THE FUTURE

ACC’s Strategic Planning and Data Retreat October 23, 2015
Agenda

• Breakfast/ Networking
• OIEA Welcome
• College Welcome
• “Future of the Economy and Business”
• “The Future demand of the Technology Sector”
• “The Future students”
• “Are we ready for the Future? What do we need to plan for.”
• “OUR Future, How do we Start Here and Get There....”
"Future of Economy and Business"

Other High Demand/ High Growth areas in the Central Tx

Doyle Fuchs Texas Workforce Commission
"The Future of Technology"

Virtual Reality and Technologies of the Future

Patrick Curry Unity Technologies
The Future of Technology Occupations

Austin MSA Projected Growth for Technology Occupations 2014-2025
Projected Tech Occupation Jobs

Number of Tech Occupation Jobs in the Austin MSA

- 50,159 jobs in 2014
- 64,070 jobs projected in 2025
Why is Austin Important?

• There are four main tech hubs that job seekers show interest in:
  • San Jose, San Francisco, Seattle, and Austin

• Interest in tech jobs by job-seekers has increased over time:
  • Interest in tech-related jobs was 3.3 greater in San Jose, San Francisco, Seattle and Austin than in the US on average.
  • In 2015, the interest in those cities was 3.6 times greater.

• Austin is home to a wide range of tech companies
  • 4744 high tech companies
  • 46 Incubators, Accelerators, Maker & Co-Working Spaces
Top 100 Software and IT Employers, 2013
Gaming Resources, 2014
What about ACC?

• ACC serves the Austin MSA
• ACC is uniquely suited to help prepare students for tech jobs
• ACC Continuing Ed is well positioned to provide continuing training for professionals already in place or changing jobs
• ACC provides pathways to move on to a 4 year degree
ACC Computer Science & Computer Information Technology

• **Associate of Applied Science Degrees**
  - Computer Programming
  - Computer Programming Web Programming Specialization
  - Game and Visualization Programming Specialization
  - Local Area Network Systems-Network Administration
  - Local Area Network Systems-Security Administration Specialization
  - Microcomputer Applications-Applications
  - Microcomputer Applications-User and Desktop Support Specialization

• **Certificates**
  - Computer Information Technology-Database
  - Computer Programming-C++ Track
  - Computer Programming-Java Track
  - Local Area Network Systems-Network Administration
  - User and Desktop Support Specialization
  - Web Developer Specialist

• **Academic Transfer Associate of Science Degrees**
  - Computer Science
  - Computer Information Systems
ACC Visual Communication

- **Associate of Applied Science Degrees**
  - 2D Animation
  - 3D Animation
  - Game Art
  - Game Design
  - Graphic Arts Technology
  - Graphic Design
  - Motion Graphics
  - Web and Interactive Design

- **Certificates**
  - 2D Animation
  - 3D Animation
  - Game Art
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  - Graphic Arts Technology
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  - Motion Graphics
  - Web and Interactive Design.

- **Enhanced Skills Certificate**
  - Illustration
ACC Continuing Education Computer & Technology Programs

• Apple Certification
• Cisco Certification
• Computer Aided Design
• Fiber Optics
• Information Security
• Java Certification
• Linux/UNIX
• Microsoft Certification
• Microsoft Office

• Mobile Applications
• Office / Home Software
• Oracle Certification
• PC Technician/CompTIA
• Programming Languages
• Project Management
• Visual Communications
• VMware Certification
• Webmaster
ACC Tech Occupation Completers

ACC Tech Occupation Completers

2013
2014
2015

Associate's
Other Awards
Challenges

• Associate’s Degree Projected Growth = 4.5% vs. Projected Job Growth = 26.79%
• Stackable credentials vs. degrees – Future in Tech Occupations?
• Better preparation for the growth of IT by?
"Who are our future students?"

"Who are the students in our pipeline and how can we prepare for them?"

Susan Dawson, President E3 Alliance
"Are we ready for the future?"

The future areas of growth and opportunity in the Central Texas region
(Health/ Start-up/ Tech/
Khotan Shahbazi-Harmon E3 Alliance/ Leadership Austin
Entrepreneurial Occupations and ACC

The future areas of growth and opportunity in the Central Texas region (Health/Start-up/Tech/)

Khotan Shahbazi-Harmon E3 Alliance/Leadership Austin
“Entrepreneurial Occupations and ACC"

Positioning our students for the future

F.C. Caranikas, PhD, Austin Community College
“Entrepreneurs are the lifeblood of economic growth – they provide a source of income and employment for themselves, create employment for others, produce new and innovative products or services, and drive greater upstream and downstream value chain activities.”

*EY Megatrends 2015*
Why are entrepreneurial occupations important for the Austin area?

