

ECPA Urban Planning Initiative

Case Study: An Innovation Center in Curitiba

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This post is the final entry in a series of four that focused on initiatives encouraging innovation through sustainable urban design.

As they defined the vision for Paraná's Center of Innovation, Education, Technology and Entrepreneurship (CIETEP), the Industry Federation of the State of Paraná (FIEP) sought to address the numerous challenges "that a fully industrialized 7-billion people planet represents," asserts Filipe Cassapo, innovation manager at CIETEP. Through industrial and business innovation, the CIETEP seeks to leverage human, social, and environmental capital to address pressures such as economic instability, climate change, and the ever-increasing gap between the wealthy and the poor. "Linear mental models of the take-make-waste paradigm have to be replaced by new systemic knowledge and innovation, which shall allow the creation of sustainable value on 3-P – People, Planet, Profit –perspective," explains Cassapo.



A group tours an innovative learning space at the Centro Internacional de Inovação in Curitiba

This philosophy represents the core of the CIETEP, which encompasses conferences, centers, and networks that contribute to a larger innovation partnership throughout Brazil intended to generate economic and social development in the state of Paraná. The institutions within the FIEP, the National Services for Industrial Learning, the Social Services for Industry, and the Evaldo Lodi Institute offer services and initiatives integrated into the CIETEP. These interdisciplinary collaborative efforts began in 2008, with FIEP leading the charge as the “regional and national innovation catalyst,” says Cassapo.

Five axioms form the foundation of the business innovation model of the CIETEP. These axioms are focused on sustainability, with attention given to social interactions. The first, “changes emerge from the social domain to gain the technological domain,” demonstrates a commitment to the creation and nurturing of human capital (Dauscha, et al. 3). “There is no innovation or no change without individuals,” Cassapo explains. “The CIETEP also works as an innovation culture catalyst, where entrepreneurs can get access to the tools, the relationships and the technology they need to turn their innovative visions into reality.” The second and fourth axioms present the concept of “soft social engineering,” asserting that technological advancement depends “more and more on social arrangement of stakeholders” and that “the new means of production are the extended social networks where new technologies are crowdsourced” (Dauscha, et al. 3). The remaining two axioms connect the creation of social capital with environmental sustainability: “Sustainable innovations are those which can effectively integrate themselves in the current social transition...[we need] a more systemic understanding of the world...To grow is not an imperative anymore” (Dauscha, et al. 3). Together, these five axioms shift the impetus of economic growth from an individualized profit motive to one of co-creation, centered on innovation, human capital, and sustainability.

From these axioms grows the concept of “sustainable knowledge,” a perspective that knowledge is a “social construct...which emerges from the linguistic and embodied interactions which occur inside social networks” (Dauscha, et al. 7). The Sustainable Knowledge and Innovation Portal deconstructs the usual business model of “destructive and self-sufficient competitiveness and profit,” instead seeking to transform shared visions into reality through the 3-P paradigm (Dauscha, et al. 2). The CIETEP posits that knowledge and innovation are born from the collaborations and interactions of people within a network. The portal facilitates these networks and leverages new connections to encourage unexpected innovation. The portal includes numerous actors from government, public organizations, private companies, universities, research and development centers and non-governmental organizations, providing them with a space for “free debate” and services such as an e-Library, forums and instant messaging (Dauscha, et al. 8). Through the Sustainable Knowledge and Innovation Portal, CIETEP seeks to not only catalyze sustainable innovation but also educate society at large about best practices and new, innovative ideas.



A working group at the office of COMEC, a regional planning authority, in Curitiba, Brazil.

CIETEP builds upon several national and state laws that seek to incentivize innovation and research and develop technological enterprises through programs such as the Technopark. The center is primarily funded by FEIP, with some revenue generated through educational services and product sales. According to Cassapo, between 2006 and 2010, R\$ 27 million (US\$ 17 million) was invested in CEITEP. Cassapo asserts that the primary challenges the center faces are not financial or regulatory, but cultural. The primary obstacle is that “most of the people still believe that innovation is expensive, and that this kind of activity is reserved to very large multinational companies which are able to provide high investments for creating their own R&D labs.” The CIETEP seeks to shift this mentality by providing incentives to companies on all scales. “Our definition for what innovation means is quite simple. For [CIETEP] to innovate is to convert new ideas into sustainable business value. Therefore, all kind of companies, of all sectors, from the small incubated startup, to the large company, can get access to partners and innovation networks, in order to start quickly and pragmatically to convert ideas into sustainable business.”

To ensure continued innovation and business development, education plays a critical role at the CIETEP. In addition to specialized institutes such as the Industrial Design Center, the Mathematical Industrial Institute and the Creativity and Innovative Environments Laboratory, the initiative includes the University of Industries (UNINDUS). Cassapo explains, “This interaction between the academy and the private sector is absolutely fundamental for allowing knowledge transfer, collaboration, and therefore innovation. The CIETEP is then surrounded by science, technology, research, development and education, which is absolutely strategic, in terms of allowing the CIETEP to be a reference meeting point for

innovation and innovation management.” In addition to increased innovation capacity, UNINDUS provides a diverse range of specialized degrees, such as an MBA in Strategic Innovation Management and post-graduate degrees in international business and sustainable management.

The progressive ideas of the CEITEP take physical form at the Centro Internacional de Inovação, or C2i, which Cassapo describes as “a corporate strategic center which aims at creating sustainable economic growth with socio-ecological responsibility.” C2i brings together numerous stakeholders including private companies, universities and research centers, and public and private investors. Cassapo explains that the C2i was strategically sited in the center of the Technopark, a program which seeks to install technology companies, research and development facilities, and universities in specific areas of Curitiba, the capital of Paraná. The Technopark connects more than 3,400 professors, 46,000 students, and 500 research groups, encouraging knowledge transfer, collaboration, and innovation. “From an urban planning and design perspective, when you walk through the campus, you understand how important space planning is to the idea of economic development and innovation,” said John Reinhardt AICP, reflecting on a recent visit to C2i. “Walking through the corridors you pass research labs, then design studios, financing offices, and business consulting shops. It’s easy to imagine how something goes from idea to viable product or business in a place like this.”

The innovations of the CIETEP were on display when it hosted the second annual International Conference on Innovative Cities a gathering of urban planners, business leaders, and citizens, in May 2011. This event focused on the innovative urban planning methods that drive innovation at the CEITEP and afforded attendees opportunities to envision their dream city (Scruggs). Attendees were encouraged to consider the increasingly important role of sustainable development and corporate social responsibility in “a reality where all kind of businesses, in all kind of contexts are compelled to live constantly on the edge of the new: new clients, new needs, new technologies, new crises, new risks” (Dauscha, et al. 2). Cassapo asserts that the “only solution” to the numerous challenges of the twenty-first century is “innovation, not only in terms of technology, but also in terms of business models, and of social relationships...This is exactly what the CIETEP is about: accelerating our capabilities of innovation in order to sustain responsible growth.”

References

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