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ESI THOUGHTLAB

Analytics-Driven Research
and Thought Leadership

For Universities and Hospitals



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Analytics-driven research and communication for a sector in flux.

It is a momentous time for higher education. Business and technological shifts are reshaping the future of work and redefining the need for talent. Institutions of higher education have an extraordinary opportunity to lead on today's big issues--to make the economy more vibrant, regions more innovative, workers more competitive, and communities more inclusive.

Hospitals are also at a turning point. An aging population, a dearth of medical professionals, and the national emphasis on wellness make health systems crucial to the vitality of our local communities and regional economies.

But institutions are also under greater pressure. Policymakers are challenging these organizations' tax-exempt status and public funding. Individual institutions and entire systems face threats from multiple directions, from rising costs and uncertain funding streams to growing digital disruption and competition.

In such times, it is essential for the academic and medical community to reframe the debate by providing empirical evidence of how universities and hospitals create local and regional economic prosperity. Such a business case needs to consider emerging corporate, urban, and technological trends and be sensitive to human and political dynamics.



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The Economic Impact of Universities and Hospitals

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The Economic Impact of Universities and Hospitals

Universities and hospitals play a pivotal role in local economies and communities. Such institutions are among the biggest employers and procurers in their region. They draw students, patients, and visitors into a region, whose spending stimulates the local economy, generates tax revenue, and drives employment. Through their education programs, universities also raise the earning power of their graduates.



To demonstrate their value, most universities and hospitals conduct economic impact studies geared to different audiences, including elected officials, community organizations, economic development agencies, alumni, donors, and trustees. Our economists specialize in quantitative and qualitative analysis for universities and hospitals, and they have successfully completed over 30 engagements in the past five years. We follow the highest industry standards, which hold up to scrutiny by econometricians, laypeople and skeptics. Our value-add lies in our objectivity, analytical rigor, and ability to tailor our research to the needs of each institution.

Thriving in the Knowledge Economy Regional economies are only as successful as their ability to export to others, thus drawing in outside dollars to support local jobs and local tax bases. In today's knowledge economy, much of what we make and sell to the rest of the world is intangible and intellectual. Universities and hospitals are among their region's top exporters, for they draw

in outside human and financial capital in the form of students, faculty, patients, visitors, research grants, and venture funding. In the past couple of years, we have had the honor of helping Emory University and University of Pennsylvania, two of the top institutions in the US, to position themselves as economic engines that draw in human and financial resources.



Emory University

Emory's academic excellence, inter-disciplinary structure, and reputation in global health research make it a magnet for the world's top

student and faculty talent, as well as for research and venture funding. That makes it an important part of the state of Georgia's portfolio of academic and medical institutions, resulting in media attention, leadership opportunities, and influxes of human talent and financial resources. Our 2017 economic impact study for Emory has been a key aspect of a broader communications effort to strengthen its role at a global, statewide, and local level.



University of Pennsylvania

UPenn competes against other Ivy League institutions for students, faculty, researchers, and leaders, as well as for research funding.

Its presence in the southeastern corner of the state of Pennsylvania has an immense statewide effect in terms of jobs and tax revenues, borne of activity that would not have otherwise been located in Pennsylvania but for Penn. Our 2015 study estimated UPenn's statewide impact at over \$14 billion, cementing the university and health system as one of the state's largest drivers of economic activity.



Assessing Benefits at a Hyper-Local Level

With town-gown relations sometimes fraught, the most important audience for an institution can be right next door. Universities and hospitals are not always good neighbors, but they can be, and we can provide the business case for working together.



Universities and hospitals contribute significantly to the high quality of life in local communities. Institutions fill their campuses and facilities with a wide range of intellectual, medical, cultural, recreational, and environmental resources. These resources are often made available to the general public and can become a community's most valued assets. Universities and hospitals provide essential services, such as public safety, streetscape enhancements, investment in local schools, and community programs. These contributions are at their best when they are based on a shared commitment to a community.

Rowan University



Rowan's strong working partnership with Glassboro Borough, and their shared interest in creating a vibrant downtown that straddled town and gown, resulted in a \$350 million public private development called Rowan Boulevard. Anchored by student housing, a Barnes & Noble college bookstore, and a Courtyard by Marriott hotel and conference center, Rowan Boulevard is a collaborative success story, both locally and nationally. Its construction has produced local jobs and tax revenues, as it continues to attract commercial activity into the borough. Our work for Rowan in 2014 has helped the institution solidify its leadership role at both a statewide and hyper-local level.



