



2014 Go Code Colorado

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Challenge Statements

CHALLENGE 1: BUSINESS SITE LOCATION

When a business starts or relocates, it needs to find a location. But business owners have limited site location information and the information that they can find is often difficult to access:

- Infrastructure data such as transportation or broadband connections
- Demographic data such as the surrounding population's income, education or age
- Incentive information such as tax credits
- Statistics on available workforce resources in an area

Plus, there's frequently a lack of integration of business opportunity data with demographic data, making it difficult for businesses to truly assess the best site location to support their future growth and talent needs.

The apps that teams develop will help level the playing field across Colorado cities, and ensure that our businesses have the tools to find the best location to support their growth.

CHALLENGE 2: COMPETITIVE LANDSCAPE

Much of the competitive data that businesses need to assess their industry and the inherent competition is held by private companies, and thus expensive, or inaccessible.

By aggregating industry- and company-level data from state, local, federal, academic and media sources, businesses could view items such as:

- Competitive density
- Mergers and acquisitions
- Market analysis tools

Businesses will use these apps to better understand and uniquely position their businesses to stand out from the competition.

CHALLENGE 3: ACCESS TO CAPITAL

Often businesses need investment capital to continue their growth or other capital resources to maintain their operations.

Navigating the investment process with venture capitalists, angel investors, private equity firms, incubators and accelerators can be confusing and overwhelming.

Further, knowing when to pursue commercial lending can be difficult and what is involved can be confusing and overwhelming as well. Plus, certain investors only work with specific types of businesses.

The apps developed will help businesses:

- Review active investors and their recent investments
- Choose the right strategic partners for funding or acquisition
- Narrow down investment options based on business type or revenue
- Evaluate investment packages

- Discover beneficial supplier relationships
- Understand historical trends and key exits

CHALLENGE 4: HIGHER EDUCATION RESOURCES

Colorado colleges and universities have a multitude of resources available to the public, many of which can help support local businesses at a minimal cost.

Unfortunately these businesses don't know what's available:

- Research and consulting services
 - Intellectual property data and statistics
 - Purchasing habits of Coloradans
 - Compensation levels and benefits across Colorado
- Pools of talent
 - Interns
 - Recent graduates
 - Professors
- On-campus resources
 - Facilities including classroom space
 - Services such as design, research, catering, and more

By generating an app that compiles the available resources at Colorado universities, we'll increase collaboration between public and private entities, benefiting both.

CHALLENGE 5: BUSINESS PARTNERS

Sourcing local business partners can be difficult due to the technical nature of many business problems and the fact that so many companies outsource.

Yet many Colorado businesses would like to be good Colorado stewards and support Colorado businesses, while also building their local reputation and increasing their bottom line.

Unfortunately, they have limited information regarding:

- Industry statistics
- Company locations sorted by industry
- Individual company performance data
- Information on company challenges and solutions needed

A business app that helps Colorado businesses address their business problems by sourcing partners in their industry or supporting industries will help grow the Colorado economy and build interdependence.

Colorado Innovation Challenge Problem Briefs:

Result of workshop with over 60 Colorado Business Decision Makers, these briefs provide greater detail on

CICPB 1: Industry Ecosystem

Problem Statement
What is the state of my industry ecosystem (talent, margin, revenue, market) and how well do I compete?
Background
Currently this data is primarily held by private companies, and thus inaccessible or expensive, or is not published by state agencies that have access or is not aggregated in a meaningful fashion for business consumers.
Desired Outcomes, Features, and Constraints
This would be the crunchbase of industries and companies. It would integrate data from state, local, federal and academic sources. The app would consist of maps with interactive filters and indicators. Companies could view the competitive density and other market analysis tools. Data could be sourced from open data, as well as federal reports, economics publications, media, press releases, M & A activity etc. Some of this data will be difficult to obtain, aggregate, and/or normalize.
Data and Other Resources

CICPB 2: Business Capital

Problem Statement

**Where can I find a comprehensive list of resources for business capital?
(VC/angel/PE/Incubators/accelerators)**

Not simply a list of resources, but create a place that drives business owners to the right kind of resources for their business (which includes business capital, but could also include strategic partners, software solutions, supplier relationships, IP, etc.) Broaden the scope from just a list for business capital. Also include a way to have results tracking. (See details below.)

Resources could also mean: Talent, Location, Capital, where to meet the right people.

Background

VC's:

Business owners don't always care that the business capital is in Colorado. However, the landscape is such that it is hard to get funded outside of Colorado unless the Foundry Group is behind you. Which defeats the purpose of going outside of Colorado.

The general theme is that they did not feel there was a strong investment ecosystem in Colorado, and to go outside of Colorado is extremely difficult without the approval of the Foundry Group. (Investors will just say, "Why isn't Brad Feld investing in this venture if it's so great and in Colorado?" Need his name behind you to get investment outside the state.)

Outside VC's will invest in CO companies as a 2nd investor, but it's hard to get the first.

