to a strong knowledge of computers.

She enjoys working for A1 Secure Network Systems, Inc., but she feels that there is more room for advancement in the field of cybersecurity.

Key Attributes

While doing some research online, Alicia discovered that there are many different ways she could prepare for a position in the field of cybersecurity. But which ones should she focus on?

Her biggest problem is finding one place where she can get accurate and current information.

Peter Mitchell

Member of the Government Workforce



Age: 39

Job Title: Information Technology Specialist

Major Responsibilities: Network manager for FAA

Education: BS, Civil Engineering

Family Status: Married

Quote

Witnessing many incidents from his network admin perch, Peter believes security policy and education can lead to less overall security incidents.

“Security starts with our users. Until they realize the large role they play in our network security, we will continue to suffer from attacks.”

Environment

Peter spends 8-5 in an FAA office with a large FAA datacenter down the hall. He uses his FAA-issued desktop for general office apps, along with another dedicated laptop for network troubleshooting, etc.

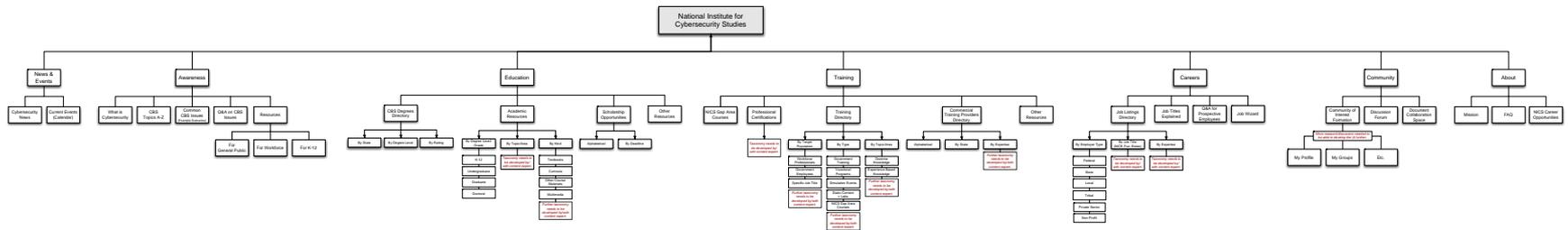
He’s competent on general IT concepts, but not from a security perspective, so he is looking to improve his skills in this area.

