

Creating the Future of Credentials

...and designing new ways to record
them

Joellen Shendy



”

QUOTE OF THE DAY

Education is the bedrock from which to build one's American dream.

*Alejandra Castillo,
CEO of the YWCA*

“

www.forbes.com



// In the minds of today's college students, getting a better job continues to be the most prevalent reason to go to college. //

Pryor, J. H., Eagan, K., Palucki Blake, L., Hurtado, S., Berdan, J., & Case, M. H. (2012). The American freshman: National norms fall 2012. Los Angeles: Higher Education Research Institute, UCLA.

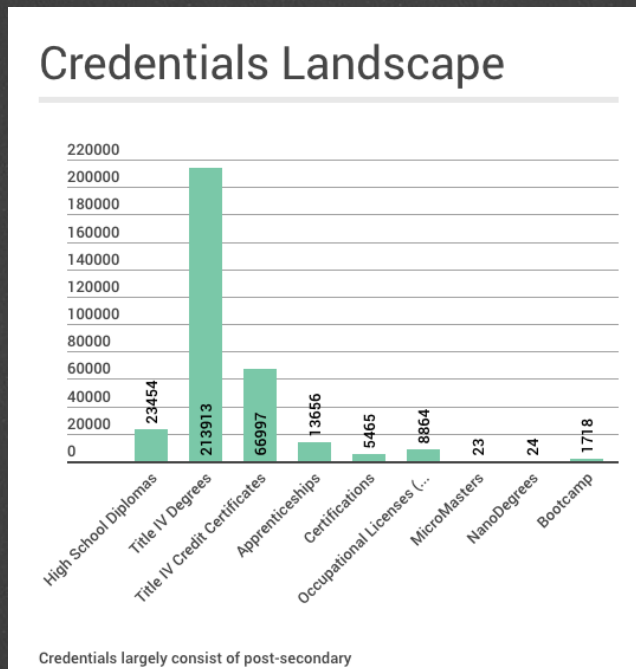


“Employers and people writing up job requirements can also think carefully about whether a degree is really an important part of what they need in a candidate. Consider looking at other factors, how that might be done. I think some workplaces are starting to do that a little anyway, because they are so unsatisfied with the people that come out of the university.”

-- Meghan Kathleen Jamieson

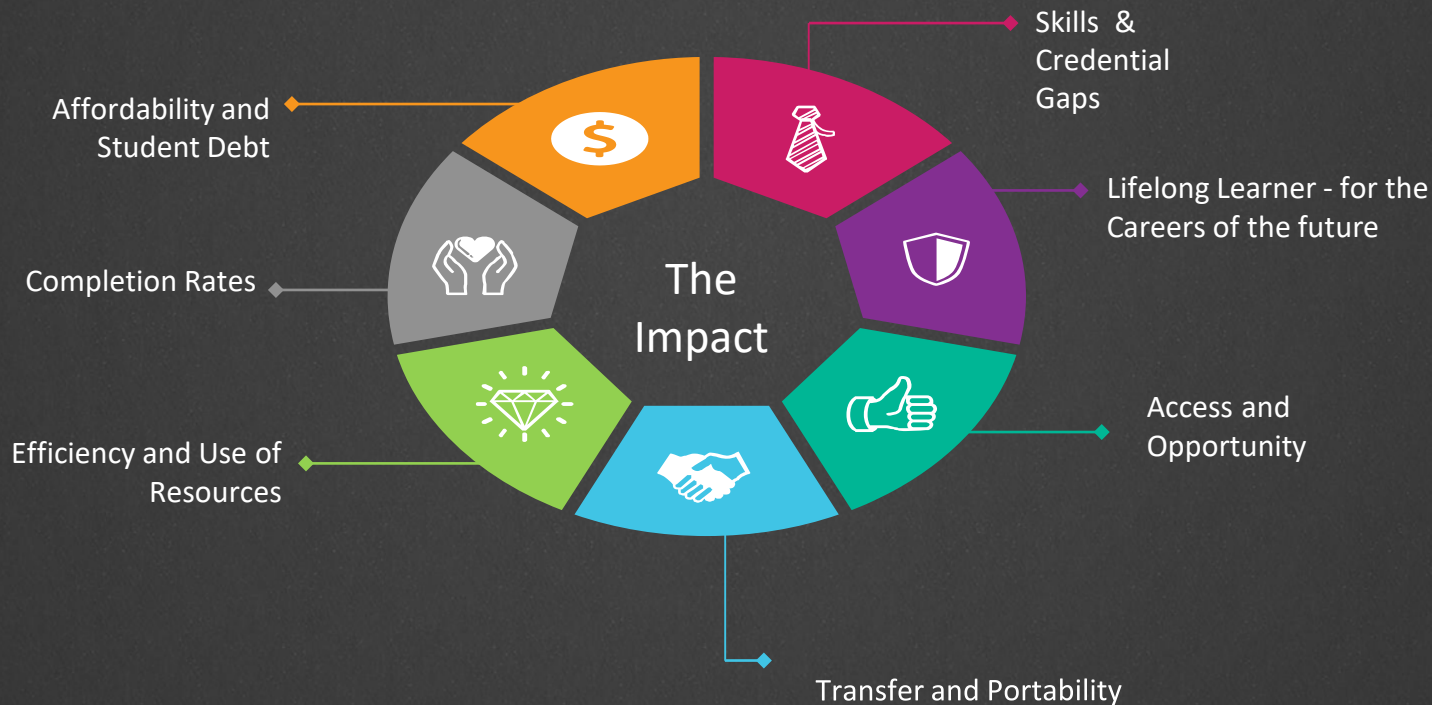
<https://www.theguardian.com/commentisfree/2016/may/18/knowledge-economy-myth-more-universities-degree#comments>

Counting US Secondary and Post-Secondary Credentials

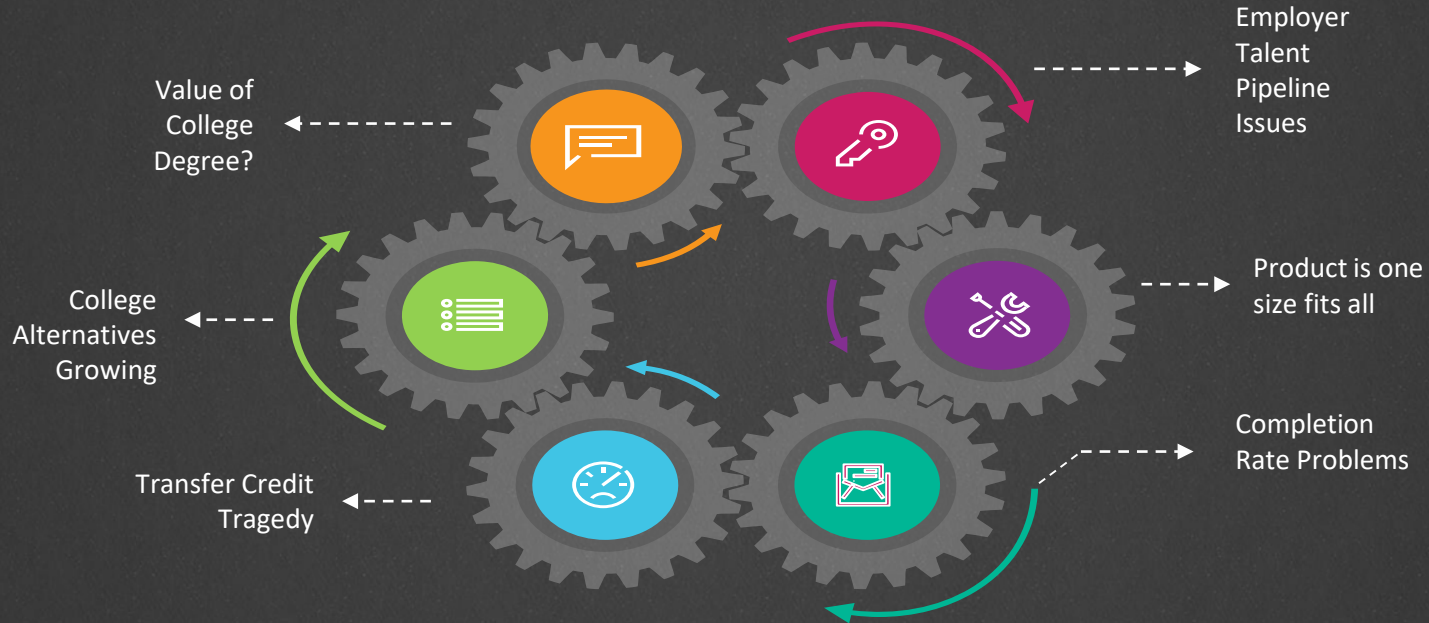


https://www.credentialengine.org/Content/Articles/Counting_US_Secondary_and_Postsecondary_Credentials_April_2018.pdf

