

Noncognitive Assessment

Applications and Opportunities to Transform Public Sector Testing

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Introduction

Use of Noncognitive assessment is increasing to guide, develop and assess talent.

- Organizations discovering the importance of personality and 21st century “soft skills”
- The universe of assessment methods is expanding
- This session explores **foundations, applications, and trends**



Presenters



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*PSI is a global leader in **workforce assessment and knowledge measurement** with a robust **content library**, **professional services**, **innovative technology platform**, and **secure delivery network**.*



70+

**YEARS OF
SCIENCE**

guiding success in
organizations

3000+

**PROPRIETARY
TESTS**

for workforce needs
across industries

1800+

TEST CENTERS

for proctoring
and identity
management

2000+

EXPERTS

psychologists,
technologists,
& client managers

100+

COUNTRIES

to support growing
business needs

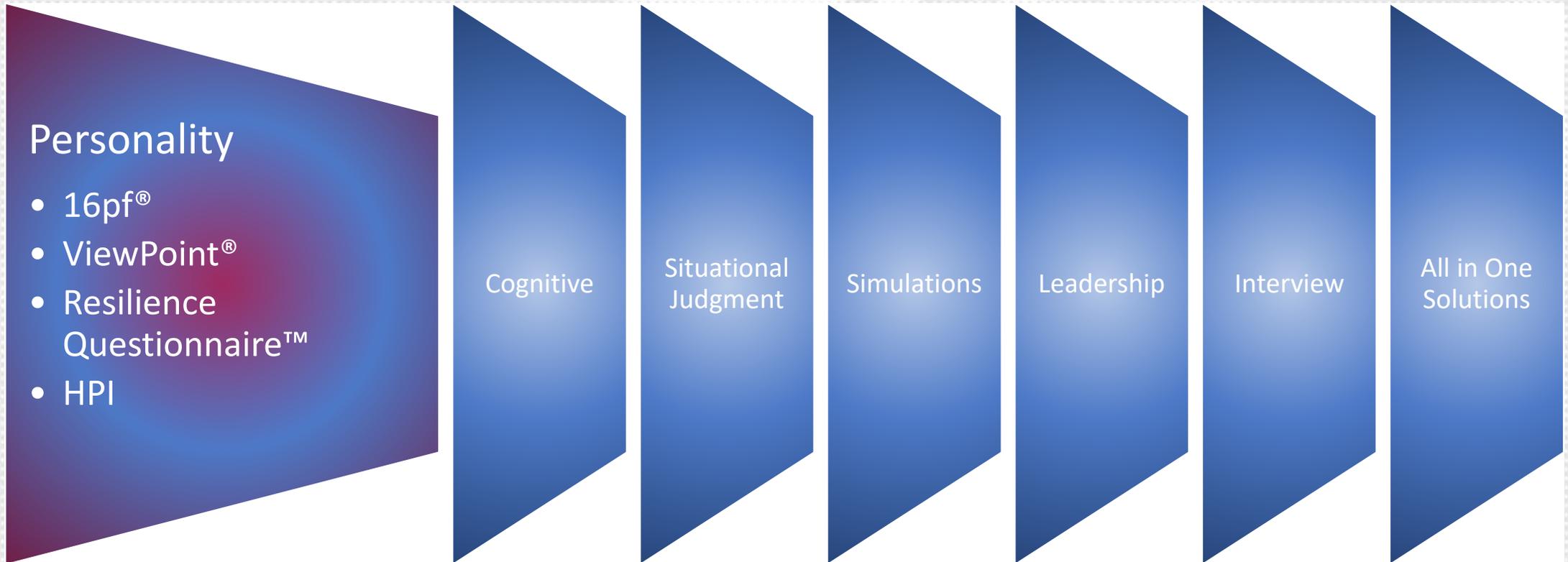
13M+

**TESTS DELIVERED
ANNUALLY**

in PSI's
network



Best of breed assessment solutions



PSI True Talent™ platform



By the Numbers

7
MILLION
ASSESSMENTS

650+



56
Countries

JOBS

+ **-** **⊕** **⚡**
AND JOB FAMILIES

350+

JOURNAL
ARTICLES
&
BOOK CHAPTERS

MORE THAN
1.1K
VALIDATION STUDIES

47
LANGUAGES

ESTABLISHED 1987

Focal Topics

1. Foundations

- Background on personality, competencies, 21st century “soft” skills and why they are important
- Assessment types and tools

2. Applications

- When, why, examples, considerations

3. Trends

- Emerging technologies, new applications, approaches, disruptions, opportunities

Q&A

1.

