

Defining the University's Role in Economic Development

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Better do it...or someone else will" is the tacit subtitle of this paper. There is so much attention today on the role of the research university in economic development that any number of people and organizations, both local and nationwide, think they understand what needs to happen. And to no one's surprise, not all the opinions being put forth agree. So each of us in our own universities needs to be affirmative and thoughtful about this, or others with differing agendas will gladly step in and define our role for us.

Much is being asked of universities today; the impetus for universities to play a key role in economic development is but one of the best examples. As part of an effort to define and publicize, both on and off campus, the role of The University of Kansas in economic development, I will share some questions I solicited on this topic from KU colleagues. The questions will help define the way we want to go or not, as KU assumes a larger role in economic development in the state and the region.

Setting the stage

A recent article in the *Chronicle of Higher Education* headlined "The University as Economic Savior" described how higher education is replacing industry in some cities as the largest and most important employer.¹ As a result, we "face both

support and unrealistic expectations." An example of the latter is a 2003 op-ed in the Seattle newspaper, declaring that the University of Washington may be bigger than Boeing as a local economic asset.² The *Chronicle* article focused on Rochester, New York, where the Rochester Institute of Technology—not Kodak—is now the largest employer.

As universities take on a larger role in economic development, the question arises of where in the institution should this function be administered? For example, the senior research officer's title at Iowa State University is Vice Provost for Research *and Economic Development* (emphasis the author's). By history or default, and because of a natural connection with technology transfer, the economic development role seems attached to the research office in

¹ Fisher, Karin, "The University as Economic Savior," *Chronicle of Higher Education*, July 14, 2006, 52:45, A18.

² Evans, Dar, "Invest in UW and We Invest in Our Future," *Seattle Post-Intelligencer*, November 9, 2003, F1.

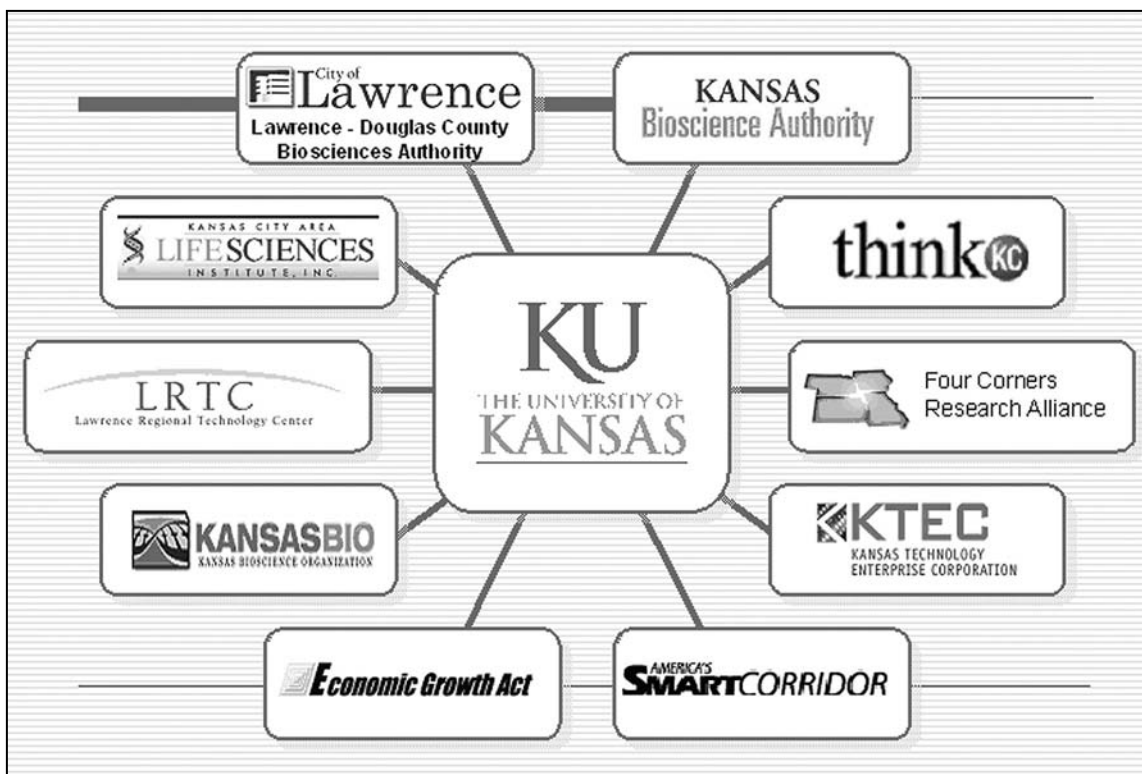
many if not most universities, even if it isn't in the title. That is not necessarily a bad thing, if the research office has the staff, structure, funding, and mandate to be successful. But it may be only an assumption that economic development administration is within the research office; in reality it may be highly decentralized.

