



USTAR: UTAH'S TECHNOLOGY CATALYST

GREG BELL

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USTAR EXECUTIVE DIRECTOR

VISION AND MISSION

USTAR Vision: Utah will lead the nation as the best performing economy, and be recognized as a premier global destination.*

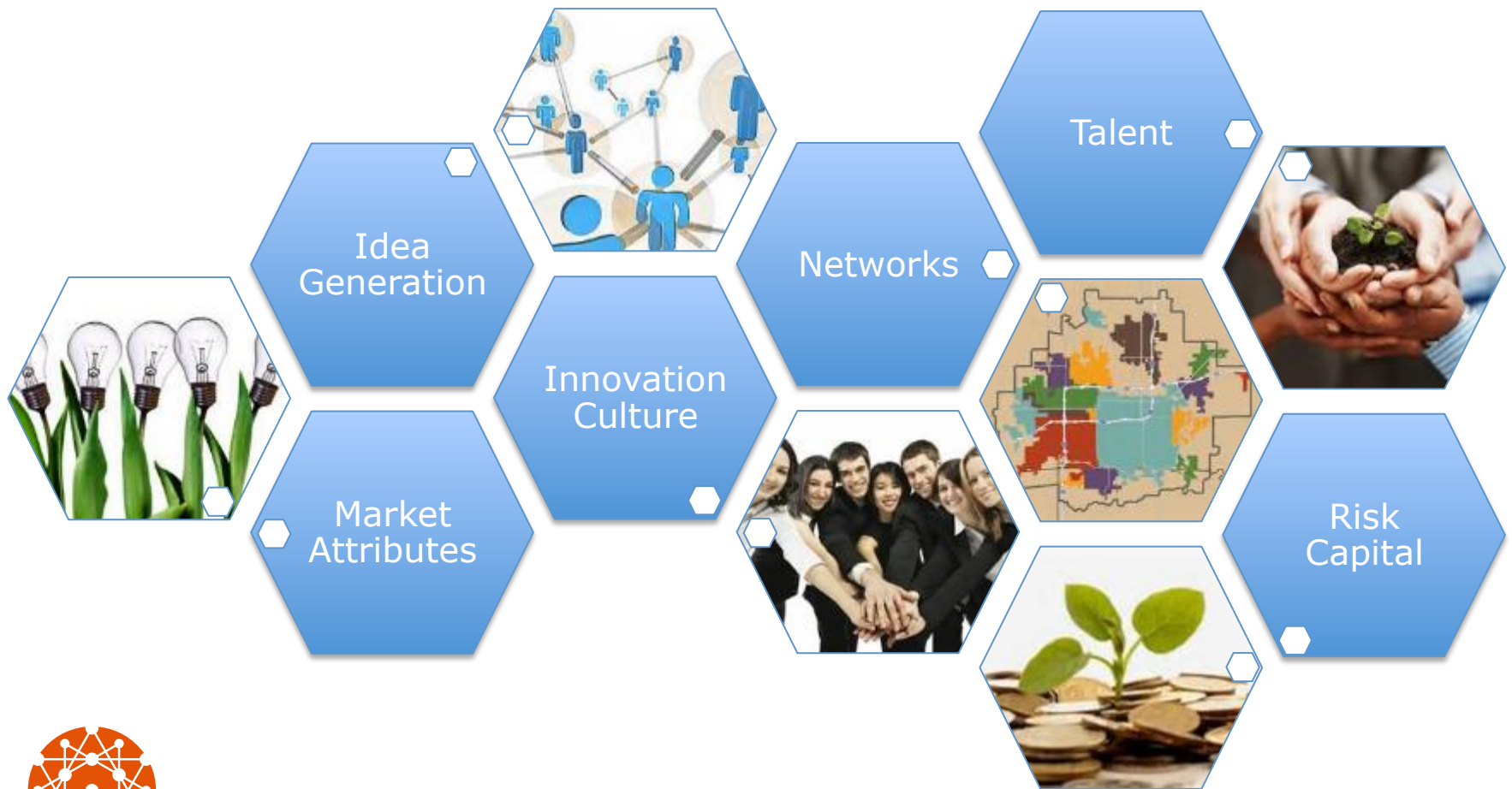
USTAR Mission: Create a technology ecosystem that enables ideas to seed, grow, and thrive. USTAR's diverse portfolio of investments will:

1. Recruit and retain top researchers to the State's research universities.
2. Support tech entrepreneurs through training, funding, incubator and accelerator programs.
3. Broker technology transfer by connecting capital, management and industry.