Foundations

PERSONALITY'S IMPORTANCE

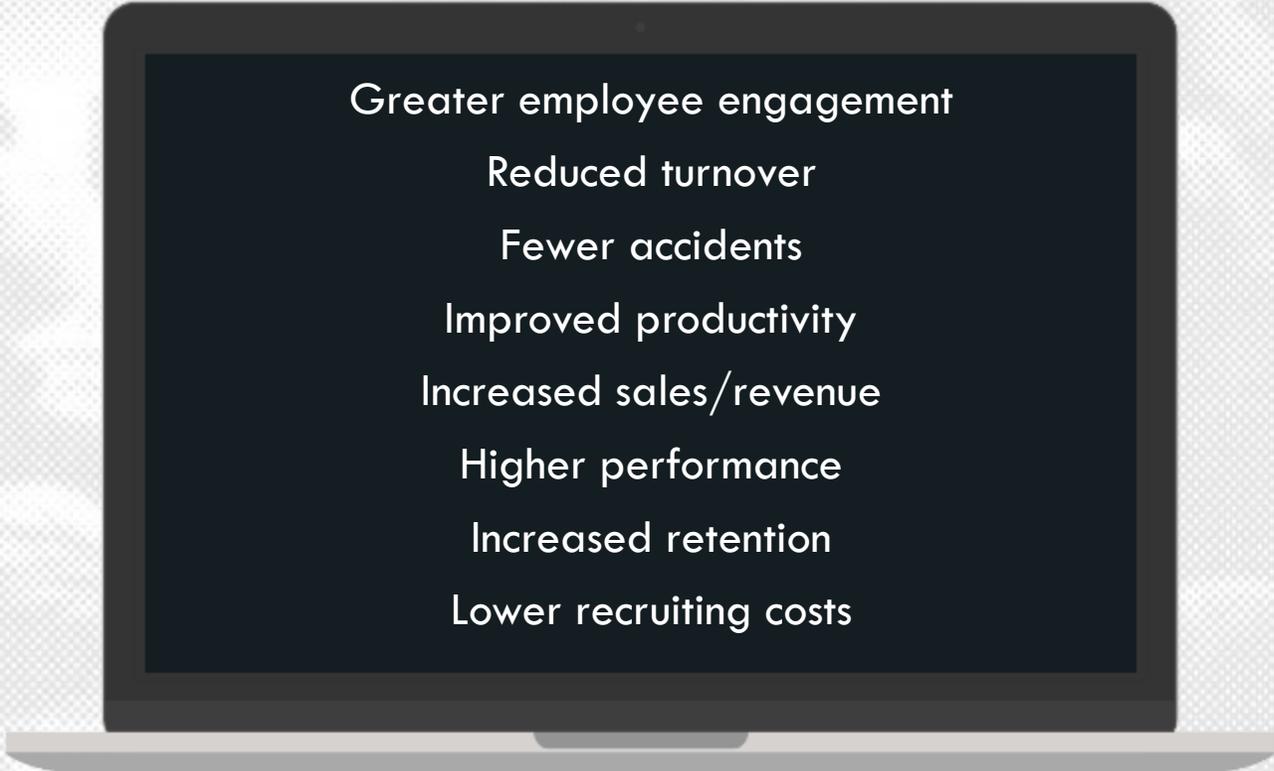
Underlies our behavior, actions, reactions, and interactions.

Insight into how we execute business strategies, and manage change, conflict and people.

Information on individual and team strengths and blind spots, and organizational culture.

Influences our effectiveness at leading people.

HOW CAN PERSONALITY ASSESSMENTS BENEFIT ORGANIZATIONS?



Greater employee engagement
Reduced turnover
Fewer accidents
Improved productivity
Increased sales/revenue
Higher performance
Increased retention
Lower recruiting costs

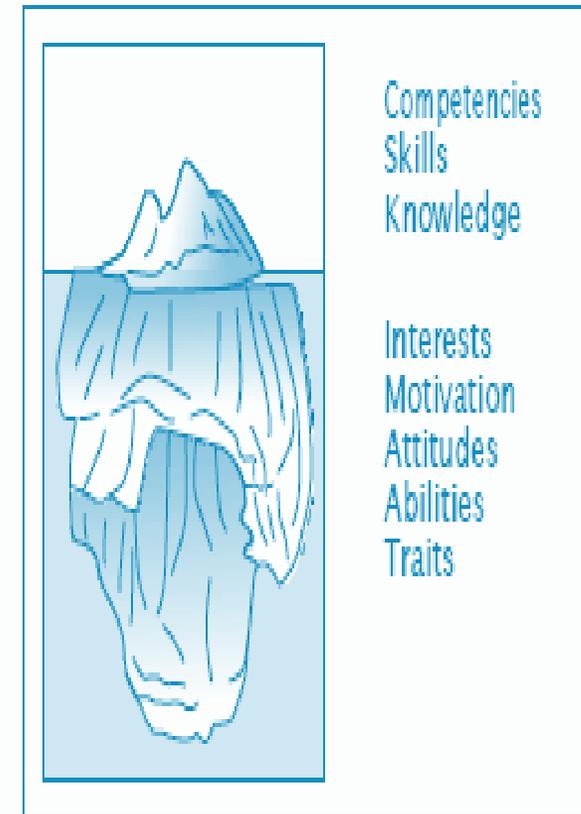
Traits vs. Competencies

Personality traits are enduring characteristics

- Deep seated
- Difficult to change

Noncog competencies are a mix of behaviors

- Surface level (observable)
- Malleable, can develop

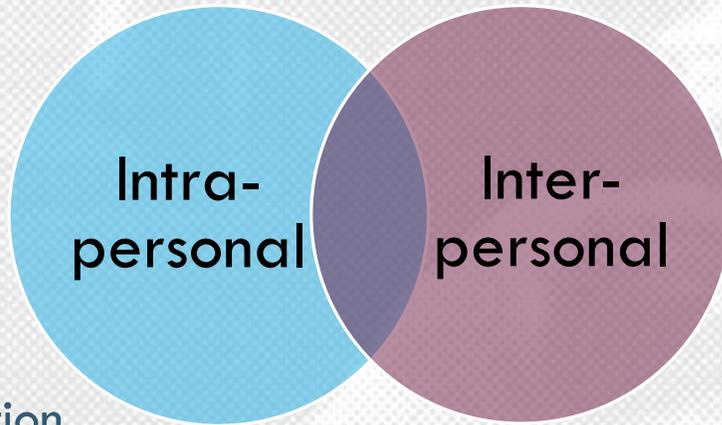


The Iceberg Model of human characteristics (Reynolds & Weiner, 2009)

21st Century Skills

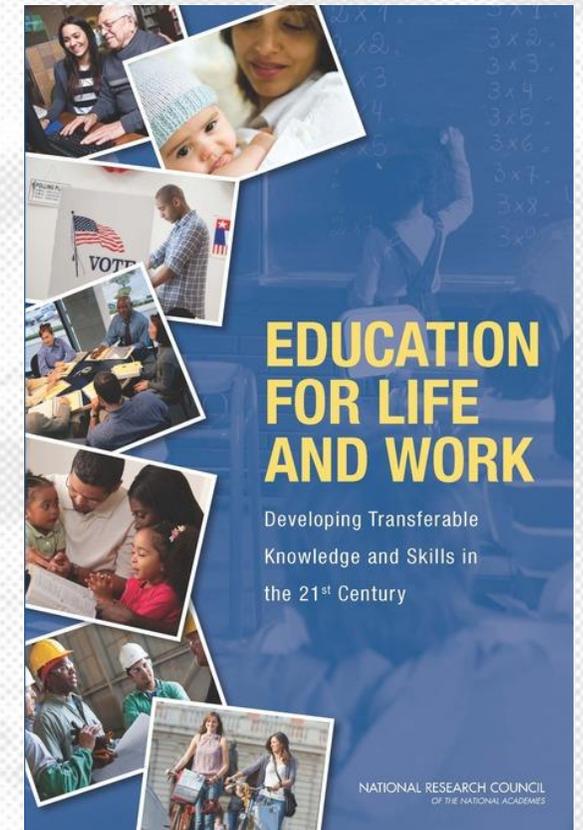
Recent studies have identified soft skill gaps in student readiness for work