At KU, as with many large research universities, there are a number of policies and procedures relating to intellectual property, consulting, research agreements, research center formation, etc. that all relate in part to economic development. And through the work of the faculty and various centers, responsibility for economic development is decentralized. There is no office of economic development per se. For this and other reasons, it is a good time to work through an exercise that helps the university agree on what it

is we want to be as an engine of economic development and to make a written record of our conclusions.

Economic development and/or bioscience organizations are proliferating in Kansas. We have the Kansas Bioscience Authority—not to be confused with KansasBIO, a trade association; the Lawrence-Douglas County Bioscience Authority; the Four Corners Research Alliance (Kansas, Nebraska, Iowa, and Missouri); and various initiatives based in Kansas City. One cause of this recent flurry of creation was passage of the Kansas Economic Growth Act that could allocate \$580 million over the next 10 years to the state research universities and others to build a strong bioscience research and industrial base.

To illustrate the scope of the flurry: the Tonganoxie Bioscience Authority was created recently. The population of



Tonganoxie, Kansas, is under 4,000. So it does appear that everyone is getting into this game, and at this rate every Kansas City suburb may end up with an authority. It is an exciting time.

What Questions Should We Ask?

As we began to think more deeply about this topic at KU, we envisioned a completed description of the university's role in economic development that included the processes, policies, and organization. But to get to that full description, what questions needed to be addressed? To start, we distributed a brief, unscientific survey to many KU faculty active in research, invention, and technology transfer. It was a one question survey: "What should we be asking ourselves as we move forward in formally defining the university's role in economic development?" We received quick responses from this select group—aided no doubt by the brevity of the survey—and from these submissions we distilled about 40 distinct questions.

I will review many of these questions, but I'll not provide answers. The answers arise from the role-defining exercise.

A primary question is, "Should we be doing this at all?" Even when the answer is an immediate and enthusiastic "yes," we ought to explain why. The explanation of why we engage in economic development is an important component of succeeding at it.

Next, though it sounds like a religious question, we have to ask how economic development relates to the mission of the university. Talking about economic development as a new, fourth leg of the mission is one way to look at

it. But economic development also can be seen as the central part of our existing mission. We can hang the whole thing on the teaching mission, if we wish to, in terms of entrepreneurial education, as a facet of life we want our students to learn about. KU offers courses in entrepreneurship in cooperation with the Office of Technology Transfer and we host internships and provide other opportunities for students to participate in economic development activities. From a research perspective, having companies allied with the university and having new companies around is important. All of this hinges on having good faculty, and today's faculty are interested in this. It's becoming a significant factor in faculty retention and recruitment, and is a public service.

Another question is, "What does the public expect?" I had lunch with one of our major researchers/innovators. He said all this should be measured in terms of benefit to the state. "How is this benefiting someone in western Kansas? How does this help my life?"

Yet another question is, "Should we write this down?" What we are really talking about is making sure everyone is on the same page and that we state it clearly.

Another KU researcher asked, "What are the outcomes and how do we measure them?" We get all sorts of comments from the public about what we ought to be doing in this realm. We can rattle off factoids such as "The KU Lawrence campus produces spin off companies at about one and a half to two times the national average, in terms of per million dollars of research" or, "We produce 75% of all the start ups in

the state.” Several faculty members have been enriched in this process. But we always get a roomful of glazed eyes when we say this. An interesting and inevitable conversation revolves around economic development activities. How should all this play into promotion and tenure decisions? If it does, what are the appropriate incentives and rewards? Usually, when I see the word incentives, I assume that means money. But here is the real money question, and the question I often ask: “Who pays” for the university’s economic development activities? We have to answer that question and a related one about whether a university should act as venture capitalist.

