Resiliency:
Be Positive #ChangeAgents

dr. david a. bray executive director
people-centered internet

This presentation in its entirety is unclassified

This is our home
3.7 billion miles away
a “Pale Blue Dot”
the sunlight reflected from Earth took
5½ hours to reach Voyager I in 1990

when Voyager I launched in 1977
4.2 billion humans lived on Earth

global GDP = 7.2 trillion USD
the Apple II went on sale that year
running at 1 MHz w/ 4 KB of RAM

Voyager I traveled 3.7 billion miles by 1990
5.3 billion humans lived on Earth

global GDP = 22 trillion USD
Windows 3.0 was released and
CERN launched the first web server at info.cern.ch

by 2013 >850 million web servers online
7.1 billion humans lived on Earth
global GDP = 75 trillion USD
7 billion global networked devices
4 Zettabytes (ZB) of digital content globally

by 2022, 75-300 billion networked devices
8 billion humans will live on Earth
global GDP = ?? trillion USD
7 billion humans online, more than 85% of the world
96 ZB of digital content > all human eyes see/year

Teaching & Transforming for the Future

if we take the 2^{32} (~4.3 billion) numbers addressable by IPv4 & put them into a beach ball

Teaching & Transforming for the Future

the 2^{128} (~340 followed by 36 zeros) numbers addressable by IPv6 = the volume of our Sun

Our World Is Changing Exponentially
We Need To Empower Everyone To Be Part of Positive Changes Across Sectors

Our World Is Changing Exponentially

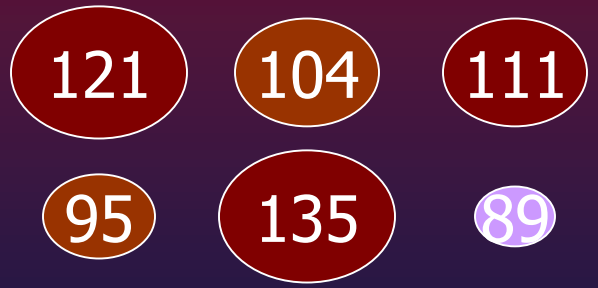
We Need To Empower Everyone To Be Part of Positive Changes Across Sectors

The Next 7 Years Will See More Change than the Last 20 Years Combined

(1) Power of Diversity

- Learned perspectives may limit the search space any one individual uses to reach an answer, even for “smart” individuals

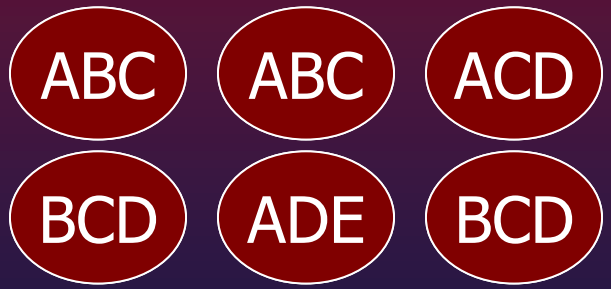
IQ view of the “Alpha” Group



IQ view of the Diverse Group

(1) Power of Diversity

- Multiple individuals with varying perspectives expand the search space employed, the result is a diverse crowd has more “tools” to apply