❖ 21st Century skills important for success (NRC)



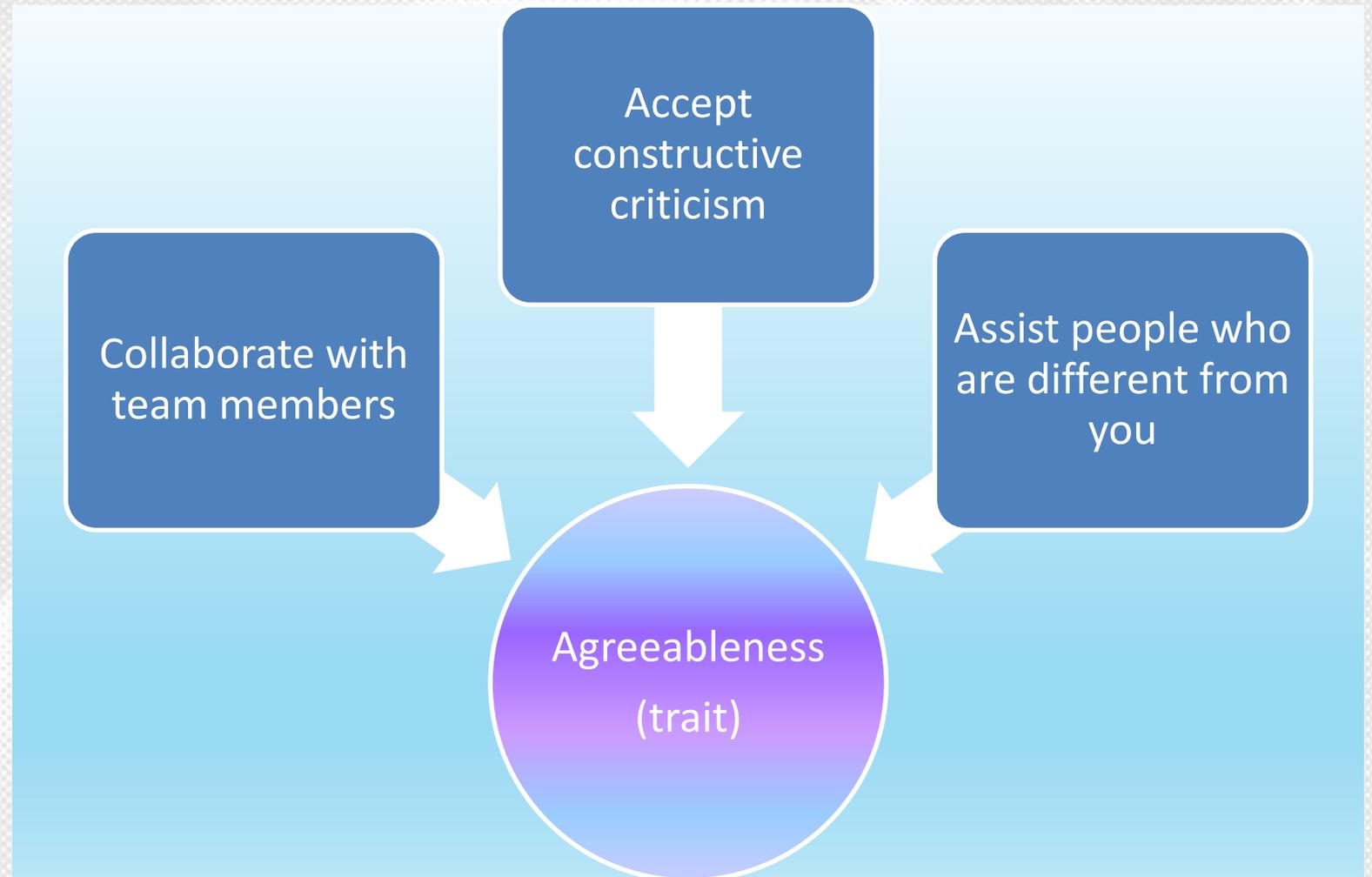
- Flexibility
- Initiative
- Meta-cognition
- Appreciate diversity

- Communication
- Collaboration
- Responsibility
- Conflict resolution



Example

*Soft skills
reflect
underlying
traits*



Personality in the workplace

Job analysis studies have mapped the workforce

- Cumulative **validation research** reveals noncog measures predict job performance across jobs and settings

Sackett & Walmsley, 2014

- **Dept of Labor (o*net)** – noncognitive domains make up 45% of worker characteristics used to describe ~1,000 job classes

Abilities (51)	Work Styles (15)	Work Values (21)	Interests (6)
<ul style="list-style-type: none">• Verbal• Reasoning• Quantitative• Memory• Perceptual• Spatial• Psycho-motor	<ul style="list-style-type: none">• Achievement Orientation• Social Influence• Interpersonal Orientation• Adjustment• Conscientiousness• Practical Intelligence	<ul style="list-style-type: none">• Achievement• Work Conditions• Recognition• Relationships• Support• Independence	<ul style="list-style-type: none">• Realistic• Investigative• Artistic• Social• Enterprising

Common Assessment Methods

Self-report Instruments

- Attitude, self-description, admission, situation
- Precise measurement of specific constructs
- **16pf, HPI**

Situational Judgment Tests

- Rate responses to scenario
- Can be designed to measure soft skills
- Multimedia formats increasingly popular

Assessment center, simulation, behavioral interview

- Role play, demonstrate behavior, take action
- Raters, online scoring
- **Virtual AC**

Whenever possible, you try to resolve one problem before moving on to the next.