• New and young firms drive net job creation in the US, contributing to growth of the local economy
• Opportunity for income above living wage for middle skill workers
• Support for entrepreneurship is one of the competitive advantages of the Austin metro area
Characteristics of Self-Employed

• About 10.6 million self-employed jobs in US in 2012
  • Over 30% were 55 years of age or older
  • Average annual wages of $26,921 (over half of annual average for total
    workforce $56,053)

• Texas ranked 14th in proportion of workers who were self-employed in
  2012 (7.7%); Vermont ranked 1st with 11.6% of workers who were
  self-employed

*Characteristics of the Self-Employed, July 18, 2012, Joshua Wright, EMSI*
More Characteristics of Self-Employed

<table>
<thead>
<tr>
<th>Self-employed jobs</th>
<th>934,704</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-12 % Change</td>
<td>31%</td>
</tr>
<tr>
<td>Avg. Annual Wage</td>
<td>$27,079</td>
</tr>
<tr>
<td>Proportion of Self-Employed</td>
<td>7.70%</td>
</tr>
</tbody>
</table>

Characteristics of the Self-Employed, July 18, 2012, Joshua Wright, EMSI
Emerging Trends Among Entrepreneurs

• Face of entrepreneurship is increasingly young worldwide
  • 50% of world’s entrepreneurs are 25-44 years old
  • 25-34 year olds have highest rates of entrepreneurial activity due to
    • High unemployment in regions where wages are low
    • Changing work and lifestyle preferences in mature economies

• Face of entrepreneurship is increasingly female
  • 126 million women launching or operating new businesses in 67 countries
  • Women owned companies are growing at more than 2 times rate of other firms in US, providing 16% of all jobs

*EY Megatrends 2015*
More Trends Among Entrepreneurs

• Startup activity increased in 2015 in the US, following a 5-year decline
  • Increase in growth of male entrepreneurs who were previously employed
  • Increase in growth of immigrant entrepreneurs
• Austin ranked #1 in *Kauffman Index of Startup Activity 2015*

<table>
<thead>
<tr>
<th>2015 Rank</th>
<th>Index</th>
<th>Major City</th>
<th>Metro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.29</td>
<td>Austin</td>
<td>Austin - Round Rock - San Marcos, TX</td>
</tr>
<tr>
<td>2</td>
<td>4.24</td>
<td>Miami</td>
<td>Miami, Fort Lauderdale - Pompano Beach, FL</td>
</tr>
<tr>
<td>3</td>
<td>3.04</td>
<td>San Jose</td>
<td>San Jose - Sunnyvale - Santa Clara, CA</td>
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<td>4</td>
<td>2.51</td>
<td>Los Angeles</td>
<td>Los Angeles - Long Beach - Santa Anna, CA</td>
</tr>
<tr>
<td>5</td>
<td>2.01</td>
<td>Denver</td>
<td>Denver - Aurora - Broomfield, CO</td>
</tr>
</tbody>
</table>
MegaTrends Driving Future Growth in Entrepreneurship

• **Mega trends**: Big data, cloud computing, 3D printing, always-connected mobile devices, social networking, and the Internet of Things will decrease barriers to entry in many industries.

• **Decreased barriers to entry**: Key business services available at low cost; 3D printing and automated logistics available; open source code facilitating innovation.

• **Impact on companies**: Small local businesses will specialize in making everyday items while larger regional and/or national companies will make more complicated products.

• **Impact on workers**: Expansion of “gig” economy where workers will obtain short term assignments, likely through mobile platforms; Increase in small entrepreneurial firms.

*The Next American Economy & Bowman “Bo” Cutter on The Good Economy. Roosevelt Institute 2015*
EMS-I sampling of entrepreneurial occupational areas with growth projected in Austin: Medical

ACC Programs of Study
- Dental Assisting (CE)
- Dental Hygiene
- Diagnostic Medical Imaging - Radiology
- Diagnostic Medical Imaging - Radiology
- Emergency Medical Services
- Health Information Technology
- Medical Laboratory Technology
- Medication Aide Permit (CE)
- Nursing (Vocational)
- Occupational Therapy Asst.
- Pharmacy Technician
- Phlebotomy Technician (CE)
- Physical Therapist Assistant
- Sonography
- Surgical Technology

SE Medical Occupations
(6,382 New Jobs Austin Region)
EMSI sampling of entrepreneurial occupational areas with growth projected in Austin: Construction

**ACC Programs of Study**

- Carpentry
- Construction Management
- Land Surveying
- Technology/Geomatics
- Woodworking

**SE Construction Occupations**

(1,722 New Jobs Austin Region)

- 2014:
  - Region: 0%
  - State: 9.7%
  - Nation: (6.9%)
- 2025:
  - Region: 17.7%
  - State: 17.7%
  - Nation: 9.7%
EMSI sampling of entrepreneurial occupational areas with growth projected in Austin: Hospitality

ACC Programs of Study
- Hospitality Management
- Hotel & Lodging Specialization
- Hotel and Restaurant Specialization
- Meeting and Events Planning
- Travel & Tourism
Helping students prepare for entrepreneurship: Resources Complementing a Program of Study

• CE Small Business courses series
• CE Exploring Entrepreneurship: Launching a Tech Business in ATX

• Austin’s Entrepreneurial Ecosystem
  https://www.mindmeister.com/24358308/austin-entrepreneurship-scene

###
“Take aways and next steps”

So now what?

Soon Merz, VP Effectiveness and Accountability