Another question: “Would we be better off just turning the intellectual property over to the company in return for an upfront license fee?” There are legal and financial implications to this, but it’s a legitimate question. Sometimes faculty complain about the technology transfer process. Sure, it can always be done better, but some difficulties arise when faculty members sometimes don’t realize the ball is in their court when working through the tech transfer maze.

The February 2006 issue of *Inc.* contained a provocative article by Carl Schramm, president and CEO of the Ewing Marion Kauffman Foundation in Kansas City;³ Chancellor Hemenway called it to my attention immediately. Schramm was saying, basically, that all universities—except for five—are greedy, bureaucratic, and other words that the chancellor underlined for my

benefit. Schramm gave his list of “five universities you can do business with”: UC-Berkeley, Caltech, Stanford, MIT, and UW-Madison. At about the same time, a major chemical company that was part of a consortium involved with one of our major research centers approached KU. They wanted the university to conduct some fundamental research for them and, of course, assign the intellectual property to them as well. The faculty and leaders of the center were basically on board with this, so we were faced with a decision. With Schramm’s article fresh in my mind, I asked our technology transfer officer to contact the five favored universities, telling them our situation and asking what they would do in our place. He called all five. One laughed, another said “never, never, never,” and the others replied “of course not!” So being “friendly” apparently doesn’t involve caving in. (It turned out that our two university partners in this center said that they would not agree to such an arrangement either.)

I was at a meeting in Chicago recently and I brought this up with the speaker, Carl Gulbrandsen, managing director of the justly famous Wisconsin Alumni Research Foundation (WARF). Gulbrandsen laughed about the article and the attention he was getting as a result. He observed that what it really boils down to is, with time, WARF has developed relationships with a set of companies like the one KU was dealing with. He said such companies are a problem for everyone. His advice? Just don’t deal with them. That may be fine for a huge operation like WARF, but it may not be for an institution the size of

³ Schramm, Carl, “Five Universities You Can Do Business With,” *Inc.*, February 2006, 23.

KU. Being a university you can do business with does have something to do with who you are and the size of your institution. If you're large enough, you can be selective.



To return to the questions: Should for-profit companies be adjacent to campus? There are various models, including research parks and incubators. At KU, Higuchi Hall once housed a Merck operation. This meant the company was literally on our campus but on property legally owned by the Endowment Association. KU has since taken over the building and converted it for research. Having a company on campus is not novel at KU, but the question is still worth asking.

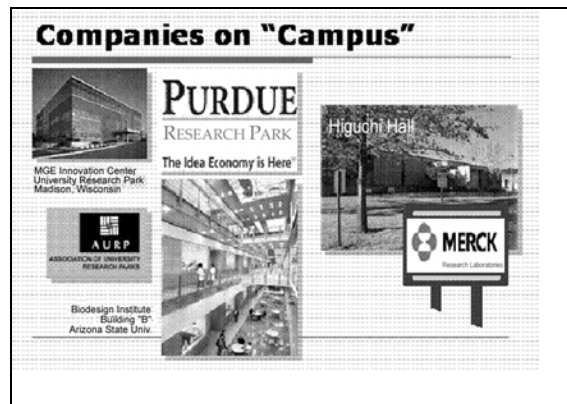
Should the economic development activity be independent of the research office? If so, to whom should it report? A related question came from one of our research centers that does a lot of innovation: "How far up the commercialization chain should a university go?" We start out inventing and managing intellectual property, but how far do we go before some one else takes over? And should we give preference in this to local companies?

Finally, there was a flurry of questions related to protecting the

faculty from conflicts of interest, re-evaluating the conflict of interest policy to allow greater flexibility, the possibility of starting companies in departments and research centers, and the possible involvement of non-tenure track faculty and persons from outside the university. The questions from my survey appear at the end of this article.

This exercise struck me as a good starting point for looking at what's on the minds of our faculty who are starting companies and working with intellectual property. There is a difference, after all, between being an ally with a business and becoming a business. I don't envision companies buying KU's Jayhawk mascot and slapping their logo all over, but there is a question of how far we are willing to go in pursuit of economic development.