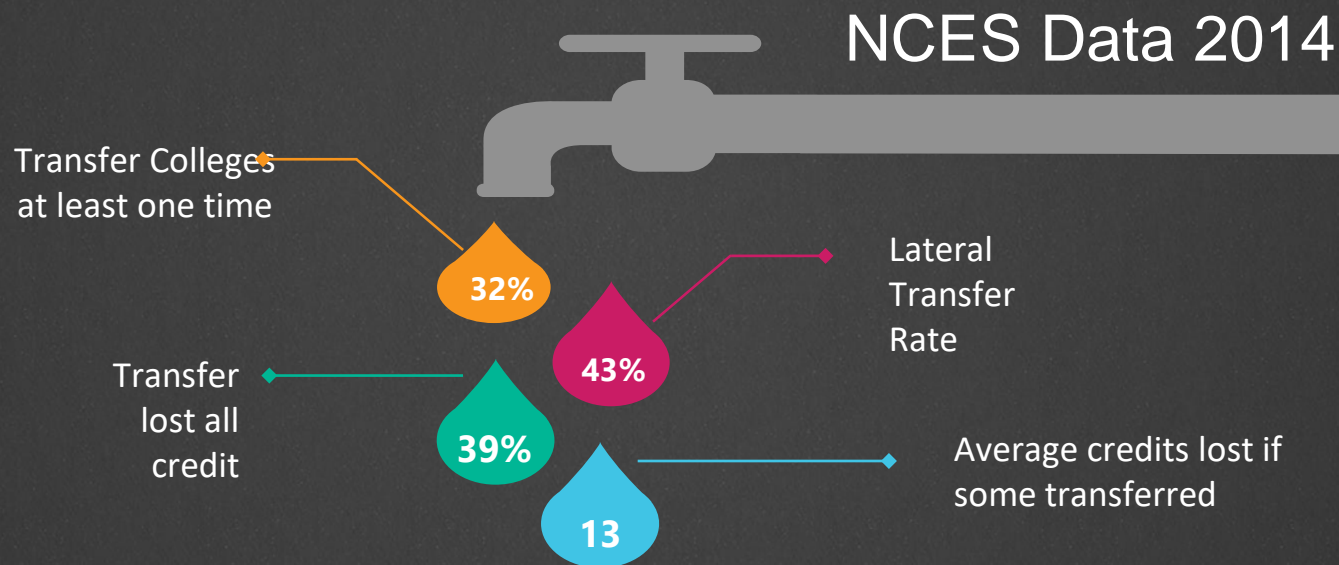
➤ Why is this important for us?



> THE GRIND



➤ TRANSFER TRAGEDY



Simone, S.A. (2014). Transferability of Postsecondary Credit Following Student Transfer or Co-enrollment (NCES 2014-163). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved April 11, 2018 from <http://nces.ed.gov/pubsearch>.




“What if “College is not for everyone” was not a judgement of students, but a call to action for universities”

- Lumina Foundation



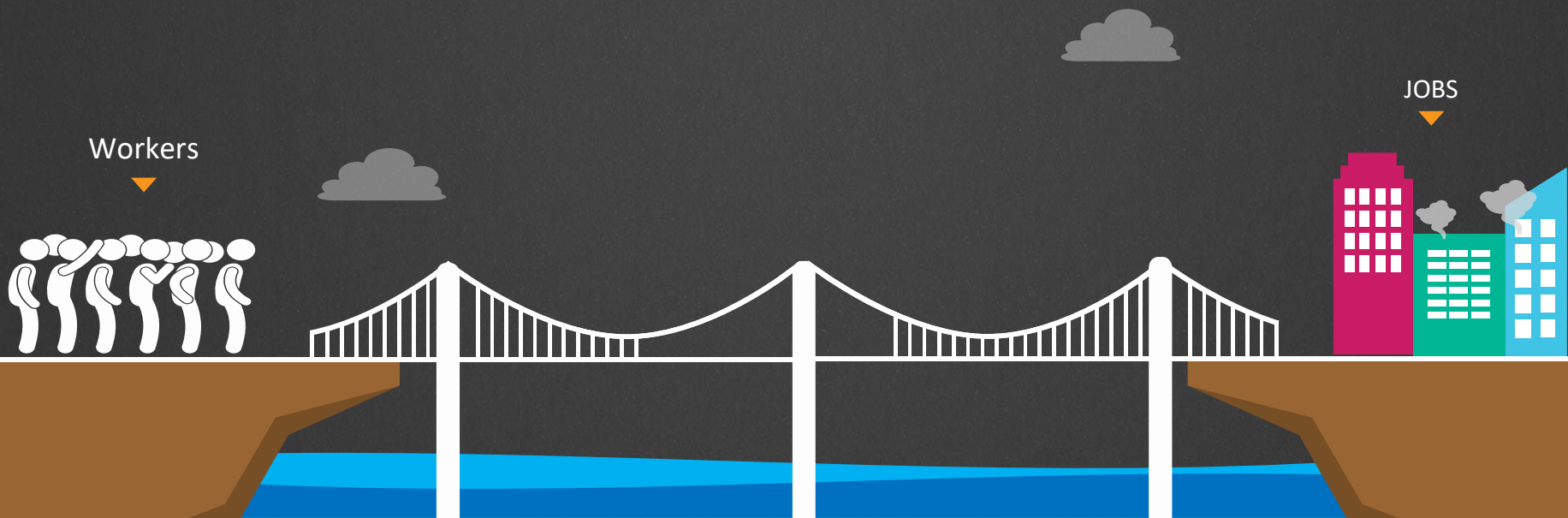
Credentials and Gaps

The background features a solid orange color with several faint, stylized icons of workers. These icons are arranged in a circular pattern around the central text. Each icon depicts a person holding a different tool: a wrench, a set of blueprints, a hammer, a drill, and an electrical plug. The central text is white and reads:

69% of HR Executives say
their ability to attract and
retain middle-skills talent
frequently affects their firms
performance

➤ BRIDGE THE MIDDLE SKILLS GAP

Jobs that need more than High School but less than College



Medical
Coders

Insurance
Claims Clerk

Computer
User/Network
Support
Specialist

Transportation,
Storage, and
Distribution (Incl.
Managers)

Air Traffic
Controller

Nuclear
Power Reactor
Operator

Real Estate
Broker

Certified Nursing
Assistant

Construction

WHY DIGITAL MIDDLE SKILLS?



