



**The System Driven Innovation® scientific method for enabling
innovation by everyone, everywhere, every day**

Increasing innovation speed (up to 6X)

Decreasing risk (up to 10X success)

Leading Growth and Innovation In Your Community

**Rick Rothwell
Jim Willms
Barry Bruns**

WEDA MISSION: To provide leadership and support to foster economic development in Wyoming.

*Providing the Foundation
for Growth of All
Economic Development
Building Blocks*



Education &
Workforce
Development



Existing
Business
Development



New
Business
Recruitment



Innovation &
Entrepreneurship



Infrastructure
Development

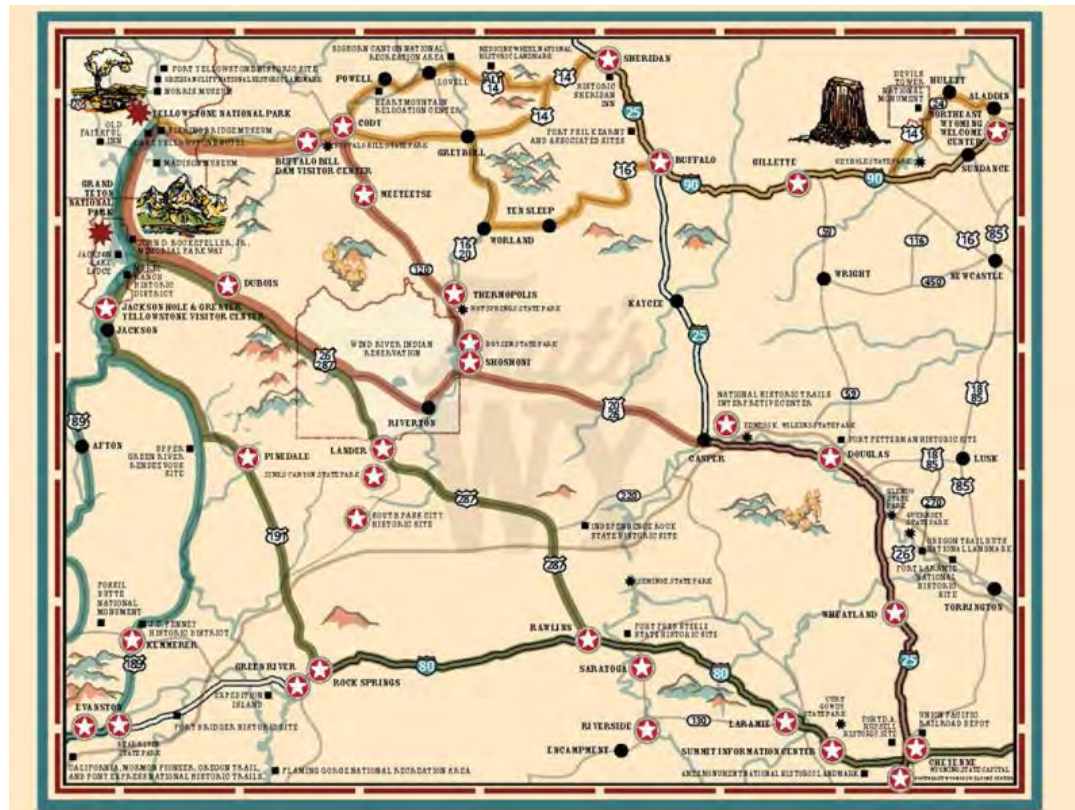


Communities
& Quality
of Life



Leadership/Civic Development & The Role of Public Policy

Leading Innovation in Your Community- What Can Economic Developers Do At A Grass Roots Level?



Who We Are

Innovation Engineering Black Belts



Jim Willms

Retired CEO of Unicover Corporation in Cheyenne, a world leader in stamp collecting and coin collectibles. Over 40 years of experience in management, marketing and international business. Senior Brand Manager at Procter and Gamble, the world's largest producer and marketer of consumer goods.



Rick Rothwell

Former VP at the Eureka! Ranch, one of the leading innovation companies in America. Assisted with roll out of Innovation Engineering on a national basis. Franchise owner of retail locations with 450 store franchise system. Won National Marketer of the Year, National Franchisee of the Year, and National WOW Customer Service Program of the Year.



Barry J Bruns

Farm kid from Chappell, Nebraska. Attended USAFA, graduating in 1971. After attending graduate school, completed USAF Pilot Training in 1973, went on to fly F-4 E's, D's, and C's along with OV-10A on active duty. Managed a diversified factory in Cheyenne, Wyoming before working with a couple of consulting groups . He has shoveled manure, cleaned feed bunks, taught Air-to-Air combat and Empowering Leadership.

Entrepreneurship

(168,000,000 results on Google)

(Wikipedia)

Entrepreneurship is the process of designing, launching and running a new business, which is more often than not, initially a small business, offering a product, process or service for sale or hire. The people who create these businesses are called **entrepreneurs**.

Innovation

(696,000,000 results on Google)

(Wikipedia)

Innovation is often also viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs. This is accomplished through more-effective products, processes, services, technologies, or business models that are readily available to markets, governments and society.



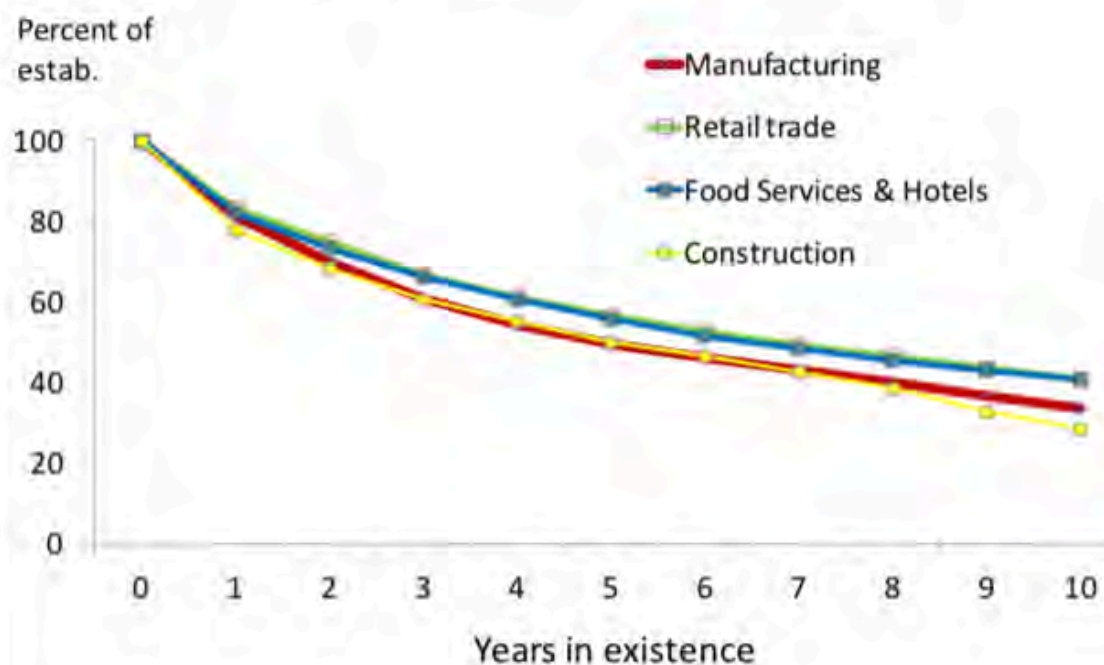
Dr. Cathy Renault

- Consultant on innovation and entrepreneurship to rural regions and states across US including ND, VA, NY, NC, RI, and ME.
- Past Director of Innovation - State of Maine

We tend to focus on entrepreneurship, and sometimes R&D, but rarely on innovation in our public policy recommendations. And, innovation is actually the critical step. It's the link between ideas and the market. It's the key piece that allows companies, big and small, old or new, to produce something meaningful for their customers. Without innovation, there'd be no entrepreneurs! So innovation has to come first.

From a policy perspective, what can be done to support innovation? **First, we can educate. Everyone can learn to be more innovative. It's a process. There's a system.** Second, we can incentivize companies to do innovation. One effective tool is R&D tax credits, but likely they need to be redefined to include all innovation activities, not the old style R&D alone. Other tools include grants and loans to support innovation learning and implementation, grants and technical assistance for patenting, and for market research.

Chart 2: Cumulative Industry Survival Rates for Establishments Started in 2000



Source: Bureau of Labor Statistics, Business Employment Dynamics.

