

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Eight (8) doctoral institutions with diverse faculty2. Industry-university cluster3. University support4. State pilot programs (i.e. AL Launch Pad, AL Innovation Funds)5. Tax incentive programs to attract industry6. Strategic hiring of faculties	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. No unified strategic plan for the state2. Traditional approach to research3. Process length & difficulty – discouraging faculty4. Recruitment & retention of good graduate students5. No entrepreneurial leave and COI policy6. Localized-insufficient business acceleration programs7. Limited venture/angel funds
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Linkage of research areas with industrial needs2. Incentivize faculty and students3. Interdisciplinary training of students4. Leverage alumni presence in industry5. Industry- university Summit to understand industrial needs6. Increased interactions with EDPA (Economical Development Partnership of Alabama) & DOC	<h2>THREATS</h2> <ol style="list-style-type: none">1. Industry collaborating with neighboring states2. Loss of established faculty3. State policy & budget constraints4. Established companies are not from university researchers5. State commercialization infrastructure – not competitive6. Perception that “Alabama is not good”

DIRECTED RESEARCH for COLLABORATION &

STATE

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Eight (8) doctoral institution, large pool of expertise and resources2. Strong and diverse STEM research and education3. Existing federal/industry presence (North AL and Birmingham metropolitan areas)4. Strategic hiring in research cluster areas	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Inadequate communications and collaborations2. No unified strategic plan for the state3. Not enough internal support from state level (weak budget)4. Too much effort on traditional “Academic Activities”5. Low percentage of students going to college
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Attracting new industries2. High quality and focused new hires (Cluster hire)3. Linkage of research areas with industrial needs. (Identifying and targeting industries)4. Need a sustained and pragmatic support from the state for long-term5. Establish industrial R&D centers in the state6. Wealthy alumni	<p>THREATS</p> <ol style="list-style-type: none">1. Surrounding states are more competitive (state-wide support, school ranking)2. Student recruitment and retention (Not competitive in graduate students)3. Linking of state support to the EPSCoR program4. No state budget stability5. Losing established faculties

<p>STRENGTHS</p> <ol style="list-style-type: none">1. University tech transfer offices2. Existing state industries3. Favorable patent policies for faculty4. Proximity of industry-university clusters5. University support for developing commercialization (Incubator programs)	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Traditional approach to research (i.e., grants and publications)2. Not enough interdisciplinary collaboration3. Recruitment of quality graduate students4. Little state support to commercialization5. Localized/insufficient technology/business acceleration programs6. Insufficient awareness of university specialist
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Large number of untapped potential industrial partners2. Better interaction with EDPA & DOC3. State has strong track record in attracting industrial; opportunities are there if state also gives similar support to university R&D4. Opportunity to inform industries about university research and specialties	<p>THREATS</p> <ol style="list-style-type: none">1. Many industrial partners are collaborating with out-of-state institutions2. Perception that Alabama is “NOT” a good place for R&D3. State’s commercialization infrastructure in NOT as competitive as surrounding states4. Loss of established faculty

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Diverse faculty2. Encouragement & existing support from universities3. Some state pilot programs: AL Launch pad, AL Innovation Funds4. Five start-up companies resulted from EPSCoR5. Faculty members work directly with industries in R&D and product development	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Faculties are “traditional” and these is no additional incentives (Faculties do not like to get out of their comfort zone), need more faculties with entrepreneurial gene2. Process is long and hard and investment/return ratio is low3. Minimal interaction between faculties from business, law and STEM disciplines, No clear policies on C.O.I. (statewide)4. No entrepreneurial leave policy5. No statewide venture/angel funds
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Incentivize faculties and students2. Interdisciplinary training of students in STEM/business/law minor3. Leverage large body of alumni presence in industry4. Develop policies on leave-of-absence and conflicts-of-interest for faculties	<p>THREATS</p> <ol style="list-style-type: none">1. Loss of well-established faculties2. Established companies are not from university research3. Out of state universities4. State policy and budgetary constraints

NEW VENTURES & BUSINESS DEVELOPMENT

ALABAMA

STRENGTHS <ol style="list-style-type: none">1. Huntsville Angel Funds2. GE Aviation added manufacturing base in Auburn, AL3. Tax incentive program from state level4. Economical to start new infrastructure5. Cluster strategic hiring at some universities6. Alabama Launch Pad pairs start ups with mentors	WEAKNESSES <ol style="list-style-type: none">1. Presence of angel/venture terms limited to specific locations2. Process length and difficulty is discouraging to faculty3. Lack of awareness of cost/benefit ratio4. How does it fit into academic structure?5. Lack of entrepreneurship training
OPPORTUNITIES <ol style="list-style-type: none">1. Room to grow the entrepreneurship culture2. Leverage alumni support3. Incentivize the faculty and educate the legislatures4. Hold industrial/university summit to understand industrial needs and university specialties5. Educating students at early stages to build the culture	THREATS <ol style="list-style-type: none">1. Competition from out-of-state universities and non-start-up companies2. Losing of well-established faculty who can serve as mentors3. Motivating faculty beyond tenure

STRENGTHS <ol style="list-style-type: none">1. Infrastructure has improved: organizations, facilities, programs, policies2. Have basics of NSF pipeline: research, intent to commercialize, bulking and icorps program)3. Human infrastructure is increasing4. MOU for shared IP	WEAKNESSES <ol style="list-style-type: none">1. NSF pipeline is incomplete2. Not building on other federal opportunities3. Lack of later-stage capital4. Lack of human capital5. No comprehensive, long-range plan for research and economic investment6. Public support for research for technology companies7. Culture of collaborative research among universities
OPPORTUNITIES <ol style="list-style-type: none">1. Use of national laboratories2. Change incentives to encourage more research and commercialization3. Increasing awareness of various federal funding programs that support commercialization4. Building a consensus in public legislature and the governor's office to support commercialization5. Educate/change attitudes at all level of colleges supporting commercialization6. Developing younger leadership relative to commercialization7. Better funding of non-profit support groups8. Venture fund9. Use agreement - college/university agreement	THREATS <ol style="list-style-type: none">1. Spending scarce resources without a targeted long-range plan2. Lack of legislative support3. Venture-level funding4. Competition among 75 counties for limited resources5. Public trust and buy-in

STRENGTHS

1. Extensive research infrastructure – (EPSCOR)
2. Pockets of expertise: UA Fayetteville, UAMS
3. ASU – Bio imaging program
4. Carol Reeves Program – business plan development
5. Exposure to NSF PIPE program
6. UAF IGNITE program and ME CDOI
7. Established multi-state collaboration – experience
8. Experience: commercial/academic convening
9. Strong SBIR/STIR assistance
10. High quality market research – MOU across state campuses
11. PI – Directed Research for Innovation and Collaboration

WEAKNESSES

1. Legislator/campus and general policies: academic support; mechanism for coordinating research and industry; service/equipment agreement; lack of state research funding
2. Lack of public recognition: research
3. Lack of release time for faculty
4. Lack of connection: industry and research
5. Difficulty in attracting research – retention and talent
6. Maintaining student workforce retention
7. Curriculum doesn't match industry needs (ex. engineering)
8. Internal competition among groups

OPPORTUNITIES

1. NSF programs (other than EPSCoR)
2. Add more job creating opportunities out of EPSCoR
3. Job-oriented administration (ex. governor)
4. More fortune 500 companies to engage – global opportunities, WalMart's innovation labs
5. Increasing awareness of SBIR/STTR assistance – free through ASBTDC
6. National Center for Toxicology Research
7. USDA Rice Laboratory
8. Regional common interest w/adjoining states – working relationships established
9. Arkansas Research Alliance
10. Computer science initiative – PR has generated interest from large, out of state organizations
11. EPSCoR within AEDC
12. Accelerate AR

THREATS

1. EPSCoR transitions in personnel
2. Legislative budget cuts
3. Continuing federal budget support for research
4. Public support for research
5. Competition with other states
6. Uncertainty of governors support
7. Talent competition
8. Geography

STRENGTHS

1. Campus incubators
2. 1 strong TT office instate
3. VIC
4. UAF Technology Park - positive attitude for commercialization (UAF)
5. Established process for SBIR companies
6. ASBTDC – innovative entrepreneur services statewide
7. Reynolds Governor’s Cup
8. Elevator pitch training
9. Many special programs - \$ assistance
10. IGNITE
11. Globally recognized medical university w/incubator
12. Centers for Excellence
13. Training programs open to public
14. Connections w/corporate
15. Multiple accelerator facilities/programs
16. High quality market research available