Job Skill Required

8 in 10 jobs require digital skills



Growth of Jobs

Jobs that require digital skills grow 2.5X faster

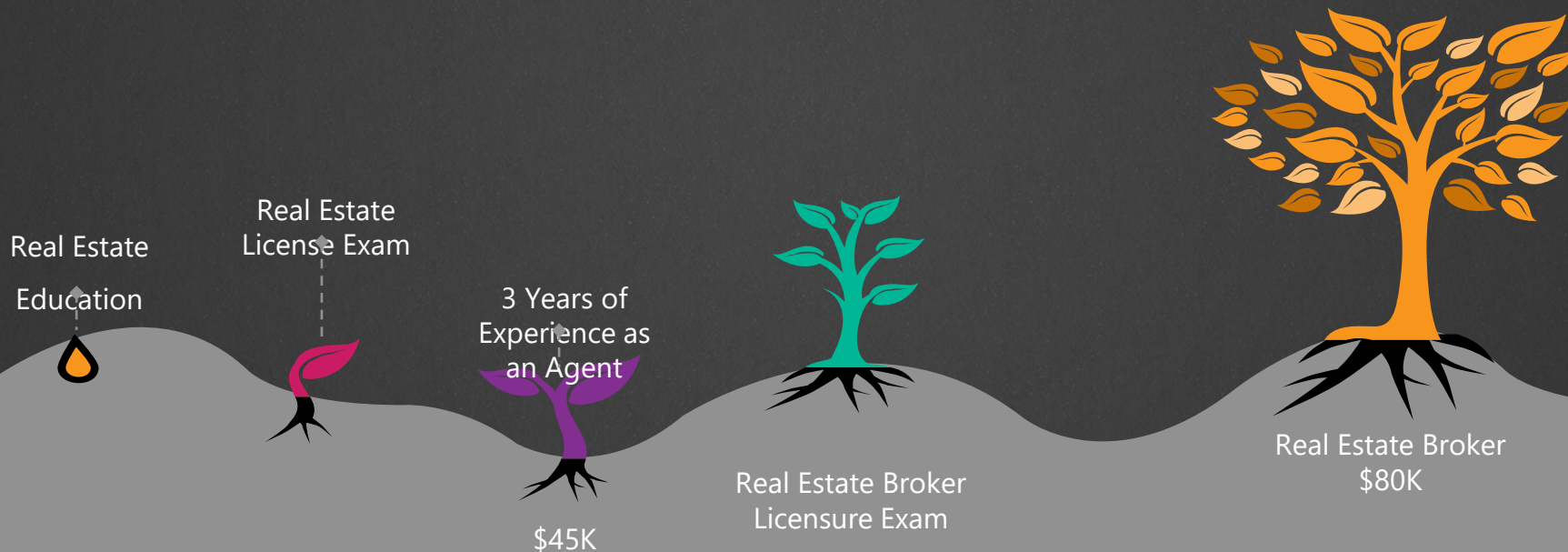


Pay

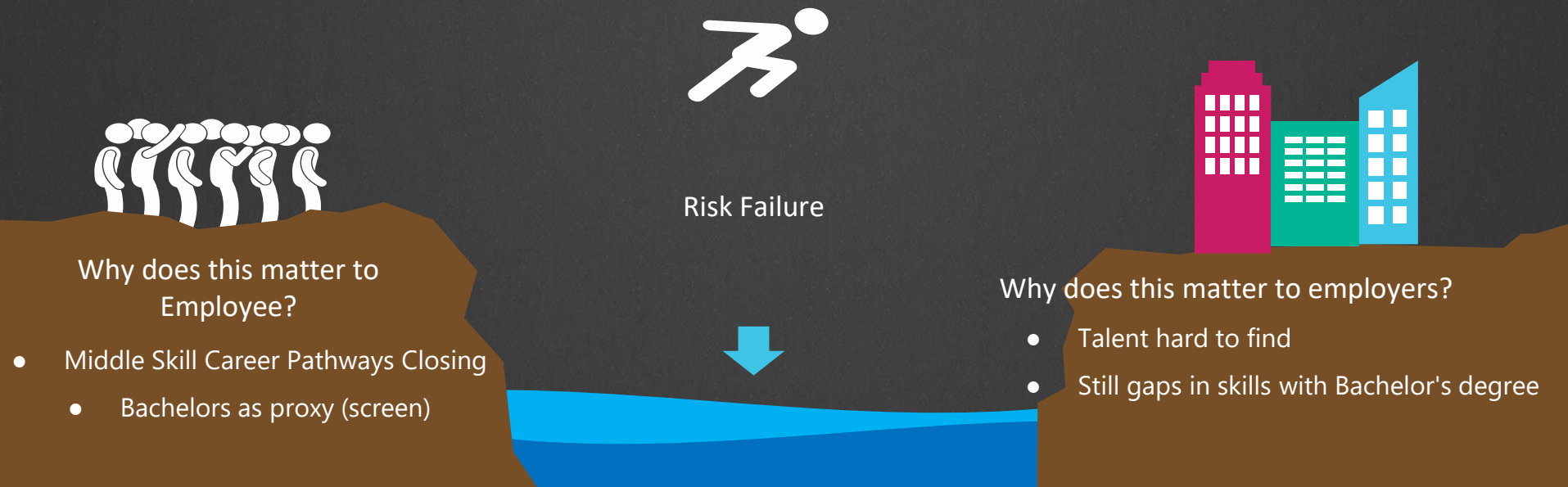
Jobs which require Middle Skills pay 18% more than average

<https://www.burning-glass.com/research-project/middle-skills/>

> GROWTH POTENTIAL REAL ESTATE PATH



> CREDENTIAL GAP (UpCredentialing)



➤ Computer User Support Specialist Gap

Credentials Gap in Help Desk Roles

Occupation Title	Credentials Gap	%Job Holders with BA+ (Source: American Community Survey)	% Postings Requiring Bachelor's Degree (Source: Burning Glass)	2013 Job Postings (Source: Burning Glass)
Computer Network Support Specialists	31%	39%	70%	11,675
Computer User Support Specialists	21%	39%	60%	201,332

Financial Models

> Income Sharing in Action

Idea is you are funded while in school and you pay a percent of your income for a set number of years after you graduate.



Purdue University

- Option for Jr. and Sr.'s
- No interest, no extended repayment terms
- Not a loan in a traditional sense

Alternative Providers

> Alternative Providers

Providers that provide the skills and knowledge students need for workforce



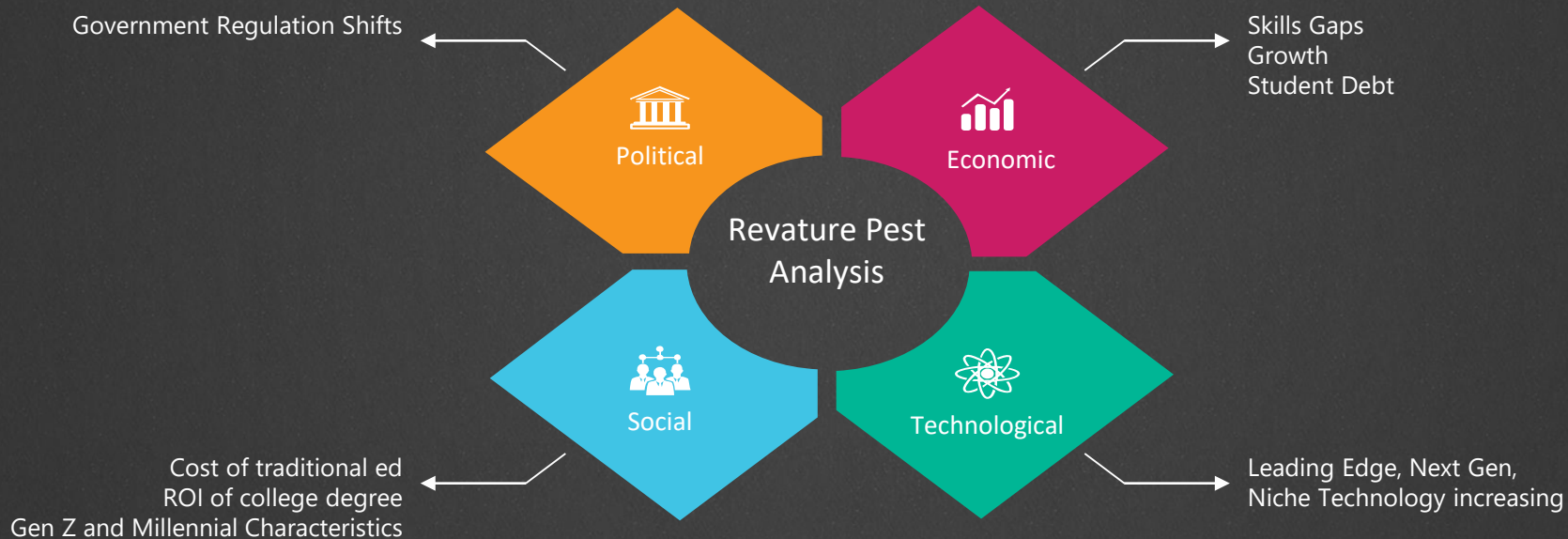
MissionU (Startup)

Replace traditional Bachelors
with a one year program

- Cohort Driven
- 4 Quarters - skills and internship opportunities
- Income Share

“We want to hire people who are ready to hit the ground running from Day One. We love that MissionU prepares its grads for the realities of today”

Neil Blumenthal
Co-Founder & Co-CEO of Warby Parker





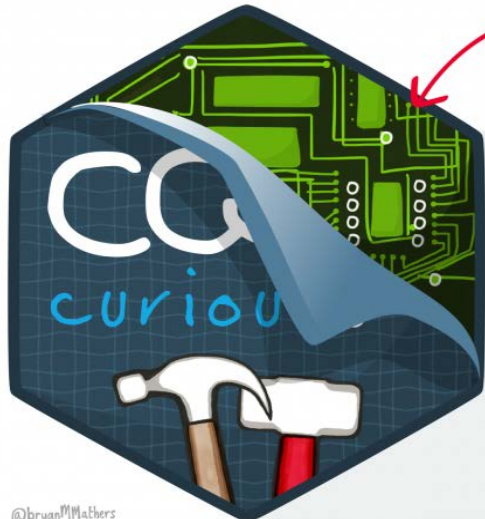
- Low Cost
- Online
- Personalized Pace
- General Education and lower level requirements

Alternative Credentials

Micro, Nano, Meta and More!

OPEN BADGES

OPEN BADGES & META DATA



THERE'S DATA INSIDE!

- badge name
- badge URL (description)
- badge criteria
- badge image
- issuer
- issue date
- recipient
- tags
- alignment (standards)
- expiration date
- evidence URL

@bryanMethers

➤ BENEFITS OF BADGES



DIGITAL
EVIDENCE
INCLUDED

VISUALLY
APPEALING
TRANSFERABLE

DIVERSE
INCREMENTAL
LEARNING

DRIVE
ENGAGEMENT
FREE AND
OPEN SOURCE

EdX MicroMasters



MICROMASTERS PROGRAM

UMUC, USMx

Cloud Computing

Gain expertise in one of the hottest fields in IT, as you learn how to design, implement,...