**Survival rates improve
for a given business as it
ages.**

**About two-thirds of
businesses with
employees survive at
least 2 years and about
half survive at least 5
years**

**We need to help
Wyoming Business do
better!**



Welcome to the Movement

**30,000+ Educated
50+ Partners • 20 Universities**

**Quantitative Data on
20,000+ Innovations
\$15 Billion in Real World Projects
*“New Field of Academic Study”***

Pedigree



Systems Approach Set
P&G Innovation Record
9 to MARKET in 12 Months

Finance Dept. Audit for Similar Project
Invention Team **16% of the time**
Invention Team **18% of the cost**
Invention Team **10% of staffing**



Established 1986

**System Thinking & Measurement Transforms
Innovation from a Random Gamble to a Reliable
System**



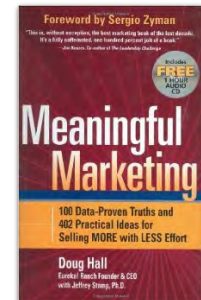
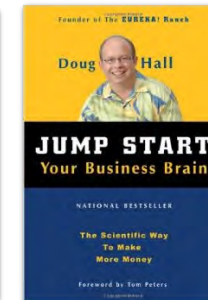
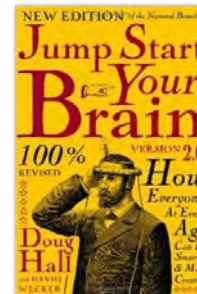
Johnson & Johnson



P&G



NIST
National Institute of
Standards and Technology
U.S. Department of Commerce





Body of Knowledge

6 College Courses



CREATE

1. Meaningful Uniqueness
2. Stimulus & Diversity
3. Exploring Stimulus
4. Create Sessions 1.0
5. Unrelated Stimulus
6. Patent Mining
7. Insight Mining
8. Market Mining
9. Advanced Create Methods
10. Future Mining
11. Wisdom Mining
12. Professional Grade Create



COMMUNICATE

13. Strategy Activation
14. Concept Writing - Yellow Cards
15. Concept Improvement
16. Meaningful Marketing Messages
17. Estimating Concept Values
18. Concept Feedback Systems
19. Advanced Benefit & Proof
20. Advanced Concept Improvement
21. Sales Forecasting
22. Technology Translation
23. Real World Communications
24. Proactive Selling Pitches



COMMERCIALIZE

25. Plan, Do, Study, Act
26. PDSA Best Practices
27. PDSA Concept Prototypes
28. PDSA Functional Prototypes
29. PDSA Rapid Research
30. PDSA Reducing Variation in Forecasts
31. Confront Reality - Cost & Price Estimating
32. Business Models
33. Proprietary Protection
34. Organizing for Success
35. Business Opportunity Recommendation
36. Innovation Decisions



SYSTEM DRIVEN LEADERSHIP

37. Appreciation for a System
38. Knowledge About Variation
39. Theory of Knowledge
40. Psychology
41. Alignment - Strategy to Ideas Subsystem
42. Alignment - Across Departments Subsystem
43. Rapid Research - Implementation Subsystem
44. Rapid Research - Forensic Mining Subsystem
45. Collaboration Subsystem
46. Proprietary Protection Subsystem
47. Culture Change Through Learning
48. Personal Leadership



Experience
Define/Discover

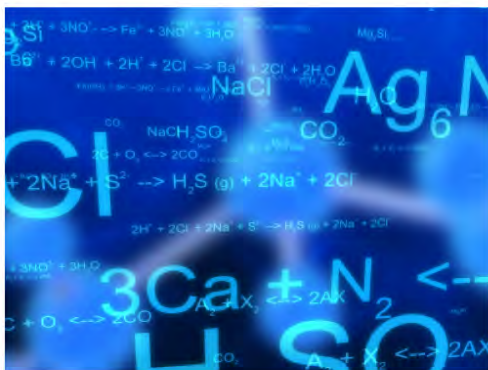


Experience
Develop

Minor or Graduate Level Certificate



Why the Name?



Chemistry

"The science of substances"



Chemical Engineering

Practical APPLICATION

WHAT is an Innovation ?



Meaningfully Unique

A Product or Service is Meaningfully Unique when...

Customers are willing to pay more money for it.

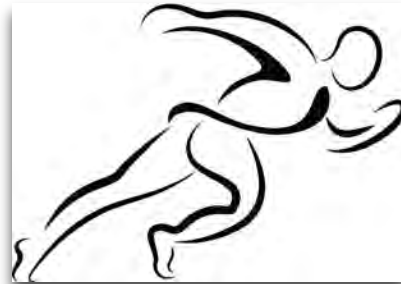


A **SYSTEM** Innovation is Meaningfully Unique when...

Your Co-workers & Organization are willing to
Invest **T**ime, **E**nergy **A**nd **M**oney to implement



Time



Energy

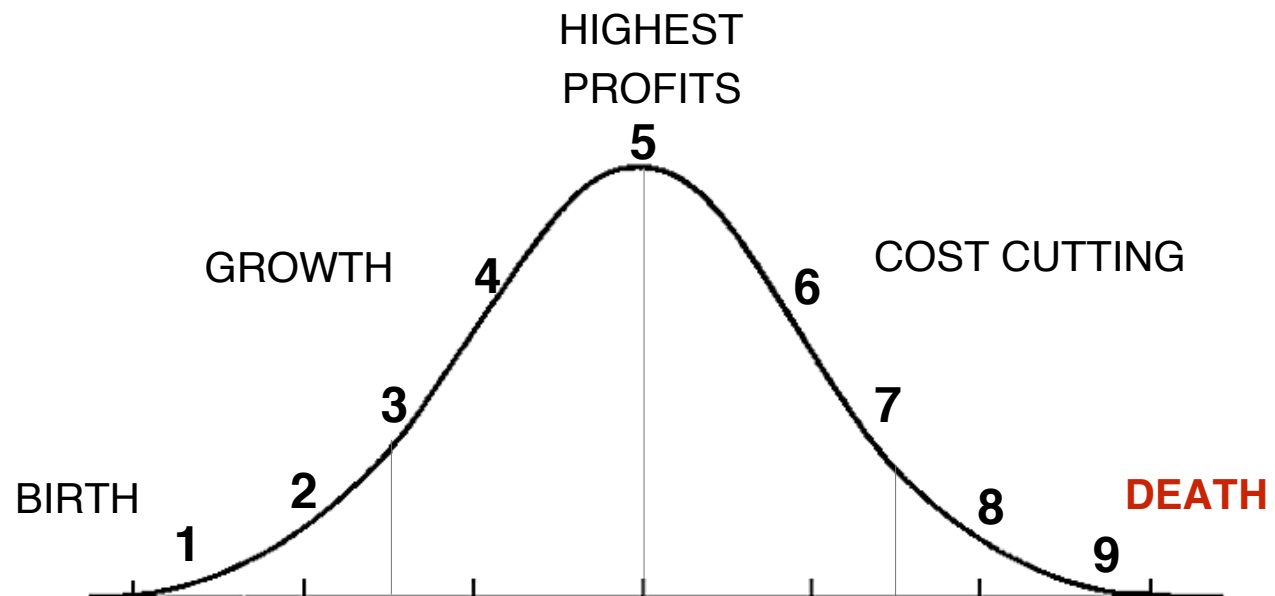


Money

WHY Innovate ?