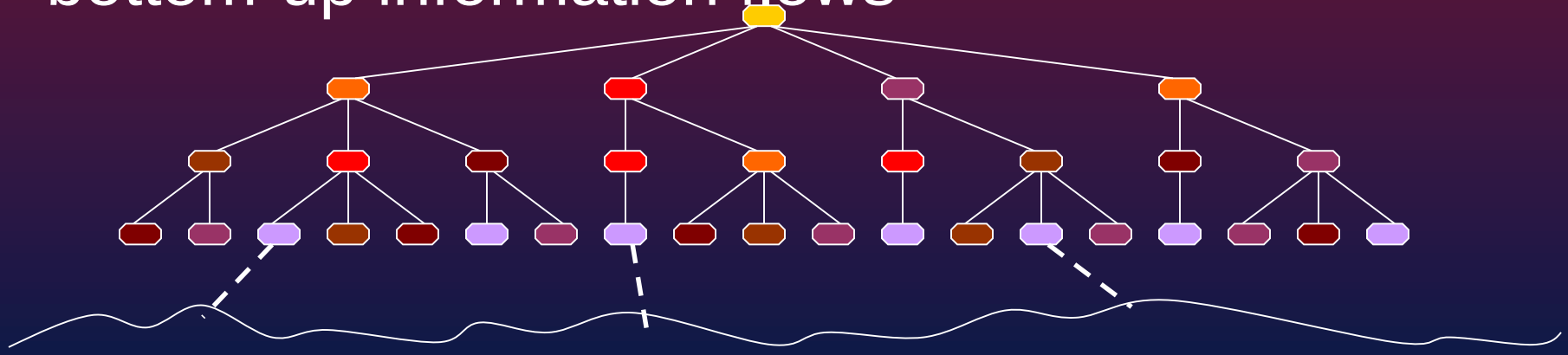


Toolbox view of the “Alpha” Group

Toolbox view of the Diverse Group

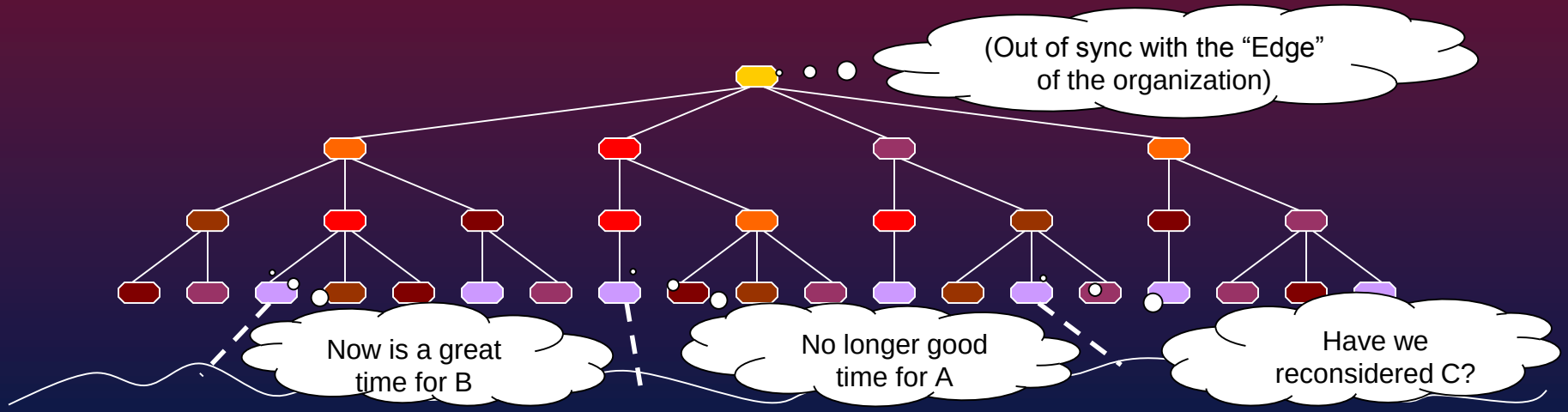
(2) Power of the Edge

- Traditional organizations exist to harness worker output, usually a top-down approach
- Yet top-down hierarchies restrict opportunities for bottom-up information flows