Current



MICROMASTERS PROGRAM

MichiganX

User Experience (UX) Research and Design

Gain a solid foundation in UX Research and Design to help create products and advance...

Current

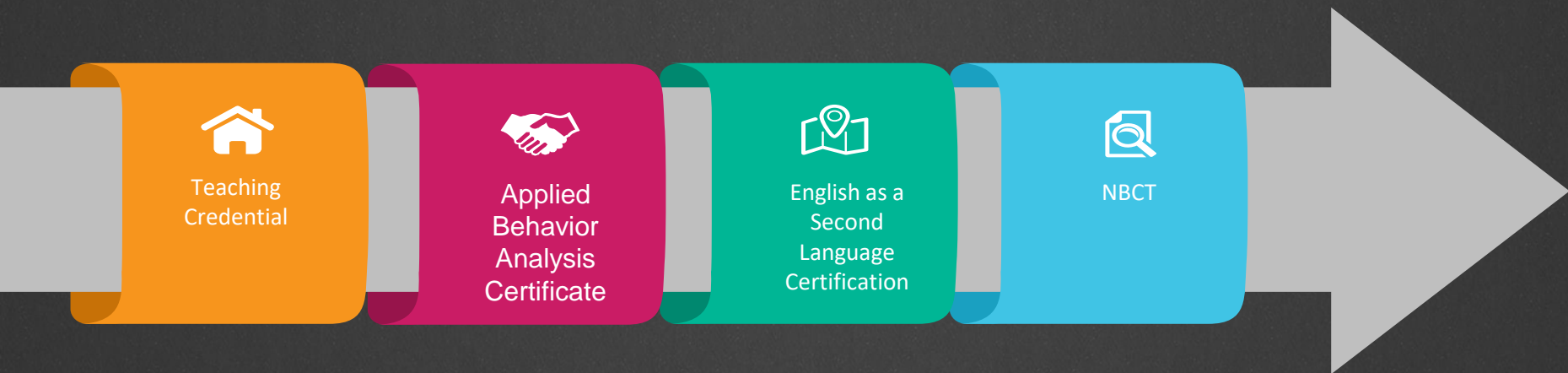


Credential Stacking

> VERTICAL CREDENTIAL STACKING



> HORIZONTAL CREDENTIAL STACKING



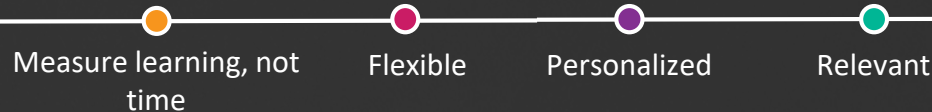
VALUE ADD CREDENTIAL STACKS



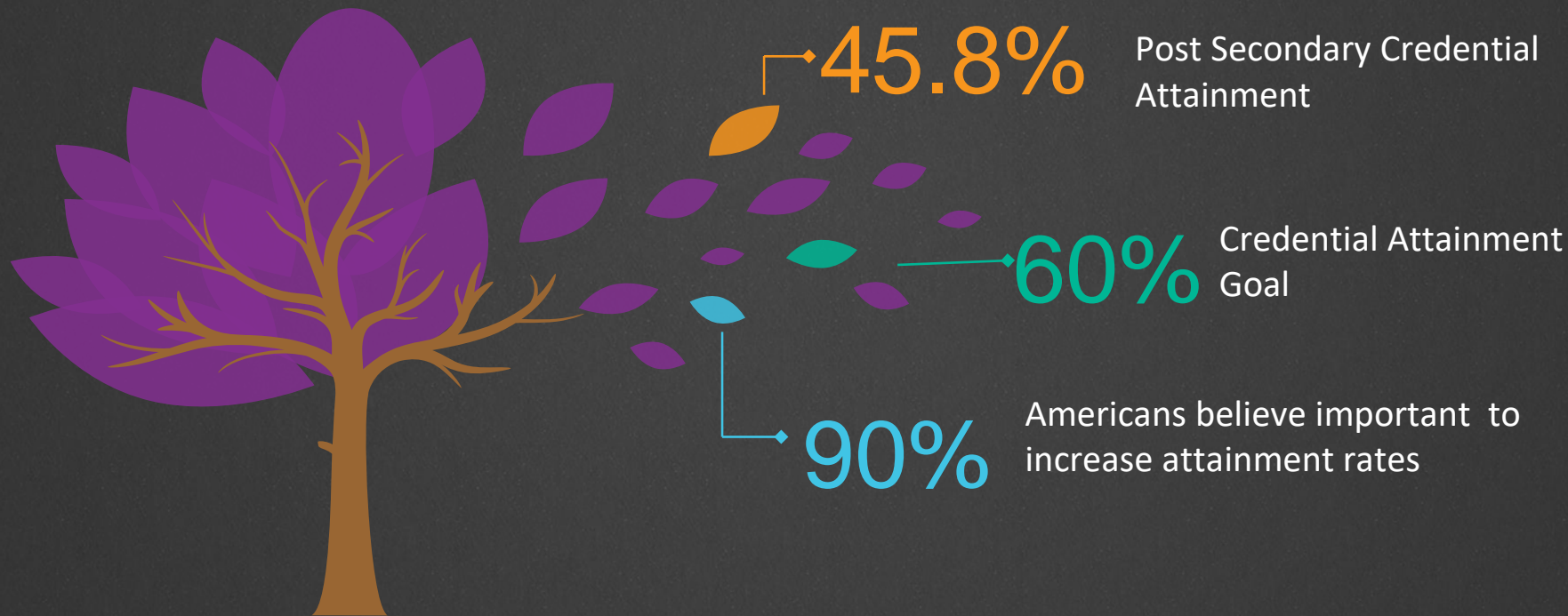
John's History

- | | | |
|------|---|-------------------------------|
| 2010 |  | Bachelor Degree in English |
| 2011 |  | CCAM® & Cosmetology Licensure |
| 2013 |  | Real Estate Agent License |
| 2014 |  | Real Estate Broker License |
| NOW |  | Owner of Small Business |

Competency Based Learning



- It's not just about Degrees, It's about building & growing the **talent** we need to meet the challenges of the future



➤ It's not just about Universities and Colleges



> It's not about how fast they go, it's about **personalized pace and pathway**



Parents need help - fly home to assist



Job change

Slow down - math ahead



Change career field



Acceleration Drills



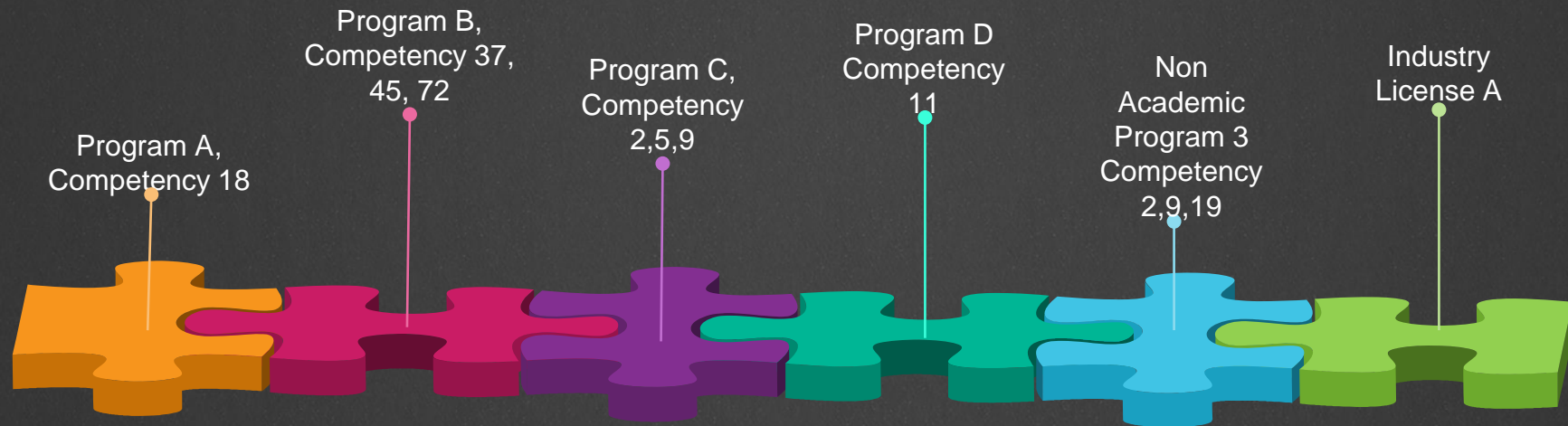
Baby on board







> MICRO-CREDENTIALS RE-IMAGINED



Credential Registry

CREDENTIAL ENGINE

Scaling and maintaining a web-based Credential Registry that – through apps – enables job seekers, students, workers, and employers to search for and compare credentials.