Angels:

Most Angels come through networking. However, there is a growing effort amongst Angels to aggregate. Such as:

FG Angels

Rockies Venture Club

GUST

Angels List

Rocky Mountain Venture Capital Association

PE:

Industry specific—Health Care, Oil/Gas. Not hard to find, but hard to get investment through them. Expect high profit/high growth potential. PE's are very quiet.

Check out the Association of Corporate Growth.

Felt incubators and accelerators were option for only a very narrow group.

There is another type of investor not listed above: **Strategics**

Strategics are companies that have money to invest in new ventures or can offer partnership. They would like to see a way to enhance relationships with companies in Colorado looking to invest in companies in Colorado. It's a growth path that validates the solution. An example would be for Rally Software to buy up a Colorado based start-up, or give seed money while offering a partnership.

The business owners really want a better way at matching business owners with investors and improve deals here. They want to hear the success stories, who did they work with, what did they do to be successful? What was their deal structure? Their management?

They really see this as an ecosystem problem. It's cheaper than ever to start a business, but once started, it's very hard to keep funding going (in Colorado).

There is no aggregation in Colorado or centralized database giving business owners the resources they need. Especially not in horizontal resources. Investors are very quiet and not well known outside of 2 or 3 investors. They want to know what money moved hands, because right now they feel people think that money is not flowing in Colorado.

Need a resource that speaks to all business, and then sends them to the right place. For instance, there are traditional businesses vs. venture backed. It's a waste of time for a traditional business to be part of the VC scene. Where should restaurant owners go for capital investment? The Chamber and other resources (hopefully an app) should be available to know where to send them. And vice versa, Angels are not interested in all businesses.

They felt overall that companies get to a growth point in Colorado and then stall, whereas that same point of growth is an inflection point in California. There is an ecosystem in California that pulls up and picks up growing businesses – Silicon Valley re-invests in entrepreneurs and successful companies.

Some felt that Colorado was making it hard for manufacturing start-ups. They can get going, be cash positive, but do not have enough cash to really grow or promote job growth. They wanted more awareness around this issue and solutions for the non-start-up scene.

Desired Outcomes, Features, and Constraints

Provide a tool that educates business owners about the kind of business you have, and what it looks like within the business landscape. And then provides resources available that make sense for your type of business.

WANT: Plug in your type of business and find out what resources are available to ME and which ones are NOT right. Who am I? What are my resources. Could also include answers that help other types of businesses, such as

small business loans, state funding, etc.,

Create a decision tree – asks business owners questions that investors ask, like, “What is your revenue? Are you profitable?” Decision tree questions lead the business owners on a path the resources that best fit their business model, including where to find the capital that fits their needs. For instance, a restaurant owner does not need to be speaking to a venture capitalist. A restaurant owner is not in a high/fast growth position, with a fast rate of return. (Idea: Could we share this tree with VC’s as a revenue generator?)

Would also like the tool to have an accurate list of investors that are active. Who has done a recent deal? Who’s active? What deals have they done? Investor profiles with accurate up-to-date information about their investments and how active they really are. Are they only managing old deals? Registered = active. Also include track record of investments.

Historical trends – they would like recent historical trends for investment in Colorado. What does the investment landscape really look like? Lift the curtain on the investment process in Colorado. Also, historical data around substantial/significant business exits in Colorado.

Start-up info – number of start-ups in the state, and the number of exits. Could we get this info when they incorporate?

They thought it very important that the EXIT stories be told in one place – how many had an IPO, were acquired, purchased outright, etc., Examples: Rally, Digital Globe, Sketch-up vs. success stories, which are Orbotix and Otterbox. They want to hear both the success stories in terms of long-term growth companies like Otterbox that are brining jobs to the area, and those that successfully exited like Sketch-up. They feel that the more stories that come to light, the more money that will come to the state. Make noise around successful investments and the money will flow both inside and outside the state.

Data and Other Resources

Use existing platforms:

Rockies Venture Club

Angel’s List

GUST

Crunch Base

Built In Colorado

Idea: Build a data portal as a service that has an API that can push to the above resources.

The data must be dynamic and update regularly. Would be considered a useless app otherwise.

CICPB 3: Site Location

Problem Statement
Where should I site/relocate my business [interstate, intrastate, intracity] (tax incentives, tax rates, zoning, education, skills, competitive landscape, community characteristics [parks, trails, etc])
Background
<p>When a business starts or relocates, it needs to find a location. But business owners have limited site location information and the information that they can find is often hard to find.</p> <p>Some of the information shortages expressed were:</p> <ul style="list-style-type: none">Lack of access to infrastructure data (road, rail, air transport, broad band, and sewer).Lack of access to demographic data (income, education, age, gender, race)Lack of integration of business opportunity data with demographic dataLack of access to incentive information (tax credit, enterprise zones, economic development)Workforce center provide job posting services, but not statistics on available resources in an area. <p>Example: Love Grown Food – growth and move to Denver</p>
Desired Outcomes, Features, and Constraints
<p>One of the key findings expressed is that the tool help level the playing field across jurisdictions/cities.</p> <p>The site location tool must be used in places that may have limited internet access. The tool should be platform agnostic. The business owners expressed an interest in seeing the tool provide the ability to mashup multiple data sets.</p> <p>Desired features identified:</p> <ul style="list-style-type: none">Mapping (GIS) toolsVisualization toolsSearch toolsAlerts <p>The owners expressed an interest in seeing the tool both consume and create data</p>