WEAKNESSES

1. Connections & cost (incl. legal services)
2. Only 1 strong TT office in state university
3. Less applied research vs. basic
4. Lack of networking with industry
5. SBIR proposal dev. knowledge – seeking topic matches
6. Lack of university dept. incentives for commercialization
7. Competition for limited resources
8. Lack of credit for tenure process
9. Lack of industry interest in research opportunities on campus
10. Lack of understanding – industry needs
11. Lack of applied research funds
12. Lack of incubator space usage
13. AMS – underdeveloped
14. Low national ranking SBIR awards
15. Lack of NSF program use
16. Lack of service agreements – equip. & space
17. Commercialization is not faculty priority

OPPORTUNITIES

1. “Industry inspired” research
2. High-end infrastructure that industry can use
3. Changing NSF attitude re: programs
4. More use of NSF pipe programs
5. Educating researchers and universities: commercialization
6. UAMS BioVentures – change focus back to start-ups
7. More participation in accelerators by universities
8. Licensing and purchasing from small companies
9. Strengthen TT offices
10. Fortune 500 companies – potential collaboration
11. Globalization in new markets
12. Geography and transportation system
13. Large number of research institutions
14. Natural resources (oil & gas, minerals, aquaculture)

THREATS

1. Air transportation
2. Geographic isolation between industry and research
3. Crumbling infrastructure and lack of support investment to expand
4. Lack of high-speed internet connectivity
5. Poor economy in education in many state regions
6. Public attitudes toward economic development
7. Poor state image
8. Few industry R&D facilities
9. Lack of connectivity w/industry headquarters
10. Not enough champions for commercialization

STRENGTHS

1. Good state programs in place
2. A number of private/non-profit support (angel groups)
3. Growing mentor members
4. Accelerate AR
5. More recognition and understanding
6. Governor's Cup (AEAF support - Y.E.S. & Y.E.S 2.0)
7. Carol Reeves Program
8. Student engagement – SBIR projects
9. K-12 programs (Nobel impact)
10. STEM programs
11. 6 regional ASBTDC locations (training, consulting)
12. Culture of small business ecosystem activity
13. Entrepreneurial legends

WEAKNESSES

1. Underfunded state programs
2. University connections weak w/private groups
3. Not enough recognition/understanding
4. Not enough strong college entrepreneur programs
5. Not a strong entrepreneurial attitude among colleges – NCIA participation
6. Technology workforce
7. Broadband availability
8. Funding issues for non-profits
9. Keeping educated graduates
10. Not enough champions
11. Aging nonprofit leadership
12. Need more applied research grants
13. Underfunded entrepreneurial programs
14. More entrepreneurial research programs
15. Lack of commercializing ideas out of federal labs
16. Public relations to highlight opportunities
17. Access to university IP for entrepreneurs
18. Release time for faculty for future activities

OPPORTUNITIES

1. Keep family units close when students stay
2. Gaining technology (ex.computer based) across state
3. Building in-state ventures
4. Creating start ups
5. Developing younger leadership
6. Better funding of non profit support groups
7. Proof of concept fund
8. Better use of NSF programs – pipeline
9. New AEDC leadership & governor – opportunity for more homegrown talent
10. Opportunity for balance between recruiting and homegrown
11. State sanctioned intrastate crowd-funding

THREATS

1. Venture funding all out of state
2. No mechanism for getting IP out of federal labs
3. Losing research strengths – ARA scholars
4. Losing existing entrepreneurial funding
5. ASBTDS – national competition for federal funding each year
6. Access to user-friendly computer equipment
7. Ability for rural ideas to get access to support
8. Lack of support for colleges and their programs

NEW VENTURES & BUSINESS DEVELOPMENT

ARKANSAS

STRENGTHS

1. Tax credit (R&D + Investment)
2. Growing angel community
3. Improved new business startup process
4. Innovate AR – mentoring, coaching
5. ASBTDC – training
6. Non-profit support organizations
7. Some out of state investments
8. Capital gains tax credits
9. Lowest US state cost to start a business
10. USPTO speakers – share IP details and best practices

WEAKNESSES

1. Lack of venture capital
2. Low amount of AIF-funded investment
3. Lack of shared manufacturing facilities
4. Geographic isolation
5. Weak cluster strategy statewide
6. Lack of significant exits to generate investor confidence
7. Lack of C-Level individuals
8. Lack of serial entrepreneurs
9. Lack of science based startups
10. Lack of success of companies coming out of accelerators
11. More SBIR Ph 2 awardees
12. More incentives for university, faculty engagement in SBIR/STTR projects

OPPORTUNITIES

1. Venture fund
2. Better models for accelerators
3. More funding for non-profit support organizations (ex. Venture Center)
4. Use agreement for college equipment
5. Raising cap on equity investment tax credit
6. Allowing companies to use R&D tax credit after using the regular/traditional one
7. Reinstitute Arkansas Technology Summit – attracts investors
8. Better funding of entrepreneurial programs
9. Create plan for technology-based industries in rural AR
10. Incentivize the entrepreneur
11. Incentivize the inventor & the department
12. Innovate Arkansas – better interaction with universities

THREATS

1. Possibility of losing Reynolds's Gov. Cup (funding support)
2. Lack of legislative support
3. Loss of investment at the angel level due to lack of exits
4. Loss of our non-profit support orgs
5. Economic culture built around recruitment rather than building new industries
6. Disappearance of manufacturing jobs – because not kept modernized and competitive
7. Startups getting recruited away from state

<p>STRENGTHS</p> <ol style="list-style-type: none"> 1. Office of Economic Innovation and Partnerships (OEIP) integrates and facilitates process from research, to startup to commercialization 2. Strong culture for establishing centers and facilities to support research and innovation 3. Courses in entrepreneurship business development/Spin In^R / Spin Out in collaboration with Lerner College of Business and Economics 4. Strong alumni base/entrepreneurial Networks 5. Small campus / small state 	<p>WEAKNESSES</p> <ol style="list-style-type: none"> 1. Lack of strategic alignment of too Independent programs that compete for the same limited resources 2. Lack of coordinated SBIR-STTR program 3. Lack of funding support – Angel/Investor 4. Lack of State commitment to entrepreneurial/small business development 5. Lack of State and government incentives to keep business in DE/to nourish businesses 6. Too many independent programs within innovation community
<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> 1. Change in leadership at the State and University 2. Office of Economic Innovation and Partnerships to facilitate all aspects of business development 3. SBA FAST grant for SBIR 4. Increased alignment of academic, private, government entities 5. Spin In^R and Pathways 2015 program (systematically change education to include entrepreneurial training at the undergraduate level) 6. New faculty hires 	<p>THREATS</p> <ol style="list-style-type: none"> 1. Decline in federal funding 2. Change in leadership at the State and University 3. Lack of alignment with the State for venture/economic development strategies 4. Lack of strategic alignment between administration and faculty on basic research vs. new business development 5. Lack of faculty incentives that impact retention/tenure

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Small campus/small state – speed of action2. Good partnership culture/network3. Culture for establishing centers to facilitate research and innovation	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Sustainability of centers and institutions2. Lack of support from the State3. Too many independent programs within innovation community4. Lack of SBIR/STTR process5. Lack of adequate funding
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Direct communication with congressional group2. Change in leadership at the State and University3. Pathways 2015 program4. The Office of Economic Innovation and Partnerships facilitates all aspects of business development	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of agreement on funding2. Major leadership changes3. Decline of federal support4. Priority issue between administration and faculty on basic research and new business development