- Strongly Disagree
- Disagree
- In Between
- Agree
- Strongly Agree



2.

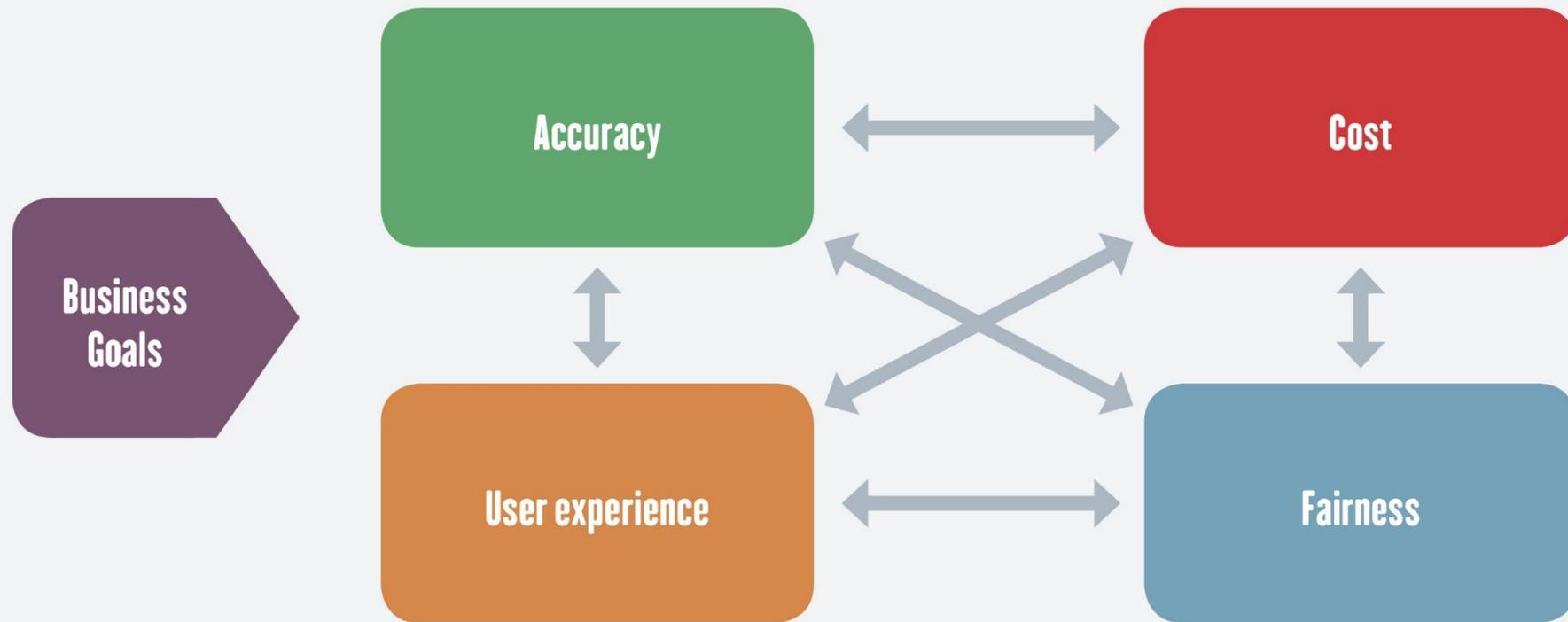
Applications

When to assess?



How to select?

Figure 16: Factors in selecting an assessment methodology



Why assess?

Organizations use noncog assessments to address a range of workforce needs

- ❖ Work habits / citizenship
- ❖ Quality
- ❖ Service
- ❖ Safety
- ❖ Retention
- ❖ Leadership

Examples

How does your organization use noncog assessments?

U.S. state agency wanted to enhance their **selection process for Leaders**. Hogan then used validity generalization strategies and identified, that leaders must **be stable under pressure** and identified that high fit leaders shall, **deliver results** and work hard, build and **maintain relationships**, are **dependable** and detail-oriented

A civil service agency needed to identify job candidates with **soft skills that align with the organization's competency model**. PSI designed an assessment solution that included *work attitude and personality assessments* to select candidates for **several job families**, including administrative, trades, professional and managerial roles.

One of the world's largest fire departments needed **select firefighters who would be service and safety oriented**, and **willing to assist people** from a diverse range of cultures, ethnic and socio-economic groups. PSI provided a *work attitude assessment* to use with a cognitive battery.

An Australian government agency wanted to improve their **selection process for Correction Officers**. Hogan research shows, that successful individuals in this jobs **remain composed under stress, take initiative, and remain process-focused**.

A federal government agency needed to identify **high potential** employees for a **leadership development and succession planning** program. PSI designed an in-depth *personality and SJT* to align with the organization's competency model.

Considerations

Purpose	<i>What is the purpose of assessment? What problem is to be solved? How will the assessment results be used?</i>
Measurement	<i>What does the assessment actually measure?</i>
Psychometric Quality	<i>What is the technical quality of the assessment (evidence of validity and fairness). Do the assessments adhere to Professional and legal guidelines and standards?</i>
Users	<i>Who will be the users of the assessments? What user qualifications are required? What reports are available?</i>
Security	<i>What level of security is needed for test administration? Is the assessment high stakes?</i>
Faking	<i>Is response distortion (faking) or coaching to answers a concern?</i>
Languages	<i>What languages are needed? How was the assessment translated and adapted to other cultures?</i>
Scalability - Cost	<i>What are the time, labor and costs to administer and score the assessment?</i>

3.

Trends

Technology impact on assessment

Assessment technology has evolved rapidly since the turn of the millennium....

- ✓ IBT
- ✓ SaaS
- ✓ Automation

The pace of technology is accelerating faster than the science of measurement...