*Governor Herbert's vision for Utah's economy.



INNOVATION ECOSYSTEM FRAMEWORK



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UTAH INNOVATION SYSTEM GAP ANALYSIS

CATEGORY	COMMON CHALLENGE	UTAH
Research capacity	University R&D	++
	Business R&D	+
Industry-university linkages	Information gaps & networks	-
Entrepreneurial culture	Risk aversion	++
Managerial talent	Serial entrepreneurs	-
	Sector specific knowledge	-
Risk capital	Pre-seed/seed	-
	Venture capital firms	+/-

University R&D/GDP 2012

1st quartile

Source: NSF

Total VC Investment Dollars 2014

9th (\$783.2M)

Source: NVCA

Business R&D/industry output 2012

2nd quartile

Source: NSF



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SB166 FUNDAMENTAL STATUTE CHANGES

- Clarified the authority of the Governing Authority (GA), USTAR's executive board, to create grant programs to both private and public entities.
- Clarifies the roles of the USTAR organization to include training, mentoring, networking, incubation and acceleration programs.
- Funding commitments of USTAR already made by universities will be honored:
 - Recruitment packages.
 - Ongoing salary.
- Updated reporting requirements to be consistent with the best practices of comparable state's programs.
- Annual review and performance metrics are required.
 - Rigorous standards for written agreement with each researcher established requiring:
 - Annual review.
 - Performance metrics.



USTAR TOP 3 GOALS FOR FY17

1. Initiate New Grant Programs:
 - Industry Partnership Program (IPP)
 - Private sector – university collaborations.
 - Technology Acceleration Program (TAP)
 - Private tech companies.
 - University Technology Acceleration Grants (UTAG)
 - Researchers / research teams at non-profit higher-ed institutions.
2. Implement new metrics collection process to meet SB166 requirements.
3. Align outreach program to fill tech ecosystem gaps.
 - Clearly define mission and performance metrics.



GOAL 1- IMPLEMENT GRANT PROGRAMS: INDUSTRY PARTNERSHIPS PROGRAM (IPP)



- Establishes network connections between universities and industry.
- Promotes the development, acceleration and commercialization of technology and innovation by teaming industry and university research expertise to address specific technology gaps identified by a Utah company.
- Joint proposal between private Utah entity and non-profit university.
 - Goal is to address tech challenges / gaps and help industry partners gain a market advantage or create new products.
- A cost-share is required by the industry partner.
- Measures of economic development:
 - New products, processes or IP developed.
 - New Sales.
 - New Jobs.



GOAL 1- IMPLEMENT GRANT PROGRAM: TECHNOLOGY ACCELERATION PROGRAM (TAP)

- The Technology Acceleration Program provides early stage funding to accelerate technology development of new Utah-based science and technology companies.
- Work may include, but is not limited to R&D, proof of concept, product validation, and product development.
- All projects must have specific technical milestones that are clearly defined and can be assessed in the proposal. The technology must align to one of Utah's technology sectors, as defined by USTAR, and be at a technology readiness level (TRL) between 3-5.
- Measures of economic development:
 - Follow-on investment
 - New sales
 - New jobs
 - New products introduced



GOAL 1 - IMPLEMENT GRANT PROGRAM: UNIVERSITY TECHNOLOGY ACCELERATION GRANT (UTAG)

- UTAG supports research, discovery and innovation through competitive funding to individual researchers or ad-hoc teams at Utah colleges and universities.
- All funded projects will have an identified market and/or commercialization path.
- Funded projects must meet predesignated milestones.
- Measures of economic development:
 - External grant funding leveraged
 - New patents, products, and license agreements
 - Research jobs supported
 - New spin-out companies



GOAL 2- IMPLEMENT METRICS:



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GOAL 2- IMPLEMENT METRICS: UNIVERSITY METRICS

University
Statutory
Reporting
Requirements.