“Look at Rowan Boulevard. [It] used to generate just \$50,000 in ratables for Glassboro. [It] already does about \$2 million. That’s the power of the public-private partnership between higher education and the community.” Ali Houshmand, President, Rowan University

Source: NJBiz, May 29, 2017



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Quantifying the Innovation Impact

Innovation drives economic success, so regions compete fiercely to attract and nurture innovation assets. Today's innovation ecosystems are typically in metropolitan centers with high levels of connectivity across the public, institutional, corporate, and startup sectors. Importantly, they are anchored by one or more academic, medical, and research institutions, which can provide tightly knit concentrations of human capital and knowledge infrastructure.



As hubs of innovation, universities and hospitals make an enormous contribution to regional performance. Given the global competition for human talent, research funding, and startup capital, these institutions are vital for preparing tomorrow's workforce, building research and entrepreneurship assets, and producing scientific breakthroughs. Innovation, particularly through the application of new technologies, can also boost business and government performance. We can measure the innovation impact by using our advanced economic impact and cost-benefit tools.

The Role of Research Universities to a Region's Innovation Ecosystem

In textbooks, commercialization is often described in linear terms, from scientific discovery to protection of intellectual property to start-up funding to product launch. In reality, the path to innovation is more complex. Regions are successful when they can foster innovation ecosystems replete with institutional connections and collaborative initiatives.

Applying these principles, our team of economists evaluated the Philadelphia region's innovation ecosystem for the Greater Philadelphia Chamber of Commerce, ranking it against other regions in terms of research and development, intellectual property, and commercialization metrics. Our analysis formed the basis of a set of actionable recommendations that are being implemented today. Many of them draw on the fundamental importance of having a diversity of research universities to draw in human and financial capital, circulate and advance ideas, and birth new ventures. The publication of this report highlighted the role of research universities in making the region an innovation destination.

The Impact of Digital Innovation on the Investment Industry

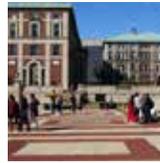
As part of a program for leading technology and consulting firms, ThoughtLab conducted a comprehensive study across 15 countries to assess the impact of digital innovation on the performance of a range of financial institutions, from universal and private banks to insurance companies, pension funds, and endowments.

Drawing on a survey of 1,500 companies, our team was able to quantify the impact of digital innovation across a range of performance measures, including revenue growth, profitability, productivity, and market share.



Project Evaluation and Cost-Benefit Analysis

Beyond standard economic impact reports, universities and hospitals often need to conduct cost-benefit analysis of a planned project or demonstrate the viability of a proposed initiative. Such objective analysis can inform internal go/no-go decisions or be used to make a business case to the local community or potential funder.



Our economists excel in cost-benefit analysis, and they have a strong track record of marshaling the analytical resources and communications tools to satisfy all audiences. Because of the quality of our analytical work, it often results in projects receiving the go-ahead and outside funding.

Evaluating the Benefits and Costs of a Building

Campus expansions and new buildings have numerous financial implications for local jurisdictions. While they often generate new tax revenue, these initiatives can also increase municipal expenditures, public school costs, and infrastructure investments.

Thus, a critical part of evaluating the merits of a proposed project is translating its impact on local government revenue and expenditures. This analysis can help universities and hospitals demonstrate the benefit of their expansion efforts to their host communities, and help those communities properly adjust their budgets, operations, and investments. In 2015, we completed a study for the Town of Mansfield and the University of Connecticut, to calculate the net new revenues and expenditures that would result from UCONN's proposed Next Generation Connecticut initiative. By deploying a wide range of analytical techniques, we were able to identify, estimate, and explain the many consequences of this initiative on the Town's finances.



Artist rendering of UConn's \$40M Innovation Partnership Building

Return on Public Investment



In today's resource-constrained environment, securing public funding often requires making the case that such outlays will produce a suitable economic return on public investment, in the form of greater employment, increased business, and higher tax revenue.