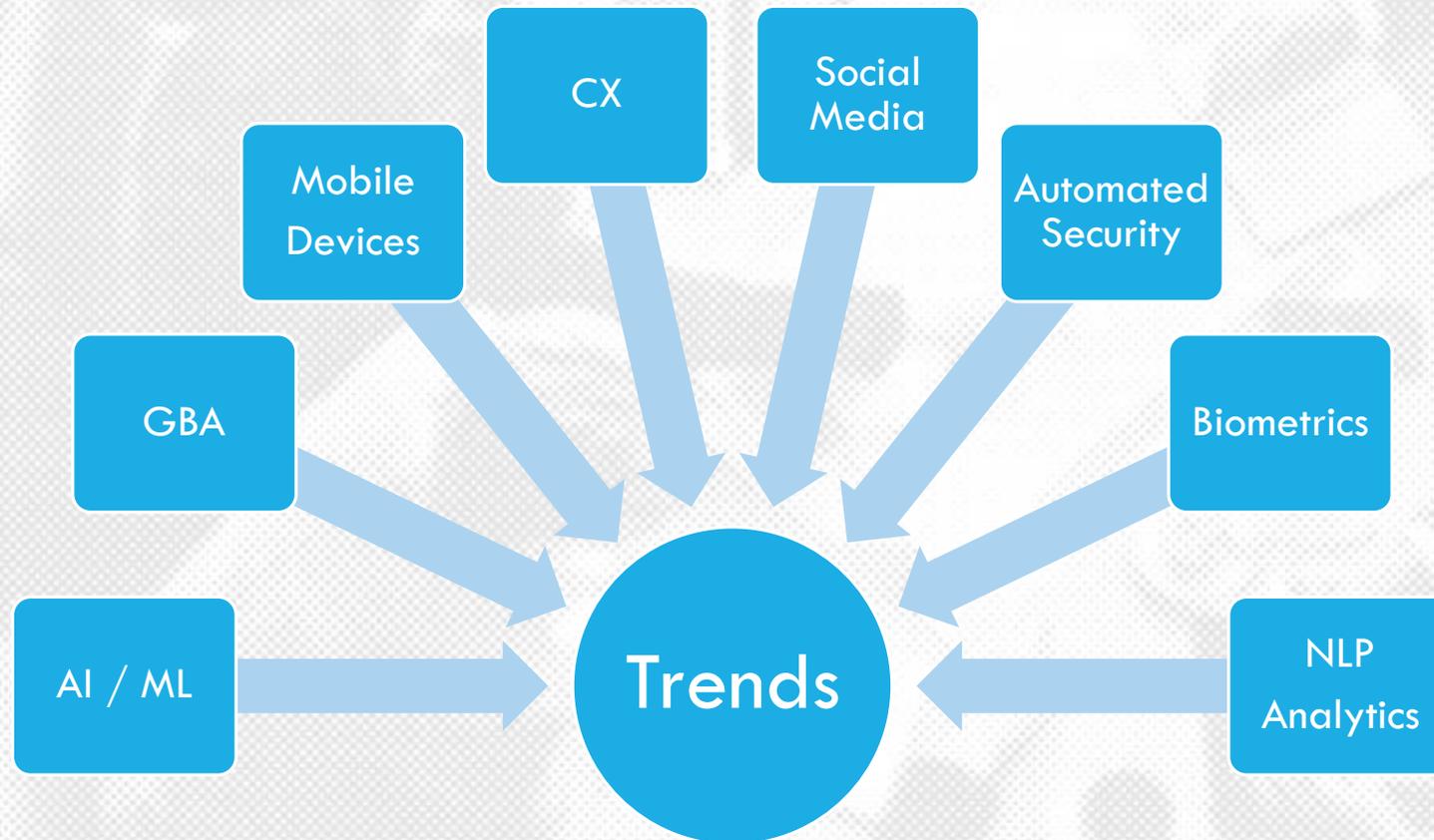
...The train has left the station in many cases

- ✓ Mobile
- ✓ GBA
- ✓ CX

We have the challenge and opportunity to ensure validity of technology-driven assessment

Technology trends

Many transformative trends are emerging that will change assessment design, development and delivery



NEW HR ASSESSMENT METHODS, FFM

- Accuracy
- Reliability



- No measuring of behaviours
- Age and gender-related expressions



HR AS PERSONNEL ADMINISTRATION

- Attention on accurateness and personnel



- Low effectivity
- High bureaucracy



TECHNOLOGICAL REVOLUTION → SCIENTIFICALLY VALID AND COMMERCIALY PROFITABLE ASSESSMENT METHODS

- Usability on almost all levels



- Only for performance enhancement



TRANSITION OF HR

- ERP



- Lack of complex employee satisfaction strategies



CONSTANTLY ACCELERATING DEVELOPMENT

- New platforms every month



- Big data



- Cheap, scientifically invalid tools



- Skepticism towards technology and data

HR AS A FIELD OF SCIENCE

- Most innovative data-analytics tools
- Validity and reliability of personality tests



