

Primary Jobs

- “Its about the economy...stupid” 1992
 - “Its about jobs...stupid” 2016
- “Its about primary jobs...stupid” 2020



Primary Jobs

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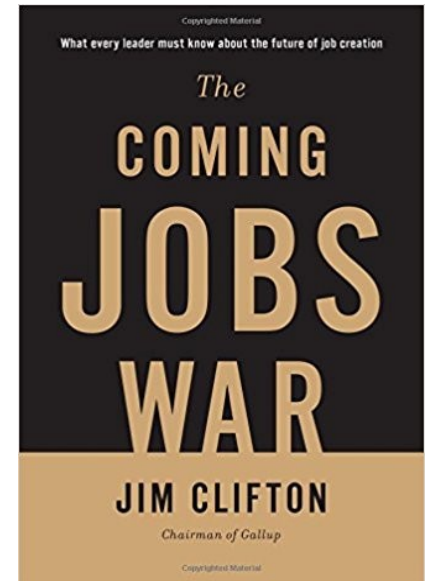
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Jobs...Jobs...Jobs...

“Why Jobs?”

*“The coming world war is an all-out global war for good jobs. As of 2008, the war for good jobs has trumped all other leadership activities because its been the cause and the effect of everything else that countries have experienced. This will become even more real in the future as global competition intensifies. If countries fail at creating jobs, their societies will fall apart. Countries, and more specifically cities, will experience suffering, instability, chaos, and eventually revolution. This is the new world that leaders will confront.”**

Will your city compete in this “WAR?”



In the 1950's, two “entrepreneurs” were challenged by a local truck company owner to expand their businesses. Harvey Jones, owner of Jones Truck Lines, had created the largest private trucking company in the U.S. by 1949.** Mr. Jones encouraged these two entrepreneurs to expand their markets and ship products to national markets.

A family purchased a retail store on the town square in 1950 and renamed it. The retailer had rapid growth, but his wife wished to remain in their hometown to raise the family. By the time this company became the #1 Fortune 500 in 2002, it was still based in this small town.

The impact from the headquarters was multiplied by the 1,100 plus vendors who were required by the Walmart headquarters to have a local sales office with residential staff in the region. There was a large number of satellite offices for companies of almost every industry. It meant that transplants from around the United States resided in or near this small town and its headquarters. This phenomenon impacted the culture of all four surrounding communities.

WHY and HOW could this happen?

*Jim Clifton, author of “The Coming Jobs Wars,” is the Chairman of Gallup, the polling company. He produced startling observations in the 2011 book based upon data from the “World Poll” that Gallup created in 2005.

Jobs...Jobs...Jobs...

Mary Ann Wright, the daughter of the local banker in the 1950's, recalls how this all got started,

“Yes, and in fact one of the great stories about Wal-Mart's beginnings concerns my Dad. Dad was the town banker in Bentonville when this young whippersnapper named Sam Walton moved to town and had an idea about having not one little five-and-dime store, but maybe two or three of them.

He went to the Bank of Bentonville and asked for a loan to create this network of stores. The Board of Directors of the Bank of Bentonville said, “Oh, we're so sorry, Sam. This idea of having lots of stores to reduce the prices by purchasing wholesale in volume would never work.” So the bank didn't loan him the money that he needed for his idea.

*But Daddy thought Sam had a pretty good idea, so he and a few others personally loaned Sam some money and that helped him get his second store and then his third store..!”****

Following World War II, in the early 1950's, a small mid-American town sowed the seeds for transformation. Something extraordinary transpired over the next few decades. Four surrounding towns benefited as this 21st century region exploded to 450,000+ residents by 2010.

Below is a chart that shows the impact on Bentonville, Arkansas.

Historical Population based upon U.S. Census data

1950	1970	1990	2010	2015 (EST.)
2,942	5,508	11,257	35,201	44,299

Could your community produce a similar result?

“Wal-Mart was moving right ahead in Bentonville as was the J.B. Hunt trucking company and Tyson's, the big chicken company. All three of those organizations were building up their operations. So there were jobs to be had, very good jobs to be had, for people that didn't want to go to college.

Jobs...Jobs...Jobs...

As a result, when I go back to my little town in Bentonville, many of my high school classmates have retired from those companies and are multi-millionaires because they started working as the stock boys and girls for the first Wal-Mart stores and then became the managers of a tiny little stores in some small city or town in Arkansas or Oklahoma or Missouri.

*Then they came back to Bentonville to be the buyers for a section of Wal-Mart and then went out again to be the manager of a bigger store. As Wal-Mart started growing and growing, these employees grew with the organization. Those who stuck with it, and most of them have, have ended up in a very fine financial situation.”****

Other U.S. examples:

- **Holland/Zeeland, Michigan has 4 headquarters: Herman Miller, Gentex, Prince and Donnelly.**
- **Rochester, Minnesota had the Mayo Brothers and Mayo Clinic.**
- **Midland, Michigan has Dow Chemical and Dow-Corning.**

Where are the examples in your state/region?

Who in your local community has an expertise that could be leveraged like Jones Truck Lines, Walmart and Tyson? It only takes one or two locals who care enough to engage.

Questions:

- Who are your local leaders that might engage?
- What are the barriers that limit your city from engaging?
- Where and who are the next generation leaders that would return to your city and expand the primary jobs?
- What products/services could your city offer to regional and national markets?
- Where are the financial resources to accelerate the creation of a sustainable economy?

*Jim Clifton, introduction from “The Coming Job Wars,” 2011, Gallup Press

**Harvey Jones biography: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=5495>

***Interview with Mary Annette Wright: <https://cdn.loc.gov/service/mss/mfdip/2007/2007wri02/2007wri02.xml>

Jobs...Jobs...Jobs...

“CEO at GE Speaks Out”

In the midst of our digital and service oriented economies, General Electric Company (GE), one of the most productive manufacturing (MFG) job creators in the world, sees MFG jobs as the cornerstone of America’s historic and future economy. In a CNN & GPS interview by Freed Zakaria on 4/2/2017, Jeff Immelt, the CEO of GE states,

“Let’s look at Germany.