S.B.166 requires
universities to
provide data
AND copies of all
IP license
agreements.

<i>University Reporting Requirements</i>	<i>Count</i>	<i>Importance</i>
Federal Funding	\$ value	Leveraged funds
Philanthropic/non-profit funds	\$ value	Leveraged funds
Industry funds	\$ value	Leveraged funds
State funds (outside of USTAR)	\$ value	Leveraged funds
Disclosures	#	Early indicator of commercial potential
Patents	#	Early indicator of commercial potential
License agreements	#, revenue collected	Commercialization measure, return to State
Research jobs	#	Increasing tax base
Average wage for research jobs	\$	Determination of high paying jobs



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GOAL 2- IMPLEMENT METRICS: PRIVATE ENTITY

Private Entity
Statutory
Reporting
Requirements.

USTAR requires a
3rd party survey of
information.

<i>Reporting Requirement</i>	<i>Count</i>	<i>Importance</i>
Public funding raised	\$ value	Indicator of commercial success
Private funding raised	\$ value	Indicator of commercial success
Sales or revenue generated	\$ value	Increase to tax base
Jobs	#	Increase to tax base
Average wage for jobs	\$ value	Determination of high paying jobs



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GOAL 2- IMPLEMENT METRICS: USTAR ORGANIZATIONAL METRICS

- USTAR holds itself to the metric of economic impact measured through the impact on tax revenue to the State.
- All companies that use USTAR services through the outreach program will be required to provide reporting on an annual basis to USTAR and possibly a 3rd party detailing jobs created, salary range, sales and revenue, follow-on investment, etc.
- As exact data may not always be available USTAR will employ the IMPLAN model which is a well-established input/output model of economic impact development to measure the economic development impact in terms of increased tax revenue to the state.



GOAL 3 – ALIGN OUTREACH PROGRAM TO FILL TECH ECOSYSTEM GAPS



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GOAL 3 – ALIGN OUTREACH PROGRAM: TECH INCUBATORS



- Tech incubators are a critical piece of an ecosystem. USTAR supports tech incubators by providing capital intensive equipment, mentoring and networking to start up companies.
- Focused on supporting technical and scientific early stage startups.
 - BIG: Life sciences and technology
 - Utah Innovation Center (UIC): (Currently under relocation) Focus on aerospace / defense
 - Nanofab: State of the art equipment for nanoscale micro electronics
 - Large Scale Biomanufacturing Facility: Equipment and expertise for large scale bacterial fermentation production



GOAL 3 – ALIGN OUTREACH PROGRAM: SBIR-STTR ASSISTANCE CENTER

- Assists entrepreneurs and start-up companies in preparing and submitting SBIR-STTR applications.
 - Helps technology-oriented businesses win funding awards to continue their path towards commercialization.
- Assists Utah companies in identifying appropriate solicitations and designing competitive applications.
- Companies working with USTAR increase their chances of winning to over 25% (the national average is 14-17%) and winners are better able to meet their predetermined goals.



GOAL 3 – ALIGN OUTREACH PROGRAM: NON MONETARY SUPPORT FOR UTAH'S BUSINESSES

- USTAR's Regional Outreach offices work with tech entrepreneurs to connect them with resources for developing their technology and growing their businesses.
- Regional offices work closely with partners at all regional universities as well as local entrepreneurs, businesses and other resources.
- USTAR plans to expand services going forward to greater service the needs of science and tech communities around the state.



USTAR

THANK YOU FOR LISTENING.

Find Us Throughout the State.

