Community Economic Development

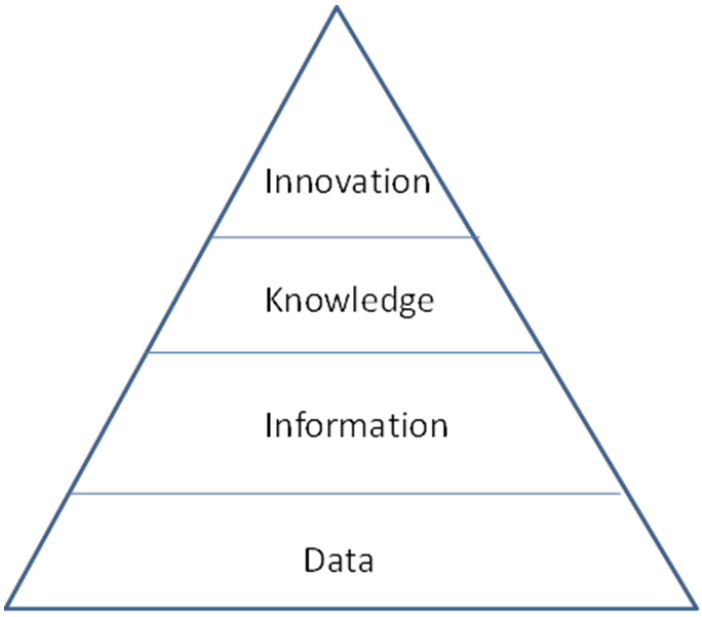
Data Analysis

The Creativity Pyramid

One underlying philosophy of community economic development within an Extension framework is "helping communities make more informed decision". The facilitation of community processes is the helping the decision making, but the informed decision requires bringing the results of research to the discussion making. One way to think about this process is moving from data to innovation using the "creativity pyramid". In the end, the goal is to help the community become innovative in terms of developing strategies to affect change. Innovation, however, much be based knowledge, which is turn is based on information and information is drawn from data. In this framework, innovation is built on quality data, or data is the foundation of innovation. The key here is how to help communities move up the pyramid.

Data can take two forms: primary and secondary. Primary data are original data collected by the practitioner or educator and can come from surveys of local residents and businesses or focus groups. These data are generally unique to a targeted group. Secondary data are those that have been collected and reported by others, such as the Census or employment and income data collected by state and/or federal governments. In Wisconsin the Department of Workforce Development, for example, is a central source of employment data.

Information is the transformation of that data using such tools as growth indices, location quotients, pull factors and others. Raw data, such as a spreadsheet containing survey responses, is of little value to the decision-making process. The data must be analyzed to draw information from the data. This can range from simple to complex analysis. Simple analysis might include calculating the percent of survey respondents answering a question in a particular way. More complex analysis might be something like cross-tabulation where the survey responses are broken into men and women or by age group to see if responses vary across groupings. One could even employ statistical tools such as regression analysis to further explore patterns in the data. It is those patterns that the practitioner or educator are seeking to uncover.



Knowledge comes from interpreting those data and coming to better understand the local economy. Within the data is a "story" of the local economy and the analysis of that data give us pieces of that story. Knowledge or

understanding of the local economy is gained as the "story" of the local economy is put together and explored. For the educator a challenge is being strategic in selecting the key pieces of information to tell that story. Too much information (i.e., "data dump") can be as confusing as it is insightful. Too little information and a true understanding of the local economy will be elusive. The "art of the science" centers on identifying those key pieces of information. By selecting those key pieces of information the educator can influence the direction of conversations undertaken within the community. On the one hand, this selection process can be a powerful educational tool helping the community focus on certain issues, but on the other hand the biases of the practitioner or educator can distort those local conversations.

Innovation comes from the insights from that knowledge which is turned into policy actions. Once the "story" of the local economy is understood the community is in the best position to develop strategies and policy actions that can steer or nudge the future direction of the local economy. The data analysis should not dictate the direction of these strategies, but rather inform those strategies. Through the data analysis, the strengths, weakness, threats and opportunities of the local economy can be identified and explored. Some communities may elect to build on their strengths while another community may elect to address their weaknesses. One community may conclude that a particular piece of information is a threat to the community and act accordingly while another community may interpret that same piece of information as an opportunity and act in another fashion. In the end, the data analysis should inform and not dictate strategies and decision making.

It is not uncommon that when communities explore the "story" of the local economy more questions will be raised then questions answered. This is actually a positive for the community. Generally, these new questions that are raised are more refined, focused and in-depth. This is a reflection of the learning process that the community is progressing through. This is also natural because the practitioner or educator has been selective in the use of information in painting the story of the local economy. As noted above, the practitioner or educator must refrain from doing a "data dump" and this necessarily means that some of the data based information is held-back.

If the initial data analysis is sufficiently complete, then it should be an easy matter to draw out the additional information required to shed light on the new questions being raised. In the days of overhead transparencies it was not uncommon to have 100 overheads of figures and tables prepared, but only ten of these are used to "paint the story" of the local economy. As new questions are raised, the educator would reach into their briefcase and pull out the relevant overhead to help move the discussion forward. Alternatively, the community economic development effort is ongoing and in reality has no "end date", additional data collection and analysis may be required to provide insights into these more refined and focused questions.

One must take care to avoid "paralysis by analysis". This occurs when communities cannot move beyond collection and analysis of data. As more refined questions are raised there is a natural tendency to want additional study before any actions are undertaken. Again, back to the days of the overhead project, the educator would often have one additional overhead slide at the bottom of the 100 slides of figures and tables that had a simple phrase: "paralysis by analysis". The challenge for the educator is the balance between not enough and too much data and information. At what point does the community have sufficient knowledge to act?

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