Germany has high wages.

24% of their labor is in manufacturing...

9% in the U.S.”

What does Germany do, according to Immelt, to create these MFG jobs?

- Great training
- Great infrastructure
- Export bank
- Tax policy that encourages them
- Banks have to lend money to small business

So what are the key questions we should be asking? Should manufactured products and MFG jobs be a focal point for the U.S.?

- Will replicating German strategies and tactics actually create sustainable economies in mid-American cities and towns?
- Will the changes in U.S. Federal policies on tax and trade do the trick for mid-America?
- Won’t a federal infrastructure investment solve the problem by creating short term higher paying jobs?
- Won’t new trade policies solve the long-term problem and bring back higher paying manufacturing jobs to mid-America?

Germany
...24% of their
labor is in
manufacturing
...9% in the U.S.

Jobs...Jobs...Jobs...

Will
these
changes
actually
help?

- Won't regulatory reform actually solve the problem by increasing profits so that Fortune 500 companies can invest in creating new industries & manufacturing jobs?

All of the above tactics are important and will help large corporations reduce their costs and increase profits for future investments.

- But will it actually create higher paying manufacturing jobs that increase discretionary income for the middle class in mid-America?
- Will it actually stop the decline in the middle class? Or will it increase the percentage of our population as an educated middle-class with discretionary income?
- Will these emerging national federal policies actually help mid-American regional cities create sustainable economies where our youth can return home?

Will these changes actually help? What is the brutal reality?

Since 1979-87, and research published by Professor John Birch at MIT, decision makers agreed that small companies are the job creators. However, recent research in 2011 entitled, "Who Creates Jobs? Small vs. Large vs. Young" by John Haltiwanger, Ron Jarmin and Javier Miranda suggests that when you examine net jobs versus gross jobs, the equation changes in favor of "young" companies. The researchers also observe in a footnote,

*"Statements that small businesses create most net new jobs are ubiquitous by policymakers. A common claim by policymakers is that small businesses create 2/3 or more of net new jobs. Every President since President Reagan has included such statements in major addresses (often in the State of the Union addresses to Congress) and many other leaders in the U.S. House and Senate have made similar remarks."**

So where is the so called "sweet spot" for manufacturing job creation? Or put another way by the little old lady in the Burger King ad,

"Where is the beef?"

Jobs...Jobs...Jobs...

According to the U.S. Manufacturing Extension Partnership (NIST-MEP) there are 330,000+ manufacturing companies in the U.S. with less than 500 employees. These manufacturing companies employ approximately 8,200,000+ employees.**

The Manufacturing Institute and the Census Bureau in 2014 published figures on the number of manufacturing companies in the U.S.:***

- 254,941 MFG companies with 1-500 employees
- 46,589 MFG companies with 20-99 employees
- 11,670 MFG companies with 100-500 employees

The 58,259 MFG companies with 20-500 employees are not just start-ups. Many are advanced manufacturing operations sufficient to SCALE their companies because they...

- Have advanced manufacturing processes
- Developed skilled management
- Generate positive cash flow
- Are a supplier to an original equipment manufacturer (OEM)
- Have growth potential...can scale at 8%-15% annually

Could 20% of these privately-held companies with 20-500 employees actually SCALE and create an average of 200 MFG jobs by 2030? Could they be a cornerstone for primary job growth in mid-America?

There are 58,259 companies with 20-500 employees. If 20% or 11,651 companies, create 200 jobs each by 2030, they could increase manufacturing jobs by 2,330,200 on top of the 8,200,000 NIST-MEP MFG jobs.

MFG

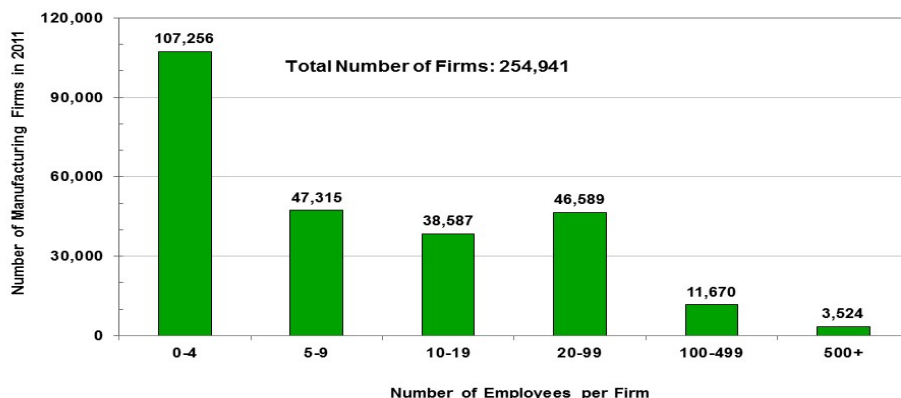
Companies:

- 58,259
- 11,651

Primary Jobs

- 2,330,200
- 8,200,000
- 10,530,200

Manufacturing Firms by Number of Employees
(Updated April 2014)



Source(s): U.S. Census Bureau and MAPI

Jobs...Jobs...Jobs...

CNN Interview with Jeff Immelt (Start at 23:40 minutes into this interview on the U.S. economy): https://youtu.be/ZNS_u2-jEJE

*Job Creation Research in 2011 http://econweb.umd.edu/~haltiwan/size_age_paper_R&R_Aug_16_2011.pdf

**NIST-MEP web site

<https://www.nist.gov/mep>

***U.S. Census Bureau and Manufacturing Institute link

<http://www.themanufacturinginstitute.org/Research/Facts-About-Manufacturing/Economy-and-Jobs/Company-Size/Company-Size.aspx>

****NIST-MEP report on Supply Chain

<http://nistmep.blogs.govdelivery.com/supply-chain-foundations/>

Jobs...Jobs...Jobs...

Why MFG Jobs?

On 4/2/2017 at GPS on CNN, Immelt, CEO of GE made the case for manufacturing jobs by comparing the U.S. with Germany. Immelt stated, "Let's look at Germany. Germany has high wages. 24% of their labor is in manufacturing...9% in the U.S."

