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## **Public Bureaucracy Collaboration: Barriers and Challenges**

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#### **Abstract**

The decentralization, privatization and globalization have created a world without boarders and highly competitive markets, forcing firms to constantly innovate in order to survive, improve performance and grow. One approach for firms to innovate is to collaborate with universities. University-Industry Collaboration (U-IC) has proved to be very effective in developed world, but in most cases quite ineffective in developing countries. While many research have identified success or failure factors in collaborative efforts in developed world, not much known about it in developing world, and even less in their public bureaucracies.

The purpose of this paper is to briefly review the existing literature on U-IC, focus on the reality of politics in public bureaucracies, namely university and municipality in developing countries, and identify prerequisites needed to be addressed before contemplating on any joint effort.

### **Keywords**

University-Industry Collaboration, Municipality, Barriers, Success factors

### 1. Introduction

The unprecedented scientific discoveries and technological progress coupled with constant intensification of competition, privatization and numerous other environmental factors in the past few decades has led both public and private sectors to rethink their past limited worldview in order to create new capabilities, unlearn and relearn, and synergize their efforts. The concept of University-Industry Collaboration (U-IC) is a response to these mega-changes. U-IC can be



defined as "bi-directional linkages between university and industry entities, established to enable the diffusion of creativity, ideas, skills and people with the aim of creating mutual value over time" (Plewa et al., 2013). In an OECD report (2007), the existing University-Industry Collaboration is highlighted, where the main focus is on knowledge creation toward economic development. However, in recent years, as Petruzzelli (2011) argues, a primary factor for economic growth is the ability of organizations to create and apply new knowledge in their field of work, and as such universities, as the main source of new knowledge (Davis, 1996; Bramwell & Wolfe, 2005), are their natural partners. Thus, U-IC has become the cornerstone of development in the industrialized world where knowledge and practical know-how are shared, transferred and internalized.

Municipality, as a public bureaucracy, affects peoples' daily life more than any other public institutions. Given an ever increasing expansion of cities and public services, municipalities are faced with new demands and complex challenges where development requires the utilization of innovative and advanced methods and techniques in city planning and projects. Hence, city administrators worldwide have realized that the knowledge and technology in public policy and practices in relation to city infrastructures, construction, housing, roads, etc. has reached a point where the traditional executive knowledge and skills are no longer adequate for a balanced and efficient development of today's metropolises. Thus, they are increasingly utilizing the capabilities of other entities, including firms and universities to advance the cause of better city life.

Similarly, universities, particularly public ones, unlike the past, are now expected to use their knowledge for financial gain as well as knowledge creation so that they could fund and advance their scientific and research activities. However, this has caused some serious concerns over possible damages to the principles of open science (Merton, Rein & Goodin, 1973). In addition, Tartari, Salter & D'este, (2012) are concerned that the market-orientation of university research toward organizations' problems may change the research agenda of the university (e.g. fewer publications) and its orientation (from long-term to short-term). But, it seems the potential benefits of close collaboration, particularly its intellectual and economic spin off (Meyer-Kramer & Schmoch, 1998; Arza, 2010) outweighs these concerns.

Therefore, municipalities with their vast financial resources, in one hand, and knowledge and skill they need, on the other, provide ample opportunities for forging forces with university staff and researchers to bring about change and improvement in the ways cities are designed, built



and managed. Moreover, as municipalities devolve and focus more on planning and administering, and less on design and execution, they increasingly outsource their traditional hardware activities to private firms, and their software activities to universities. This sets the stage for more collaboration between these players for the benefit of all, particularly greater well-beings and satisfaction of citizens and their communities. Thus, it seems that such a collaboration is no longer a marriage of convenience, but of necessity.

Despite the importance and significance of U-IC, and its recognition and utilization throughout developed countries, municipalities in developing countries have been slow in adopting such a strategy, particularly as it relates to working with universities. Among the main reasons for municipal-university distant relationships are bureaucracy, cost, intellectual property, geographical distance and past experience (Roed, 2012, Moran, Rein & Goodin, 2006). But underlying reason for this distant relationship has to do with the nature of power politics in developing countries. As Brown & O'Brien (1981) suggest, there seems to be a direct relationship between country development and institutional collaboration and coordination.

To understand this relationship, we devote the next two sections to research findings related to motivations and barriers in U-IC, particularly U-MC efforts in developing countries.

### 2. Theory vs. Practice

The economic development in developed world has evolved through stages over the last century, beginning with standardization followed by customization and finally innovation. These economic stages met with their corresponding organizational structure, i.e. functional, divisional and network, and alliances (Miles, Miles & Snow, 2000). This implies that as an economy develops, organizations come closer together to synergize their efforts and capabilities. This occurs both at intra-organizational (Nahapiet, Gratton & Rocha, 2005) and inter-organizational (Miles, Miles & Snow (2005); Rocha, 2006) levels.