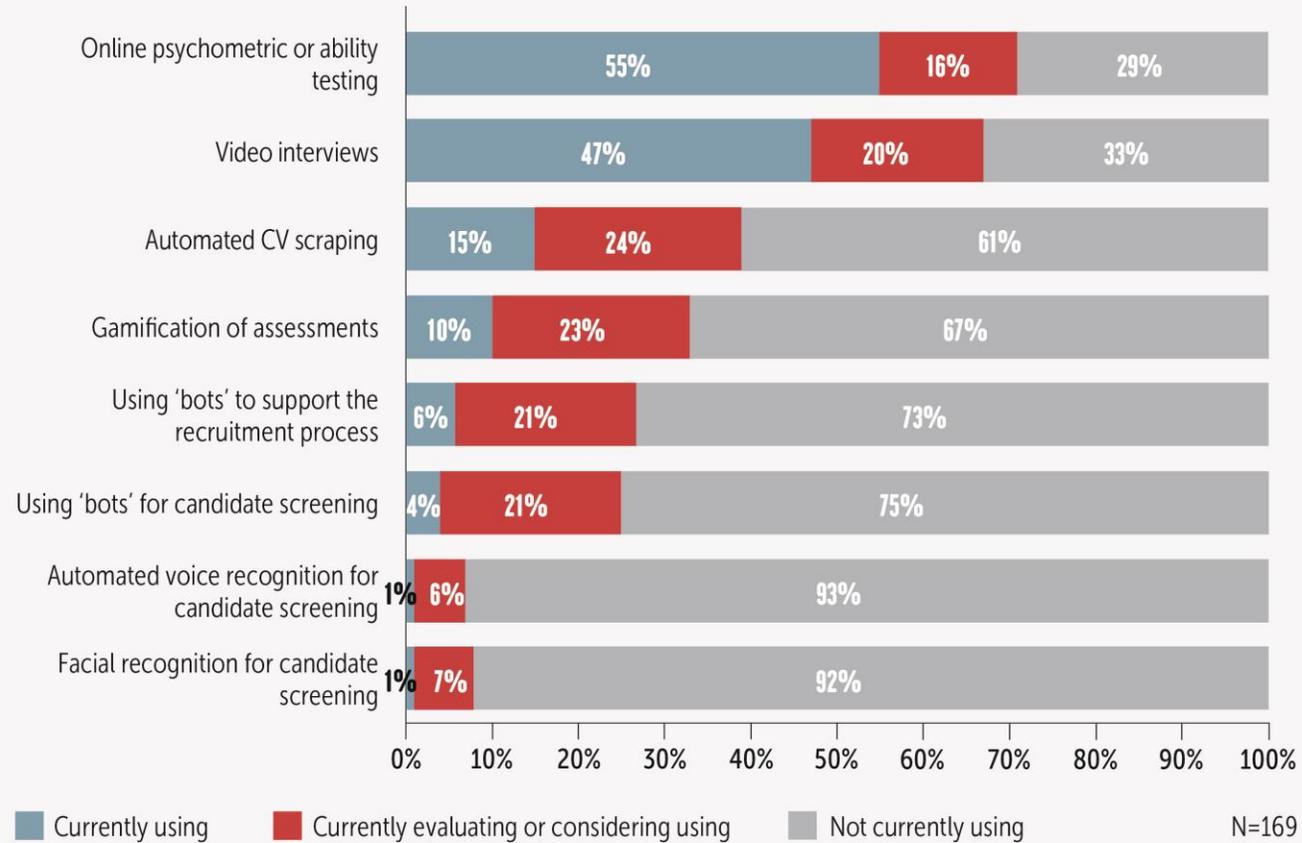
- Talent analytics

- Good vs. bad assessments
- Thousands of publishers selling technically invalid tools



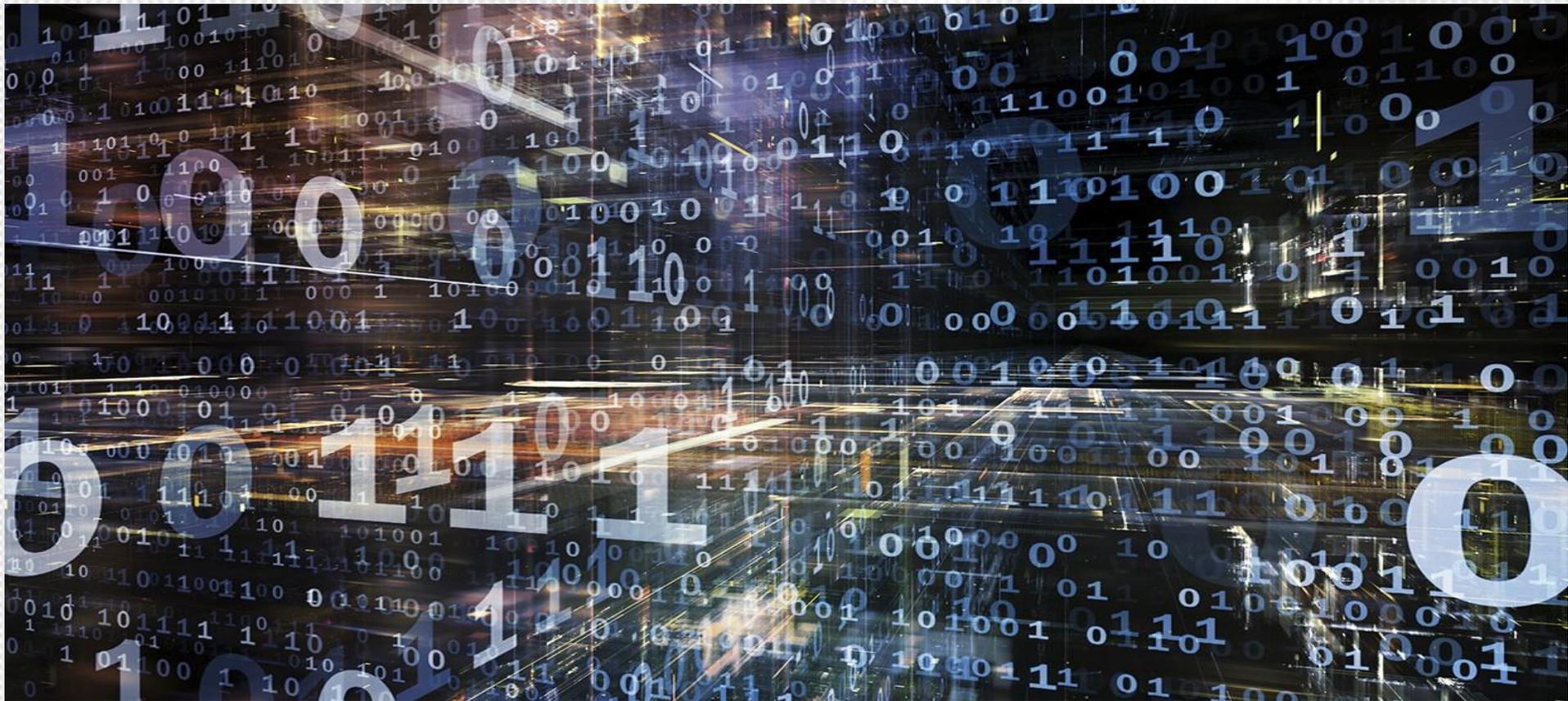
Current and future methods

Figure 22: To what extent do you use the following to support your recruitment activities?