TECHNOLOGY COMMERCIALIZATION

DELAWARE

STRENGTHS <ol style="list-style-type: none">1. Facilities to support technology commercialization – (Science Technology Advanced Research (STAR) campus, Delaware Technology Park, UD Incubator)2. Process to integrate activities from research, to startup to commercialization3. Strong alumni base for mentoring4. Integrated commercialization process managed through Office of Economic and Innovative Partnerships5. Strong community college system6. Courses on technology commercialization7. Spin In^R	WEAKNESSES <ol style="list-style-type: none">1. Lack of funding support – Angel/Investor funding2. Lack of support from State – low tax incentives3. Lack of strategic alignment between State and Academic Institutions4. Cultural differences between north/south Delaware
OPPORTUNITIES <ol style="list-style-type: none">1. Change in leadership at the State and University2. Retraining programs – change from manual labor to higher tech programs3. Cyber security initiative across state – facilitating partnerships among government, private sector and academic institutions4. New faculty hires with high interest in technology commercialization5. Spin In^R	THREATS <ol style="list-style-type: none">1. Change in leadership at the State and University2. Increased focus on internal vs. external opportunities3. Lack of faculty incentives that impacts retention4. Lack of accelerator incubator to keep small businesses in Delaware

STRENGTHS

1. Process / facilities that encourage support of entrepreneurship – (Science Technology Advanced Research (STAR) campus, Delaware Technology Park, UD Incubator)
2. Courses and experiential learning programs in place to teach under/grads
3. Entrepreneurship management through Office of Economic and Innovative Partnerships
4. Strong alumni base
5. Cost free business counseling from invention through commercialization
6. Employees with private sector experience that understand entrepreneurship

WEAKNESSES

1. Too many independent programs w/o a common goal
2. Independent programs competing for the same funding sources
3. Lack of State support
4. Inadequate funding for an effective SBIR/STTR program
5. Lack of commitment to establish a strong entrepreneurial culture

OPPORTUNITIES

1. Change in leadership at the State and University
2. Integrate independent programs; coordinate and leverage resources
3. Spin In^R
4. Network of alumni & local entrepreneurs
5. New faculty hires
6. Stronger SBIR/STTR program

THREATS

1. Lack of funding to execute our plan
2. Change in leadership at the State and University
3. Increased focus on internal vs. external opportunities
4. Loss of faculty incentives
5. Faculty tenure related issues

NEW VENTURES & BUSINESS DEVELOPMENT

DELAWARE

STRENGTHS <ol style="list-style-type: none">1. Horn Program in Entrepreneurship2. Office of Economic Innovation and Partnerships (OEIP)3. High Tech Entrepreneurial Class4. Alumni base, network of entrepreneurs5. Proximity of companies – small state6. Incubator capacity – Delaware Technology Park & Science Technology Advanced Research (STAR) campus7. Cost free business counseling from invention through commercialization	WEAKNESSES <ol style="list-style-type: none">1. Limited funding for valley of death financing2. Lack of angel/investor funding sources3. Lack of incentives – tax credits / etc, from State4. In hours capacity and expertise to handle new ventures
OPPORTUNITIES <ol style="list-style-type: none">1. Coordination of efforts to facilitate the process2. Develop alignment with the State3. SBA funding for SBIR/STTR program development4. Coordinated “Maker Space”	THREATS <ol style="list-style-type: none">1. Lack of angel/Investor funding2. Lack of alignment with State for venture / economic development strategy3. Priority issue between administration and faculty on basic research and new business development

<p>STRENGTHS</p> <ol style="list-style-type: none">1. IGEM2. Statewide SBDC & Tech Help3. Tech Transfer offices with consistent policies4. CAES5. Research infrastructure6. Easy to start a small business	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. SBIR/STTR program limited/minimal presence2. Lack of understanding and incentives for faculty3. Low rate of post HS Education4. Small businesses lack trans. Plan and not scalable
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Pathway of resources/ecosystem development2. SBIR/STTR support program3. Better collaboration w/INL and between universities4. More tax-friendly start up environment5. Potential for \$\$ investment6. More comprehensive SOP's	<p>THREATS</p> <ol style="list-style-type: none">1. Minimal venture capital investment2. Lack of coordination of universities & common organizations3. Isolated geography and competitive neighboring states4. Education cuts during downtimes

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Single government agency SBOE2. Proximity to large industry3. Infrastructure and personnel4. Research centers5. CAES/Collaboration6. Increasing research \$7. Physical makeup of state	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lowest GDP per capita in US2. Most universities have limited research track record3. Internal competition for limited \$4. Retention of faculty (res/\$)5. One of nation's lowest rates of going on past HS6. Rural, resource based culture7. Rogue faculty
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Further leverage INL2. Private funding3. Statewide research projects4. Improved collaboration5. Maximizing SBIR/STTR programs	<p>THREATS</p> <ol style="list-style-type: none">1. Legislative changes2. Lack of education & communication3. Retention of quality students (HS)4. Isolated geography5. Workforce depletion6. West Coast influence7. 63% of ID Federally owned

TECHNOLOGY COMMERCIALIZATION

IDAHO

<p>STRENGTHS</p> <ol style="list-style-type: none">1. TTO at each university2. IGEM program3. Consistent TC (TE) policies at universities4. SBOE licensing guidelines5. C TAP (“crack model”)6. Research parks & Incubators	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. No incentives to disclose (besides RD%)2. New IP police, new program3. Understaffed OTT, \$4. Rogue faculty5. IP Champion6. SBIR/STTR culture7. Understanding Ine/Acc/RP capabilities
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Signature IP showcase2. Research foundations3. Improved faculty innovation culture/ priority4. Improved awareness5. TC organization at INL6. Growth of SBIR funding7. Leverage \$8. Commercialization fund for SBIR	<p>THREATS</p> <ol style="list-style-type: none">1. News media (local) TT/IGEM2. Lack of coordination & communication (Centers/Incubators)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. VL @ BSU2. Entrepreneurial degrees @ all universities3. Pitch competitions4. SBDC on campus statewide5. Entrepreneurial Law at UI6. IGEM7. Supportive culture & infrastructure	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Internal collaboration needed for pitch events2. Minimal SBIR/STTR3. Lack of collaboration/involvement with COBE at BSU
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. BSU CID2. SBIR/STTR support for entrepreneurs3. B SURF4. Entrepreneurial “pathway” of state resources5. Vandal Venture Fund6. Comprehensive policy to promote entrepreneurship	<ol style="list-style-type: none">1. No leave policy2. Culture of silos3. Limited venture funds – for students and otherwise

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Manufacturing and prototype facilities across the state2. Easy to start a small business in Idaho3. Tech Help & SBDC4. Workforce Training Fund5. IGEM	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Angel fund currently re-structuring2. No VC funds3. Clusters – limited to marketing4. A lot of small businesses in Idaho: No generational transition or not scalable
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Working with WBI to help Angel Alliance2. More flexibility in incentive programs and new incentives for tech-based start-ups3. Coagulate start-up services for united front	<p>THREATS</p> <ol style="list-style-type: none">1. Develop our own critical mass2. Business environment in neighboring states3. When recession occurs, education is most likely cut, which directly impacts workforce development

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Community Support2. Selected state programs/support (KSTC, KSEF, SBIR-STTR, etc.)3. Entrepreneurial Ecosystem4. Recent successes in commercialization and translation	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Uneven support across universities2. Few serial entrepreneurs/mentors/role models3. Not enough funds to grow capital intensive tech companies4. Lack of major corporate HQ5. No federal lab
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Closer collaboration between universities2. Emphasis on Public-Private Partnerships3. Innovative academic programs4. Engaging alumni and friends of the university5. Greater efforts to attract industry to KY	<h2>THREATS</h2> <ol style="list-style-type: none">1. Uncertain support for innovative programs, e.g. Bucks for Brains, matching funds, tax incentives, etc.2. Competition from surrounding states and universities3. Lack of legislator understanding of the importance of the higher education enterprise4. Declining economy in areas of strength in KY5. Outside perception of KY

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Center of Excellence in multiple areas2. State support for selected programs3. Bucks for Brains – quality faculty4. Strong collaboration between universities5. Recent successes in highly visible collaborations between UK and UofL	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Research infrastructure2. Ability to recruit and retain quality faculty (low compensation)3. No federal lab4. No major corporate HQ/R & D5. Institution competition6. Few major research institutions7. Industrial-Academic partnerships
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Statewide funding for innovation (Like Ohio’s Third Frontier)2. Research in exomedicine3. Aggressive pursuit of federal funding4. Joint efforts in bringing industry interest to KY	<p>THREATS</p> <ol style="list-style-type: none">1. Continuous fractioning of research efforts, in particular between UK and UofL2. Declining economy in areas of strength in KY3. Threat to federal funding4. Change in state funding – matching5. Brain drain6. Competition from surrounding states7. Lack of support for higher ed among legislatures8. Perception of KY by outsiders

