



# HAWAI'I DIGITAL LITERACY & READINESS STUDY

# BACKGROUND



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# WORKFORCE DEVELOPMENT DEFINITIONS

## DIGITAL READINESS VS. DIGITAL LITERACY



### The Digital Roadmap: Working Definitions

**DIGITAL READINESS**  
from a workforce development perspective is preparedness in terms of self efficacy, skills and trust in digital applications and tools that enable entry to participating in the 21<sup>st</sup> Century economy.\*

**DIGITAL LITERACY** is the capacity or fluency to proficiently access and be resilient in the changing environment of digital technology and to understand, engage and effectively use digital content, information and tools for individual living, working, learning, creation, self-fulfillment, and empowerment

**NO BARRIERS**

**TECH CHANGES**

# DIGITAL LITERACY AND READINESS FOCUS SKILLS



- 1) **Basic Operational Skills** to use the Internet
- 2) **Social Skills** to use online communication
- 3) **Navigation Skills** for searching for information online
- 4) **Creative Skills** to create quality content to be shared online including textual, music, video, photo, multimedia, and remixed content.

# Digital Readiness Clusters

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- Respondents are clustered into 5 groups based on their self-assessment on 7 main factors.
- Given that the 21<sup>st</sup> century anticipates changes in technology, the model puts relatively more weight on self-efficacy especially pro-active curiosity to learn new things and thereby grow, and relatively less on functionality.
  - Confidence in using digital devices
  - Ability to get new technology to work
  - Productivity from using electronic info devices
  - Ability to determine the trustworthiness of online info
  - Perception of info overload from electronic devices
  - Use of digital tools for learning
  - Familiarity with contemporary “education tech” terms







# Digital Readiness Continuum



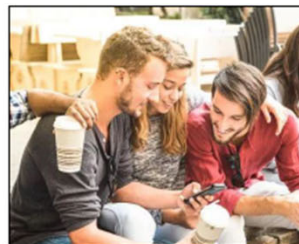
**The Unprepared**

They have the lowest level of tech adoption and tech ownership. They are least likely to learn (both online and others). They do not have confidence in their computer skills, need help setting up new tech devices, and least likely to feel productive using electronic device. They are not familiar with "ed tech" terms.



**Old Guard**

They are more likely to learn than the Unprepared and they have low ownership of tech devices. They do not take online course but engage in online learning informally. They need help setting up new electronic device and they are not familiar with "ed tech" terms.



**Social Users**

They are not active learners and therefore do not use Internet for learning. They own technology, especially digital device with Internet connection. They are confident about using electronic devices, but most bothered by too much digital info.



**Technical DIYers**

They are active learners. They do not take online courses but engage in online learning informally. They are confident about their technology skills, especially when setting up new electronic devices. They are not bothered by too much digital info. They are most aware of "ed tech" terms.



**The Digital Learners**

They are ardent learners and learn from both online courses and other online sources. They have technology and are confident about their technology skills. They are more productive by using electronic information devices. They are aware of "ed tech" terms.