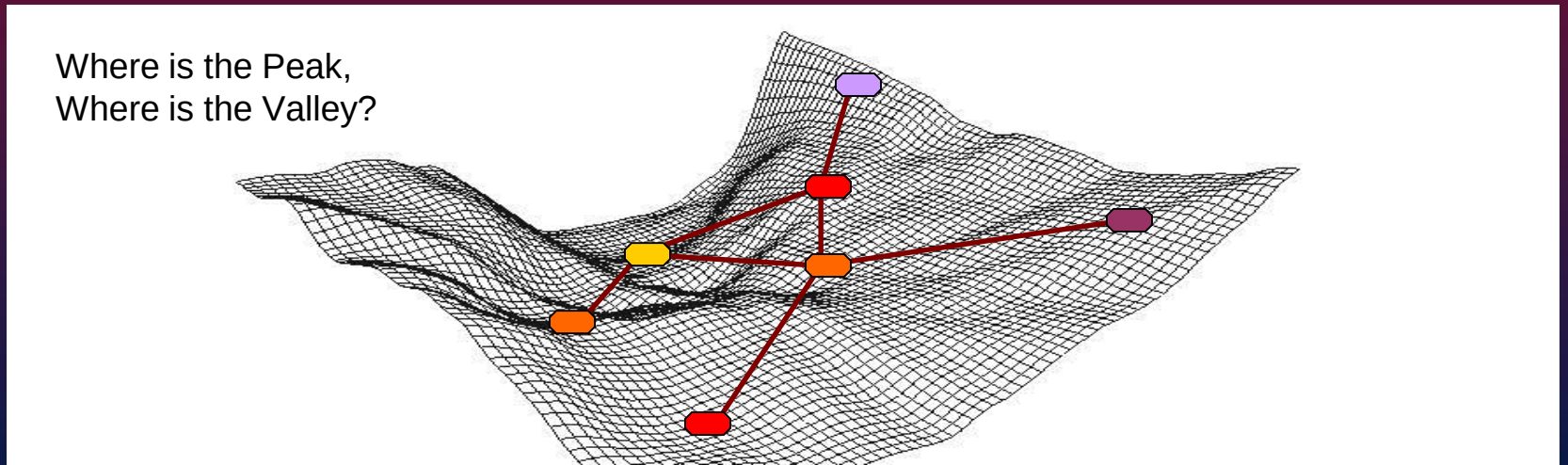
(2) Power of the Edge

- If the organization doesn’t encourage bottom-up insights, highly probable that the top could lose relevancy despite larger scope



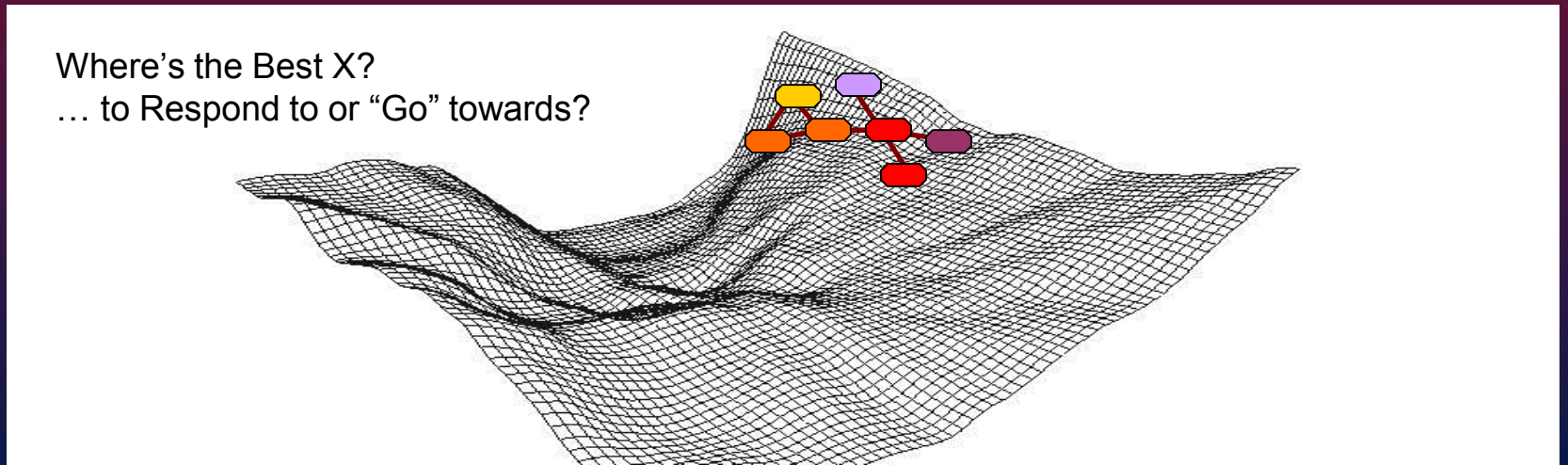
(3) Power of an Ecosystem

- Where any one individual (or team) is looking may no longer be relevant; different views can better scan the environment



(3) Power of an Ecosystem

- Through chatter and conversation, new threats or opportunities can be addressed through swarming + rapid mobilization



Teaching & Transforming for the Future

change
isn’t easy

Teaching & Transforming for the Future

change
isn't easy

leaders don
"flak jackets"