TECHNOLOGY COMMERCIALIZATION

KENTUCKY

<p>STRENGTHS</p> <ol style="list-style-type: none">1. KY Commercialization Fund2. Community support for technology commercialization3. Incubators, accelerators, research parks4. Innovative faculty members5. Experienced staff – DTT & Industry6. Engagement7. Recent successes in commercialization and translation	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Imbalance and non uniformity across universities in the state2. Tech commercialization not a faculty priority3. Virtually no tech transfer support at comprehensive universities (staff and funding for IP protection)
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Build on increased funding opportunities, NIH, NSF, commerce, etc.2. Increase in trends of industry shifting R & D to universities3. Additional collaboration between universities4. Collaboration with SBIR companies5. Take advantage of existing experience and expertise of faculty members that can be used to solve real life problems	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of understanding by legislators2. Few faculty innovators3. Less focus on applies research4. Few industries to collaborate on TC (Lack of corporate HQ's)5. Other states are outpacing us, including some of our neighbors6. Outside perception of poor track record in commercializing research

STRENGTHS

1. Entrepreneurial leave
2. Great state-wide network for assistance
3. Entrepreneurial ecosystem
4. SBIR-STTR matching/assistance
5. Overwhelming community support
6. Student Entrepreneurial Programs – Idea State U. Governor’s

WEAKNESSES

1. Uneven support from Business Colleges across the state
2. Low emphasis at regional universities
3. Some faculty reluctance to start companies
4. Not enough funds to grow capital intensive tech companies
5. Lack of mentors
6. Lack of business clusters in specific areas

OPPORTUNITIES

1. Greater emphasis on public, private partnerships
2. More innovative academic programs integrating entrepreneurship
3. Aggressive pursuit of out of state investors
4. Capitalize on visibility of student entrep. teams
5. Create more investment funds
6. Tap into alumni entrepreneurs who want to help their university

THREATS

1. Regional competition
2. Weak venture capital resources available
3. Losing momentum
4. Downturn in the economy leading to lower risk taking by investors
5. KY is vulnerable to outside venture capital investment in its tech companies

NEW VENTURES & BUSINESS DEVELOPMENT

KENTUCKY

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Tax incentives for business2. Tax incentives for investors3. Community support business creation4. Early seed investment5. Kentucky Innovation Network	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of strong industry cluster2. Lack of access to capital3. Few serial entrepreneurs/Role models4. Lack of people with management experience5. Lack of exposure of KY startups at the national level
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Concerted effort to promote KY innovations nationally2. Develop strategies to capitalizes on areas of research excellence in translation to companies3. Connect KY businesses to national funding institutions4. More partnering across regions and institutions5. Deep pool of entrepreneurial faculty6. Collaboration with federal labs in the region	<p>THREATS</p> <ol style="list-style-type: none">1. Angel/VC funding decline2. Competition from other states3. Declining economy

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. State & BOR supported programs2. Innovation culture3. Physical infrastructure4. Business & entrepreneurship training and support5. Technology transfer expertise6. Preseed capital	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Lack of experienced business leadership for startup & support2. University leadership continuity & culture3. Public perception and K-12 education4. Budget priorities and uncertainties5. Venture & angel funds6. Laws and statewide communications
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Niche research specialties2. Biomedical3. Best practices in startup and recent student involvement4. Education & training in entrepreneurship5. Linkages & network in funding6. Improved use of incubators/accelerators/research parks	<h2>THREATS</h2> <ol style="list-style-type: none">1. Budgets and funding2. Natural disasters3. Public perception and K-12 education4. Federal law5. Price of oil6. Competition from adjacent economies

<p>STRENGTHS</p> <ol style="list-style-type: none">1. State programs: BOR industrial ties, BOR POC/P fund, SBIR/STTR tax credits and Phase 0, LED Innovation Council; LONI2. Innovation funds3. Maker spaces4. Decentralized higher education multi-systems5. Culture of innovation	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Industry headquarters outside of state2. Perception/attracting3. K-12 education4. Not diversified economy - energy/chemical5. Brain drain6. Higher education and healthcare are not protected priority in state budget
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. National Labs @ NASA STENNIS2. Cyber Innovation Center (Bossier)3. Biomedical research: Pennington, Tulane, LSU, HSC-S and NO; population demographics4. Gulf as a natural laboratory5. Water Institute6. Climate7. Advanced manufacturing	<p>THREATS</p> <ol style="list-style-type: none">1. Low industry R&D spending In state2. Over-reliance on state funding for academic research3. Price of oil4. Natural disasters (insurance cost)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Experienced T.T. people2. Statewide organization of T.T. professionals3. Business mentor pool development4. BOR initiative to hire statewide liaison5. LED appreciation importance on T.T.6. Favorable policies - royalty sharing incentives7. Incubators8. Accelerators9. Research park10. Statewide technology gateway	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Limited patent budgets2. University culture P&T3. Mixed continuity4. High level leaders turnover @ some institutions5. State laws6. Attorney general on law firms7. Lack of understanding8. Engineering experimentation stations
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Connected at highest levels of AUTM2. Some political support against patent reform3. Niche specialties: Agriculture, Energy, Cyber, Civil/Infrastructure	<p>THREATS</p> <ol style="list-style-type: none">1. Patent reform: joinder; fee shifting2. Transportation across state3. Perception4. Low R&D federal expenditures

STRENGTHS

1. Many entrepreneurship training programs
2. Business plan competition prizes
3. Angel tax credit
4. Angel funds (new)
5. SBIR/STTR training
6. POC funding @ state level (BOR)

WEAKNESSES

1. Experienced business managers lacking
2. Professional business services not focused on early state
3. VC funding scope – primarily medical
4. Risk taking culture not embraced
5. Networks locally and across state missing or non functioning
6. No clear communication @ opportunities at state
7. Loss of best & brightest

OPPORTUNITIES

1. Educate and train future entrepreneurs
2. Angel networks and community culture change programs
3. VC growth and linkages
4. Innovation fund
5. Favorable incubator rates
6. Multi-disciplinary entrepreneurship education – experiential learning (bus/sci/law)
7. Link to university alumni

THREATS

1. Competition from other bugger states with better resources
2. Not innovation economy – mfr/tourism
3. Louisiana external perception
4. Few Fortune 500 companies – senior leadership retirees not local

NEW VENTURES & BUSINESS DEVELOPMENT

LOUISIANA

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Business plan competition prizes2. Maker space for prototyping3. State-wide POC/P funding (BOR)4. Business tax credits for R&D and angel \$5. Private investment funds6. Business incubators & accelerators7. BREW	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of experienced business leaders2. Service providers for small business3. Limited VC scope4. Angel investors looking to later stage5. Lack of innovation culture – negative incentive
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Improve use of research parks & incubators2. Education & training in entrepreneurship3. Linkages & networking in new ventures4. Utilize recent grad students/post docs in company creation/startup5. Learn best practices from aspirational ecosystems6. Improve/change cultures; success stories	<p>THREATS</p> <ol style="list-style-type: none">1. Relocation/draw to other economies2. International student visa laws3. Louisiana external perception4. Poor K-12 public education5. No long term commitment from senior leadership in large companies

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Strong Seagrant extension program2. Incubators – CCAR, DMC, ARC3. MTI (funding, competitions, training)4. Top Gun (entrepreneur training)5. Favorable industry/academic relationships6. SEANET – interdisciplinary research7. Cross-state marine science collaboration across universities8. Large & diverse ecosystem	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Low VC presence2. Geographic distance3. Value chain ignorance & lack of process/dist. infrastructure4. Immature industry5. High transactional cost for outreach6. Small market for licensing7. No R&D funding in industry8. Coordination of R&D facilities
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Open to new start-ups2. Need for new employment in rural areas3. Aquaculture is growth industry globally4. Growing interest in sustainable foods in US5. Availability of follow-on federal funding6. Ripe for innovation7. International R&D collaboration	<p>THREATS</p> <ol style="list-style-type: none">1. Fear of market dominance by 1-few commercial players2. Foreign competition – imported aquaculture3. Competition from existing industry4. DMR permitting5. Public perception against aquaculture6. Banking sector – willingness to invest (low ROI; high risk)