But Immelt didn't really address WHY high paying manufacturing jobs are critical to a nation's economy. Immelt only told us WHAT Germany was doing to create higher paying jobs but not WHY!

WHY Manufacturing Jobs?

Manufacturing contributes disproportionately because it often...

- **Exports** products from a headquarters and its city to national or international markets generating increased revenue.
- **Innovates** in the form of redesign of existing products for existing markets which adds value.
- **Increases productivity** that usually supports and sustains high wages for well-educated and skilled employees.
- **Servicing equipment** by field personnel has accelerated the opportunities for high paying jobs in the service economy. Field service reps are also a critical source for identifying problems and opportunities for product improvements. This is a profitable revenue stream. IBM and GE are generating substantial revenue from field/service programs that augment computer monitored embedded sensors.
- **Returns profits** from domestic and international operations to the headquarters and their city/state supporting a range of community functions including education, health care, arts, etc.

Contribution:

- Exporting
- Innovating
- Productive
- Servicing
- Profitable

Jobs...Jobs...Jobs...

McKinsey Global Institute* states,

“The global manufacturing sector has undergone a tumultuous decade: large developing economies leaped into the first tier of manufacturing nations, a severe recession choked off demand, and manufacturing employment fell at an accelerated rate in advanced economies. Still, manufacturing remains critically important to both the developing and the advanced world.”

In developing countries, “...it continues to provide a pathway from subsistence agriculture to rising incomes and living standards.

In developed countries, “...it remains a vital source of innovation and competitiveness, making outsized contributions to research and development, exports, and productivity growth.”

Historically, developed nations in the 20th century that had 22%-25% of their GDP in MFG products thrive. A gradual decline in this percentage is all part of a reduction for all industrialized nations. However, has the U.S. experienced a disproportionate decline? And if so, why? Could it be reversed for mid-America? Does this percentage provide a benchmark for mid-America cities and their economies while the coastal cities focus on other options?

Manufacturing as a Percentage of Total GDP

USA	Germany	Japan	Korea	China
'97: 16.57%	'97: 22.36%	'97: 21.37%	'97: 24.02%	'97: 32.87%
'14: 12.32%	'14: 22.97%	'14: 17.70%	'14: 30.15%	'13: 29.73%

**World Bank: <http://data.worldbank.org/indicator/NV.IND.MANF.ZS?locations=US-DE-JP-KR-CN>

The current focus on federal funding of infrastructure, new trade policies and regulatory reform may be necessary. However, they are not sufficient to increase the percentage or number of mid-American employees for 21st century manufacturing companies.

Jobs...Jobs...Jobs...

Is there a long-term strategy for mid-American cities which complements federal initiatives? Could it center on creating high paying manufacturing jobs?

Challenging an often invisible network of privately-held manufacturing companies headquartered in mid-American cities is an interesting option. Do manufacturing companies with at least 20-500 employees have skilled labor, management and cash flow to scale while minimizing their risk?

But how does a middle sized mid-American city with limited resources engage in the daunting task of primary job creation?

In the next few weeks, subsequent articles will provide one point of view that answers that question.

The next article in this series on jobs revolves around what Roy Williams, President of the OKC Chamber of Commerce calls,

“PRIMARY JOBS.”

However, one question for mid-American cities remains,

“Can mid-America identify and support a strategy that will create higher paying manufacturing jobs for the middle class?”

Let us know what you think about this option!

Jeff Immelt at GE (Look at second video entitled ‘GE CEO on future of work in the age of robots’) <http://money.cnn.com/2017/04/01/news/companies/ge-general-electric-jeff-immelt-donald-trump/>

*McKinsey Global Institute: <http://www.mckinsey.com/business-functions/operations/our-insights/the-future-of-manufacturing>

Jobs...Jobs...Jobs...

Primary Jobs vs. Secondary Jobs

“Primary jobs are the sole provider
of economic development.”

Roy Williams

Roy Williams, President of the OKC Chamber of Commerce, states in a provocative five minute video at <https://youtu.be/MsbgbCJyZYY>,

“Primary jobs are a product or service that has value added to them. And that product or service is then exported out of your respective geography. What they are doing is importing wealth back into your community.”

An alternative phrasing of this definition might be...

“Primary jobs result from value added products or services exported to national or international markets where the profits come back home to the headquarters and their city.”

Can mid-American cities identify and support a strategy that will create primary jobs?

Roy Williams carefully explains that if a region does not allocate a portion of their resources toward filling the pipeline for primary jobs, they will atrophy over time.

Mr. Williams also explains that this is a not a competition between primary and secondary jobs. Both are valuable; however, primary jobs are a **wealth creator**. Secondary jobs are a **wealth circulator**.

Can mid-America re-create itself as a sustainable economy or will mid-America just become a welfare economy dependent upon major metropolitan regions and the east and west coast?

Primary jobs
result from a
valued added
product
exported to a
national market
where the
profits come
back home.

Jobs...Jobs...Jobs...

To shed some light on this question, we examined the history of rural Detroit. Ft. Detroit was established in 1710. During the 19th century, Detroit became an important hub of the Great Lakes region because of its location and transporting materials on the Great Lakes waterways. With the expansion of the American automobile industry in the early 20th century, Detroit emerged as a significant metropolitan region within the United States.

Detroit had become both a primary job and wealth creator.

In fact, one might argue that Detroit was the “high technology and venture capital center of the U.S.” until 1928...or maybe even until after W.W. II when they abandoned the assembly of four-engine bombers at Willow Run airport in Michigan. Those bombers were the predecessor to the four-engine commercial aircraft designed and built in Seattle and other cities.

**Detroit
did not just
spawn the
automotive
industry.**

Detroit did not just spawn the automotive industry. The automotive industry created “economies of scale” for several emerging industries including steel, rubber, upholstery, lighting and engines among others. Although Detroit was viewed in the early 20th century as a rural backwater by the east coast establishment, one might conclude that Detroit actually provided the “capstone” to the industrial economy in the U.S. Therefore, Detroit and Michigan thrived.