Why Innovation



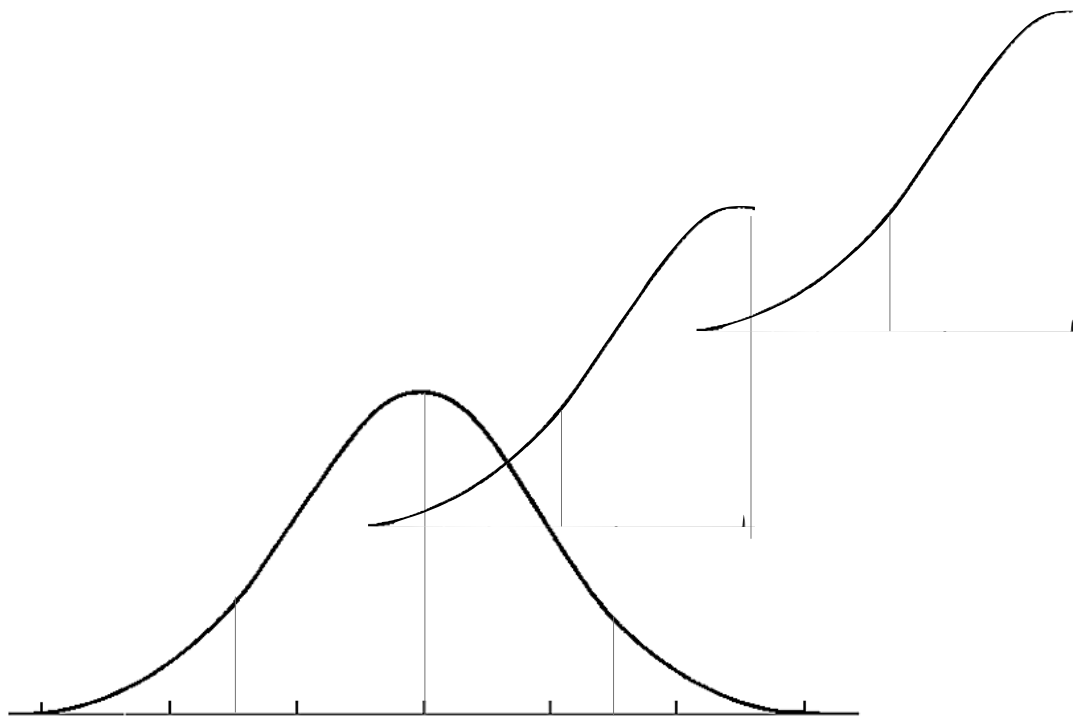
Why Innovate?

Because
you don't want
your organization
to die.

**75% of S&P 500
Gone in 16 Years**



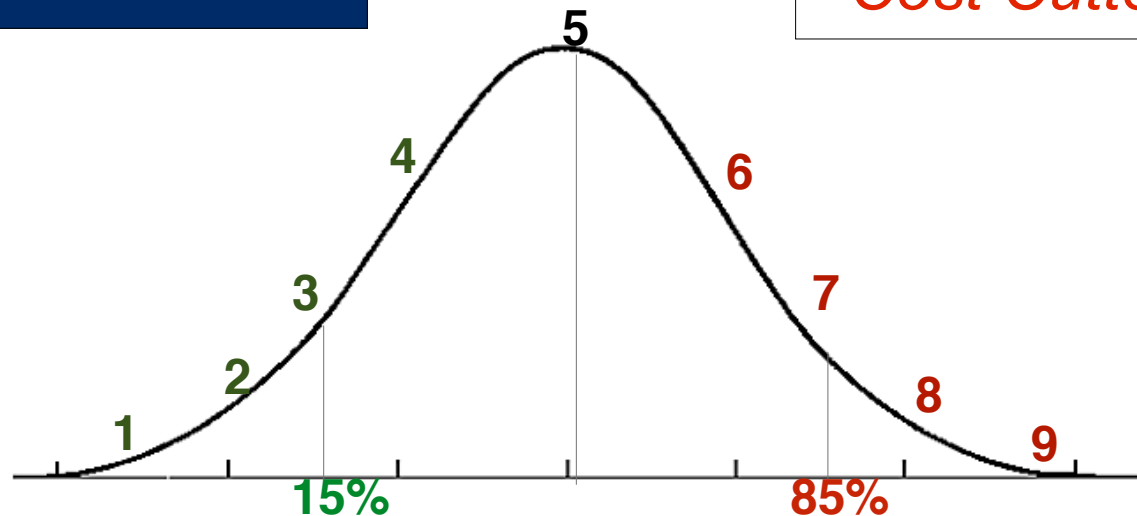
Innovation ignites Ongoing Growth Curves



