Cross Sector Clusters

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nuguru

Business and Marketing Consultants

Agenda

- Cluster Theory
- Clusters in Saskatchewan
- Alternative Approach

Cluster Theory

Clusters arise because companies are stimulated to locate near one another to take advantage from the existence of a variety of external effects. The literature emphasizing these externalities is considerable. The basic reason for clustering is the minimization of transportation and communication costs. Also, geographical proximity gives companies the possibility to access a large pool of suppliers (including skilled workforce) and thus reduce search costs, which positively impacts productivity. In addition, industrial agglomeration facilitates the flow of tacit knowledge among firms (Desrochers, 2001), creating an “environment of learning”, and allowing companies to more efficiently acquire “know-how” and accelerate innovation.

Cluster Theory

More generally, “agglomeration fundamentally serves to increase the opportunities for exchange and to reduce the incidence of missing markets” (Gordon and McCann, 2000, p. 518). This perspective is supported by Porter (1998), who argued that “being part of a cluster allows companies to operate more productively in sourcing inputs; accessing information, technology, and needed institutions; coordinating with related companies; and measuring and motivating improvement.”

http://mpra.ub.uni- uenchen.de/6275/1/MPRA_paper_6275.pdf

Clusters in Saskatchewan

- Mining
- Oil and Gas
- Agriculture Implement Manufacturers

- Arguments for others?

Why Not Clusters?

- No critical mass of population or industry
- No closely linked supply chain
- Long distances between homogenous industry
- Lack of differentiated industry
  - Saskatoon does not have a transportation cluster, it has the number of transportation companies you would expect for a city of that size

Why Not Clusters?

- Relies on coordination – who should lead?
  - Government
  - NGOs
  - Associations
  - Companies
- Assume key stakeholders will act for the good of the sector – the “Road to Hell”

Why Not Clusters?

- Key Stakeholders are too “self interested”
- In general running too hard with labour constraint and aging and thin management
- Maximization of profit under the current conditions is more motivating than focusing on the good of the sector
- More may be developed from regional cross sector groups than in sector

Why Not Cluster?

- Traditional cluster application has become overused
- Results in misapplication for political motivations
- Literature on direct Government involvement is not generally positive
- Most of the cluster experience is based in areas of large population and smaller distance – no real rural model
- Manufacturing and processing facilities are owned by multinationals that make their decisions to cluster expertise elsewhere

Rural Clusters

- Rural clusters in the United States with Government involvement are characterized by massive Federal and State subsidies, low wages and skill levels, and anti-union legislation – Tennessee and Alabama
- Other clusters are “catalogued” to validate the model such as arts/crafts cluster or houseboat cluster

NASA Model

- “Put a man on the moon” – Solving the big problem through cross sector teams
- Everyday products linked to NASA:
  - Invisible braces
  - Scratch resistant lenses
  - Memory Foam
  - Ear Thermometer
  - Shoe Insoles
  - Long Distance Telecommunication
  - Safety Grooving
  - Cordless tools
  - Water filters

Cross Sector Problem Solving

- "Leadership for Common Good" is emerging in the United States to solve ecological and health issues with cross sector teams including Universities, Multinationals, and Special Interest Groups
- Issues of Intellectual Property and management/direction of project are key challenges

Cross Industry Clusters

- Organized first to solve common issues such as labour recruitment
- Move to solve industry problems through collaboration with groups outside of industry
  - Avoid Group Think
  - Reduce R&D time and investment by using existing solutions in new industries
  - Reduce capital investment by using existing industry to outsource solution

A Quick Situational Analysis

- Saskatchewan is in a huge boom driven by resources – not unnoticed internationally
- Lack of labour – skilled and unskilled is the biggest constraint
- Saskatchewan businesses are overdue for transition – aging ownership and thin management

Alternative Approach

- Start at individual company level searching for opportunities
- Once an individual company moves toward new opportunities they become better positioned to work with other companies on combined markets and products

Alternative Approach

- Appeal to self-interest – the motivation is to maximize profit operating within current constraints
- Find approach that works at the grassroots level with the economic development people that live and work in the community
- Leverage off the current Saskatchewan boom and focus on industries that “pull” products to market

Opportunity Assessment

- Assess each company through some basic questions:
  - Are you operating at capacity (administration, machines, and labour)?
  - Is there a bottleneck? Can it be resolved?
  - Of the products and services you provide are you optimizing you return?
  - Are there products and services similar to yours with greater return?
  - What would you need to do to produce the products and services and access the market?

Opportunity Assessment

- Two Examples (names changed to protect the innocent – both companies have in excess of $20MM in sales)
- Company A producing product for market with strong ”pull” and losing money on every product
- Company B stagnant sales in sectors, but great network of distributors and dealers and great brand

Company A

- Provides specialized finish product because it sells well in the market and other companies offer it as well
- Finish requires substantial rework and existing machinery to apply is inadequate
- In current market they can sell other products and run at full capacity for more return
- Solution is to actually offer less product

Company B

- Sales stagnant because of focus on one industry
- Running at capacity and company unwilling to risk current production
- Find other products produced in Europe to brand and move through distribution network
- Sales doubled in two years

Collaboration

- Next step is for companies to work together to produce products and services and to reach new markets
- Traditional Cluster theory uses companies and supply chain in the same industry
- Cross Sector Cluster puts companies together that do not compete in the same sectors – in search of the “peanut butter-chocolate” moment

Collaboration

- Saskatchewan Advantages are maximized in cross sector approach
  - Not mass production so changes can be incorporated quickly
  - Cross sector overcomes geographical disbursement
  - No trade secrets exposed to competitors
  - A regional approach means less travel time and more direct connections

Opportunity Assessment 2X2

- EMEP – Buick Lacrosse

- EMNP – Buick Enclave

- NMEP - China

- NMNP – 59 Buick (Cuba)

Maximization – Markets/Products

- EMEP
  - Existing Market/Product
  - Relies on supply/demand of existing target market
  - Requires no investment
  - Relies on economies of scale
  - Can be low margin
  - Cash Cow Strategy

Maximization – Markets/Products

- EMNP
  - Leverages existing dealer and distribution networks and relationships
  - Provides larger product mix
  - Can be low investment if products are contracted
  - Some investment and relationship risk
  - Outside contracting strong match with low labour supply
  - Brand Leverage Strategy

Maximization – Markets/Products

- NMEP
  - Maximizes economies of scale potential
  - Creates new dealers and networks
  - Can require investment and development time
  - Provides exposure to new markets and opportunities
  - Relies on strength of sales and marketing team
  - “STEP” Strategy

Maximization – Markets/Products

- NMNP
  - Requires investment and substantial time
  - Highest risk option
  - May provide the highest return
  - Requires expertise at all levels of the organization and partnerships
  - Difficult to implement in times of high product demand
  - Make or Break Strategy

Creating the Cluster – Adding Value

- Can occur at any point in the Matrix of existing and new
- With existing market and existing product can occur when bottlenecks are moved outside and production increases
- Need to look at others' expertise to access new markets and create new products

Two Approaches

- Solving the big issue – The NASA approach
- Getting cross sector teams to apply their expertise and capacity to create big solutions – can be localized issues that once resolved can be applied elsewhere
- Simply finding the new market or new product – incremental approach that relies on the benefits of partnering

Next Steps

- Pilot projects for both approaches
- Need a region to undertake the big problem with a solution to be found at the intersection of cross sector team expertise
- Need a region to take on the SME approach
- Slow sustainable approach to finding opportunities and building linkages