This should encourage urban and rural mid-American cities to take up the challenge. Detroit, Michigan had an impact on the industrial economy that rivaled Silicon Valley’s impact on the information economy. That is one reason why Michigan and the upper Midwest thrived in the 20th century.

**Could your city be an example that
experts talk about in the 21st century?**

Yes, but only if you make some hard choices about filling your pipeline for primary job creation.

Let us know what you think!

Jobs...Jobs...Jobs...

4 Minute Video by Roy Williams or type in at YouTube.com, and search for “What is traded sector” <https://youtu.be/MsbgcJyZYY>

Job Creation Research in 2011 http://econweb.umd.edu/~haltiwan/size_age_paper_R&R_Aug_16_2011.pdf

Embed in On-Line Publications

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<iframe width="560" height="315" src="https://www.youtube.com/embed/MsbgcJyZYY" frameborder="0" allowfullscreen></iframe>
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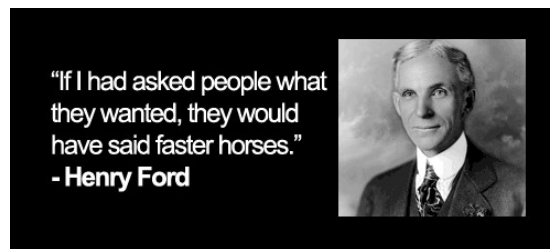

Jobs...Jobs...Jobs...

Re-Design Products

Henry Ford & Steve Jobs had something in common

“...both men responded to their customers needs not their wants.”

Henry Ford and Steve Jobs had something in common... they did not respond to their customers wants/desires. Instead, they responded to their customers **unperceived** needs.



Henry Ford gave them an automobile instead.

Steve Jobs is notorious for avoiding focus groups. He believed that Apple's staff had a better sense of what people needed.

"It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them."
-- BusinessWeek, May 25 1998

The second thing that Ford and Jobs had in common was that they both **redesigned products for existing markets.**

Henry Ford helped re-design the horse and buggy into an automobile, some say horseless carriage, for an existing market. Steve Jobs successes were redesigned products with existing large markets. For example, Sord Computer Corporation, a Japanese company, introduced in 1972 its SMP80/08 microcomputer which preceded the introduction of Apple 1, an initial offering in 1976.

- Blackberry dominated the smart phone market before Apple introduced its iPhone in 2007.
- Microsoft in 1992 introduced Pen Computing 1.0 software for a notepad that included an on-screen keyboard for writing before Apple introduced its iPad in 2010.

Jobs...Jobs...Jobs...

This is not meant to criticize Steve Jobs and Apple's strategy. Rather, redesign was and still is a brilliant tactic that cities could apply.

However, Wall Street was not sure about this tactic in 1997. Nor does Apple's approach fit the typical venture capitalist's traditional view-point of high technology new products for huge markets.

Why do you think that Steve Jobs pursued this contrarian tactic at Apple? Steve Jobs knew, supported by data, that...

- A product was valued and actually being purchased by specific consumers that also identified with Apple's offerings.* (See Simon Sinek's "Why...How...What" video)
- A market existed that was large enough to support a re-designed product for Apple.
- Re-designing a product for an existing market would minimize the risks associated with product introduction and scaling when necessary for a large market.

As a result, should mid-American cities and their manufacturing companies examine Henry Ford's and Steve Job's emphasis on redesign of products for existing markets?

Is this a key tactic for mid-America cities?

Future articles will make a case that the most fruitful avenue to scale for existing privately-held manufacturing companies with 20-500 employees lies with the redesign of products for existing markets...but maybe not all markets.

Steve Jobs Quotes: <http://archive.wired.com/gadgets/mac/commentary/cultofmac/2006/03/70512?currentPage=all>

1st Micro-Computers: <https://en.wikipedia.org/wiki/Microcomputer>

Simon Sinek's "Why...How...What..."

<https://youtu.be/sioZd3AxmnE>

-Product Valued

-Market Existed

-Minimized Risk

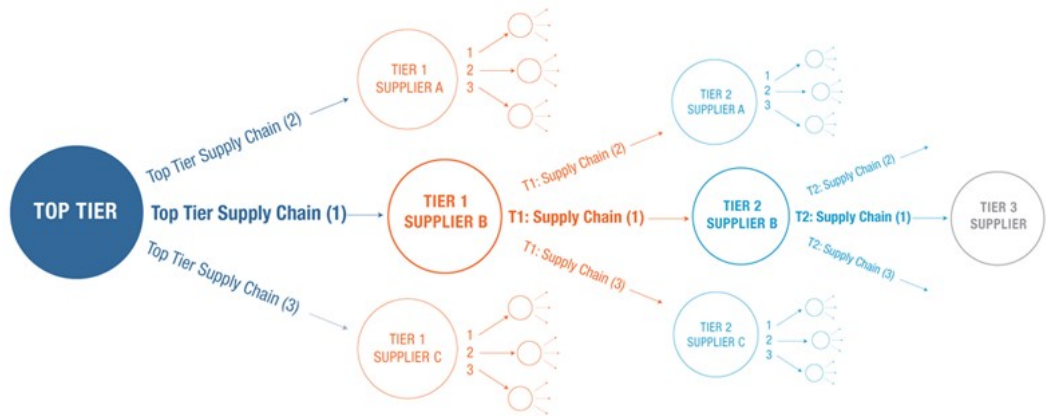
Jobs...Jobs...Jobs...

Supply Chains & Commercial Products

Tier I, II III Suppliers

Why was Microsoft, founded by Bill Gates and Paul Allen in 1975, positioned as the primary and sole **supplier** for MS-DOS to IBM in 1981?

Can a Tier I, II or III **supplier** become an original equipment manufacturer (OEM)? If so, how?



The popular conception for job creation and economic growth focuses on consumer products. While consumers are an important part of any economy, mid-American manufacturing companies need to be cognizant of the risks associated with scaling consumer products.

Privately-held manufacturing companies with 20-500 employees should first examine the options within commercial or industrial markets before jumping into consumer markets. Consumer markets require a company to scale in stage II or stage III requiring capital, skilled management and core MGF competency.