As KU moves forward with this initiative, this is a good time to ask these basic questions. As we answer them, we will convey our goals and our values to the public, and we'll be letting them know better what their public university is all about.



The University and Economic Development: Basic Questions to Consider

(Generated by researchers / research or tech-transfer administrators, KU Lawrence Campus)

Should economic development activities be encouraged, recognized, and counted toward promotion and tenure? If so, what are appropriate incentives and rewards?

Is economic development a good use of faculty time? Should it be viewed as a form of public service?

Can and should faculty participate in start-up opportunities and other commercial endeavors? What about disclosure and management of conflicts of interest?

Should universities consider providing unpaid faculty leave, for up to three years, without jeopardizing the academic career? How would this affect the tenure clock?

Who on campus should pay to support economic development activities?

Should KUCR act as a "venture capitalist" for opportunities coming out of KU?

What is KU's risk threshold when it comes to economic development activities?

What's allowed? Product development vs. incubation vs. full-scale operation?

Would KU be better off allowing companies that sponsor research to own any IP that resulted, in return for an up-front license fee paid before any work is done? Does Bayh-Dole prevent this?

Can a case be made for KU marketing and sometimes selling patents and other IP to the highest bidder outright?

What are the barriers to and the benefits of industry and universities working together? How do they differ in the U.S. from Europe, China, India, etc.?

Does co-location of university, government, and industry activities that foster "economic development" work? If so what are the barriers that prevent the establishment of more formal co-located activities?

Should the university have two kinds of projects, i.e., research that results in discovery, and service that provides commercially useful or valuable data for a fee?

Should KU actively engage in economic development at all? How is it part of KU's mission? Is there a consensus on this?

Should for-profit companies be allowed to locate on or adjacent to the KU campus, even in an incubator?

In an era of increasing globalization, is the role of universities to promote innovation and the competitiveness of U.S. industries only? Does our economic development mandate transcend national (and state) boundaries?

What are the essential elements of a mutually "sustainable" contract between industry and KU that's consistent with their respective missions?

Should the University consider a separate office for industry relations with adequate staff for fostering and nurturing industry/university partnerships?

What are the goals and the definition of economic development? How exactly will it be measured, tracked, and communicated to the campus and the public? Are the outcomes indirect and abstract or direct and tangible?

How far up the commercialization chain should the university participate? Invent, protect IP, mature, incubate, invest, market, manage, etc.?

Should KU give preferential treatment to Kansas companies in economic development relationships?

As a public state university, what does the public (State of Kansas, students, industry, various stakeholders) expect of KU in the area of economic development? Is there a consensus?

How can inventors be encouraged to do research with possible industrial applications within the university?

How can tech transfer be streamlined so that licensing to faculty entrepreneurs is quicker and easier?

Should KU engage and expand activities in this domain that tends toward "corporatization" of the public university?

How does KU plan to protect the faculty-scientist from potential conflicts of interest that may result from direct involvement with product development and patent licensure?

Should for-profit companies that have been granted permission to have a physical presence on the KU campus be required to make significant capital investment in new research space?

Can individual KU departments or research laboratories set up revenue-producing LLC's to promote and distribute their products?

Should KU centralize its economic development efforts for greater efficiency?

Should a centralized economic development effort report at the Vice-Provost or Provost level so as to rise above potential divides between departments, schools, Centers and campuses?

Should KU have a written document describing its internal economic development strategy and process?

Should the KU economic development document carry the full, public endorsement of the Provost?

Should KU's economic development efforts be headed by non-tenure track faculty since tenure track faculty necessarily have their research programs, their departments, and their schools as a primary focus?

Should KU's economic development efforts be headed by individuals who have private sector and product development experience?

Should the School of Business be included as an integral component of KU's economic development effort to provide marketing, valuation and early business plan preparation assistance?

Should KU re-evaluate its Conflict of Interest policy to be more "embracing" of economic development; e.g. allow for greater inventor/PI involvement post-licensing?

Should KU re-evaluate its Conflict of Interest policy to more easily allow for technologies invented at the University to be clinically tested at KUMC?

Should KU take a leading role in local and regional economic development efforts?