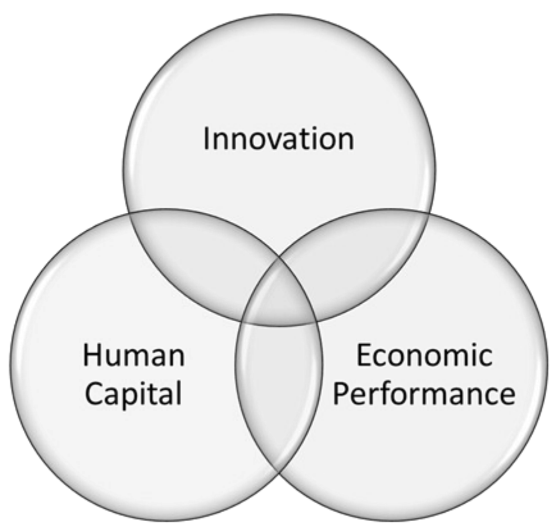
Innovation and Economic Performance

Economists disagree on most issues, but there is widespread agreement that innovation is a driver of economic growth and development. Early economist Joseph Schumpeter described a process of "creative destruction" wherein new innovative ideas, processes and products replace (e.g., destroy) existing ideas, and these (technological) advances spur economic growth. Innovation is rarely the result of random events (there are noticeable exceptions such as the discovery of the micro-oven) but rather a purposeful outcome of intellectual activity. Innovators ask themselves if there is some new way to accomplish some task or a different way to use some resource. The discoveries that are made in attempting to answer these questions are the innovations that drive economic growth and development.

Innovations are valuable because of the ways they enhance quality, accelerate processes, and satisfy both known and not-yet known human needs and wants. Because of their value, it is straightforward to see why many businesses view research, development, and innovation as part of profitable business plan. These innovative firms, and to a lesser extent early adopters of these innovations, are able to capture the profit windfall from being the first to market with the innovation. Depending on the nature of the innovation, patent protections can even give the innovative firm some monopoly powers over pricing and hence revenues. Thus firms have a strong profit motive to invest in research and development with the end goal of bringing a profitable innovation to market.

Consider the "innovation milieu" as outlined in Figure 1, which captures the interplay of innovation, both human capital and economic performance. The interface between innovation and economic performance is well understood in both academic and policy making circles. Firms that are innovators—those bringing new ideas, processes and products to the market—create an advantage over their competitions and are rewarded by higher profits. Indeed, if the innovation is sufficient, the firm can obtain exclusive use of the innovation through the patenting process, which gives it market power to earn especially high profits. Such profitable firms create jobs and pay competitive wages building stronger economic performance of the community and region.

Figure 1: Innovation Milieu



The interface between innovation and human capital is also well understood within the academic literature. Innovations are the result of ideas and ideas come from people. Investments in human capital are integral to generating curious and creative people who have valuable ideas that lead to innovation. Innovative firms will seek out places with "thick labor markets" where talent pools are larger and more diverse. In addition, innovative firms will invest in their workforce by encouraging workers to pursue professional development opportunities such as seminars, workshops, and conferences. Many firms attempt to create a work place environment that allows for maximum flow of ideas amongst its employees. Office space design consultants are working on ideas such as shared open office spaces, open conference rooms, and walls covered with whiteboards where employees are encouraged to write down ideas and thoughts. Thus, the term "innovative firm" is something of a misnomer. Firms do not innovate; people innovate. "Innovative firms" are simply those that strategically hire and cultivate innovative people and provide the funds that support research and development.

Innovative firms, which in turn require innovative workers, have been shown to drive economic growth and well-being. Economic growth then reinforces itself by creating even thicker labor markets, larger spaces for entrepreneurial activity and the ability of the public sector to invest in services such as public safety, parks and recreational services, and education. Some economists who study economic growth and development processes refer to this as "agglomeration effects" where dynamic cities are the hub of economic growth. This is not to say that smaller or rural places are not sources of innovation, but rather the critical mass (i.e., agglomeration levels) of activity tends to be located in dynamic cities and accelerate the innovation process.

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A number of years ago Wisconsin embraced the notion of cluster development which has had a number of positive outcomes. For example, it has helped many across the state to focus on Wisconsin's comparative advantages while at the same time communities have come to appreciate that these clusters do not recognize municipal or county boundaries. To be effective communities have found that collaborative efforts must be part of larger economic growth and development efforts. Communities have also learned that vibrant clusters must be composed of innovative businesses: businesses that are willing to invest in research and development and most importantly their labor force.

Innovation is driven by what people do (human capital in Figure 1) and innovative firms understand that they can not have an antagonistic relationship with labor relations. Effective clusters and the businesses that make up those clusters invest in their labor force both internal and external to the firm. This is strong in-house mentoring and professional development opportunities as well as strong partnerships with local and regional educational institutions including not only high schools and technical colleges but all institutions of higher education. Rather than taxes that pay for these investments in the labor force (human capital) being viewed as a cost to the bottom-line of the firm, and thus must be minimized, they are viewed as a vital investment into the future profitability of the business.

This creates two very different views of business climate: one that seeks to drive costs of operation as low as possible and the second that seeks to promote investments in human capital, interactive and continuous learning, a cooperative culture, and an investment in community. The latter, investment in community, aims to make the community as attractive to highly educated and skilled workers as possible. A happy, educated and motivated workforce drives innovation which drives economic growth and development for the firm and the community at large.

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