Google, Facebook, Amazon, etc. received venture capital investments as they scaled because of huge consumer markets and advertising revenues. There is nothing morally wrong with these strategies even though they seem to depart from some 20th century values.

As Jim Collin's observed in his 2000 book, entitled, "Good to Great," "Students at Stanford University are more interested in FLIPPING a company rather than growing a GREAT company."

This may be true of Silicon Valley and venture capitalists, but it does not necessarily represent the core values of many privately-held companies in mid-America.

How could Microsoft become the primary and sole Tier I supplier to IBM?

Jobs...Jobs...Jobs...

Flipping may become necessary if a smaller company discovers a product with a large market. However, there are valuable niche markets, some with limited growth, which privately-held companies are ecstatic about because they have

- Long product life cycles,
- Extra-ordinary profits and
- None of the risks associated with 30% compounded growth.

The popular rise of venture capital and job creation over the last five decades has been dominated by consumer products. While an important part of any economy, mid-American cities and their manufacturing counterparts need to be cognizant of the risks associated with scaling consumer products.

Mid-American cities and privately-held MFG companies with 20- 500 employees should first examine the options within commercial or industrial markets before jumping into consumer markets. Why?

- The commercial customer decision network is smaller and more manageable.
- You are solving a tangible problem for a commercial market that is well defined.
- The decision process is more rational.
- Leadership can build trust relationships between engineering staff and decision makers at the OEM.
- The growth pattern for the next 3-5 years is more predictable for capital investments based upon the OEM's planning process.
- A company can grow the niche, at least in part, from cash flow over a 3-5 year period.
- Usually, a company does not have to organize and finance a sales organization for the OEM's customer.

- Manageable
- Solving
- Rational
- Trusted
- Growth
- 3-5 years
- No Sales

Jobs...Jobs...Jobs...

Mid-American cities and MFG companies that are pursuing commercial or industrial markets might consider the following criteria.

- Re-Design
- Niches
- Commercial
- Low TECH
- Find & License

- Redesign products for niche markets with at least \$20,000,000 in annual sales to justify the investment as well as creating economies of scale.
- Select a product-market mix with a maximum of \$200,000,000 in annual sales. This minimizes the opportunity for large companies to subsidize a product-market and put a manufacturing company out of business.
- Enter commercial/industrial markets as a Tier II or Tier III supplier. This takes time and is difficult to establish but can elongate product life cycles.
- Utilize low-medium technology and/or trade secrets to redesign products for an OEM market.
- Find, acquire & license technology from universities, labs and inventors. Creating a new technology takes too much time and money.

Where do we get these redesigned products so critical to mid-America's success?

In our next article, we answer this key question:

*McKinsey Global Institute: <http://www.mckinsey.com/business-functions/operations/our-insights/the-future-of-manufacturing>

World Bank data on Manufacturing Jobs: <http://data.worldbank.org/indicator/NV.IND.MANF.ZS?locations=US-DE-JP-KR-CN>

Jobs...Jobs...Jobs...

Find vs. Create...

High vs. Medium...

Patents vs. Trade Secrets...

Most observers would agree that Boston and Silicon Valley shaped the “Information Economy.”

Each region thrived as a result.

Can a regional city help shape the “NEXT Economy” for 2030?

So, what is the adjective that might replace “INFORMATION” by 2030?

- Green economy
- Genome economy
- Nano-Tech economy

In order to help shape an emerging economy, a city, region or state much make a choice. You have to take a risk.

From an earlier article on REDESIGN, we would suggest the “Design Economy” as the best option for mid-American cities. Why? Design cuts across most disciplines and professions including engineering.

So, if a local MFG company and its city commits to the redesign of existing products, what are the next steps?

Find or Create Technology

Venture capitalists seldom create the technology for their investments. They scurry around the U.S., and even the globe, to find technology based products for large markets. A market should be large enough to sustain 30% compounded annual growth.

Venture capitalists just find and invest. You can do the same.

Most manufacturing companies with 20-500 employees may not have the financial and design resources to create technology. But they can find and license many and varied low, medium and high technologies from universities, labs and inventors.

What’s Next...

- Green
- Genome
- Nano-Tech

Jobs...Jobs...Jobs...

High vs. Medium Technology

In 2014, we were interviewing Chamber of Commerce Presidents in smaller mid-Western cities. We were surprised when the Chamber Presidents of two Indiana cities stated, and we are paraphrasing,

“I am tired of reading about high technology. Everyone is preoccupied with the application of high technology which no one locally understands or knows how to apply to their company.

Our local MFG companies don't have the staff or labor force that is skilled to handle high technology. We would be more interested in the redesign of existing products using low or medium technology. Someday, these MFG companies may be able to incorporate high technology but not today.”

Patents vs. Trade Secrets

Patents...Patents...Patents...

Once you patent a product, it becomes public information. A patent can be reverse engineered, designed around or just ignored.

Just ask your local serial inventor,

“How many of your inventions have you patented lately?”

You may be surprised at their answer. Patents are public and expensive. However, they do have a role to play in protecting selected niches.

In spite of all the talk about patents, a unique tool for protecting a product-market lies with trade secrets. For example, Coke never patented its formula. Trade secrets for a manufacturing process will often elongate a product lifecycle. Trade secrets are usually the basis for monopolies as well.

Who will headquarter a “great” company in your local city?

We will answer that question in our next article entitled,

“Good to Great” vs. Flipping

What is the inherent value of a patent compared to a trade secret?

*Wisconsin Alumni Research Foundation or WARF: https://en.wikipedia.org/wiki/Wisconsin_Alumni_Research_Foundation

Jobs...Jobs...Jobs...

“Good to Great” vs. Flipping a Company

Jim Collins, author of “Good to Great,” was a professor at Stanford University in the 1990’s and early 2000’s. His classes were overflowing until the tech boom in the early 2000’s. Then everything changed... enrollment dropped precipitously. Why!

- Stanford students were more interested in flipping a company.
- Stanford students were no longer interested in building great companies like, Ford, General Electric and Sears?