Source: CRF member survey, May 2018

NEW TALENT SIGNALS HAVE EMERGED



GAMIFICATION AND VIRTUAL REALITY



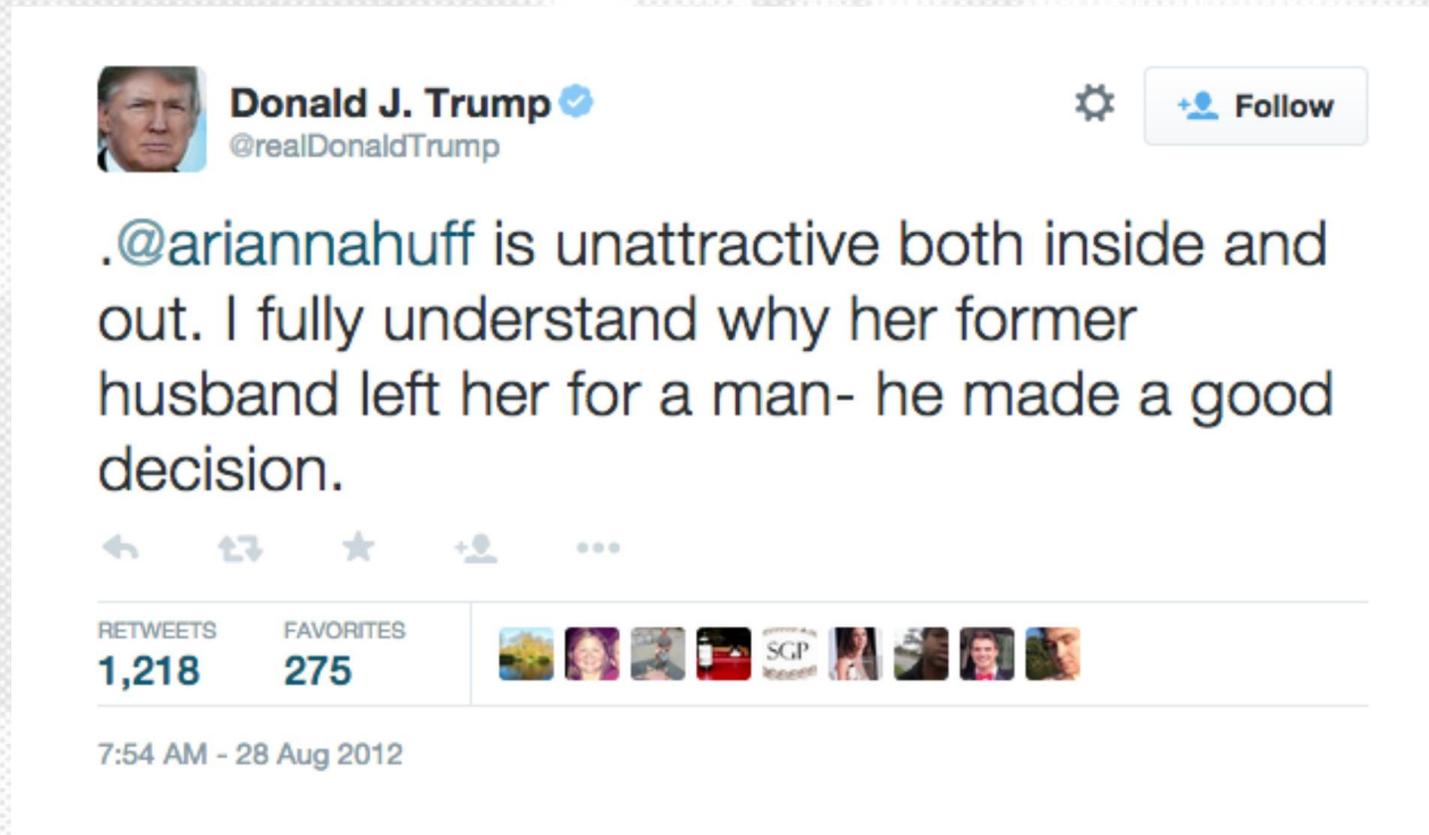
VIDEO AND VOICE PROFILING



SOCIAL MEDIA ANALYTICS



TEXT ANALYTICS ON TWITTER AND EMAIL CONTEXT



A screenshot of a tweet from Donald J. Trump (@realDonaldTrump) dated August 28, 2012. The tweet contains a personal comment about Arianna Huffington. The interface shows the user's profile picture, name, and handle, along with a 'Follow' button. Below the text are icons for replying, retweeting, favoriting, and sharing. At the bottom, there are statistics for retweets (1,218) and favorites (275), and a row of profile pictures of users who interacted with the tweet.

Donald J. Trump 
@realDonaldTrump

  Follow

.@ariannahuff is unattractive both inside and out. I fully understand why her former husband left her for a man- he made a good decision.