However, such development and evolution in developing world differs significantly from their developed counterpart, mainly due to their different political governance and cultural characteristics. For instance, while politic is only one factor in governing in developed countries, it exerts an overarching influence on developmental processes in developing countries, particularly economic development and activities. The political system, in effect, acts as a suprasystem that



dominates and subordinates other systems, and is often instrumental for preserving status-quo through distribution of economic and financial resources among political elites at the expense of political responsibility and accountability, and of sustainable development. For example, German Development Institute report (2011) underlines research findings that show lack of continuity of political system in Sub-Sahara Africa prevents change from taking place. The key reason for this state of affair in most of Africa and other developing countries where elections are held is that the political power is concentrated in the hands of one person or a group of people who control executive office as well as judiciary, military and security forces. This is summed up by a United Nations Development Program (2013) report:

"Countries that improve their governance effectiveness raise their standard of living, as measured by per capita incomes, by about three times in the long run. Poorly functioning public sector institutions and weak governance are major constraints to equitable development in many developing countries. In addition, governments must work with the people to 'build anticipative capacity, inventive government and foster an innovative society in order to create emergent solutions to the complex challenges that the society may face in future."

Despite this, as Zuñiga (2011) suggests in many developing countries institutional constraints prevent U—IC to take hold. Obviously, the more centralized, rule-bound and inefficient institutions are the less is the desire to work with other players. Similarly, there are instance, for example in Thailand, where firms call for closer links with universities, but universities and government agencies are reluctant to answer the call (Brimble 2007).

### 3. Barriers and realities of U-MC

In a politically charged environment, universities are purposefully sidelined or ignored in development process. Furthermore, some professional academics stay clear of such working environment where merits and regards for public good are neither a goal nor priority. But others argue that they are part of and dependent on the system, community and society where they conduct their research activities and livelihoods. However, it seems that the latter group makes up the majority of academics who actively seek to be part of a system that has drastically reduced university budgets (Guimon, 2013) and has tied academic wages and promotion to their efforts in injecting outside funds to university coffers.

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In situations where self-interest overrides all other concerns, a typical university academic in developing countries who is approached by a public institution, such as a municipality to undertake a research project may encounter some or all of the following barriers:

### 3.1 Spending a research budget

Municipalities often allocates funds for research projects, because it is mandatory by the political hierarchy (e.g. interior ministry) to do so as a way to lessen bad decisions and inefficiency. However, since there is no or little accountability as how and where research budgets are expensed, municipality administrators usually hire cooperative academic staff or consultants who don't ask a lot of questions and "don't rock the boat". Furthermore, they may be asked to choose some or all of their research team members from municipal personnel who know very little about research work, but nevertheless receive sizeable portion of the budget allocated to a project. In other words, system works very hard to keep all the resources within, even if utilized inefficiently.

### 3.2 Research project assessment and utility

Academics are often faced with the prospect of their work (research, design and consultancy) be judged by bureaucrats or municipal consultants who are rarely competent or impartial to be suitable for the job. Thus, the project assessment is often highly subjective, superficial or unjustifiably harsh.

As mentioned earlier, lack of accountability regarding the use of funds expensed on projects often leads to no follow-ups or interests to implement project findings. Instead, nicely voluminous reports for the purpose of boasting to others and filling book shelves become the only utility of projects. This fate is particularly true for almost all projects in the so-called "soft research" related to social science disciplines, such as management, industrial relations and organizational behavior, where reports are "shelved" and "forgotten" forever.

#### 3.3 Knowledge-averseness

Most developing countries face the challenge of generation-gap, old vs. new, and highly educated vs. lowly educated. As more and more of young people are educated, the old guards who control power and resources feel outdated and outsmart by younger generation. This trend in countries that produce millions of university graduates every year, but unable to create comparable



number of new jobs has led to "over-qualification syndrome", i.e. people who are applying for jobs whom they are by far more qualified than the job requirements, and also more knowledgeable than the person who is going to be their boss. This is the dominant theme in U-MC where municipal administrators may see the scientific language of competent academics as threatening that not only undermines their authority, but also highlights their incompetence.

#### 3.4 Mistrust

Similar to what Guiman (2013) refers to the secrecy in industry, municipalities in developing countries are considered the turf of old guards, thus prone to manipulation and secrecy. On the other hand, offices such as mayorship or councillorship is considered a proper spring board for higher public office, as seen even in some developed countries, namely US and UK. A sense relating to a knowledgeable and independent outsider learning about the politics of a municipality and real motivations for collaborative projects is an eerie feeling that could prevent close U-MC efforts.