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Largest coastline in US2. CCAR, ARC, DMC – 3 wet tank R&D facilities3. Seagrant (NOAA) - govt.4. Seagrant (NSF) - govt.5. UNE, UMaine, MMA, UMM, St Joseph's (schools)6. Bigelow, MDIBL, GMRI, DEI (private)7. State is populated with (people) DEEP EXPERTISE in marine science8. Favorable relationships, practices, outcomes w/industry	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Funding: operating budget; capital budget2. Allocation of funds3. Interpersonnel strain; coordination of research staff across state4. Coordination of R&D infrastructure, pricing structure (internal)5. Dated infrastructure in some facilities6. Poor proximity of facilities to campus7. No advocate in state government
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. SEANET – follow on grants2. Growth industry (globally)3. Climate change4. Interdisciplinary growth5. Opportunity to grow support for R&D6. Synergy with offshore wind projects7. K-12 STEM initiatives8. Growing interest in sustainable food/organic farming9. Good industry and academia people	<h2>THREATS</h2> <ol style="list-style-type: none">1. Climate change2. Diminishing state funding3. Social perceptions/resistance4. Subsidized foreign competition (R&D \$)5. Small R&D community (insular)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Commercialization oriented faculty2. Commercialization oriented administration3. Incubator facilities – unique, aligned with industry4. Foster center for innovation5. Strong extension (outreach)6. Interdisciplinary R Teams7. Good industry/research comm.8. MTI9. Workforce development	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. R (no D) oriented faculty2. Immature industry3. No industry \$ for research4. High transaction/outreach cost5. Small market for licenses/patents6. R&D risk7. Lack of depth in key positions
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Coastal non-profits, conservation groups2. Grass roots interest3. Good \$ ops (currently)4. Opportunity for improved profitability (immature industry)5. Can make work more appealing6. Good ind/research connection7. Incentivizing participation in the process (NSF, incl. licensing)	<p>THREATS</p> <ol style="list-style-type: none">1. Imported technology2. Public perception3. Competition for the coastline4. Competition from established industry5. Capital availability (high risk)6. Foreign (subsidized) competition7. DMR permitting

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Innovation Engr. Prog. (Entrep. minor)2. Top Gun (UMaine, MCED)3. New UMaine business accelerator, coaching4. Accessible training/coaching5. Extension6. Access to faculty	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. No aquaculture specificity in training and coaching (yet)2. “Small” thinking3. Lack of awareness of opportunity4. Lifestyle work – weather, hard labor5. Value chain ignorance6. No entrepreneur in residence7. Geographic district
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Open to new start-ups2. Follow on grants; education, cluster grants3. High unemployment of willing workers4. Historically working waterfronts5. Processor/distributor opportunities	<p>THREATS</p> <ol style="list-style-type: none">1. Brain drain to Boston2. Low barriers to competition3. Lack of distr. infrastructure

NEW VENTURES & BUSINESS DEVELOPMENT

MAINE

<p>STRENGTHS</p> <ol style="list-style-type: none">1. MTI, FAME, Maine Angels, CEI2. Ongoing relationships w/UNI/SEANET leadership3. Legal services – deferred payment	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Poor profitability2. High risk (red tide, storm)3. Very low V.C. presence4. Geographic distribution of support5. Faculty teaching loads6. Maine bond process7. Business school engagement
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Libra2. Translational NSF Res. Grants3. Community Micro Loans4. Community farming5. One UMS	<p>THREATS</p> <ol style="list-style-type: none">1. Access to working capital2. Relatively low ROI3. Market dominance by 1 or few commercial entities4. Attractiveness of foreign opportunities for investment \$

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Strong TTO @ MU2. 2nd most accelerators/capita3. Strong research institutions4. Identifies research clusters w/industry anchors5. 5 medical schools + clinical research6. MU Research Reactor – largest in US7. Kauffman Foundation8. Strong entrepreneurial education9. Strong support organizations10. Improving seed funding for start-ups including state \$	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Limited pre-seed/POC funding2. Limited late-stage institutional investors3. No angel tax credits4. Limited SBIR/STTR engagement/strategy5. Lack of consistent faculty leave policy & faculty capacity6. Inter-Institutional competitiveness7. No state-wide EPSCoR strategy8. Limited state resources for research and education9. Poor communication among schools10. No industry engagement of office/strategy11. Weak culture of tech commercial./entrepreneurship
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Identify/educate new sources (locally) of investment, angel & VC2. Better leverage of government programs3. Coordinate access to manufacturing/prototyping4. Look to others for best practices for education & business formation5. Increase regional collaboration6. Exploit strengths in ag, high-performance computing	<p>THREATS</p> <ol style="list-style-type: none">1. Politicized science2. Increased competition for research \$3. Reduced federal funding4. Lack of C-level management5. Insufficient/undereducated workforce6. Acceptance of failure7. Managing expectations regarding benefits of entrepreneurship

DIRECTED RESEARCH for INNOVATION & COLLABORATION

MISSOURI

<p>STRENGTHS</p> <ol style="list-style-type: none">1. UM System2. Washington University3. SLU4. Danforth Plant Science5. Stowers6. 5 medical schools7. Research clusters8. Strong industry collaboration9. Research reactor10. Strong clinical research capacity	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Limited state resources2. Limited state support of education3. Poor communication among schools4. Politicized science5. Regional competitiveness (negative)6. Difficulty in engaging industry7. No statewide EPSCoR infrastructure
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Feed the World2. High performance computing capacity3. Health outcomes research4. Improve communication5. Super cluster (IA,KS,MO,NE)6. New IP policy for UM System	<p>THREATS</p> <ol style="list-style-type: none">1. Politicized science2. Regional competitiveness (negative)3. Water availability4. Reduced federal funding – defense5. National funding priorities

TECHNOLOGY COMMERCIALIZATION

MISSOURI

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Strong TTO at MU (Top 25% AUTM)2. Strong regional expertise in technology evaluation3. Progressive policies at UM for IP4. Good technology pipeline5. Good incubator network6. Strong research parks – STL7. 2nd most accelerators/capita in US	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Statewide under staffed2. Weak culture for tech commercial.3. Limited proof of concept funding4. Territorialism5. Commercialization not counted in faculty evaluation6. Poor communication
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Untapped industries for partnerships2. Could improve early-stage proof of concept funding3. Could improve state-wide coordination4. Could improve research parks	<p>THREATS</p> <ol style="list-style-type: none">1. Increased competition for research dollars2. Could miss opportunities3. Politicized science

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Kauffman Foundation2. Good level of programs (education)3. MO Entrepreneurial Law Clinic4. MO SBTDC5. MO Sourcelink6. Team mentoring (MU)7. Bio design (MU)8. Support organizations strong	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. No/inconsistent faculty leave policy2. Lack of incentives – Angel tax credit3. Regional competitiveness4. No SBIR/STTR matching funds5. Lack of SBIR/STTR support programs
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Better leverage SourceLink2. Share/expand curricula3. Improved university policies for business formation4. Expand large company investment in start-ups5. Better leverage student resources6. MO-FAST like program7. Expand opportunities for under represented populations	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of C-level management2. Insufficient workforce3. University culture/competitive disadvantage4. Acceptance of failure

NEW VENTURES & BUSINESS DEVELOPMENT

MISSOURI

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Improving seed funding2. Increased MO funding start-ups3. Quality support organizations (SEL, KC)4. Incubators/accelerators co-working space	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of pre-seed/PoC, institutional investors, late investment2. Low SBIR/STTR usage3. Angel tax credits4. Untrained start-ups
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Expand angel groups2. Leverage available government programs3. Coordinate access to manufacturing/prototyping4. ID new investment fund sources locally5. Investor education to lower risk aversion	<p>THREATS</p> <ol style="list-style-type: none">1. Loss of start-ups; recruited away (perception vs. reality)2. Managing expectations regarding benefits of entrepreneurship

AGGREGATE

NORTH DAKOTA

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Center for Innovation/Research Technology Park2. Actively streamlining paperwork3. Student Innovation Programs	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of connectivity between programs2. Low faculty incentives3. Lack of CEO's/mentors4. Lack of these activities viewed as scholarly activities5. Lack of critical mass
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Access to the state-led R&D programs and tax credits2. New ways to view core: Ag, Energy3. Marketing campuses/state4. TCs and PUIs – more partnerships5. Valley Prosperity Partnerships	<p>THREATS</p> <ol style="list-style-type: none">1. Conservative state legislative body2. Lack of champions3. Nature of energy and ag4. Lack of VC and angels5. Turf protectors stifle collaboration