Features:



Credential Finder™

- Open Source App



Employer,
Schools, Industry

-Source of Data for all
participants

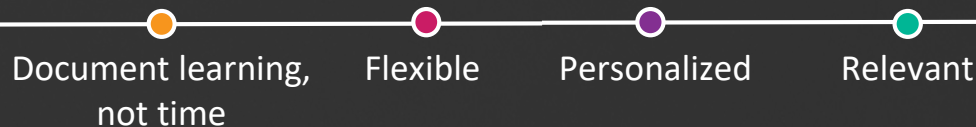


Open Applications
Marketplace

-Encourage Open Apps
that leverage the power
of the Registry



Comprehensive Learner Records



<http://www.aacrao.org/resources/comprehensive-learner-record>



// Employers are asking for better insight into the discrete competencies and skills that make up today's academic credentials around the country, colleges and universities are beginning to reimagine how we convey the experiences and learnings that make up the degree. By taking a new approach to academic credentials, students are able to better map those to new educational and job opportunities.

//

Matthew Pittinsky, CEO Parchment 2016

> Brandman University



CHAPMAN UNIVERSITY SYSTEM

COMPREHENSIVE STUDENT RECORD MODEL



> Brandman University

CATEGORIES OF COMPREHENSIVE STUDENT RECORD



AUTOMATIC DIRECT
FEED FROM BANNER
TO CSR

DEGREE(S), ACADEMIC
PROGRAM/MAJOR,
COMPETENCIES & COURSES
COMPLETED, BADGES
EARNED, UNIVERSITY
ADDRESSED CERTIFICATIONS



STUDENT SUBMITTED DOCS
VERIFIED BY APPLICABLE
SCHOOL OFFICIAL
THRU WORKFLOW

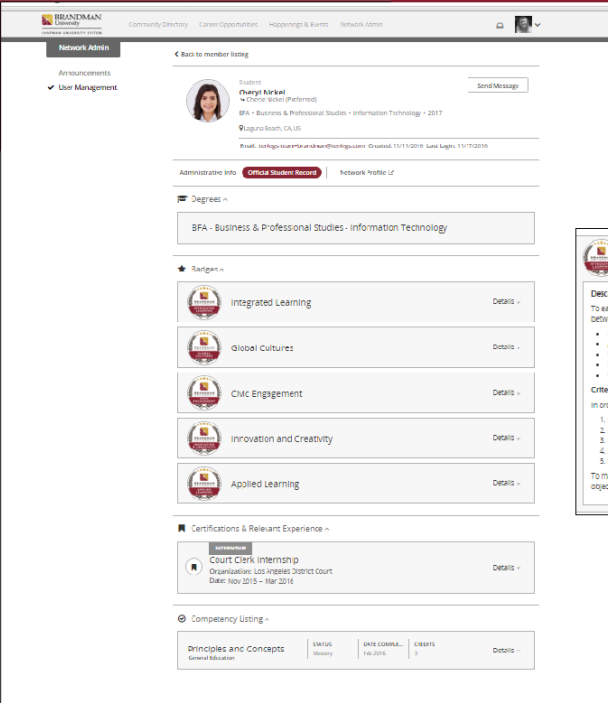
UNIVERSITY INTERNSHIPS,
ORGANIZATION
MEMBERSHIPS



STUDENT SUBMITTED
DOCS UNVERIFIED
(DISCLAIMER INCLUDED)

PORTFOLIO,
PROFESSIONAL/MILITARY/
WORK CITATIONS, CIVIC &
VOLUNTEER ACTIVITIES,
NON-UNIVERSITY
CERTIFICATIONS

Brandman University



Official University Record (verified)

Integrated Learning

Description:
To earn the integrated learning badge, students must show mastery by effectively devising connections between personal experience and academic disciplines. Specifically, students:

- Evaluate individual, organizational, and social behavior.
- Apply the principles and methods of the natural sciences.
- Understand consumer behavior fundamentals and promotional practices.
- Investigate global problems and develop positive solutions.
- Understand the impact of organizational dynamics on performance.

Criteria:
In order to earn the integrated Learning badge, students must master the following competencies:

1. Behavior and Cognition
2. Methods and Applications
3. Fundamentals of Consumer Behavior
4. Social Systems
5. Organizational Dynamics

To master each competency, students completed a series of formative assessments along with either an objective or performance-based final assessment.

Close

Summary view with click to open metadata:

- Description
- Criteria
- Evidence

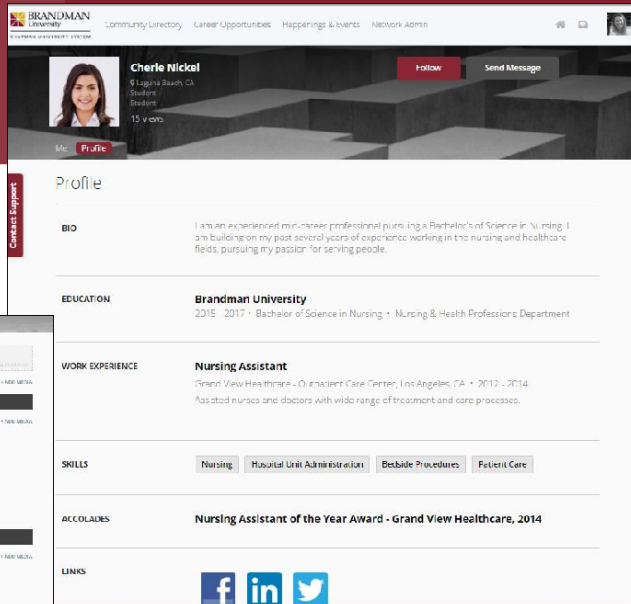
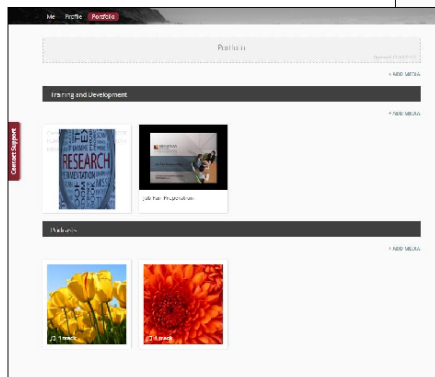
Brandman University

Student Loaded (Unverified)


Professional profile & portfolio

Externally shareable links & printable

Ability to create multiple versions tailored for unique career fields



Elon University




ELON EXPERIENCES VISUAL TRANSCRIPT


Elon University validates all information presented on a student's Elon Experiences Transcript. Validation occurs within each program responsible for the experiences and is then maintained in a centralized system. Students do not personally enter any experiences onto their Elon Experiences Transcript. The Elon Experiences Transcript is an official document of Elon University. For more information about the Elon Experiences Transcript visit [our site](#).


STUDENT INFORMATION


NAME JULIE WHITE
 DEGREE BACHELOR OF SCIENCE
 MAJOR COMPUTER SCIENCE
 COMPLETE 20TH OF MAY 2010


SUMMARY OF ELON EXPERIENCES


RESEARCH
8 TERMS


INTERNSHIP
320 HRS





SERVICE
66 HRS


GLOBAL EDUCATION
2 TERMS





LEADERSHIP
4 TERMS

EXPERIENCE TIMELINE




2006

-  BAPTIST STUDENT UNION FALL
-  S.H.A.R.E. FALL
-  SAFE RIDES FALL













2007

-  SAFE RIDES FALL
-  DELTA DELTA DELTA FALL
-  BLOOD DRIVES SPRING








2008

-  DELTA DELTA DELTA FALL
-  RESEARCHVCLR FALL
-  DELTA DELTA DELTA SPRING

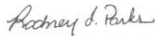
2009

-  TEAM HERO FALL
-  GOOGLE FALL
-  UNDERGRADUATE CONFERENCE FALL
-  RESEARCHVCLR FALL
-  MICROSOFT SPRING
-  UNDERGRADUATE CONFERENCE SPRING
-  RESEARCH SPRING
-  OLEN RAVEN GRANT SPRING
-  ELON SERVICE DAY SPRING
-  BOY SCOUTS SPRING
-  DELTA DELTA DELTA SPRING
-  SEMESTER AT SEA WINTER