**TECH AVERSE &  
LESS LEARNING  
ORIENTED**

**TRADITIONAL, PHYSICAL**

**NETWORKING LESS CURIOUS**

**TECHIES, ACTIVE  
FUNCTIONAL LEARNERS**

**ARDENT  
ABOUT  
GROWTH  
THRU  
LEARNING**



**LES**

**40%**

**MORE**

60%

LESS

**19%**

**MORE**

81%





# DIGITAL READINESS BY COUNTY

	STATE	HONOLULU	HAWAII	MAUI	KAUAI
<b>DIGITAL READINESS: Knowledge Gaps to Target</b>	<ul style="list-style-type: none"> <li>&gt;Creative</li> <li>&gt;Employment</li> <li>&gt;Financial Skills</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Creative</li> <li>&gt;Employment</li> <li>&gt;Financial Skills</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Basic skills</li> <li>&gt;Social skills</li> <li>&gt;Online learning</li> <li>&gt;Awareness of opportunities</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Creative</li> <li>&gt;Employment</li> <li>&gt;Financial Skills</li> <li>&gt;Basic skills</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Basic skills</li> <li>&gt;Social skills</li> <li>&gt;Online learning</li> <li>&gt;Awareness of opportunities</li> </ul>
<b>CLUSTER OPPORTUNITIES: Improvement and Champion</b>	<u>For improvement:</u> Social Users Unprepared Old Guard	<u>For helping others:</u> Tech DIYers Digital Learners	<u>For improvement:</u> Unprepared Old Guard	<u>For improvement:</u> Unprepared Social Users <u>For helping others:</u> Digital Learners	<u>For improvement:</u> Old Guard Social Users
<b>DEMOGRAPHICS TO TARGET</b>	<ul style="list-style-type: none"> <li>&gt;35 years old</li> <li>&gt;High school ed</li> </ul>	<ul style="list-style-type: none"> <li>&gt;35 years old</li> <li>&gt;High school ed</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Over 35 years old</li> <li>&gt;Native Hawaiian</li> <li>&gt;High school ed</li> <li>&gt;Trade School</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Over 35 years old</li> <li>&gt;High school ed</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Over 35 years old</li> <li>&gt;Native Hawaiian</li> <li>&gt;High school ed</li> <li>&gt;Trade School</li> </ul>



# DIGITAL LITERACY AND READINESS STUDY OBJECTIVES

- To establish a baseline measurement of the digital literacy and readiness of Hawaii's working age population;
- To measure the present rate of digital readiness statewide, disaggregated by demographics, education, occupation, industry, and geography;
- To determine the proportion of adults who are not digitally literate
- To identify the largest population segments of adults who are not digitally ready by selected demographics, education, occupation, industry, and geography.

## Digital Divide was empirically evidenced in study:

### COMPOUND DIVIDE

A CUMULATIVE DISADVANTAGE WITHIN DIGITAL SKILLS AND USES

ABILITY TO SHARE INFORMATION SOCIAL DOES NOT NECESSARILY  
LEAD TO HIGHER PROFICIENCY FOR INFO SEARCH & NAVIGATION

### SEQUENTIAL DIVIDE

DIGITAL SOCIAL SKILLS HAS NO SEQUENTIAL EFFECT ON DIGITAL USE

NOT ALL DIGITAL SKILLS INCREASE ECONOMIC DIGITAL USES

INFORMATION SEARCH SKILLS ENHANCE USE FOR FINANCE BUT NOT  
FOR EMPLOYMENT

# EXECUTIVE SUMMARY



Hawai'i is less digitally ready (40%) as compared to a 2015 national study average of 19%.

Hawai'i residents are less digitally prepared (41%) than the national average (48%).

Digital trust and self efficacy are foundations to build digital readiness and literacy.

Residents' acceptance of online learning culture is strong. However, Hawai'i has lower levels of digital trust than the national average.

Hardware and internet access are obstacles to readiness for only 4% of the population statewide.

# EXECUTIVE SUMMARY



Variations in digital confidence by industry sector may also have an impact on the digital transformation process.

Residents with a high school education who work in blue collar, sales, and self-employed occupations are less digitally ready or literate.

Higher income and education levels accelerate digital literacy and seeking opportunities to grow.

Younger Hawai'i Residents living on O'ahu with higher income and higher education level, are more likely to benefit from digital technology and online learning.



# HOW IS HAWAII ADDRESSING DIGITAL EQUITY AND LITERACY?



\$975,000 Grant from the U.S. Department of Labor

Partnered with the Hawaii State Library

- 51 branches on 6 islands
- Computer basics
- Internet & Web connectivity and navigation
- How to be safe on the internet; and
- E-mail basics

Partnered with the Hawaii Department of Education, Community School for Adults

- Partner in the American Job Center
- Provide services to vulnerable population under the Workforce Innovation and Opportunity Act

# *Mahalo*

## *(Thank You)*

Maricar Pilotin-Freitas, Administrator  
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State Department of Labor & Industrial Relations