CEO Survey

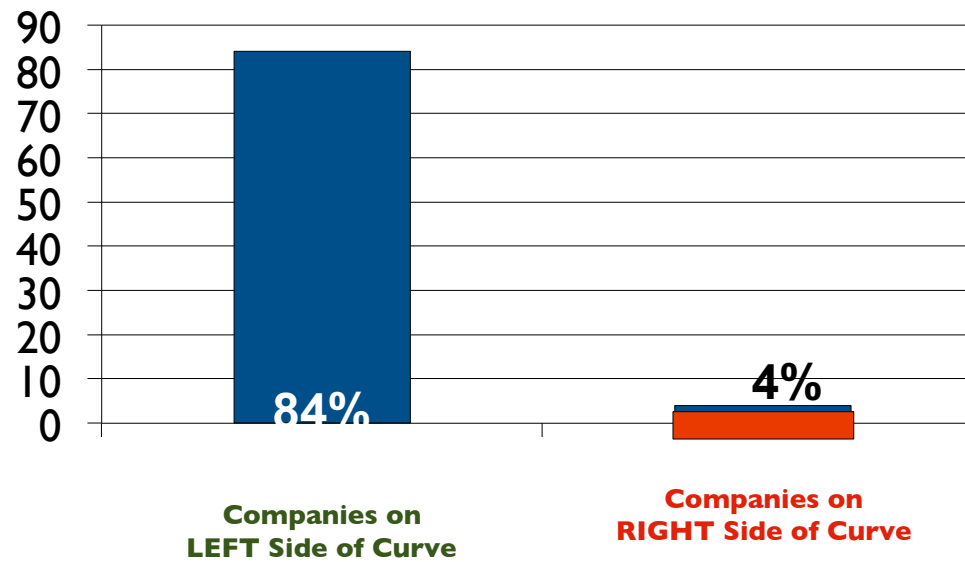
Left Side
*“Proactive
Innovators”*

Right Side
*“Reactive
Cost Cutters”*



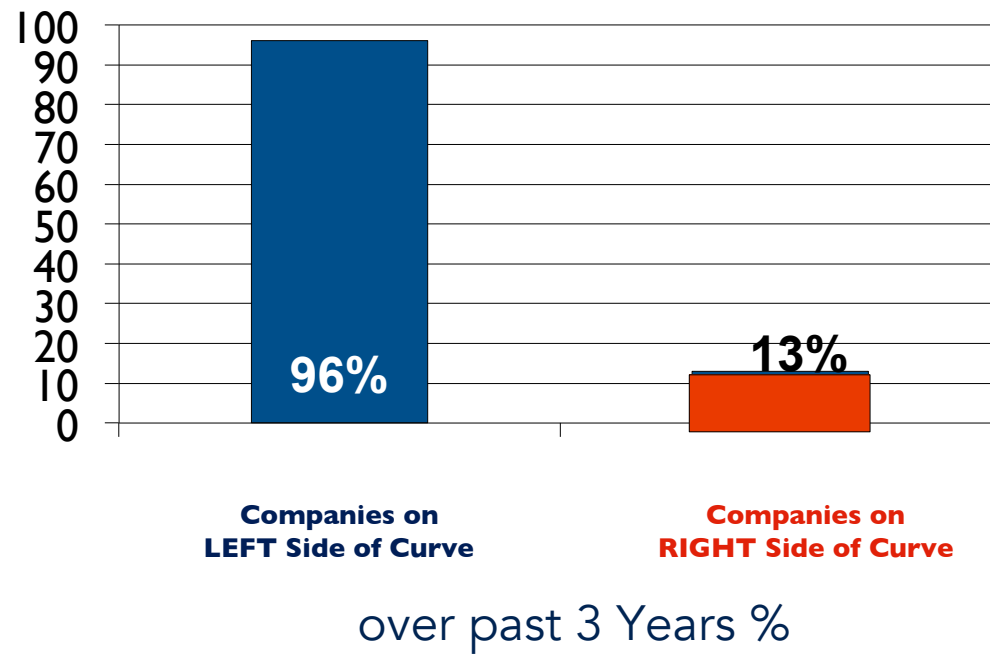
n=7700+

SALES Growth

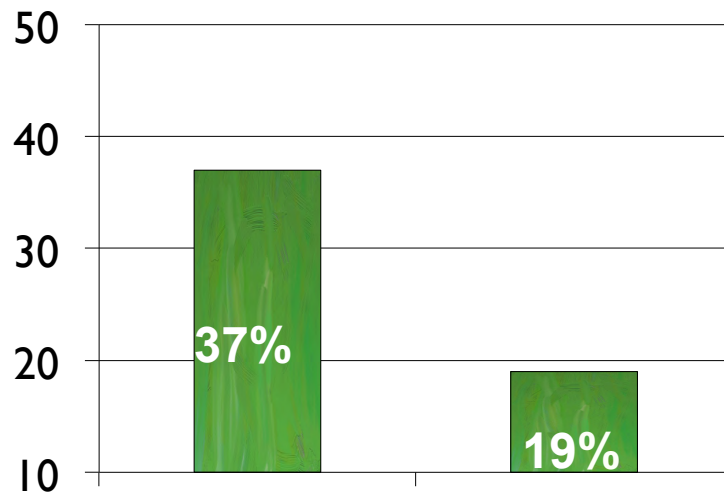


over past 3 Years %

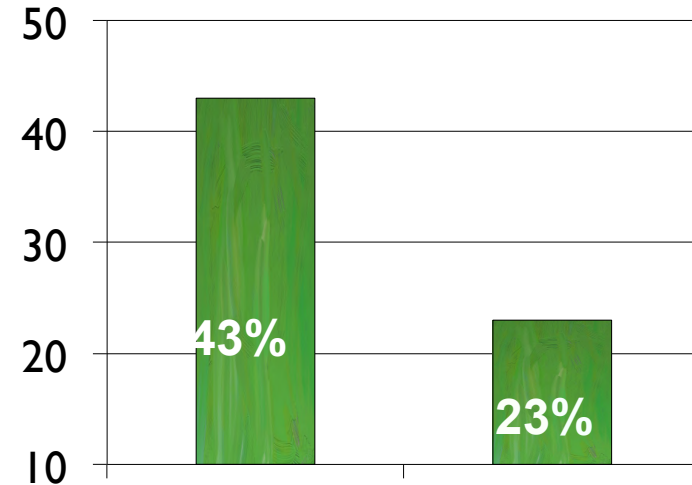
PROFIT MARGIN Growth



**PROACTIVE companies ADAPT QUICKLY
to changes in the Global Economy**

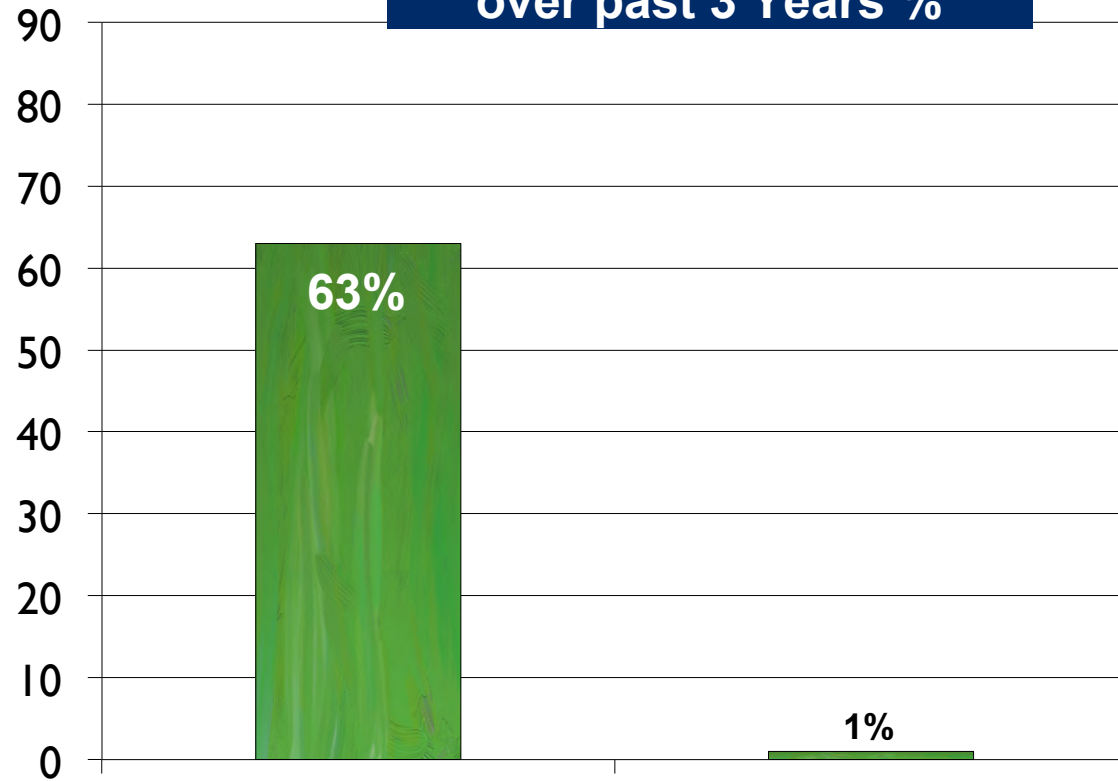


**% of Company Sales in
New Products/Services**
that they didn't have 3 years ago



**% of Sales to
New Customers**
Domestic & Export
that they didn't have 3 years ago

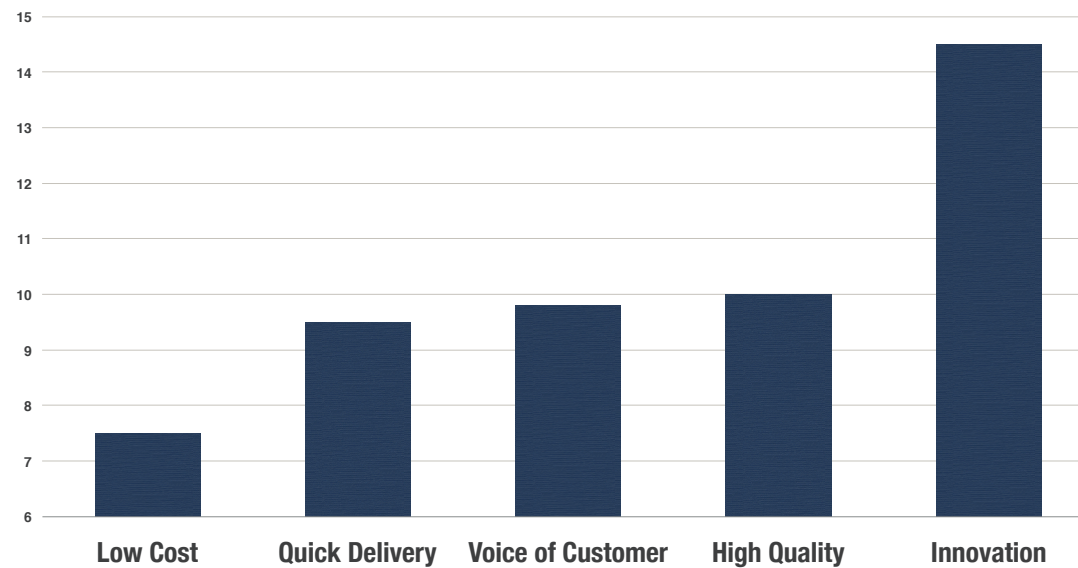
EMPLOYEE Growth over past 3 Years %



over past 3 Years %

The Facts...