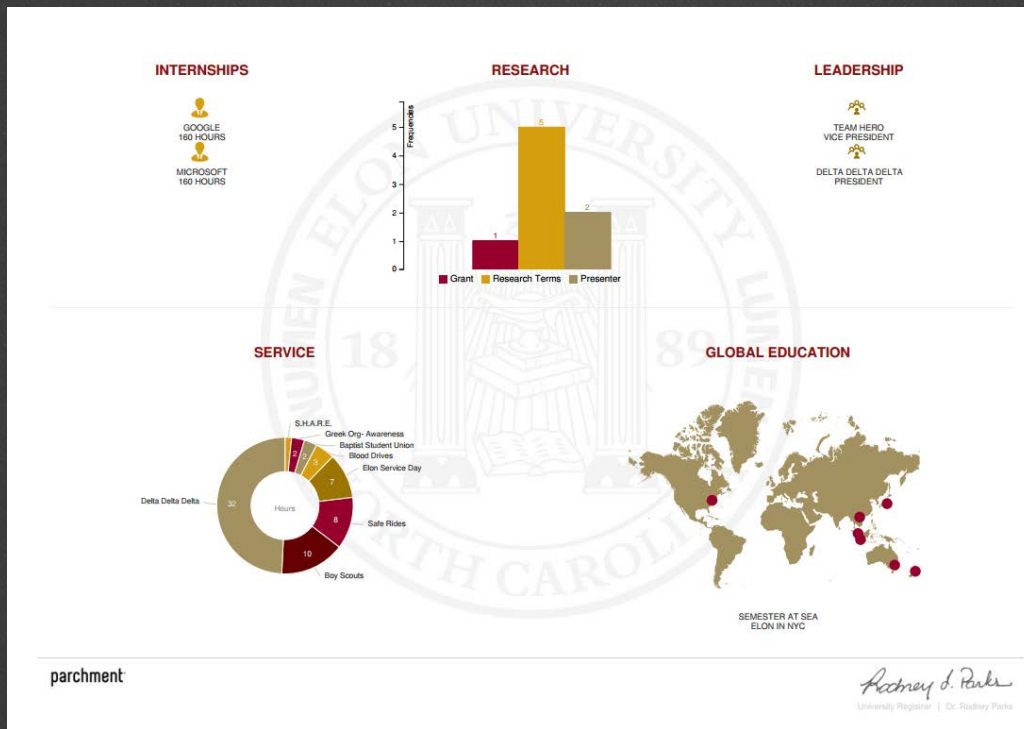
2010

-  TEAM HERO SPRING
-  ELON RESEARCH FORUM SPRING
-  RESEARCHVCLR SPRING
-  BLOOD DRIVES SPRING
-  GREEK ORG-AWARENESS SPRING
-  ELON IN NYC WINTER
-  BLOOD DRIVES WINTER

parchment


University Registrar | Dr. Rodney Parks

Elon University



Stanford University



The purpose of this record is to provide a visual representation of this student's achievement in the University of Central Oklahoma's (UCO) Tenets of Transformative Learning. This student's educational experience at UCO has resulted in achievements at the exposure, integration or transformation level as indicated below. See the key on the back of this document for short descriptions of what these levels of learning indicate with regard to student knowledge and experience. These experiences have been assessed and validated by trained faculty and professional staff members at the University of Central Oklahoma.

Global and Cultural Competencies	
Transformation	_____
Integration	_____
Exposure	_____

- ▶ GC - Dropbox Life Review - Care of Vulnerable Individuals - Fall 2016 - Exposure
- ▶ Mod 6 Korea Lecture--STLR Global Cultural Competency - International Marketing - Fall 2016 - Exposure
- ▶ Assignment 2 Photo Essay - Regional Geo Of The World - Fall 2016 - Integration

Research Creative and Scholarly Activities	
Transformation	_____
Integration	_____
Exposure	_____

- ▶ Research, Creative, & Scholarly Activities - Dropbox - Music Outreach Program 2016 - Fall 2016 - Integration
- ▶ Mosquito Experiment - Biology I for Majors - Fall 2016 - Exposure
- ▶ RCSA Reflection Assignment STLR- Dropbox - Landmark Cases in Forensic Sci - Fall 2016 - Integration
- ▶ Assignment 2 Photo Essay - Regional Geo Of The World - Fall 2016 - Integration

Health and Wellness	
Transformation	_____
Integration	_____
Exposure	_____

- ▶ Assignment 2 Photo Essay - Regional Geo Of The World - Fall 2016 - Integration
- ▶ Marriage Initiative - STLR Assignment - Landmark Cases in Forensic Sci - Fall 2016 - Exposure
- ▶ GC - Dropbox Life Review - Care of Vulnerable Individuals - Fall 2016 - Exposure

Service Learning and Civic Engagement	
Transformation	_____
Integration	_____
Exposure	_____

- ▶ Assignment 2 Photo Essay - Regional Geo Of The World - Fall 2016 - Integration
- ▶ Service Learning Project - STLR - Success Central - Fall 2016 - Transformation

Leadership	
Transformation	_____
Integration	_____
Exposure	_____

- ▶ The Little Event-STLR - Success Central - Fall 2016 - Integration
- ▶ OIFC Visit Reflection Paper - Intro to Crime Analysis - Fall 2016 - Exposure

Student Transformative Learning Record



Global and Cultural Competencies

Transformation	Integration	Exposure
Keen sense of cultural self and an identity as a global citizen has emerged.	Developing sense of cultural self; and relation to the global community.	Beginning awareness of cultural self; openness to learning.



Health and Wellness

Transformation	Integration	Exposure
A holistic view of health and wellness for self and community is articulated and practiced.	A developing holistic view; some application to self and community with some ability to evaluate own behavior.	Beginning awareness and understanding of health and wellness; initial attempts at personal change.



Leadership

Transformation	Integration	Exposure
Leadership knowledge and skill are applied effectively to community or campus issues.	Leadership is developing; knowledge and skills are applied at a basic to intermediate level.	Leadership skills are being tried out with increasing understanding.



Research Creative and Scholarly Activities

Transformation	Integration	Exposure
The "why" and the "how" of research and creation are grasped and show in work.	Relevant inquiry about research and creative process & skills are developing.	Skills in research and the creative process are developing; ideas are beginning to emerge.



Service Learning and Civic Engagement

Transformation	Integration	Exposure
Deep engagement in the community, both through learning and helping.	Awareness of community issues and the importance of engagement.	First experiences in volunteering and civic interest.

The Student Transformative Learning Record is an accurate reflection of the named student's transformative learning achievements at the University of Central Oklahoma. Information provided in the student's e-portfolio is not curated by the university and is therefore not an official representation of the student's work while enrolled at the University.

ACCREDITATION:
The University of Central Oklahoma is accredited by the Higher Learning Commission/North Central Association of Colleges and Schools as a bachelor's and master's degree granting institution.

NAME CHANGE HISTORY:

1890	Territorial Normal School	1939	Central State College
1904	Central State Normal School	1971	Central State University
1919	Central State Teachers College	1990	University of Central Oklahoma

OFFICIAL TRANSCRIPT ⓘ

This is an official transcript.
Learner information is guaranteed unaltered from the source.

MASTERS OF BUSINESS ADMINISTRATION

Demonstrate diversity and inclusiveness in a team setting.

In-Progress

Evidence (1)

- Demonstrate respect for the differences that gender, race, culture, ethnicity and worldview may lend to others' perspectives.
- Foster a network in which each team member has an equal voice.
- Solicit and incorporate multiple and diverse viewpoints into team work.
- Work cooperatively and respectfully with a diverse group of people to achieve project goals.

Identify and analyze new opportunities.

In-Progress

Evidence (1)

- Articulate opportunities and analyze their impact on organizational operations.
- Evaluate an organization's readiness for change.

DILLARD UNIVERSITY EQI EXPANDED TRANSCRIPT
"THE DU DIFFERENCE"

IAM A TEST ID #552497
 1869 TULANE AVENUE
 NEW ORLEANS, LA 70126

Academic Year 2014-2015: SPRING

CODE	ACTIVITY	SKILLS	SKILL DEFINITION
EQI-SE-IE	Personal Finance 101	Independence	Self-directed; Free from emotional dependency
EQI-IC-SY	Voter Registration Drive	Social Responsibility	Social consciousness; Helpful
EQI-DM-FS	Love Shouldn't Hurt: Getting Your Friend Help	Problem Solving	Find solutions when emotions are involved

Academic Year 2015-2016: FALL

CODE	ACTIVITY	SKILLS	SKILL DEFINITION
EQI-SP-SR	Man in the Mirror	Self-Regard	Respecting oneself; Confidence
EQI-SE-AS	DU Fitness Self-Defense Workshop: Women in the Workplace	Assertiveness	Communicating feelings, beliefs; Non-offensive
EQI-DM-RT	Brain Food Spring 2016	Reality Testing	Objective; See things as they really are