We have significant experience in supporting applications for local, state, and federal funding for a wide range of clients, including universities and hospitals. For example, we assisted University of Pennsylvania in its application for the Redevelopment Assistance Capital Program with the Commonwealth of Pennsylvania for the Pennovation Center, a business incubator that brings together researchers, innovators, and entrepreneurs for the commercialization of research discoveries. Due in part to the economic, employment, and tax revenue case we made in support of the Pennovation Center, Penn received the full capital allocation of \$2.5 million, a crucial part of the project's overall \$37.5 million cost.



UPenn's \$37.5M Pennovation Building

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Today's government and business decision makers are bombarded with information. Engaging them requires evidence-based thought leadership delivered in compelling, digestible formats.

At ESI ThoughtLab, we go beyond other research firms by integrating three pillars of successful thought leadership:

1. Mixed methods research Combining qualitative and quantitative analysis—from surveys, interviews and peer groups to macro and micro-economic modeling—to create thought leadership that is visionary, ground-breaking and evidence-based.

2. Multi-format publishing Our world-class editorial team has worked for top publications, such as The Economist, Harvard Business Review, and Institutional Investor. We specialize in presenting analysis through white papers, data visualizations, analytical tools, and social media.

3. 360-degree marketing and communication We can help bring your message to your target audience and create a high-impact media campaign. Our brand is trusted for its objectivity and analytical rigor, and enables our marketing team to reach executives through a mix of traditional and digital media channels.

Telling the Story at the National Level



The Council for Christian Colleges & Universities is a global higher education association dedicated to advancing the cause of Christ-centered higher education and to helping its institutions transform the lives of students by faithfully relating scholarship and service to biblical truth. In the face of an increase in the number of state and local legislative climates that are unsympathetic and even hostile to faith-based educational institutions, CCCU reached out to Econsult Solutions to provide valuable data that articulates the important role CCCU institutions play in the economic, social, and human vitality of the communities in which they are located, as well as their broader aggregate national impact as large-scale employers, initiators of capital investments, and educators and credentialers of students. Our work for CCCU is a good example of how we combine sound analytics and effective messaging to advocate our clients.



Exploring the future of work

Winning in the digital economy requires new skills and tools. To understand how the future of work will evolve, ThoughtLab collaborated with Cognizant on a ground-breaking study of key players in the global business community, including MBA students and senior executives and their staffs.

The result was a thought leadership program on The Work Ahead. The program included a decision-support microsite, research papers, social media, and data tools that show how jobs will change in the knowledge age. Unlike other research, this program demonstrated the impact that digital advances will have on productivity, profitability, and revenue growth.



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ESI ThoughtLab's team includes over 35 full-time economists and thought leadership specialists, with access to a global network of over 100 economists, industry specialists, and business editors. Our practice area for universities and hospitals is led by Lee Huang, MPA, Senior Vice President of Econsult Solutions, who has many years of experience conducting economic impact analysis for the sector. Our firm's evidence-based thought leadership activities are managed by Lou Celi, CEO of ESI ThoughtLab. Lou was formerly a managing director at the Economist Magazine Group and President of Oxford Economics.

Leadership Team for the Academic and Hospital Practice



Lee Huang, M.P.A.
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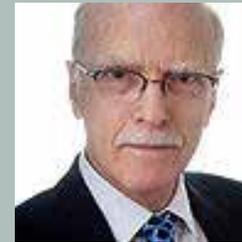
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“The trustees are pleased with the merits of the study, which summarizes points of interests for distinct constituencies.”

- Joe Meade, Chief of Staff and Director of Government Affairs, La Salle University

“I want to thank the whole team for their effort on this report. You helped us with a work product that is a real treasure for Emory.”

- David Payne, Senior Director of Operations for Business and Administration, Emory University

“Lou and his team did a terrific job helping us with our Work Ahead series of reports. From idea development through to fact checking, they were in the trenches with us all the way.”

- Benjamin Pring, Co-Director- Center for the Future of Work Cognizant Technology Solutions

ESI ThoughtLab is the thought leadership arm of Econsult Solutions Inc, a leading economic consultancy with links to academia. With access to a global team of over 100 economists, industry analysts, and thought leadership experts, our firm uniquely brings together macro-to-micro analytics with the ability to survey and interview executives, consumers, and policy-makers around the world. We provide our analysis in a variety of engaging executive formats, from global ranking and benchmarking tools to cost-benefit and economic impact models.

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