Profit
Margin
%

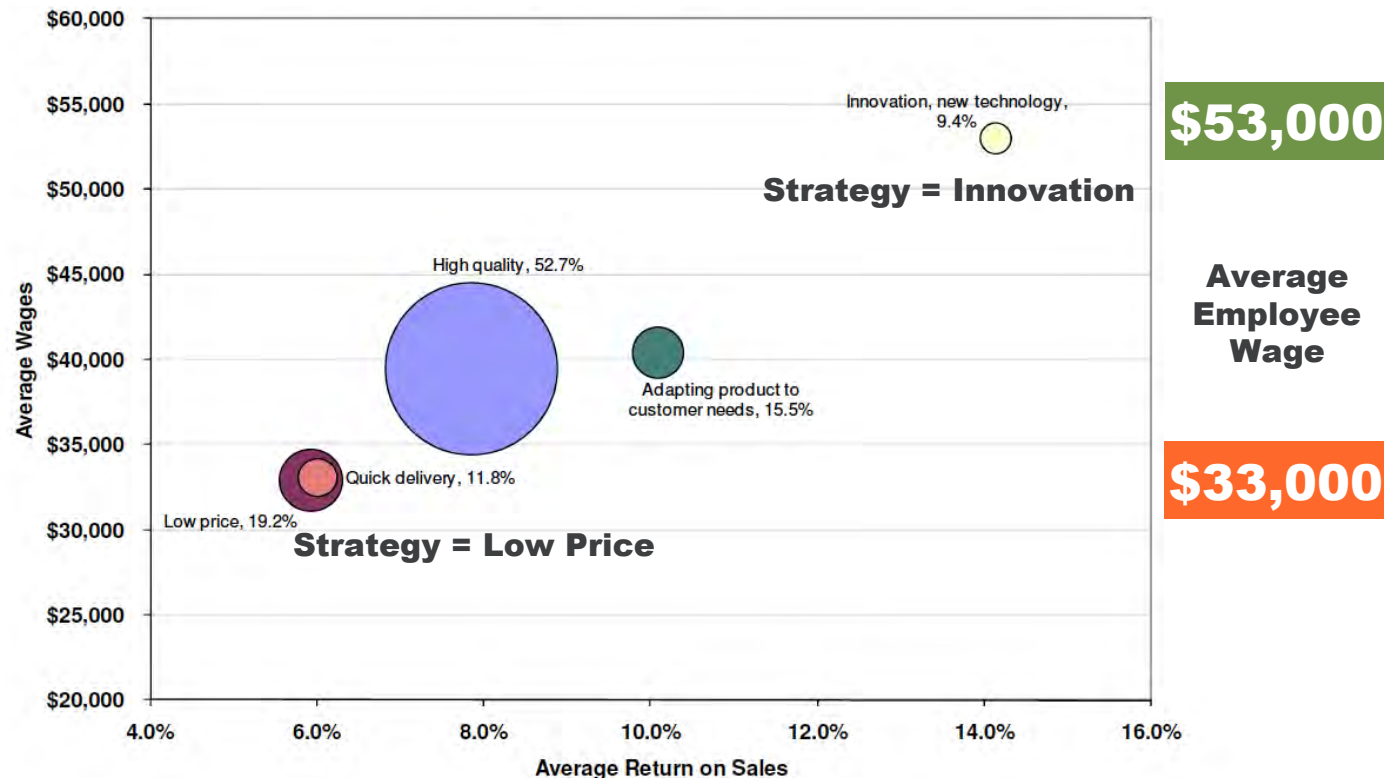


Self Reported Company Strategy

n=738
Georgia Tech

INNOVATION Means EMPLOYEES Make More Money \$

Innovation Driven Companies create better PAYING JOBS



Two Types of Innovations



VIO

Very Important Opportunities

EXTERNAL - Grow Sales / Profits



VIS

Very Important Systems

INTERNAL - How we Work



Dr. W. Edwards Deming

The Man Who Commercialized Systems Thinking



Systems Approach

"94% of failures are due to the **SYSTEM**
6% are due to the **worker**"

The ultimate “guru” feels “idea start up” is easy
It's the Development System that is the MAGIC



Your Ideas are Valuable

The Yellow Card is How we Capture Them Now
and In the Future

Yellow Card™
For Product, Service, or Process Innovation Projects
Start from the front or back side of card. Fill in all that you can.

Innovation Name: _____
Product, Service or Process Innovation NAME that is suggestive of the benefit.

NEWS HEADLINE: In a sentence - what makes your innovation MEANINGFUL/ UNIQUE.

CUSTOMER: WHO specifically is the customer for this innovation?

Customer PROBLEM: WHAT customer problem or wish does the innovation address?

Benefit PROMISE: Make a SPECIFIC or numeric promise to solve the customer problem.


WHAT the Innovation is and WHY it can promise what others can't is on the BACK of CARD...

=



Tool to Capture Ideas: Yellow Card Tour

Yellow Card™
For Product, Service, or Process Innovation Projects
Start from the front or back side of card. Fill in all that you can.

 **INNOVATION**
ENGINEERING

Innovation Name: _____
Product, Service or Process Innovation NAME that is suggestive of the benefit

NEWS HEADLINE: In a sentence - what makes your innovation MEANINGFULLY UNIQUE.

CUSTOMER: WHO specifically is the customer for this innovation?

Customer PROBLEM: WHAT customer problem or wish does this innovation address?

Benefit PROMISE: Make a SPECIFIC or numeric promise to solve the customer problem.

WHAT the Innovation is and WHY it can promise what others can't is on the BACK of CARD...

Product/Service Name suggestive of Benefit.
"In a Blink Eye Glasses"

If you are only going to fill in ONE THING, fill in the Headline. It's the essence of the NEW and the WOW of the innovation. *"The first... The only..."*

EXACTLY- who is the customer?

WHO has WHAT Problem? Be specific. STOP. Think. Is it a REAL PROBLEM that will motivate change?

Why should the customer care? You can't be too specific. Be numeric. *"Improves your kids reading ability by a full letter grade in just 1 week."*

Tool to Capture Ideas: Yellow Card Tour

PROOF: *WHAT is the Innovation & WHAT makes it Meaningfully Unique versus all others.*

Customer Cost: *Initial goal for customer cost in time, energy and/or money to adopt this innovation.*

DEATH THREATS: *Rather than compromise on the idea start the process of problem solving.*

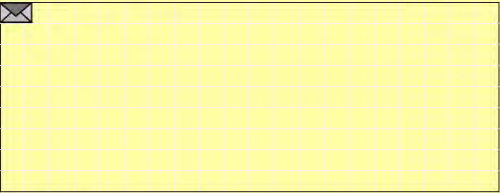
1. Death Threat: _____

DO to learn more: _____

2. Death Threat: _____

DO to learn more: _____

Raw Math Game Plan: Your choice: a) Sales Potential, b) Cost to Develop, c) Savings, d) Other



PASSION *This project is important because...*

This project will Primarily help and/or serve: Current Customers _____ New Customers _____

STAGE: Define _____ Discover _____ Define for Develop _____ Develop _____ Validate for Launch _____ Deliver _____

Inventor's Autograph: _____ Date _____

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How does it work? What Proof is there? Think GOAL. Tell is what's in your mind.

Rough customer cost if possible in cost, time money.

Important unknowns and issues. Be instinctive. What are you emotional and rational anxieties? What should we do first to address them?

Keep it simple. Estimate. Revenue & Cost.

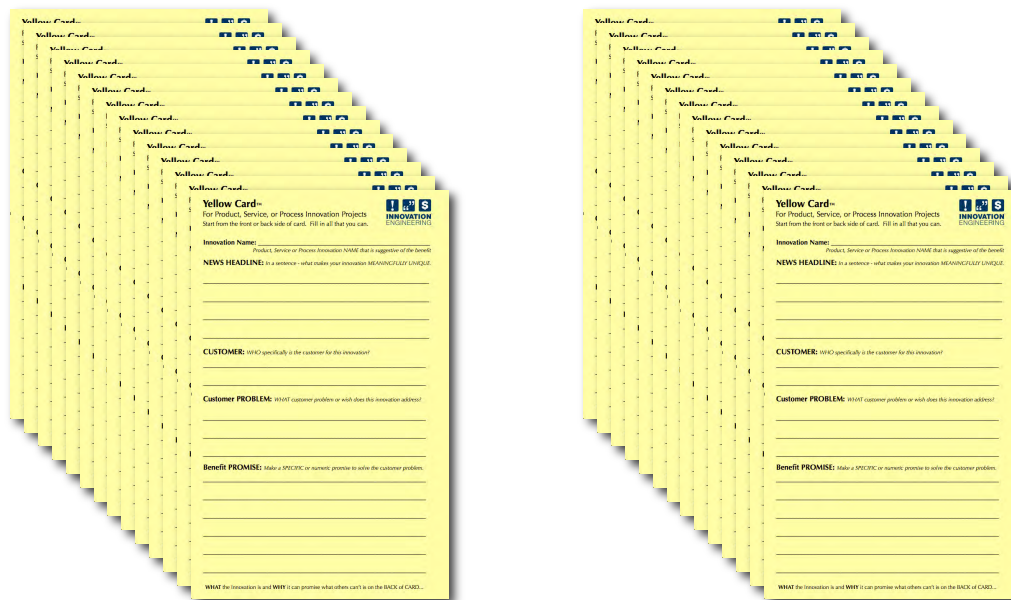
Calibrate: versus current. "Will it sell half as much? 2x as much?"

Deconstruct: How much from current and new customers?

Give Range: Worst Case - Best Case

Artists sign their work. **SIGN/ ORGANIZATION-**

Quantity Breeds Quality



If in doubt - write more

The background of the slide is a vibrant blue with a bokeh effect of out-of-focus light circles. A single, bright spark from a firework or sparkler is the central focus, with a thick, dark, diagonal line representing the sparkler's handle. From a point on this line, a burst of fine, white, star-like sparks radiates outwards, creating a dynamic focal point.

Spark Deck

WEDA Feb 12, 2018

Innovation/Entrepreneurial Needs

SPARK DECK:

We are NOT selling these ideas.

We show MANY
to find one or two that can help us grow.



Stimulus Processing

WEDA-Innovation/Entrepreneurial Needs

IDEA ENGINEERING

1. INDIVIDUAL

Spark Deck Elements

As you see the Spark Deck - jot down any ideas that come to you...