Data and Other Resources

CICPB 4: Business Partners

Problem Statement
There is no way to identify, locate and learn more about companies that could be business partners based on multiple criteria supplied by companies.
Background
The current models for seeking local partners do not work. Success factors are often outdated due to changes in the economy, such as outsourcing. Further, specialized talent and partners are often hard to find due to the specific or technical nature of many modern business problems. However, many companies desire to source locally for both reputational and economical reasons. Nevertheless, partnering is hard and often expensive. Any tool that would allow for companies to learn more about the landscape of partners combined with input from business and industry would significantly aid the business community.
Desired Outcomes, Features, and Constraints
A tool that can map, analyze and detail the landscape of partners for businesses in CO. Companies could learn more about potential partners both and whether they would make successful, local partners. Open data would provide information about industry statistics, location of various companies in specific industries, and data surrounding company performance etc. Companies would provide information about their specialties, their ability to partner and what problems they have or solutions they seek. There would need to be some sort of validations of any subjective, company-supplied data. Analysis should include maps, charts, & graphs, customizable by your parameters.
Data and Other Resources

CICPB 5: Education

Problem Statement: Education
<p>What assets or resources are available from high education institutions that could help my business? (IP/employees/interns/services/stats/physical or on-campus resources)</p> <p>Intellectual Property, research, data, stats, etc: How can I access this information? For example, Where can I find research on consumer's purchasing habits in the state of Colorado? How can I find information on compensation levels, talent levels, benefits, etc.?</p> <p>People and Skills: What services are available to a business to help at low cost or for free (prototyping, consulting, legal, accounting, design, research, etc.)? Where can I find workers (graduates or interns) with the skills I need? How do I translate the skills that high ed teaches (and the language they use around that) to the terms I am looking for in identifying employees or interns? Non-credit and customized training students are also of interest to me, how do I identify them? Higher ed has data that is disaggregated between job skill sets versus curriculum categories.</p>
Background
<p>Connections between Higher Ed and business are not strong, we need more collaboration and connection. This could be helped with project based matching for resources and assets? Focus more on support and connection between education and small/medium businesses and their needs. Furthering the connection between interns and business grows both businesses and our workforce's skills and value to the state.</p> <p>Build buy-in from organizations other than state institutions and then sustain that buy-in as education is a more diverse and shifting landscape now.</p> <p>Higher Ed has a data quality issue: The data collection categories, etc. does not align with industry needs. Align education with SIC codes? Value does not only come with accreditation, but with other forms of learning as well. Based on this, how do we tag or match skills and education to industry needs?</p>
Desired Outcomes, Features, and Constraints
<p>Data is simply not available about the resources (facilities, consulting, etc.) available. An app that could also collect this info as well as disseminate it would be beneficial.</p> <p>These apps needs to be clearly communicated as a state vendor rather than a state owned resource. This is a public/private partnership and that carries weight with the industry side of this.</p>

Attractive and easy to navigate (focus on UI, UX) to make this app something people and organization want to use. This will help motivate organizations such as universities and non-traditional educational institutions such as code schools to engage with it to share their resources and information.

Add value for both data providers and data consumers.

This should be a faceted search tool rather than a marketplace structure.

Evaluation and feedback for the tool built in from the beginning so that the tool can iterate based on feedback (but make the evaluation information not public, just for the dev side).

Use the language of business, not education, for this tool.

Would people pay a nominal fee for higher level access? Or for other types of tools, access, etc.? Freemium model?

Match services offered to business needs (design, video, etc.).

Match people and their skills to business needs (graduates, interns, etc.)

Combine services and people into one tool? Example: You can hire an intern to help with design or you could use the educational org's design program?

Include an internship guidebook that outlines the differences between an employee, intern, independent contractor, etc.

Value offered: Connect small business needs to higher ed resources and offer value to both. This is especially valuable for students seeking experience and can enrich a school's offerings through real world experience.

Value offered: more data and knowledge for industry from higher ed research and increased use and exposure for research and expertise coming out of higher ed

Value offered: Build an educational organization's standing in a specific field through showing knowledge and people assets in a specific industry (start with one industry vertical first). There are orgs that work with universities on this already, so leverage them in this process.

Challenge: Sustained use, funding, growth and current information

Data and Other Resources

Tech Transfer Offices

Combine public, private, and state data to create a more complete picture? For example: linkedin

Tie into mozilla badges or similar non traditional forms of skill communication to connect students and learners to jobs/work for their skills? Or is this too complicated? Maybe this is better for a later and further round of development?