### 4. U-MC Success factors

Despite many barriers affecting U-MC, there are cases in developing countries where university-industry collaborations exist with mutually beneficial outcomes (Oxfam, 2002, 2003; Guimon, 2013), but they are few, sporadic and unsystematic. The question is when or under what conditions effective collaboration may come to realization and fruition in developing countries? We believe that several factors should be thought of first, before any kind of formal discussion on collaboration between municipality and university commences. Here we identify and discuss three most important factors.

**4.1 Need:** For collaboration to succeed, it should support the mission and motivation of each partner (Hudson, 2012; Bruneel et al., 2010; Seigel, et al., 2003). For universities, typical motivations to collaborate with municipalities include access to funding, reputation enhancement, and access to empirical data from municipality. For municipalities, the motivations to collaborate with universities may include gaining access to complementary technological knowledge, tapping into a pool of skilled workers, providing training to existing or future employees, gaining access to the university's facilities and equipment, and gaining access to public funding and incentives. In some cases, a municipality may also seek to reduce risks by sharing the costs of R&D, and to influence the overall teaching and research agenda of universities (Guimon, 2013; Moran et. al.,



2006; Siegel, Waldman, Atwater & Link, 2003). There are ample evidence to show that unless these goals and motivations are recognized and respected, there is no prospect for successful collaboration.

**4.2. Attitude:** There is often a feeling on the part of collaborators that the other side doesn't have the right attitude to do its job right. However, the nature of this feeling differs on each side. While municipal administrators and its project managers are skeptical of university academics and researchers' attitude, knowledge, time and effort required to work with a public bureaucracy, university academics and researchers often criticize municipal administrators and personnel for not being serious about academic work and its suggested solutions. Furthermore, municipal administrators tend not to trust academics' ability to apply their knowledge in real projects. Academics, on the other hand, are not pleased to see their work is shelved or misused. Thus, it is imperative that both parties openly discuss their roles and responsibilities and holds each other responsible and accountable for what each has to do to meet project goals. However, this should go beyond contractual agreement, rather it must be in the form of psychological contract (Rousseau, 2001) where each party commit themselves to do certain things and be true to their commitment throughout the project.

**4.3 Trust-building champion:** Numerous researchers have identified trust, as the foundation for collaborative efforts; without it there is very little chance the results will satisfy the parties involved (Galan-Muros & Plewa, 2016; Hattori & Lapidus, 2004, Roed, 2012). Lack of trust between city administrators and academics is a major obstacle for joint projects. The question is how two entirely different organizations may overcome their preconceived attitudes toward each other? Perhaps the first step is to get to know each other through joint activities, such as seminars, informal meetings, and visits to each other workplace to familiarize themselves with people, work and capability of the other side. To do this, they must be led by leaders who are the champions of trust-building and attitudinal change, and have a real desire to overcome the barriers that prevent them from working together, to move forward, and to put their effort and money where is most beneficial for their respective organization. Hence, a million dollar question is "do politics and bureaucracy in most developing countries allow such leaders to emerge in either universities or municipalities?" And if they do, "could these leaders survive where self-interests override organizational interests?

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### 5. Practical applications

As Perkmann et al. (2013) emphasize the motivation to engage to collaborate with industry and the role of the main outcomes from the linkages must receive deeper analysis. Considering that there is a real desire on leaders to collaborate, then the other two factors i.e. need and attitude, when combined, determine appropriate collaboration models. In other words, the extent that needs and attitudes exist, parties choose the working model that suits them. In the case of U-MC in developing countries, it is often the municipality that is in the position to choose what collaboration model is most suitable for its needs. For example, if municipality has high needs, but has a dim view of academics, it should take the "conservative" path by identifying capable academics and involve them on a single project. On the other hand, if its needs are high and has high regards for academics, then it may choose "deep involvement" structure, for example by helping to establish a research center at university campus where both municipality personnel and academics are actively engaged to identify municipality needs and problems, find solutions and execute them.

### 6. Discussions

The effective organizing requires synergy between resources and capabilities. Theoretically, it demands teamwork, proactivity, learning and cooperation, and most of all leadership. These concepts are fundamental in realizing improvement and development, mainly due to scarce resources and fierce competition. For governments to become efficient, they not only need to become smaller and decentralized, but also streamline their activities and outsource those activities to experts who are better equipped to perform them at a lower cost.

However, such a strategy, albeit defendable in theory, faces enormous obstacles in practice in developing countries, particularly where it undermines the interests of powerful politicians and interest groups. Having said that the trends toward greater transparency, accountability and people participation are forcing public institutions, including municipalities and universities to do more with less. Thus it is imperative for city administrators and academics to alter their old mindset and suspicion of each other, and embrace collaborative efforts based on mutual respect and understanding for the benefits of their community and national interests. The first step in that



direction is to determine what each party's goals are, what they needs are, and who is capable of meeting those needs. Unless these questions are answered, any decision to partner with another institution is premature and therefore unlikely to bear fruits. In fact, it may lead to unnecessary frustrations, conflicts and inefficiency.

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