STRENGTHS

1. Researchers
2. Facilities
3. Database/Rolodex of univ/ind liaisons
4. Someone to do corporate relations
5. Internal knowledge of state players (extension agents)
6. Hard working students
7. Senior Eng. Design courses that work directly with industry
8. Industrial advisory boards within departments
9. Actively streamlining industry agreements
10. Centers of Excellence

WEAKNESSES

1. PT&E process that doesn't recognize industrial work as scholarship
2. Lack of faculty incentives
3. Limited faculty (high faculty to student ratio)
4. Time is "relative"/lack of understanding/priority
5. Lack of faculty interest
6. Lack of clear conflict of interest policies
7. No center point of contact designated by campus with industry
8. Limited research faculty positions
9. Lack of continuity of funding following federal award
10. No industry pitch days
11. Competing Centers of Excellence
12. Rogue faculty
13. Lack of promoting ourselves

OPPORTUNITIES

1. Everybody knows everybody
2. COE, reach other ND state funded programs to work with industry
3. Service Center
4. Career Fairs
5. Strong Alumni
6. Individual Wealth
7. Not going after the federal \$s available
8. Research and tech partners work with early stage companies
9. Industry contracts due to ag, oil, UHS (Industry related state strengths)
10. Internet connectivity statewide
11. Retirement of baby boomers
12. No students with earned graduate degrees/ Lure them back

THREATS

1. Inability to use angel/venture funding
2. State legislators – lack of support; continue ?
3. General attitudes toward higher ed: 4 yr campuses, 2 yrs do their job
4. Lower tax incentives
5. Legislative biennium
6. Difficult to transport folks to state
7. Limited # of companies regionally
8. Limited company innovation
9. IP language – restricted who owns it
10. Export control issues
11. Fewer ND students
12. End flow of oil and ag
13. Outside parties continue to pit the 2 research universities against each other
14. Lack of understanding of "cost", "time" to be innovative
15. Say anything blog, and other state media
16. ND students leave to get their graduate degrees
17. Individual wealth
18. Legislative body vs. state board of higher education

STRENGTHS

1. Internal IP attorney (statewide)
2. Faculty buy-in (UND)
3. Commitment (UND)
4. Updated IP policy (statewide)
5. More flexibility in upper administration (NDSU)
6. Educate students/they educate faculty (UND)
7. Flexibility of payment structure, etc. (both)
8. Use of EPSCoR \$ to to prototypes (UND)
9. Student IP Microfunds (UND) \$2500 each
10. SPIN offs
11. Detail oriented
12. Incubators/accelerators
13. Innovative faculty
14. Take advantage of what our faculty "STARS" know

WEAKNESSES

1. Faculty buy in (NDSU)
2. Low disclosures (NDSU)
3. Commitment (NDSU)
4. No faculty incentives
5. Competing relationships (UND EERC)
6. Slow turnaround (NDSU)
7. Active bad mouthing
8. Lack of understanding of invention as scholarly work (both)/limited comm support
9. Staffing levels
10. Low royalty revenue
11. Lack of champions
12. Lack of personnel (NDSU)
13. Communication (general) regarding IP = lack of understanding (NDSU)
14. Siloed startup infrastructure
15. Limited connections to business colleges
16. Foundation model (NDSU)
17. Programs don't align with structures (STAAR)
18. New VPRs and staff
19. Bonded facilities – for specific use
20. Lack of auditing – don't know what facilities are bonded
21. Promoting success stories to appropriate audiences
22. Imbalance/nonuniformity across state; including varied support among campuses

OPPORTUNITIES

1. Marketing of patent groupings as a whole
2. UAS test site
3. Energy, ag, coatings
4. Research ND and venture grants
5. More NDSU/UND collaboration
6. ND EPSCoR Track 1/Track 2 promotes this
7. Innovation week (NDSU)
8. Tech parks
9. Master agreements (like MN)
10. Tech transfer support for TCs and PUIs

THREATS

1. UAS test site contracting and specifications
2. Lack of champions
3. Perception of IP
4. Fiscal threat: oil dropping, ag dropping
5. Legislative conservative nature and lack of understanding
6. Lack of consistent policy – attacks on higher ed due to mistrust
7. Lack of reputation
8. Not being able to find right person due to lack of knowledge about industry
9. Lack of forward thinking companies in ND
10. Outward perception of poor track record
11. Neighboring states (MN) outpace us

STRENGTHS

1. Center for innovation (UND)
2. Entrepreneurship Degree (UND)
3. Outreach
4. Internships (both)
5. SBIR/STTR office (UND)
6. Student led venture fund
7. Innovations Week
8. Bison Ventures
9. Microfunding grants for students
10. STTAR/Operation Intern
11. Serial entrepreneurs
12. EMPOWERED-ND
13. Tech accelerators/incubators
14. Extension (Ag & Manufacturing)
15. Multidisciplinary internal research programs
16. NDSU global challenges
17. CEO challenge

WEAKNESSES

1. Pockets that are not coordinated or collaborative
2. Silos and unwillingness to share contracts
3. Conflict of interest and other policies
4. Entrepreneurial leave policy
5. Ent. leave instead of consulting 8 hours/week
6. No entrepreneurial law program
7. Matching funding
8. Aging faculty
9. Lack of knowledge of IP
10. Lack of/low CEO pool
11. Combined tech transfer and startup function (like MN) – competing priorities
12. Limited collaboration w/each park incubator
13. Minors in entrepreneurship
14. No release time of faculty like SD
15. No proof of concept funding like SD
16. Lack of critical mass
17. Historically teaching universities
18. Geography

OPPORTUNITIES

1. Statewide recognition
2. IDEA Center
3. Entrepreneur in-residence program (ie. School of Mines)
4. Emerging pra?- ties to new folks
5. Economic downturn for some parts of state
6. Religion of entrepreneurship to hold failures up
7. Venture research ND, innovate ND
8. Tax credits
9. Workforce expansion programs at state level
10. Step by step support program
11. Cross pollination with science, engineering, and business
12. Level quality of like and other national advertising

THREATS

1. Lack of VCs, angels, etc.
2. Lack of cohesiveness among emerging entrepreneurial groups, esp given state size
3. Lack of understanding of term/objectives/goals
4. Community is narrowly focused on IT (Arthur Ventures on software)
5. Cuts in income tax rates make tax credits (for investors) less appealing
6. Lack of support from our own tech park residents
7. Economic downturn (for some parts of state)
8. Matching funding
9. Size of state does not allow for “multiple” failure
10. ND nice does waste time
11. “Religion” of entrepreneurship (don’t hold these folks up)
12. Brain drain
13. Workforce is not readily available
14. More national competition

STRENGTHS

1. Renew EPSCoR
2. Prototyping and manufacturing
3. Center for Innovation/Tech Park
4. Tri(?) College
5. EMPOWERED-ND
6. ND Governor's School – entrepreneurial track (NDSU) – common course
7. Best Robotics NDSU – Lego Challenge – UND
8. Monthly meeting with incubator participants to help them out

WEAKNESSES

1. Lack of institutional capital
2. Risk adverse environment
3. Lack of buy-in
4. Limited knowledge/experience
5. Starting from scratch
6. NDSU's "Ag Only" stance
7. Support structures – even electronic do not exist
8. Make it hard for people to succeed
9. Linking between functions
10. Long term commitment

OPPORTUNITIES

1. IDEA Center
2. Tax credits
3. APUCK/Development fund/New venture capital and Venture grant program
4. Return w/h taxes returned
5. \$100 and an address start a company
6. Low state regulatory barriers
7. Access to mentors
8. Tribal ties with EPSCoR
9. MISU's Certificate program
10. TC, PUI, CC collaborations
11. EDCA/JDA/SCORE
12. Red River Valley research corridor fund
13. ICORP
14. Rural (federal funding)
15. Lake Agassiz
16. ND Development Fund
17. Quality of life
18. Education strong K-12