1. ENDOW- Entrepreneurial Development
2. ENDOW-Education & Workforce Training
3. UW- Innovation & Entrepreneurship
4. Why Risk Takers are Winners
5. Five Keys to Leading Innovation
6.Speed to Market: An Entrepreneur's View
7. What is Missing in Leadership Development?
8. The U.S. drops out of the Top 10 in Innovation Ranking
9. How Can We Add Value to Outdoor Recreation?
10. To Increase Innovation, Reduce Fear
11.Ten top skills of the best Transformation Leaders
12. First, human capital development is a key driver of rural innovation
13 .A better way to train small business owners: using psychology to teach personal initiative

2. PAIR

Create Ideas

Randomly Pick a piece of stimulus and turn into an idea

2.


3. TEAM

Refine & Revise

Ask your team for ideas and advice regarding your idea. Keep ideas you like and ignore those you don't agree with.

4. INDIVIDUAL

Write Best Ideas on Yellow Cards



Individual- 2 Min
Teams- 10 Min-(2 Min/each)
Individual-Cards-3 Min

At Least 1 Yellow Card per person



Preliminary Findings and Recommendations

Focus on Entrepreneurial Development

- Startup Wyoming - Building Wyoming's Entrepreneurial Ecosystem
- Establish a Wyoming Research and Innovation Fund



How do we build an entrepreneurial ecosystem in our communities?

- Favor incumbents less?
- Listen to entrepreneurs?
- Think big, start small, move fast?
- How will we train the entrepreneurs?
- Focus more on Innovation than Entrepreneurship?



Preliminary Findings and Recommendations

Focus on Education and Workforce Training

- Provide Equitable Opportunities for Students to Learn Computer Science
- Improve Higher Education Attainment and Retention of Graduates
- Allocate Resources for Workforce Training



What are innovative steps we can take in our communities to create a workforce for the future?

- Determine needs for existing businesses?
- Determine the needs of new businesses we want to develop?
- Determine to best way to deliver the training in our communities?
- Create a Workforce Investment Board to manage community wide funds?
- Establish a team of stakeholders including DWS, Community College, UW, BRN, ED, and businesses to map and direct workforce training long term?

Institute of Innovation and Entrepreneurship at UW

Purpose: Fulfills responsibility to purposefully be an engine of economic growth and diversification

- University-wide, governed by Board of Deans and VPR&ED, with professor of practice as COO
- Draws on teaching, research and service strengths of all colleges through the Faculty of IIE
- Integrates/embeds innovation with entrepreneurship across the university
- Experiential learning emphasis (learning by doing) through degrees and informal programs
- Provides support along pathway from idea to commercialization, for UW and community
- Engineering & Business co-academic leaders

How can our communities and businesses support and benefit from the new Institute of Innovation and Entrepreneurship (IIE) at UW?

- Can ED's be more proactive in finding meaningful internships for students of the IIE in their communities?
- How can our Community Colleges interface with the IIE?
- How can our communities and their schools help identify potential entrepreneurs and point them to the IIE?
- How can we tie UW into the rest of the state-for action NOW with existing businesses?



UNIVERSITY OF WYOMING

Why Risk-Takers Are Winners (and Why All Entrepreneurs Should Take Risks)



Innovation involves changing how people do things. It is about sharing and teaching what we know, and putting new ideas into practice. Innovation cannot happen if you will not accept the risk that your undertaking might fail.

Thought Starters

1. What if our businesses and communities were not so risk adverse?
2. Can we teach world class processes for reducing risks?
3. How can our communities help us to better mitigate risks?

The 5 Biggest Keys to Leading Innovation



Focus on an innovation process: Innovation in organizations cannot be a random or unstructured activity. It requires people with innovation mindsets who work together to explore, ideate, craft and implement groundbreaking ideas.

Thought Starters

1. How can we LEAD Innovation?
2. What if we had a state-wide innovation process?
3. How can we create the innovation mindset in Wyoming?

Speed to Market: An Entrepreneur's View



...accelerating the growth of innovation clusters in emerging industries – the speed to market of potentially game-changing products and technologies is vital to long-term economic competitiveness. In fact, being able to design and manufacture high-potential products quickly is critical to revitalizing manufacturing in the United States.

Thought Starters

- 1. Who can we learn from to increase the speed of innovation?**
- 2. Who are the leaders in this area?**
- 3. What if we could manufacture the offerings with in-state resources?**

What's Missing in Leadership Development?



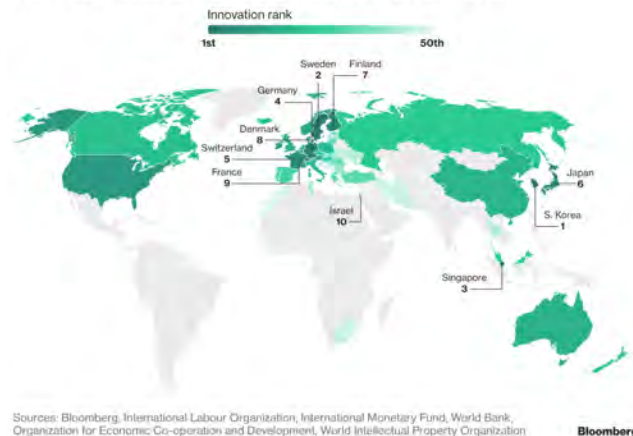
Our latest research has a similar message: only 11 percent of more than 500 executives we polled around the globe strongly agreed with the statement that their leadership-development interventions achieve and sustain the desired results.

Thought Starters

1. How can we help our Wyoming small business leaders to succeed?
2. How can our Community Colleges become even stronger partners in teaching Wyoming business leaders?
3. How are the leaders in your community doing- are they growing and learning, or just getting by?

Fifty Most Innovative Economies

South Korea, Sweden and Singapore top the list; U.S. drops out of top 10.



The U.S. drops out of the Top 10 in Innovation Ranking

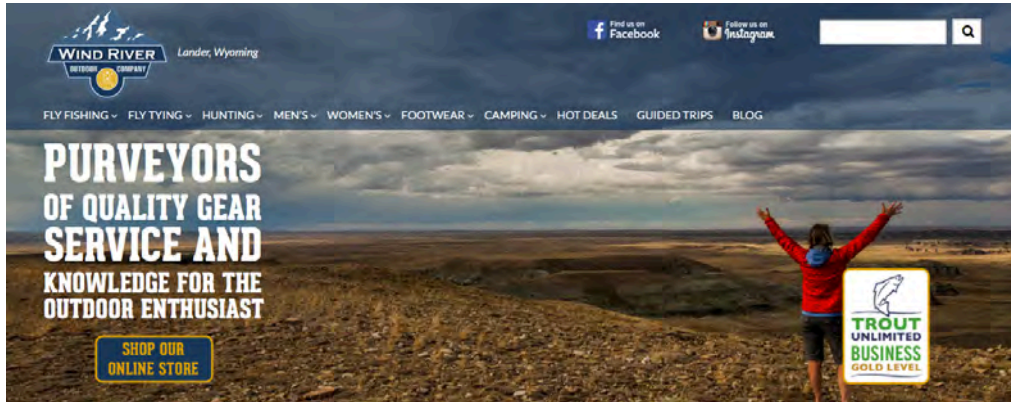
Thought Starters

1. How can Wyoming break this national trend?
2. How can we use our Business Ready state to better embrace innovation?
3. Are our businesses truly growing and prospering, or are they just struggling?
4. How can we educate not only businesses, but also school kids?

The U.S. dropped out of the top 10 in the 2018 Bloomberg Innovation Index for the first time in the six years the gauge has been compiled. South Korea and Sweden retained their No. 1 and No. 2 rankings.

The U.S. fell to 11th place from ninth mainly because of an eight-spot slump in the post-secondary, or tertiary, education-efficiency category, which includes the share of new science and engineering graduates in the labor force.

How Can We Add Value to Outdoor Recreation?



This Wyoming business does an excellent job of adding VALUE to the overall Wyoming outdoor experience, making it better and unique.

They sell top quality goods...guided trips...blogs for information.

This company adapted to customer needs...

Thought Starters

- 1. How can we better add value to Outdoor Recreation?**
- 2. How can we work with other regional partners to add value?**
- 3. How can we become the national expert in this area?**

To Increase Innovation, Reduce Fear



Innovation thrives where everyone can “tell the truth” and not be admonished for so-called “failures.” As IBM’s legendary founder Thomas Watson said upon retirement: “If I had it all to do over again, I would have encouraged employees to make more mistakes.”