Will your local young adults, since you invested more than \$100,000 in their K-12 education, commit to building a great company for your city? Or will flipping a company headquartered in your city be their strategy? You should ask them and find out before you invest!

What is wrong with “flipping?”

Nothing, except if you want to retain higher paying primary jobs in your city. Check out Pittsburg, Pennsylvania’s experience with successful start-up companies that were funded locally as well as by venture capitalists who later headquartered the companies outside of Pittsburg.

These successful start-ups in Pittsburg required additional capital. In stage II or III when they were beginning to scale, the venture capitalists required them to move the company close to their headquarters so that they could supervise their investment. It makes sense to the VC.

Attract or Create a Headquarters (HQ)

It is very difficult to attract a headquarters that can scale and create primary jobs in mid-America. Branch plants usually bring MFG jobs that are on the back side of a product’s life-cycle. They are not bad. But a community needs to understand that they will leave at some point in time.

So, who will actually grow your start-ups or scale an existing company that creates primary jobs? Usually, people who grew up in your city and view it as their HOMETOWN.

Jobs...Jobs...Jobs...

Niche Headquarters

Mid-American cities and MFG companies that are searching for products in commercial and/or industrial markets might consider the following criteria...

- Re-design products for existing niche markets with at least \$20,000,000 in annual sales.
- Select a product-market mix with a maximum of \$200,000,000 in annual sales.
- Enter commercial/industrial markets as a Tier II or Tier III supplier.
- Find, acquire & license technology from universities, labs and inventors.
- Utilize low-medium technology or trade secrets to redesign products for the OEM's industrial market.

24% of their
labor is in
manufacturing
...9% in the U.S.

Flipping and Ownership

Venture capitalists, including angel and seed investors, are always cognizant of their need to exit their investment. The common term is FLIPPING...not a flattering concept to those who have been victimized by a venture capitalist.

The venture capitalist with a success story would argue that it creates wealth for the original entrepreneur and the community. And there is truth in that perspective. However, many communities, who have subsidized a company that is later sold or taken public, do not participate in the capital gains. Capital gains are not necessarily reinvested locally. This is because of the way cities structure their investments...that is their fault for being naïve or just plain stupid.

Jobs...Jobs...Jobs...

An unintended consequence is that wealthy individuals who have benefited do not necessarily re-invest the capital gains in their hometown. In fact, some of them move to a new city or state taking their financial resources, experiences and networks with them.

A portion of the resources gained when a company is flipped should remain in the community to reinvest in future ventures. But how do you do this?

Subsidiaries: Organize each product as an independent entity around product-market niches, i.e., a subsidiary. Never flip or sell the entire headquarters.

Succession: Plan for the eventual sale. Why did the Bancroft family, former owners of the Dow Jones & Company, sell the Wall Street Journal in 2007? Eventually, there were 30+ family heirs, revenue had declined and profits had dropped. In 2007, Rupert Murdoch of News Corp offered \$60/share to a company selling for \$33/share.* The alternatives were obvious to heirs scattered across the county.

Inventure Equity Pools: So is there are alternative to venture capital other than debt? Yes, there is...Inventure Equity!

Inventure Equity vs. Venture Capital

	Invenure Equity	Venture Capital
Market Size	Under \$200,000,000 annual sales	\$250,000,000+ annual Sales
Growth Rate	10% to 15% controlled growth	30+% annual growth rate
Capital to Grow	Primarily from profits or debt	Additional venture capital (equity)
Patents & Trade Secrets	Patents & Trade Secrets	Patented Technology
Quality of Technology	Low and Medium Technology	High Technology
Product Life-Cycle	7-10+ years	3-5+ years
Length of Investment	Long-Term 10-20 years	7-10 years
Exit Strategy	Sell a division...never the HQ	Sell HQ to a Corporation/Take Public
Management	Professional Management	Entrepreneur;Professional Manager
Ownership	Management 20% or less	Initial Control by Entrepreneur (51%)
Success Rate	50% to 70%	10% to 20%
Goal	Job & HQ & Wealth Creation	Wealth Creation
Strategy	Grow a Great Company (HQ)	Flip the Company

Jobs...Jobs...Jobs...

If your strategy is to encourage local companies to find ways to expand or create headquarters (HQ) as well as attract companies to their city, then inventre equity rooted in the local community should be one major component.

Pooling Sources:

Inventors, entrepreneurs and communities should challenge the following entities to create appropriate pools of inventre equity, for example,

Endowments

Endowments as a source of inventre equity:

- Community foundations & school foundation endowments
- College and university endowments
- Corporate, city or state employee retirement funds

Inventre Funds

Private Inventre Equity Funds: Individuals could aggregate \$20,000 unit investments in a local inventre equity fund for long term investments.

Taxing Districts

Taxing Districts: State legislation that allows local communities to aggregate taxes for Inventre Equity investments rooted in the community.

Can mid-America go it alone, identify and support a strategy that will create higher paying manufacturing jobs for the middle class?

*Bancroft family sells Wall Street Journal. https://en.wikipedia.org/wiki/Bancroft_family

Jobs...Jobs...Jobs...

Smart Cities vs. Design Cities

What is a Smart City?

Boyd Cohen in Fast Company magazine had a broad definition of a smart city,

*“Smart cities use information and communication technologies (ICT) to be more intelligent and efficient in the use of resources, resulting in cost and energy savings, improved service delivery and quality of life, and reduced environmental footprint—all supporting innovation and the low-carbon economy.”**

Boyd Cohen’s top 10 smart cities were:

Smart Cities:

- Vienna
- Toronto
- Paris
- New York
- London
- Tokyo
- Berlin
- Copenhagen
- Hong Kong
- Barcelona*

Why is your city not on the list?

Were you even under consideration?

Do you know what their screening criteria are to be ranked?

Could your mid-American city ever compete?

Jobs...Jobs...Jobs...

The smart city rankings include more than just broadband and digital capabilities. However, I don't think that your city should try and compete with other cities.

You may want to benchmark why and what smart cities are doing. But, to compete for ideas, inventions, technology and talent, you need to select another niche to leap-frog your competition.