Academic Year 2015-2016: SPRING

CODE	ACTIVITY	SKILLS	SKILL DEFINITION
EQI-SM-FY	What's Your Major? Where Does That Lead?	Flexibility	Adapting emotions, thoughts and behaviors
EQI-SM-ST	Get It All Out!	Stress Tolerance	Coping with stressful situations
EQI-DM-IC	Social Media Shakedown	Impulse Control	Resist or delay impulse to act

Academic Year 2016-2017: FALL

CODE	ACTIVITY	SKILLS	SKILL DEFINITION
EQI-SM-OM	Can You See Your Vision?	Optimism	Positive attitude and outlook on life
EQI-SP-SA	What's Your Spiritual Gift?	Self-Actualization	Pursuit of meaning; Self-improvement
EQI-SP-IC	When Push Comes to Shove: Emotional Intelligence at Home	Emotional Self-Awareness	Understanding own emotions

Academic Year 2016-2017: SPRING

CODE	ACTIVITY	SKILLS	SKILL DEFINITION
EQI-SE-EE	Café Noir: Spoken Word Night	Emotional Expression	Constructive expression of emotions
EQI-IC-EY	Take Back the Night	Empathy	Understanding, appreciating how others feel
EQI-IC-IR	Pajama's, Popcorn & Pearls	Interpersonal Relationships	Mutually satisfying relationships

Degree Information:

Major(s) Marketing
 Minor(s) Computer Science

Office of Student Affairs
 Dean of Student Affairs



- **Campus Life:** Provide students with service learning and extracurricular opportunities.



Process for developing the Project

The project is designed to have six career readiness badges and one Meta badge in alignment with the NACE competencies to be issued along with LaGuardia's core values. Project leaders developed a curriculum focused on career and professional development topics to facilitate in-service and badge evidence based on the badge criteria. The following are the descriptions of each badge:



Critical Thinking/Problem Solving Digital Badge

Exercises sound reasoning to analyze issues, make decisions, and overcome problems. The individual is able to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness.

LaGuardia Core Competencies: Inquiry and Problem Solving
Student Affairs Developmental Experiences: Teaching Behaviors for Personal and Professional Success



Oral/Written Communications Digital Badge

Articulate thoughts and ideas clearly and effectively in written and oral forms to person inside and outside the organization. The individual has public speaking skills; is able to express ideas to others; and can write/edit memos, letters, and complex technical reports clearly and effectively.

LaGuardia Core Competencies: Integrative Learning
Student Affairs Developmental Experiences: Building Future Leaders



Teamwork/Collaboration Digital Badge

Build collaborative relations with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints. The individual is able to work within a team structures, and can negotiate and manage conflict.

LaGuardia Core Competencies: Integrative Learning; Inquiry and Problem Solving
Student Affairs Developmental Experiences: Teaching Behaviors for Personal and Professional



Information Technology Application Digital Badge

Select and use appropriate technology to accomplish a given task. The individual is also able to apply computing skills to solve problems.

LaGuardia Core Competencies: Integrative Learning; Inquiry and Problem Solving
Student Affairs Developmental Experiences: Teaching Behaviors for Personal and Professional



Leadership Digital Badge

Leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others. The individual is able to assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize and delegate work.

LaGuardia Core Competencies: Integrative Learning; Inquiry and Problem Solving; Global Learning
Student Affairs Developmental Experiences: Leadership



Professionalism/Work Ethic Digital Badge

Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management, and understand the impact of non-verbal communication on professional work image. The individual demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes.

LaGuardia Core Competencies: Integrative Learning; Inquiry and Problem Solving
Student Affairs Developmental Experiences: Professionalism/Work Ethic



Career Readiness Meta Digital Badge

Identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals, and identify areas necessary for professional growth. The individual is able to navigate and explore options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace.

LaGuardia Core Competencies: Inquiry and Problem Solving and Global Learning
Student Affairs Developmental Experiences: Teaching Behaviors for Personal and Professional Success

Curriculum

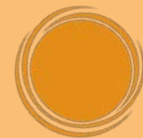
The curriculum is designed to provide students with career and professional development skills as well as co-curricular activities and experiences related to their field of study. The following is an example of the pilot curriculum where students completed action items based on the criteria of the digital badges.

Badge/Competency	Modules	Action Items
#1 Critical Thinking/Problem Solving	Time Management Complex Decision Making	1. Weekly Schedule Log 2. Monthly budget
#2 Oral/Written Communications	Interview Preparation Resume Writing Workplace Communication Public Speaking	1. Approved Resume 2. 30 second professional pitch/elevator pitch 3. Mock Interview
#3 Teamwork/Collaboration	Complex Decision Making	eP Reflections
#4 Information Technology Application	Online Presence ePortfolio LAGCC Career Connect	1. LinkedIn Profile 2. Completed ePortfolio
#5 Leadership	Becoming a Campus Champion	1. Join a student club 2. Attend mentoring sessions
#6 Professionalism/Work Ethic	Unwritten Rules of the Workplace Personal Finance	1. Supervisor Evaluation
Career Management	All	Successful completion of all tasks above and participation at the ePortfolio showcase.

The curriculum for the program was re-designed during Summer 2016, to have students earn three badges during the first semester and another three during their second semester in the program. Ultimately, all students are working towards earning at least 4/6 badges in order to earn the Career Readiness Meta badge.

First Semester Badges: Curriculum

Badge/Competency	Modules	Tasks and Projects
Critical Thinking/Problem Solving	Complex Decision Making	✓ Reflection based on workshop activities ✓ Evidence from Worksite ✓ Supervisor Evaluation/Testimonial
Teamwork/Collaboration	Service Learning	✓ Community Service Activity ✓ Supervisor Evaluation/Testimonial ✓ Evidence from Worksite
Professionalism/ Work Ethic	Unwritten Rules of the Work Place Personal Finance Interview Prep Time Management	✓ Supervisor Evaluation ✓ Attend Business Etiquette Dinner/Night at the Theater ✓ Mock Interview ✓ Monthly Budget and Weekly Schedule ✓ Evidence from Worksite



Lumina[™]
FOUNDATION

T3



U.S. CHAMBER OF COMMERCE FOUNDATION
Education and Workforce

Improving the Talent Marketplace



Lumina[™]
FOUNDATION



U.S. CHAMBER OF COMMERCE FOUNDATION
Education and Workforce

**Interoperability/
Harmonization**
Technical Standards

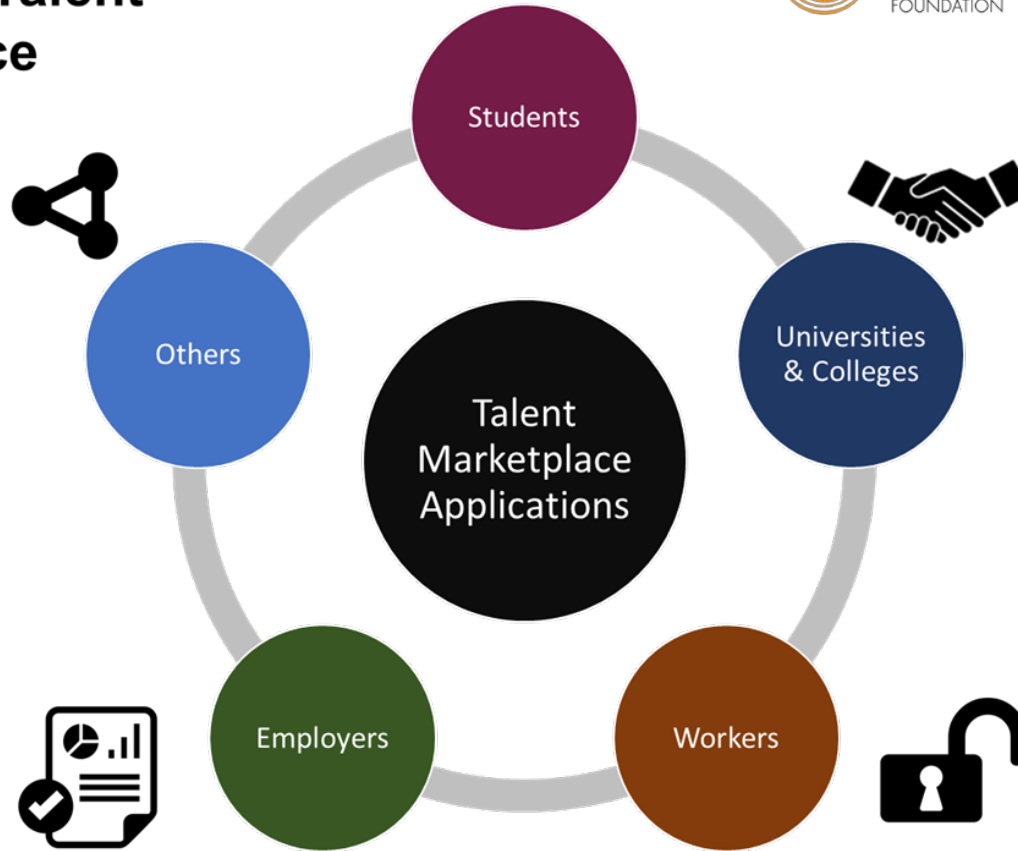


Trust
Distributed Ledger
Technologies
Smart Contracts

Analytics
Artificial Intelligence
Machine Learning
Big Data Analytics



Transparency
Semantic Web
Technologies





Innovation Landscape




Supply-side Innovation

Student and Educator Applications

Software & Systems:

- Student Information Systems
- Catalog Systems
- Transcript Systems
- Badging Systems
- Assessment Systems
- Portfolio Systems
- Career Guidance Systems
- Web Content Systems



Demand-side Innovation

Worker and Employer Applications

Software & Systems:

- Career Sites
- Job Posting Systems
- Recruitment Systems
- Applicant Tracking Systems
- Human Resource Information Systems
- Resume Systems
- Web Content Systems



Technical Standards Landscape



W3C

Schema.org

Credential
Engine

DCMI

...