Thought Starters

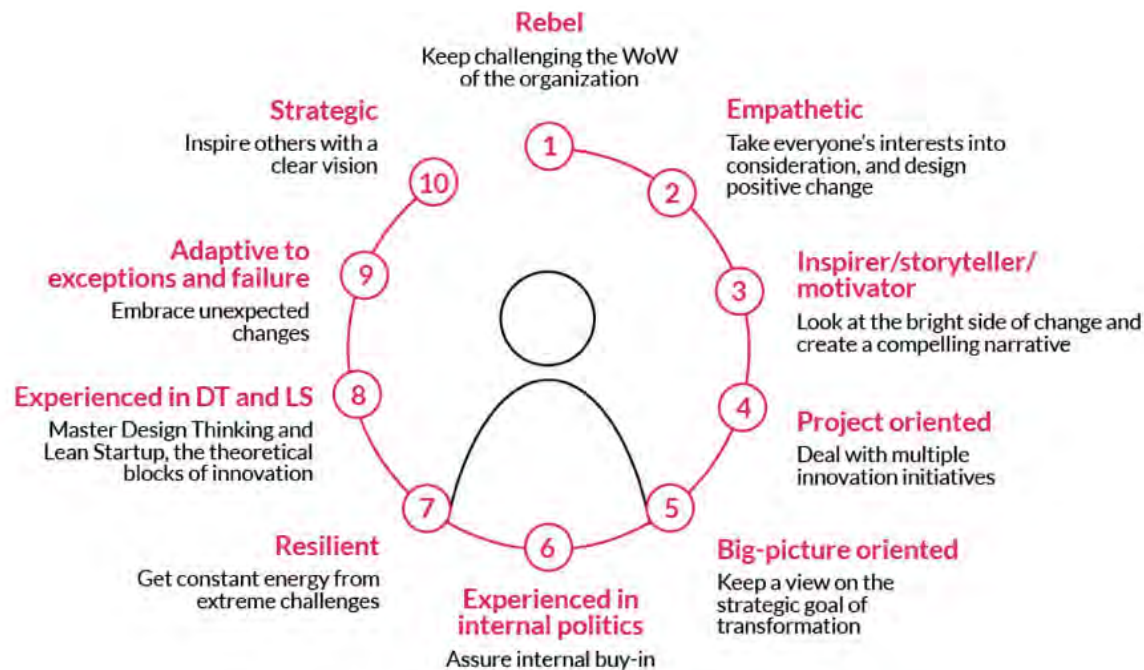
1. What if Wyoming entrepreneurs were less fearful?
2. What causes the fear?
3. What if businesses, government and communities could embrace failure, learn and proceed?

Sir Terry Leahy - You Can't Manage Failure Out



Former CEO TESCO (largest retailer in Europe...3rd largest retailer in the world).

10 top skills of the best Transformation Leaders



Thought Starters

1. How can we train Wyoming business leaders? Are they prepared to lead their teams?
2. How can we help Wyoming businesses to Fail FAST Fail CHEAP, adapt and move forward?
3. How can we help businesses to connect the innovation strategy to the tactics?

First, human capital development is a key driver of rural innovation



Adult learners, who have established links in a specific rural locality, are usually less mobile than younger students. Upgrading their skills will thus have a more direct effect on the region's economic performance.

Thought Starters

1. How can we make an immediate impact on existing businesses?
2. How can we connect to a more innovative generation? Would this keep Wyoming kids at home?
3. Who can lead this upgrading of skills in rural areas?

[oecd.org](https://www.oecd.org)
Organization for Economic
Cooperation and Development
(International)

A better way to train small business owners: using psychology to teach personal initiative



...who had been working on developing a personal initiative training program that aims to develop behaviors associated with a pro-active entrepreneurial mindset, rather than teaching basic business skills. The idea is to teach small business owners to try to find ways to innovate and differentiate themselves from other businesses, to anticipate problems and constantly look for new opportunities to exploit, to overcome obstacles, and to be self-starting.

Thought Starters

1. What if we knew our businesses intimately, so we could work with them individually?
2. Who has the expertise to work with businesses across the state?
3. How can we learn what the best systems are for working with businesses?

Stimulus Processing

WEDA-Innovation/Entrepreneurial Needs

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Spark Deck

WEDA Feb 12, 2018

**Economic Development
Best Practices**

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Stimulus Processing

WEDA- Economic Development Best Practices

IDEA ENGINEERING

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2. Why Innovation Must Be The New Development Strategy
3. Rural Tourism: It's Never Been A Better Time to Be A Small Town
4. Bridging the Generation Divide
5. Who Has Been Trained to Innovate?
6. Culture is Key to Innovation Clusters
7. Best Practices in State and Regional Innovation - Innovation Clusters
8. Best Practices in State and Regional Innovation Initiatives- Key Individuals
9. Learning's Role in Innovation
10. North Dakota Ag innovation
11. The Silo Mentality- Eliminating Silos
12. Institute of Innovation and Entrepreneurship at UW
13. Importance of patents

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At Least 1 Yellow Card per person

5 Best Practices for Economic Developers



4. Implement a business retention program: Existing businesses are usually your [greatest resource](#) for attracting new [jobs](#) and investment and your best ally when it comes to advocating for your community.

Thought Starters

1. How strong is your business retention program?
2. Does your business retention program deliver real value? Are the businesses growing, or just getting by? Do you know?
3. Do you partner with the Community Colleges, or other partners to deliver programs?

Why Innovation Must Be The New Development Strategy



Innovation is the causal mechanism for creating prosperity because it introduces newer and typically better ways of tackling pressing problems that make society more productive. Increasing productivity in society ultimately leads to prosperity.

Thought Starters

- 1. How innovative are the organizations in our community?**
- 2. How innovative are we in our economic development practices?**
- 3. Are we all stuck in the past with how we operate?**
- 4. What is the 1st step that we need to take?**

Rural Tourism: It's Never Been A Better Time to Be A Small Town

In the past five years tourism has seen some big changes. Large numbers of travelers have lost interest in cookie cutter restaurants, lodging and attractions.

Instead, they want local food, local attractions and connection to the lifestyles of local people. This has lead to huge new trends – the Slow Food Movement, Authentic Tourism, Geotourism, Agritourism, Heritage Tourism and more.



Thought Starters

- 1. Are our local businesses ready for this trend? How can we lead the way?**
- 2. What are we most proud of - that we want to 'show off'?**
- 3. How can we access data on tourists coming to our region- and why they are coming?**

<http://www.cfra.org/node/2504>
Center For Rural Tourism

Bridging the Generation Divide
Seize opportunities with millennials
through engagement and
communication



Tips for Engaging Millennials

1. Share Ownership-When millennials feel valued and are fully invested- they are highly motivated and committed.

2. Consider schedules and be flexible-Consider changing the time of your gathering to lunchtime or early morning and you might see greater involvement from millennials.

3. Redefine Socializing- Social media isn't a passing trend and its use spans generations. If your organization can't be found on Facebook you're missing a big opportunity to connect with millennials... and others, too.

4. Avoid age segregation-Break up age-defined cliques. Foster togetherness by encouraging people of all generations to mix and mingle.

Who Has Been Trained to Innovate?



There are two big hurdles to the adoption and commercialization of new innovations by companies, startups, or existing firms: capital and know-how.

Thought Starters

1. Have Wyoming business owners been trained in innovation? Have you?
2. How can we work with state partners and businesses to build on the 'know how'?
3. How can we have a common system for growth and innovation?



Culture is Key to Innovation Clusters

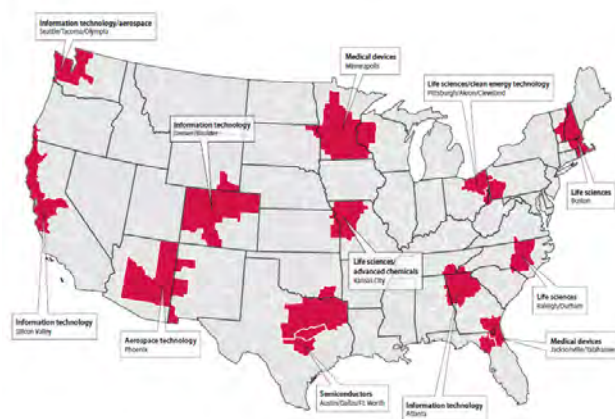
But, even if you have a great cluster or multiple clusters of rapidly growing companies, large and small, and a great entrepreneurial ecosystem, sources of innovation like research universities, there is one more ingredient that's often missing – an innovation culture. You need to be a place where diversity is celebrated, where failure is admired, and where change is embraced. This is the hardest element of a true innovation district, one that is difficult to acquire through policy and governmental action.