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North: CLEARFIELD

New Office Coming Soon
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SBIR-STTR Assistance Center

SLCC – Miller Campus
Corporate Partnership Center
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Sandy, Utah 84070
801. 957.5238

Central: OREM

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801.863.2720

BioInnovations Gateway

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385.646.4625

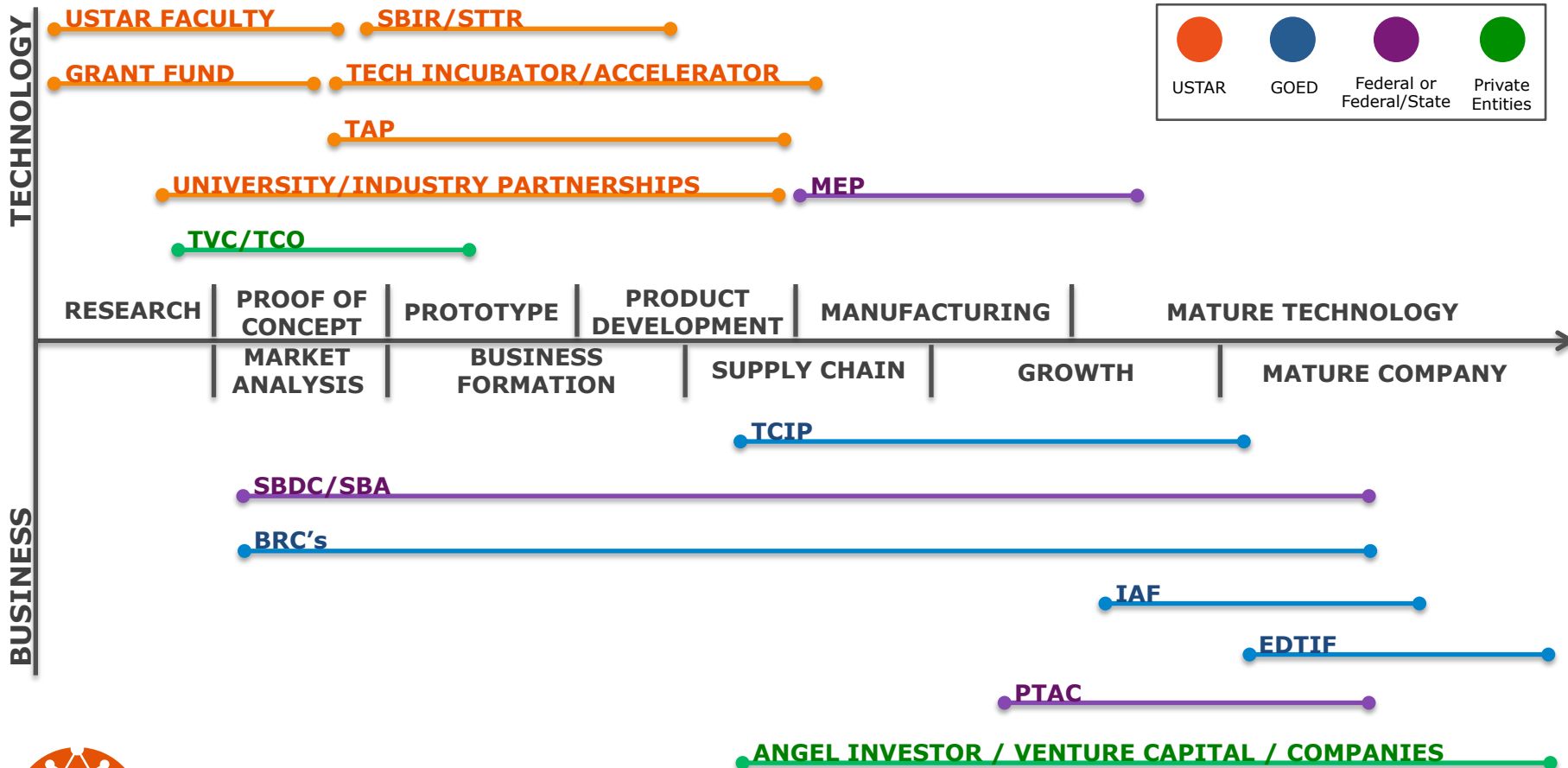
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ECONOMIC DEVELOPMENT RESOURCES FOR TECH



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USTAR TECHNOLOGY ENTREPRENEURSHIP SERVICES