Workers

Employers

Learners

Universities
& Colleges



HR Open
Standards

CEDS
Standards

IEEE LTSC
Standards

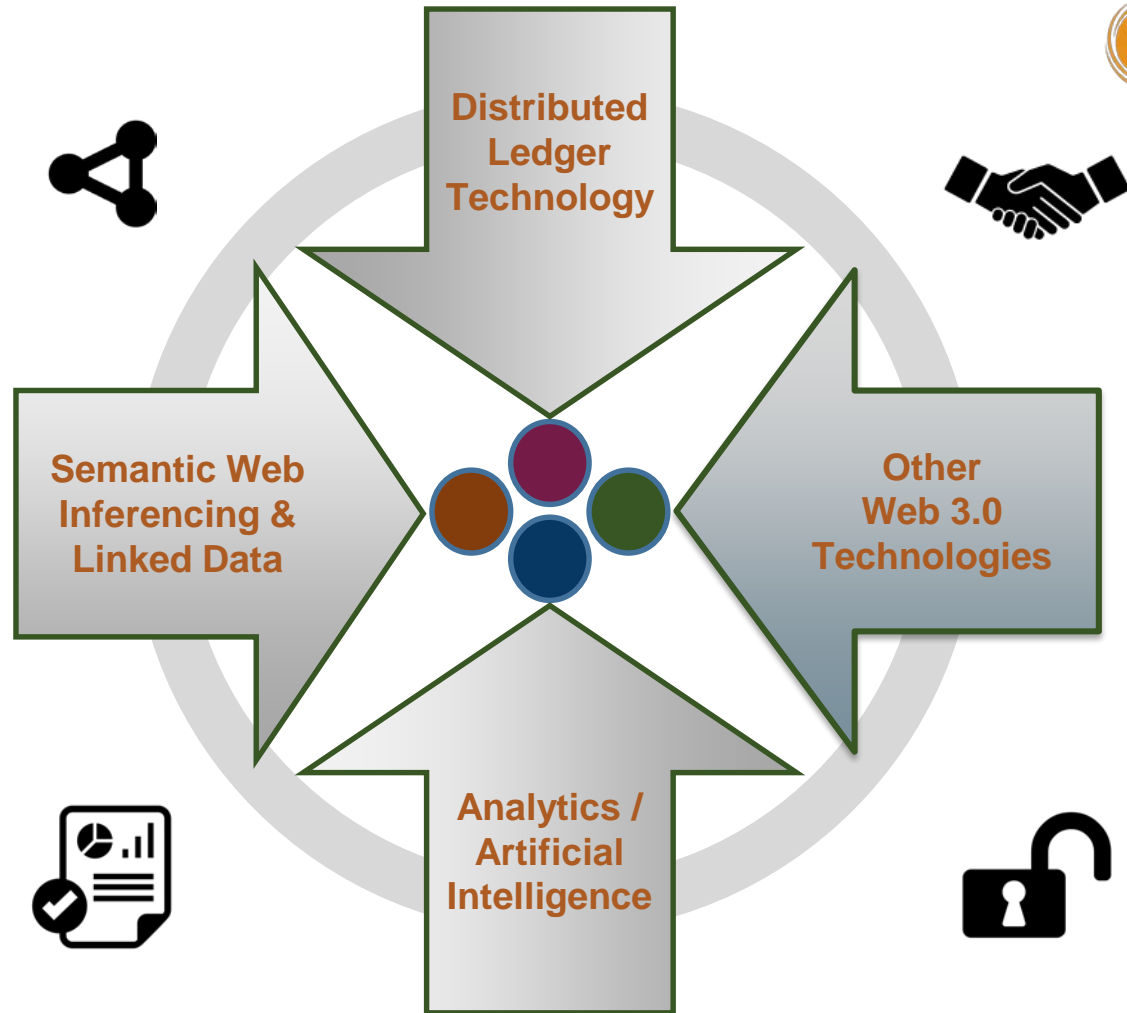
IMS Global
Standards

PESC
Standards

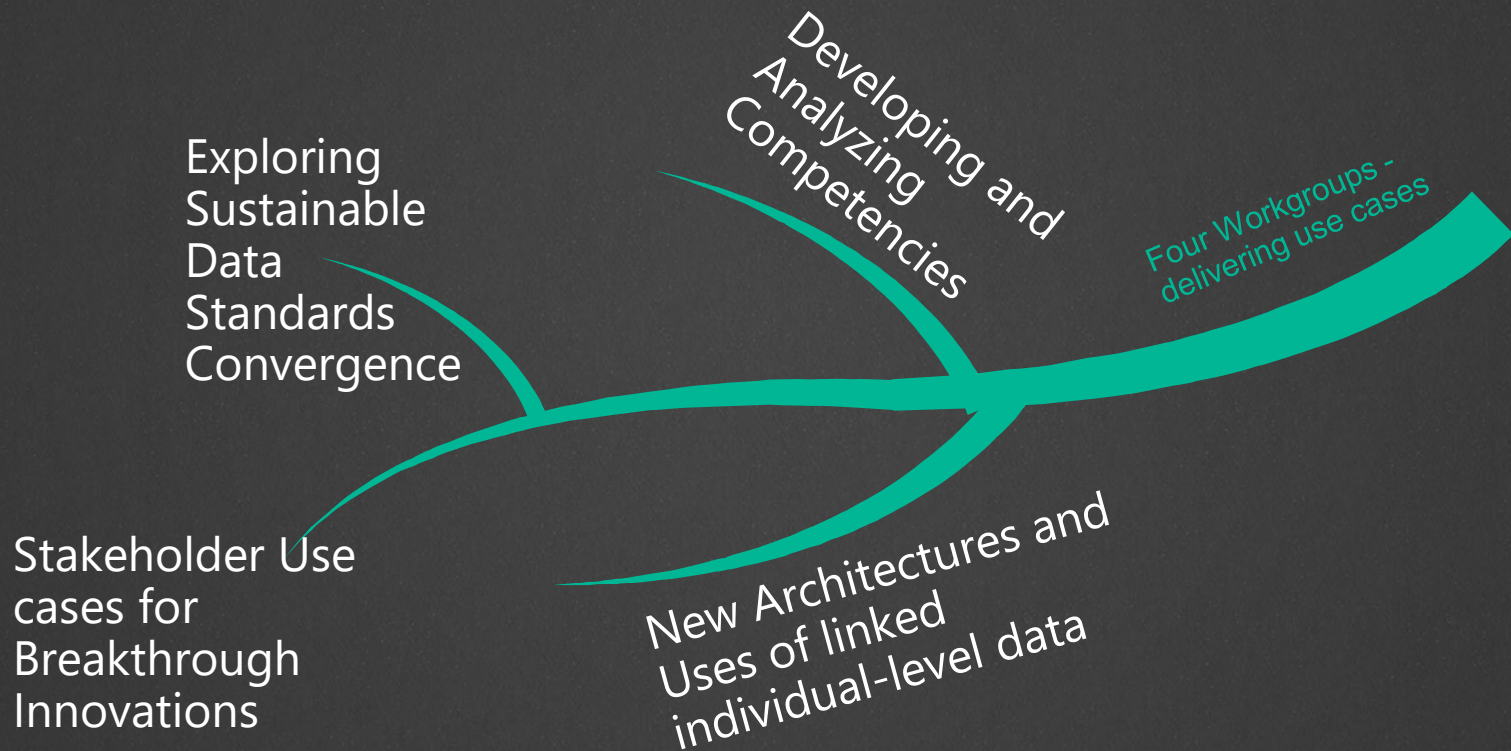
MedBiquitous
Standards

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Convergence Opportunities



> Four Workgroups - delivering use cases





PUTTING IT ALL TOGETHER

> Opportunities