Thought Starters

1. Do the organizations in your Community have a culture of growth and innovation?
2. What is being done to drive a community of learning to innovate and grow?
3. Are community partners (ED/Chamber/Community Colleges/Banks) working to deliver a learning community?

Best Practices in State and Regional Innovation Initiatives

A SNAPSHOT OF U.S. INNOVATION CLUSTERS
A selection of high-tech clusters in different parts of our country



Source: Census Mapping Project, funded by Strategic and Competitive Advantaged Regions (SCAR) program. Copyright © 2008. Reprinted and revised at various dates. All rights reserved.

Innovation clusters— localized groups of companies developing creative products and services within an active web of collaboration that includes specialized suppliers and service providers, universities, and research institutes and organizations— are now widely associated with higher levels of economic growth and competitiveness.

Thought Starters

1. Is UW doing the right kind of basic research that can be commercialized in Wyoming?
2. What other rural, energy dependent states can we learn from?
3. How can UW or other technical leaders play more of a role across all of Wyoming?
4. Is the WBC providing the right type of economic development grants?

Best Practices in State and Regional Innovation Initiatives



Successful innovation-based economic development is often fostered by a small number of key individuals bridging the space between science and commercialization.

Thought Starters

1. Who are the innovation and thought starters in our community?
2. How could we make each Community College (or their Foundations) the center of different clusters?
3. Do our communities have the amenities to attract innovators and tech savvy employees?

Learning's Role in Innovation



In short, innovation is about creating an environment where people can be exposed to different concepts, interact productively, experiment safely and be allowed time to reflect. And this is contrary to much of the working world where interaction is kept to a necessary minimum, time is to be spent on work tasks and mistakes are punished.

Thought Starters

1. Who can lead our community to become a learning community?
2. How can we learn to anticipate customer needs?
3. How can we learn from other states and communities?

North Dakota continues to work to diversify its agricultural fabric by targeting the development of value added agriculture.



Value added agriculture is changes made to primary agriculture products (crops and livestock) that increase the product's value, thereby creating new economic activity and jobs in one of three ways:

- **Process activities that create value for the product and/or introduce the product to new markets;**
- **Diversification and/or modification of primary agriculture products; or**
- **Pre-production modifications that increase yields, quality and uses**

Thought Starters

- 1. How can we add more value to our products?**
- 2. Do we have an Ag Culture of Growth & Innovation?**
- 3. How could we quickly learn from North Dakota Ag and other states?**

The Silo Mentality

Eliminating Silos in Government

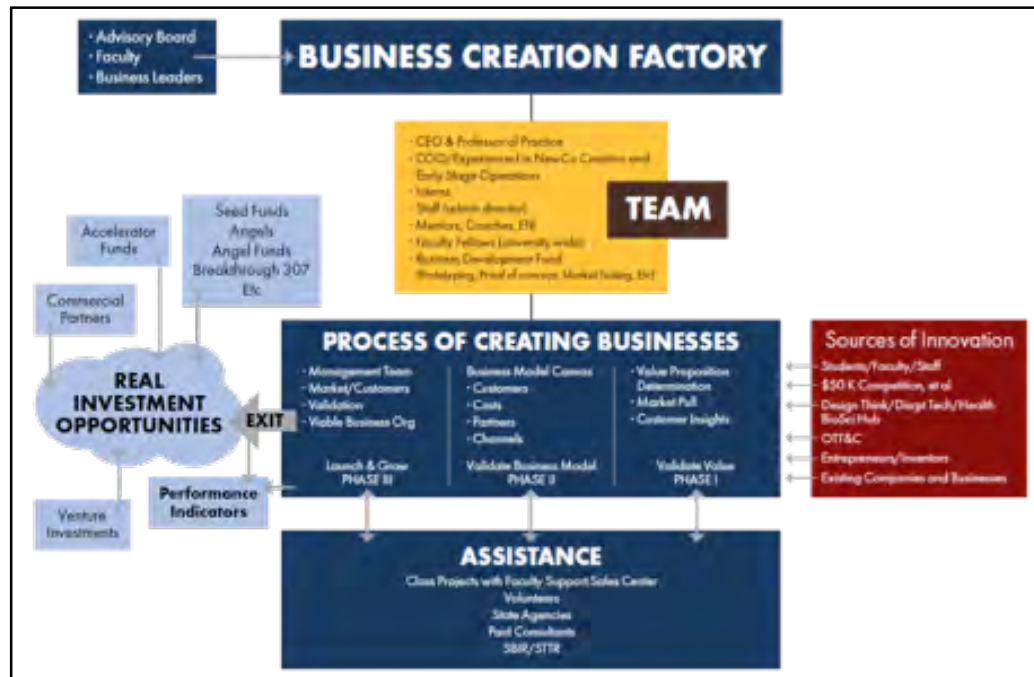


The problem with silos is that they cause people to focus insularly on the specific mission contained within their agency. Government must ensure that the structure and procedures necessary to see the big picture and accomplish the broad goals are in place and enabled.

Thought Starters

1. Would we be more effective if we could break down the historical silos in Wyoming?
2. **This will be very hard to do...**who will lead the effort?
3. Is it harder to tear down silos in governmental organizations?
4. How can we have a common mission...to bypass all of the silos?

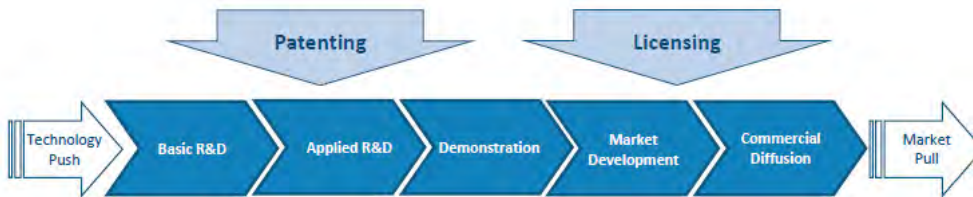
Institute of Innovation and Entrepreneurship at UW



Thought Starters

1. How can our communities and businesses support and benefit from the Business Creation Factory?
2. How can we develop a community culture of learning from UW?
3. How can the Community Colleges help with distributing the learning?

Does the Patent System Encourage Innovation?



Inject clarity into the "fuzzy front end" of innovation. Clearly define the idea generation and conversion process. The payoff: Companies that do this report higher revenue, market-cap growth and EBITDA as a percentage of revenue.


Thought Starters

1. Are we teaching businesses the importance of patents, and how to secure them affordably?
2. Are we teaching how to identify and license existing patents?

Stimulus Processing

WEDA- Economic Development Best Practices


IDEA ENGINEERING

1.  **INDIVIDUAL**

Spark Deck Elements

As you see the Spark Deck - jot down any ideas that come to you...


1. Business Retention and Expansion Best Practices
2. Why Innovation Must Be The New Development Strategy
3. Rural Tourism: It's Never Been A Better Time to Be A Small Town
4. Bridging the Generation Divide
5. Who Has Been Trained to Innovate?
6. Culture is Key to Innovation Clusters
7. Best Practices in State and Regional Innovation - Innovation Clusters
8. Best Practices in State and Regional Innovation Initiatives- Key Individuals
9. Learning's Role in Innovation
10. North Dakota Ag innovation
11. The Silo Mentality- Eliminating Silos
12. Institute of Innovation and Entrepreneurship at UW
13. Importance of patents

2.  **PAIR**

Create Ideas


Randomly Pick a piece of stimulus and turn into an idea

2.


3.  **TEAM**

Refine & Revise

Ask your team for ideas and advice regarding your idea. Keep ideas you like and ignore those you don't agree with.

4.  **INDIVIDUAL**

Write Best Ideas on Yellow Cards



Individual- 2 Min
Teams- 10 Min (2 Min/each)
Individual-cards-3 Min

At Least 1 Yellow Card per person



System Driven Innovation

Mission: To Change The World through Systems that Enable Innovation
by everyone, everywhere, every day, resulting in
increased speed (up to 6X) & decreased risk (up to 10X success).

Comments or Questions?



Save the Date Business Growth and Innovation Training June 12- 13

Leaders will learn to improve profits (or 'retained income' for non-profits) by : 1)innovating new products and services which deliver new and meaningful value for which customers are willing to pay more; and 2) learning how to deliver offerings more cost effectively, driving increased profits.

Laramie County Community College Outreach and Workforce Development
Call 778.4381 or visit our website at lccc.wy.edu/workforce for details