Key Attributes

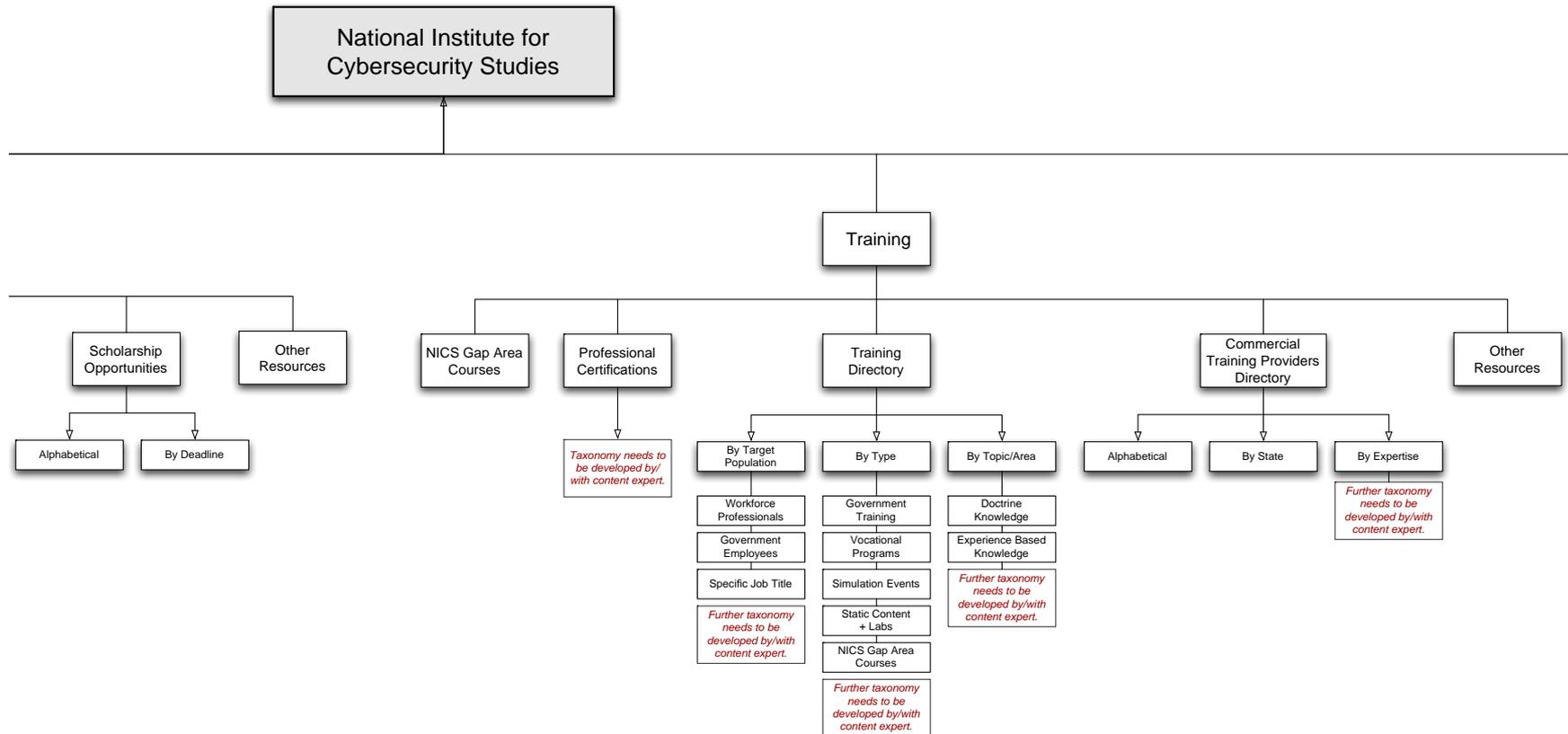
A retired Navy pilot, Peter’s interest in complex systems has led him to the IT field. He’s working to improve his skills in the area of computer and network security.

He logs many hours per day behind a system doing routine sys-admin activities, but he is interested in improving skills in network architecture, security engineering, etc.

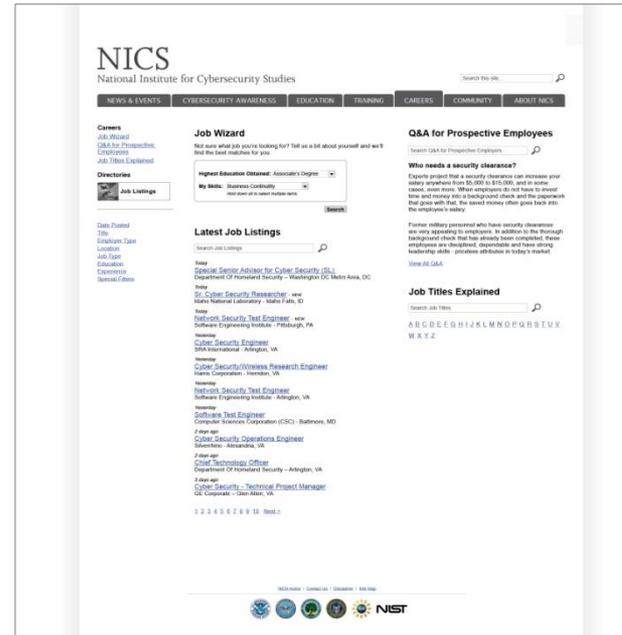
Information Architecture



Information Architecture



Wireframes



- communicate initial design ideas
- focus on content and structure, not visual design

Wireframes

NICS
National Institute for Cybersecurity Studies

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Learn basic terminology and find out how you can become more cybersecurity aware.

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SRA International - Arlington, VA
- Yesterday**

Usability Testing

We invite you to interact with the NICS Portal prototype, help us test-drive it and provide feedback that will further the site's development.

Your input is very valuable to us.

Where

NICS Booth

When

Until 3:30 pm

Length of Session

5-10 mins

Do you have any questions?

Thank you!

NICS Portal Project Team

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