THREATS

1. Low population
2. Programs focus when sales begin (growth stage)
3. Some mentorships might be looking out for #1
4. Rural (limited funding)
5. Risk adverse environment
6. Long term legislative commitment
7. International student visa laws
8. Transient population in west due to oil
9. Ties to west (ND industry rep)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Innovation Campus2. Aksarben Innovation Initiative3. Law clinic4. UN system support5. PKI6. UNeTech	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Poor innovation culture2. Campus vs. system3. No incentive to invent4. Lack SBIR, STTR, iCorp5. Lack faculty entrepreneurs6. Lack industrial contacts7. Education vs. research8. Faculty lack of understanding of IP/process
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Accelerators2. Draw “back” to state3. Supportive community leaders4. Incubators & co-working space5. NE TI² funds6. Access to C-level suite	<p>THREATS</p> <ol style="list-style-type: none">1. Lincoln vs. Omaha2. “Pageantry” of entrepreneurship3. Stable of entrepreneurs4. “Brain drain”5. Lack of tech enterprise6. Conservative investment community

<p>STRENGTHS</p> <ol style="list-style-type: none">1. UneTech2. Research programs: Biomechanics PKI-Eppley Institute, Shane Farritor, Pharmacology/Neuro3. Chancellor Gold and Scott Snyder	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Poor innovation culture2. Poor tech sector3. Lack of entrepreneurial talent4. Lack of capital5. Poor communication for university startup6. Campus vs. system directives7. Little overall insight into lab activities
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. NRI innovation programs2. Philanthropic spirit3. Burgeoning proto-ecosystem4. 2 medical campuses5. Wealthy business6. Co-working space7. Fortune 5008. Access to industry C-suite	<p>THREATS</p> <ol style="list-style-type: none">1. Small population2. Recruiting talent is challenging3. Zero integrated strategy4. Stakeholder competitiveness (counter productive)

TECHNOLOGY COMMERCIALIZATION

NEBRASKA

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Mature TTO's2. Diversity of funding3. Self-reliance4. Collaborative faculty environment5. Improving research support6. Community support7. Established businesses	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Industrial contacts2. Zero comprehensive policy/strategy3. Pipeline incentive to invent4. Education vs. research5. Limited coverage6. Default commercialization strategy7. Early stage technologies8. Opaque process9. Faculty does not "trust" process/unfair "ownership" policy
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. NRI support2. Integrated licensing business development cycle3. Economic upswing (kind of)4. Growing industry contacts5. Access to C-Level professionals6. Huge potential in technologies7. Outside incubators (STC)	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of tech business2. Patent laws3. Conservative investment environment4. Regulatory burdens5. Stable of entrepreneurial talent6. Lack of translational funding7. Few SBIR/STTR &/or iCorp

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. UN system supportive overall (EIR funding)2. Some entrepreneurial faculty3. VC research buy-in to support activities4. Engagement with start-ups5. Supportive community6. All: Partnership w/incubator & fund7. Scott Scholars required to take entrepreneurship course8. IT Innovation Program9. UNeTech/PKI10. Entrepreneurship classes offered11. Partnership with enterprise (vets, etc.)	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Faculty does not see TT as supportive2. Few SBIR/STTR3. Collaboration difficult4. Lack of knowledge/support to build start-ups5. Still traditional academic; not supported to start-up6. Few faculty entrepreneurs7. No degree programs for entrepreneurship
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Training opportunities2. Experienced faculty start-ups3. Off campus workspace available for free/reduced4. State prototype grants5. Invest NE \$6. External partners7. VCs starting to notice us8. Accelerators, Code School9. Enterprise support10. Chancellor Gold support at Medical Center11. Events/networking opportunities	<h2>THREATS</h2> <ol style="list-style-type: none">1. Available funding2. Competiveness3. Conservative investors4. "Pageantry" of entrepreneurship5. Perception of state; "Fly-Over"6. Lack of est. ecosystem7. Mentors8. "Philanthropic" investing9. No clear pathway

<p>STRENGTHS</p> <ol style="list-style-type: none">1. NRI2. NBDC3. Business plan competitions4. UNL entrepreneurial law clinic5. Innovation Campus facilities6. Research cores – STC7. Student business organizations8. Entrepreneur centers9. Maverick Innovations	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Specialized facilities are limited2. “Where to go?” – no clear path3. Each campus wants own identity and resources
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Invest Nebraska2. Wealthy individuals3. Historic business success stories4. Co-working and incubator space5. Quality of life, low cost6. Accelerators, All, etc.7. Business mentors8. Enterprise partners9. Supportive environment10. NE talent & Innovation Initiative	<p>THREATS</p> <ol style="list-style-type: none">1. Taxes not considered business friendly2. Business “Center” is in one city3. Brain drain4. Disconnects within state; Omaha vs. Lincoln vs. rest of state5. Access to outside capital & knowledge6. Angel investors risk averse7. Large companies leaving

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Business climate2. Proof of Concept funding3. EIR-SDIP4. Decision makers one call away5. Quality of living6. Pro-growth leadership @ colleges and universities7. Dakota Seeds	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Lack of critical mass2. Workforce shortage3. Limited research activity4. Limited capital – debt, equity, public5. Culture/history6. Tax contract research7. Lack of experienced growth management teams
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Concentrate on second-tier industry partners2. Leverage Sanford investments: SURF, healthcare3. “Launch SD”4. Develop equity fund5. Better integration of disparate university strengths6. Develop corporate “pull” with RFPs to solve problems	<h2>THREATS</h2> <ol style="list-style-type: none">1. K-12 education weakness2. Brain Drain – professors, young leave3. Increasing competition for external \$4. Lack of interest/availability from larger venture5. Regulatory change6. International visa restrictions

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Flat state structure2. Flexibility in contractual relationships3. Sanford Avera4. CNAMM Amptech & Ag Research5. Strong Ag Research at ATSDSU6. Strong Engineering SDSM&T7. USD?8. SDSU Research Park9. Dakota State: Software?	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of large companies located in the state2. Lack of state matching funding3. Small population & research depth4. Large geographical separation between schools5. Culture or history of research6. No major industry centers of strength7. No facilities to attract industry partnerships
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. To “Money Ball” 2nd tier industry partners2. Connections made because of workforce strengths3. SURF4. Financial industry5. Pro-growth leadership6. Quality graduates7. Quality of life8. Financial: Big Data & Security	<p>THREATS</p> <ol style="list-style-type: none">1. Continued irrelevance2. Hiring & retention of quality workforce3. Change in regulation in the financial industry4. Lack of support from key stakeholders (weakness)5. Other states are more supportive - greater resources6. Sales tax/taxing research (weakness)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. POC funds2. Angel and seed funding3. SDIP4. EiR @ Mines5. Areas of applied research and market engagement6. Deal oriented7. Business environment	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Areas of market disengagement2. Lack of companies, resources, people for deal flow3. #s of researchers, disclosures, etc.4. Young tech transfer culture5. VC high \$ for early stage6. Lack of smart \$7. Decreasing numbers of management8. Lack of long-term view
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Build upon programs with sources in one sector of the state (EiR)2. Lure the crazies out of the hills3. Collaboration between the schools within the state4. Virtual meetings can bring groups together from far away5. Engaging industry in research6. Chance to create an evergreen fund	<p>THREATS</p> <ol style="list-style-type: none">1. Decreasing research \$2. Stability of tech transfer system and researchers3. Upper levels of management could turnover – presidents, governor, local mayors4. Unrealistic expectations of shareholders5. Government regulations6. Snakes

<p>STRENGTHS</p> <ol style="list-style-type: none">1. EIR & SDIP2. Minors in entrepreneurship3. 20% time for entrepreneurship/consulting4. HR flexibility5. Univ. & state business plan competitions6. Research parks/Accelerators7. Dakota Seeds8. POC9. Building entrepreneurial culture	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack entire critical mass2. No entrepreneurship majors3. Historically teaching university4. No university based entrepreneurship funding programs5. Lack of support for service-based entrepreneurship6. Geography
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Grow EIR at SDSU & USD2. Build a step by step entrepreneurial program3. Build cross-pollination between engineering/science and business schools4. Tech MBA program and entrepreneurial programs at law school5. Leverage and promote business climate6. SBIR matching program	<p>THREATS</p> <ol style="list-style-type: none">1. Brain drain2. Attraction of VC money elsewhere3. External workforce4. Isolation/flyover5. More external competition for SBIR and entrepreneurship funding

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Business climate2. Dakota Seeds3. EIR-SDIP4. Proof of Concept5. Business incubators6. Integrated support program7. Angel funds8. Tech ed- scholarships funds	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Limited workforce2. Lack of management teams3. Infrastructure limitations4. Air transportation limitations5. Lack of confidence6. Culture - opposed to change7. Limited capital – equity, debt
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Dakota Innovations Matching – State Funds2. RC Tech Park3. Workforce training4. Launch SD	<p>THREATS</p> <ol style="list-style-type: none">1. Competition – other states2. Recession / competing needs3. K-12 education weakness4. Turnover – key people leaving5. Regulatory change – Fed.