What is a design city?

“Design cities use our nation’s most valuable resource...

creative people...

to frame a culture and destination emphasizing the redesign of existing product-markets for primary job creation.”

Many economic development consultants create plans to challenge a city/region to improve its position relative to comparable cities by focusing on four areas:

- Workforce development
- Infrastructure
- Economic development
- Regional stewardship

This is a constructive strategy that is necessary but not sufficient.

One way to leap-frog benchmarked cities is to focus on shaping an emerging economy. A city or region can refocus on the broader **context**. Replicating principles associated with the “**information economy**” will only bring you even with your competition. By looking beyond your city/nation and helping shape the 2030 “**design economy**,” you may be able to accelerate primary job creation in your mid-American city.

“Geeks existed in the 1980’s.

By 2000, they had become our heroes.”

“Designers/inventors exist today in your towns & cities.

*If by 2030 they become your city’s heroes,
your city might thrive.”*

Your heroes
will shape
the character
of your
city’s culture.

Jobs...Jobs...Jobs...

However, as you pursue a strategy associated with becoming a design city, Boyd Cohen observed three tactics you can apply from the smart cities movement.*

Step 1: Create a vision with citizen engagement

Step 2: Develop baselines, set targets and choose indicators

Step 3: Go lean

We agree...who will engage?

20 st Century	21 st Century
Information Economy	Design Economy (redesign)
Creation of Knowledge	Commercialize Technology
Research: University-Based	Redesign: Individual-Based
Hi-TEC Large Markets	Medium-TEC Niche Markets
New Product-Markets	Existing Product-Markets
Consumer Products	Commercial Products
Fast Growth (30%+)	Controlled Growth (8%-15%)
3-5 Year Life Cycle	7-15 Life Cycle
High Risk	Medium Risk
High Failure Rate	Low Failure Rate
Venture Capital	Equity from Existing Company
Attract Companies	Create/Expand HQs
Jobs (Secondary)	Jobs (Primary)
"Geeks" became heroes	"Designers" become heroes

*Top smart cities

<https://www.fastcodesign.com/1679127/the-top-10-smart-cities-on-the-planet>

**Smart city article

<https://www.fastcodesign.com/1680538/what-exactly-is-a-smart-city>
[See chart below contrasting "Knowledge versus Design Economy"](#)

Jobs...Jobs...Jobs...

Collaborating Partners

Who is Dee Hock?

Dee Hock is one of the most important business figures in the late 20th century...invisible yet influential.

Bank of America began franchising its credit card to other banks in 1965. In 1968, Dee Hock, an ordinary vice president of an obscure bank in Seattle, was assigned the job of representing their bank on a credit card task force.

Eventually in 1970, Dee Hock, after convincing Bank of America to collaborate and organize VISA, became the CEO of Visa International. Anyone interested should read Dee Hock's book on "*Birth of the Chaordic Age*" published in 1999.

But what is the lesson that we can take away from VISA and apply to mid-American cities?

Highly competitive organizations can collaborate, if not partner, when they share common vision and benefits.

Dee Hock encouraged disparate groups to begin with the following question which we adapted to our vision for design cities. We have shaped Dee Hock's question to align with a commitment to the fair exchange of intellectual property in a competitive global world.

"What would be the nature, not the structure, of an ideal organization to create a global service for the fair exchange of intellectual property?"

--adapted from Dee Hock. 1st President of VISA

So who are the local actors that, if they collaborated, could be the catalyst for primary job creation in mid-American cities?

Community Foundations

The 1st Community Foundation was founded in Cleveland, Ohio in 1914.

- Stage 1: 1914-1980...Community Foundation as Administrators
- Stage 2: 1990-Present...Grow Designated Funds & Endowment
- Stage 3: 21st Century...Catalyst, Collaborator and Strategic Partner

“What would be the nature, not the structure, of an ideal organization to create a global service for the fair exchange of intellectual property?”

Jobs...Jobs...Jobs...

Community foundations have four assets to contribute as catalyst, collaborator and strategic partner:

- *Create a designated fund specifically for primary jobs*
- *5% of general endowment as invention equity*
- *“Designated fund” donor network of investors*
- *Network of local & state leaders*

Colleges & Universities

States, cities and town leaders are reaching out to higher education across mid-America to engage in job creation. As an economic anchor of a city or town, colleges and universities have a vested interest in a sustainable economy.

Higher education has assets as a partner:

- *Entrepreneurship degrees*
- *Access to technology*
- *5% of endowment as invention equity*
- *Alumni as community leaders*
- *Network of local and state-leaders*

Community Banks

The community banking movement is gaining ground in both numbers and influence. As a spokesperson for a sustainable local economy, bank leaders have a vested interest in a city's future.

Community banks' assets include:

Access to debt financing

Knowledge of scaling pitfalls

Access to...

- *Business Owners*
- *Federal Networks*
- *Decision Makers*
- *Local Leaders*

Collaborators:

- Foundations
- Higher ED
- Banks
- K-12 ED
- Chambers
- Non-Profits

Jobs...Jobs...Jobs...

K-12 Public Education

While public education has been foundational to a democracy, it is much more than that today. K-12 education is central to developing core values and skills for primary and secondary jobs.

K-12 education can collaborate if properly supported:

- *21st century curricula*
- *Local school/education foundation*
- *Alumni who received a subsidized education*
- *Access to...*
 - ◆ *Business Owners*
 - ◆ *Federal Networks*
 - ◆ *Decision Makers*
 - ◆ *Private Foundations*

K-12 Resources

- **Curricula**
- **Foundation**
- **Alumni**
- **Access**

Chambers of Commerce

Chambers are uniquely suited to assist their members...a majority of which are “secondary job” providers. Chambers could still play a key role working with existing local companies that are, or have the potential for, exporting products and/or services to fill future pipelines for primary jobs.

Chambers of Commerce have assets to contribute:

Access to...

- *Business Owners*
- *Decision Makers*
- *Consultants*
- *State & National Leaders*
- *Education Programs*
- *Scholarships*

Jobs...Jobs...Jobs...