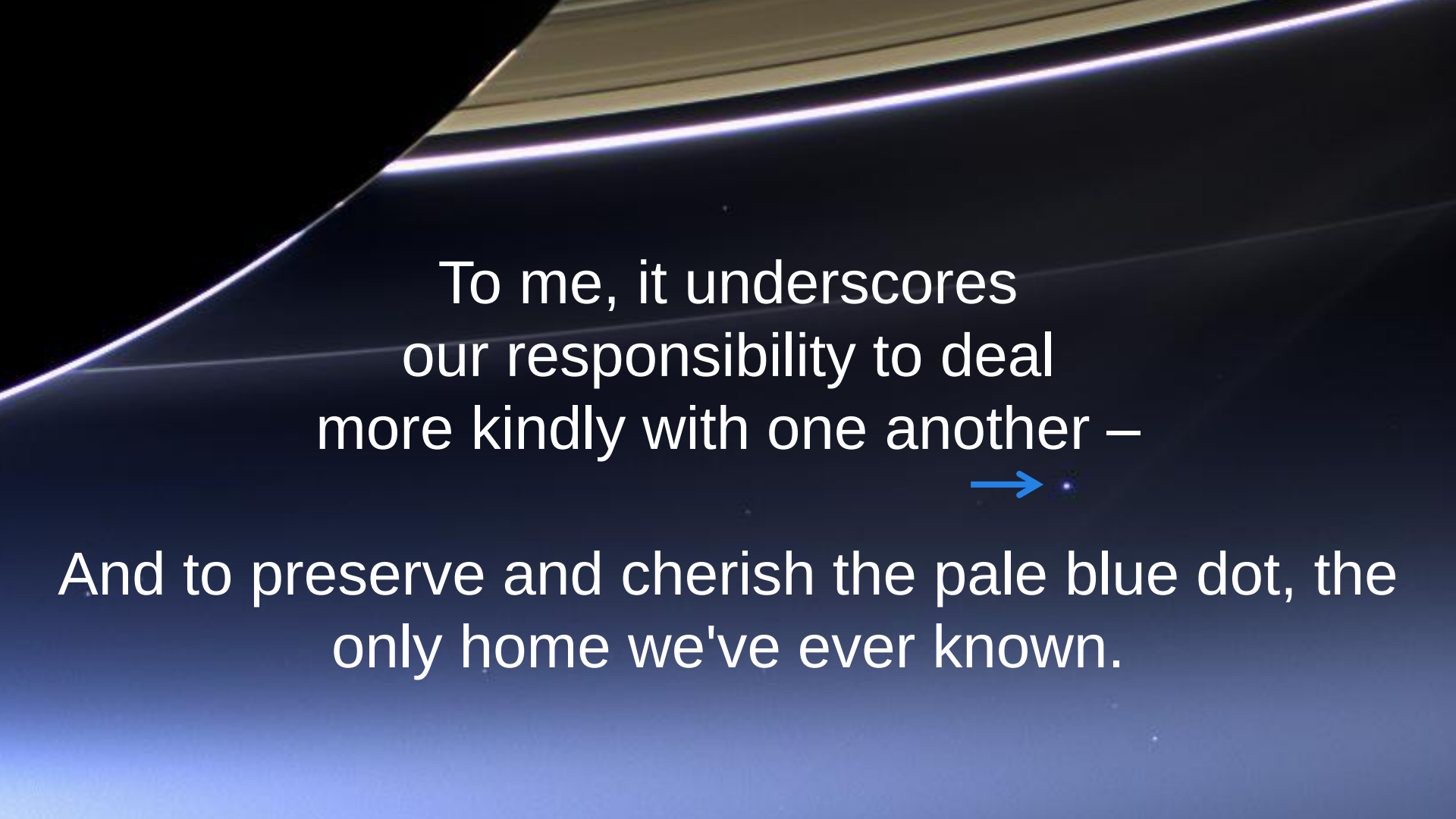
Experiments Shape Perspectives

both Expertise & Experiments
have the root “ex peria” = out of danger

the U.S. representative democracy was
born from an Experiment in self-rule
“out of danger” came Experience

Carl Sagan in 1994:
Look again at that dot.
That's here. That's home.

That's us.
On it everyone you love,
everyone you know –
Everyone you ever heard of, every human being who ever was, lived out their lives.


To me, it underscores
our responsibility to deal
more kindly with one another –
And to preserve and cherish the pale blue dot, the
only home we've ever known.

Needed Now More Than Ever:
#ChangeAgents
for Our Exponential Times
be bold, brave, and benevolent

Questions

Please wait for the **microphone** before asking your questions

State your **name & company**

Please don’t forget to…

complete the Post Event Survey

© Copyright 2018 OSIsoft, LLC

Contact Information

Dr. David Bray

changeagents@peoplecentered.net

Executive Director

People-Centered Internet Coalition

© Copyright 2018 OSIsoft, LLC

Thank You