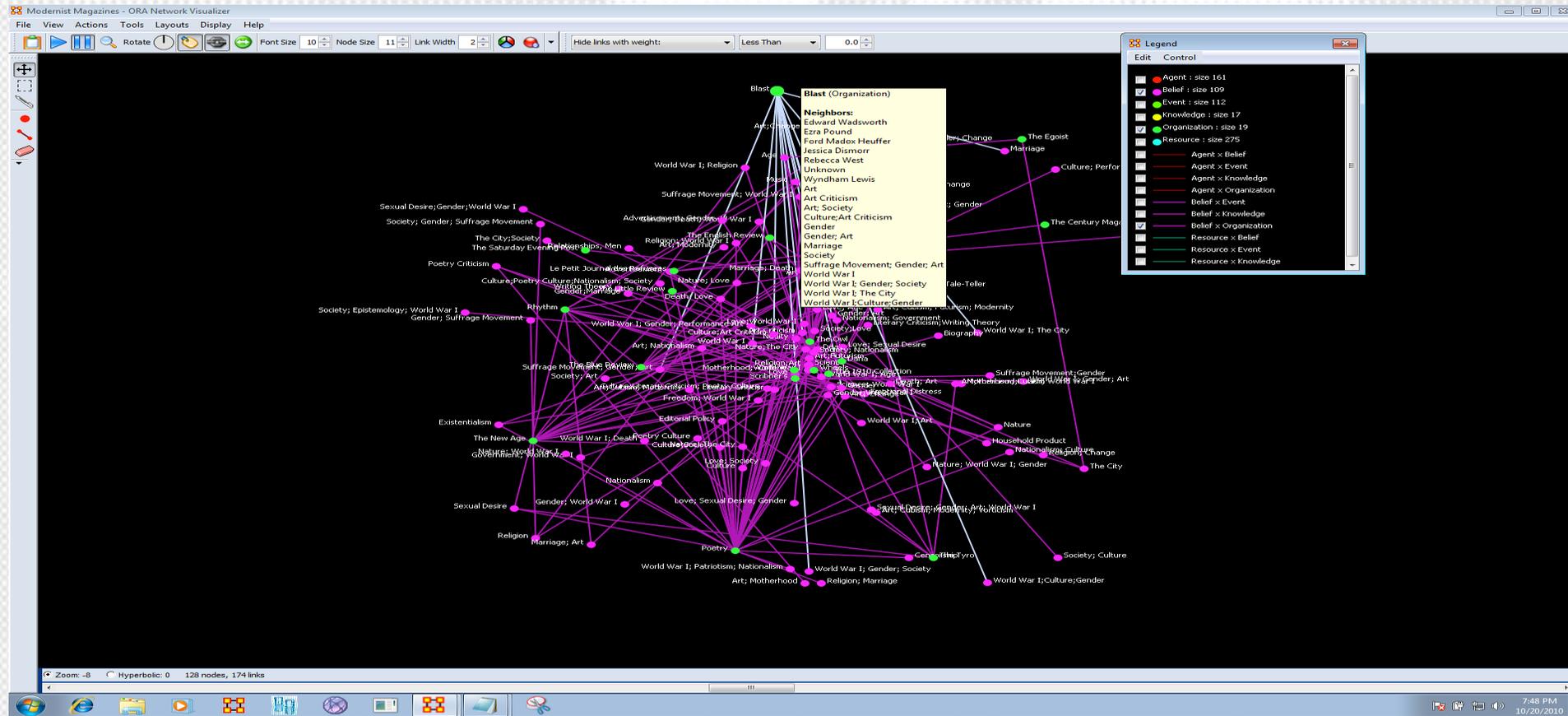
    

RETWEETS	FAVORITES
1,218	275



7:54 AM - 28 Aug 2012

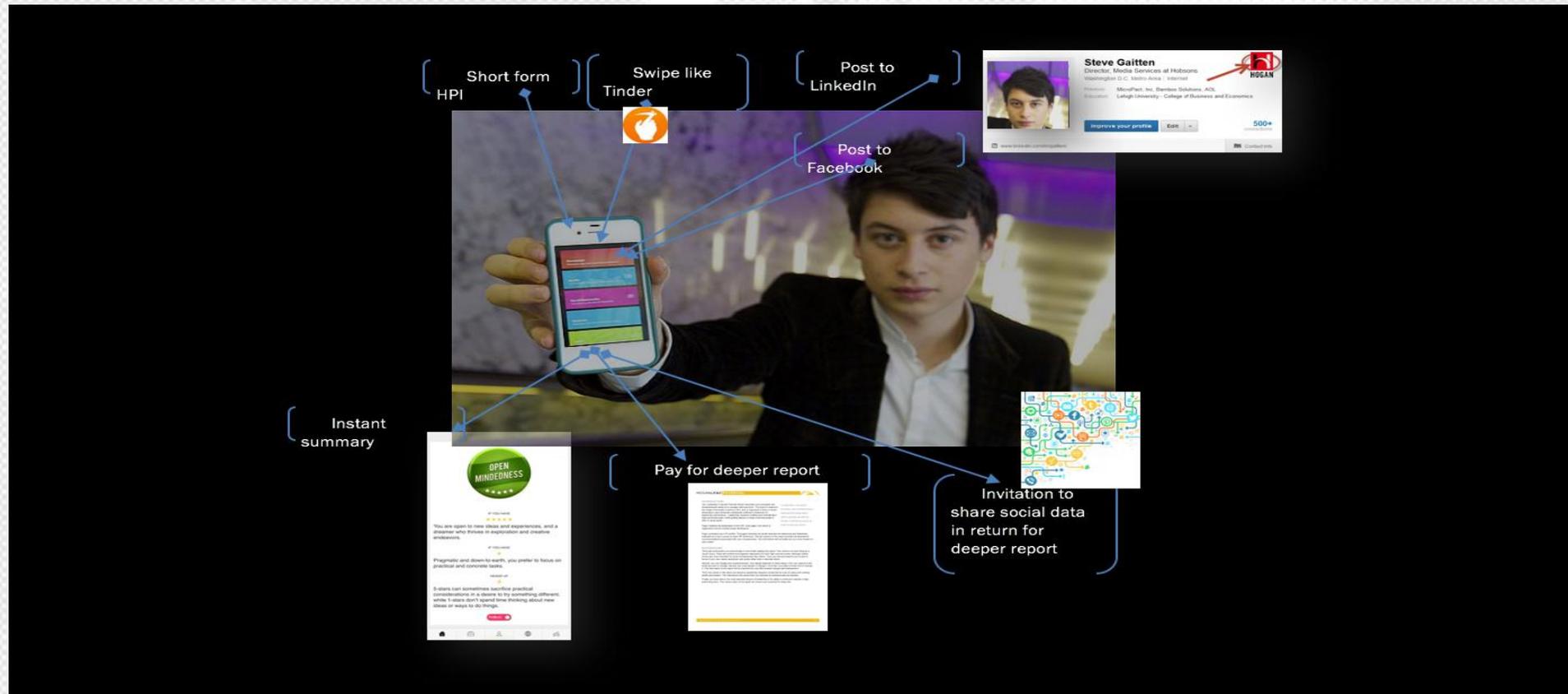
SOCIAL NETWORK ANALYSIS



ETHICAL CONCERNS MUST FIRST BE ADDRESSED



PORTABLE TALENT PASSPORT AND GDPR



Q&A

Discussion

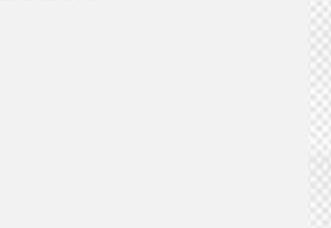
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Thank you

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