Non-Profit Organizations

Many and varied non-profits exist in most communities. They are under the radar in terms of job creation; however, their constituents are often the beneficiaries of high paying middle class jobs.

Non-Profits, including hospitals, service clubs, YMCA, churches, etc. can collaborate as well.

Access to...

- *Business Owners*
- *Federal Networks*
- *Decision Makers*
- *Local Leaders*

Can Dee Hock's strategy with VISA in the 1980's translate into an effective 21st century strategy for your city?

*Dee Hock biography: https://en.wikipedia.org/wiki/Dee_Hock

**Dee Hock: *Birth of the Chaordic Age* (1999)

***Community Foundations: https://en.wikipedia.org/wiki/Community_foundation

Can Dee Hock's strategy with VISA in the 1980's translate into an effective 21st century strategy for your city?

Jobs...Jobs...Jobs...

Template: 2030 City Outputs

Here is your opportunity to establish 2030 outputs specific to your city's future. Establishing outputs for 2030 can involve "educated guessing" or just picking a number. The outputs can be both qualitative as well as quantitative. Below is a template for you and your constituents to use to construct the final article of this series with our help.

2030 Qualitative Outputs

- Design culture & destination
- Innovative high school & graduates
- College faculty engaged in your city
- Workers skill levels increased
- Smart city infrastructure in place
- Expand core MFG competencies

2030 Quantitative Outputs

- 15 new niche headquarters
- 750 new primary jobs
- \$5,000,000 of inventure equity
- 3 local design studios
- 30% of college graduates return to the city
- 50% increase of taxable income for the city & state

2017 Action Items

- Join "Design Cities Consortia"
- Participate in virtual design network
- Access TEC databases & clearinghouses
- Create an inventure equity fund
- Replicate German strategy from the 1st article in this series

2030 Qualities

2030 Quantities

2017 Actions

Jobs...Jobs...Jobs...

Obviously, mid-American cities should be cognizant of their history and assets, for example,

- Core manufacturing competencies
- Employee skill levels
- Private capital
- Inventure Equity
- Access to debt financing
- Infrastructure
- Existing networks

Beyond the obvious, I would recommend that a city and its company owners also explore industries that are in transition. For example, America has been re-designing...

- **Cars** with a computer **to** a computer with wheels that will soon drive us around.
- **Phones** that are tethered and single function **to** mini-computers with multiple functions.
- **Refrigerators** that kept products cold **to** a storage unit that can organize and order products when depleted.
- **Packages** that are single function **to** packages that re-order products within the store and provide security features.
- **Engines** with mechanical sensors **to** embedded sensors that are monitored by computers live.
- **Steel and Plastic to** new materials that are creating innovative manufacturing processes and products.
- **Medical** furniture & equipment **to** innovative redesigned furniture designed by patents.

“The future
belongs to
those who give
the next
generation
reason to
hope.”

de Chardin

Appendices

- “Primary Jobs” 2018 Outputs
- “Why...How...What...”

Primary Jobs...

2018 Outputs

During the remainder of 2017, we are asking mid-American cities to explore options associated with primary jobs and niche headquarters creation. Our goal is to organize a cadre of “Design Cities ” by early 2018.

2018 Inputs

- **Mid-American Newspapers...**publish “Primary Jobs” 10 part series in 25 mid-American city newspapers.
- **MFG Companies...** build a database of MFG company owners with 20-500 employees and solicit participation.
- **Mid-American Cities...** solicit cities including their EDC’s and Chambers of Commerce to join a Design Cities Consortia in 2018.
- **Community Foundations...** partner with cities and colleges asking them to provide 50% of the required seed funding for projects.
- **Regional Colleges & Universities...** collaborate in organizing a database/clearinghouse of low, medium and high technology for the redesign of exiting product-markets.
- **Local Design Studios...** create a least one local design studio founded by high school students in each city.
- **Inventure Equity Fund...**organize at least one fund in each city.

2018 Outputs

- **Mid-American Newspapers...**50 community newspapers publish “Primary Jobs” 10 part series.
- **MFG Companies...** 50 expanded MFG companies creating 250 new primary jobs in 2018.
- **Mid-American Cities...** 25 cities become part of the “Design Cities Consortia” at a cost of \$10,000/year for five years.
- **Community Foundations...** collaborate to focus on removing the glass ceiling and expanding their donor base in mid-America.
- **Colleges & Universities...** license 100 products to SME companies.
- **Design Studios...** 25 Design Studios funded and operating.
- **Inventure Equity...** \$2,000,000 in various local funds.

Jobs...Jobs...Jobs...

“Primary jobs result from a value added product or service that is exported and where the profits return home.”

Roy Williams



|| Why?...We

...search daily for 1st followers who share our vision that

“The future belongs to those who give the next generation reason to hope.”

de Chardin

We think outside the box every day as we partner with city leaders, company owners and inventors to identify tools, products & trade secrets for REDESIGNED products. We engage the next generation to expand the middle class by scaling manufacturing (MFG) companies & creating primary jobs.

|| How?...Our Skunk-Works maintains

A Database of MFG Companies with 20-500 employees who could scale. **(58,259+ MFG companies in the U.S.)****

The Design Cities Consortia, composed of 25 mid-American cities are shaping the “Design Economy” and creating primary jobs...

“Value products exported and sold to national markets where the profits come back home.”

A Technology Clearinghouse & Exchange of niche technologies from universities, labs, institutes and inventors for start-ups and existing MFG companies willing to scale at 8%-15% annually.

Aggregated Sources of Inventure Equity...See chart in text.

|| What?...Outputs

- **Scale 20% of existing MFG companies...11,000+ companies @ 200 jobs each by 2030.**
- **Create 2,200,000+ American MFG primary jobs by 2030.**
- **Organize a Design Cities Consortia...25 cities by 2020.**
- **Incorporate 250+ Start-Ups (10/city) by 2020.**
- **Organize a TEC Clearinghouse to license redesigned products in 2018.**

“What’s possible? Who cares enough to engage?”



Primary Jobs

→ Engage the Next Generation



Destination for SME Company Owners

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