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Quality research institutions and people2. State entrepreneurial network3. State technology transfer network and professionalism4. Growing and diversifying investor network5. Supportive culture	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Relatively small amount of venture capital2. No formal entrepreneurship in residence programs3. Dependence of federal funding4. Risk averse culture5. Commercial success is not part of incentive structure for researchers
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Identifying baseline funding for key UDO's and ESO's2. Better utilize networks to advocate for commercialization business development and entrepreneurship3. Tell the story – culture, people, low cost of living, business friendly	<p>THREATS</p> <ol style="list-style-type: none">1. Shrinking federal budget2. Companies chasing investment3. Long term support for long term development4. Lack of long term plan

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Growing federal funding base2. Quality research intuitions and people (diverse areas)3. Building strong collaboration4. Unique facilities	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Low state/private sector funding2. Distance between resources (long state) – Three great states of TN3. Technologies are early stage – not many programs to develop/mature them4. Conservative thinking/resistance to change5. Researchers experiences with commercialization and start-ups
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. R&D partnerships with growing industries within TN and outside the state2. Increased federal focus on translational research and commercialization (ICORPS/IMI/PFI)3. Diversity creates opportunities for new research collaboration	<p>THREATS</p> <ol style="list-style-type: none">1. Competition with other states for industry2. Reduced federal budget3. Competitive states (ie- Texas-\$180 million, OK, UT)

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Growing prof. staff across the state2. Large amount of technologies to work with3. Maturation programs in place to advance technologies4. Large number of commercialization support organizations	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. SBIRs2. Lack of federal commercialization funding3. Low maturation funding levels4. Cumbersome/bureaucratic commercialization process5. Dearth of industry sponsored research6. Too little focus on development7. Tech commercialization is not part of faculty tenure/promotions
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Take advantage of Federal Maturation Funding initiatives2. Communicate existing processes & initiatives3. Research park development to pull industry to state4. Develop industry relationships to create technology pull5. Network of accelerators across the state linked by state initiative/support	<p>THREATS</p> <ol style="list-style-type: none">1. No clear understanding of what Tech. Commercialization is or what it takes2. Lack of using incubators the way they need to be used – no programs3. Outside perception of Tennessee4. Short-term thinking of leaders5. Federal budget cuts – may impact funding for Tech Com. programs

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Growing entrepreneurship education programs in state2. Strong entrepreneurial network across the state3. Generally collaborative nature/friendly4. Growing investor network5. Strong base of experienced entrepreneurial talent6. Some track record of success....Nashville7. Active industry clusters who support entrepreneurship	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Pockets of risk averse culture2. Lack of networks in certain industries3. Competitive landscape for support organizations- significant overlap/duplicate effort4. Not tapping into available experienced entrepreneurial talent5. Lack of early stage capital, esp. to mature tech based companies6. Few base-line funding for Entre Support Organizations
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Growing positive perception of Tennessee2. Tennessee is business start up friendly3. Low cost of living, growing economy, friendly/helpful culture4. Technology rich state5. Growing collaborative nature for the Entrep. Support Org.	<h2>THREATS</h2> <ol style="list-style-type: none">1. Apathy due to Federal/other success2. Disparity between economic development and wealth creation3. Under educated population4. Regional competition of start ups5. Too narrow view of entrepreneurship (short-term)6. Lack of leg. Understanding of entrepreneurship and potential impact

NEW VENTURES & BUSINESS DEVELOPMENT

TENNESSEE

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Growth of Regional Funding Network2. Broadening interest from outside investor in certain clusters3. Business friendly culture – easy to start a new business4. Launch TN	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of venture development support/organizations2. No tax credits/incentives for startups/tech-based companies3. Weak cluster development strategy4. Lab space for life science/biotech businesses5. We don't tell our story well
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Create networks to better communicate success/opportunity2. Federal program leverage (IACMI/Jumpstart/DRIVE)3. Create a TN-Investco like investment deal	<p>THREATS</p> <ol style="list-style-type: none">1. May become over focused on Clusters-may miss opportunities2. We don't tell our story/share success well3. Leaving to chase investment

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Incubator and tech transfer in house2. UW highly significant state player3. Science + Energy initiatives4. 60% royalty sharing	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Unhealthy focus on football/basketball + extractive energy2. Small faculty pool3. No business/entrepreneurship culture4. 60% of zero = 0
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. High legislative investment2. Positive reputation of UW3. Alumni	<p>THREATS</p> <ol style="list-style-type: none">1. Geographic isolation and intensively rural2. No industrial base3. Extremely conservative government + UW in bad odor

<h2>STRENGTHS</h2> <ol style="list-style-type: none">1. Low interdisciplinary barriers2. Easy to identify faculty3. Ability to negotiate research agreements4. Open to change5. State investment in energy research6. Science and energy initiatives7. One 4 year university (Weakness also)8. Cooperation w/UW Foundation9. Alumni connections w/industry10. Cowboy work ethic11. Wyoming loyalty of students	<h2>WEAKNESSES</h2> <ol style="list-style-type: none">1. Focus on athletics and energy2. Small faculty pool3. Administration in flux4. Small town5. Lack of excellence in particular fields6. Lack of population diversity7. Lack of local extractive industry8. Non-central location9. No experience collaboration w/non-energy companies10. Lack of access to diverse industry11. Lack of T&O valuation12. Most students work hours
<h2>OPPORTUNITIES</h2> <ol style="list-style-type: none">1. Prior legislative investment2. Reputation of UW in state3. Coordination w/community colleges4. Outreach mechanisms5. Strong energy industry6. Hathaway Scholarships7. Outdoor lifestyle	<h2>THREATS</h2> <ol style="list-style-type: none">1. No industry beyond energy extraction2. No high value add industry3. No urban areas4. No company w/500+ employees5. Transportation isolation6. Energy sector in decline7. Extremely fiscally conservative government8. State expectation of high proportion of matching funding9. Tuition capped by mandate

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Incubator in house2. Tech transfer in the house3. High quality IP4. 60% royal sharing5. Focus on start-ups6. Visible add to local workforce7. Favorable licensing terms8. Potential for education	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. No cultural incentives2. Low quality IP3. Tech transfer new to UW4. 60% of zero = 05. 1 person TT office6. No entrepreneur base7. Myth of difficulty8. Perception of UW as a business9. Faculty recruitment/retention
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Alumni base2. NSF incentives for patent3. Energy industry declining so need to diversify	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of industrial base2. Geography3. Most markets external to state4. Suspicion of TT efforts5. Energy industry declining: leads to lowering resources6. Resistance to change

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Per capita participation high2. Strong student interest (esp. graduate)3. Incubator4. Private donor support5. Impact potential6. Early development pipeline	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. Lack of E-Culture2. Fear factor3. Lack of examples
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Incubators2. Impact potential	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of E-Pool2. Boom + Bust (opportunity also)3. Energy Economy (opportunity also)4. Lack of diverse people and ideas5. No investor base6. No infrastructure (i.e.. Attorneys)

NEW VENTURES & BUSINESS DEVELOPMENT

WYOMING

<p>STRENGTHS</p> <ol style="list-style-type: none">1. Incubator2. Tech transfer3. 30K Competition	<p>WEAKNESSES</p> <ol style="list-style-type: none">1. History2. Culture3. Size4. Inertia
<p>OPPORTUNITIES</p> <ol style="list-style-type: none">1. Need for state economic diversity2. Incubators3. Impact potential	<p>THREATS</p> <ol style="list-style-type: none">1. Lack of diverse people and ideas2. Lack of venture capital3. Lack of physical infrastructure