The Insourcing and Backshoring Dilemma: Global Economies Fight for their Share

Helen Lam, Athabasca University, Canada
Anshuman Khare, Athabasca University, Canada

Abstract

Since the financial crisis, there has been an increased awareness about the globally interconnected world of business, its complexity and sustainability. There is emerging evidence that one popular aspect of global supply chains, outsourcing, is taking a reverse turn and insourcing and backshoring are on the rise. Reasons for such a change include considerations for cost (labour cost, transportation cost, tax differentials, exchange rates, etc.), quality control (provider reliability, availability of internal expertise), customer satisfaction, security (protection of intellectual property and information privacy), speed to market, effect on innovation (e.g., proximity of operations with R&D), and overall risks and uncertainties (e.g. political and environmental stability). Basically, outsourcing cost advantages have been gradually eroding, especially when productivity-adjusted labour cost is considered. However, insourcing does come with a set of challenges, particularly in relation to human capital, infrastructure and the level of resource commitment. To ensure insourcing effectiveness and sustainability, all stakeholders have roles to play. Strategies and processes must all be aligned. Otherwise, the balance may once again shift toward outsourcing. This paper, then, explores how emerging economies (who have felt the negative effect of insourcing) can "fight back" to reverse the trend with adjustments to their economies, markets and organizational strategies.

Keywords: insourcing, backshoring, reshoring, offshoring, outsourcing

Introduction

Since the financial crisis, there has been increased awareness of the globally interconnected world of business, its complexity and sustainability. There is emerging evidence that one popular aspect of global supply chains, outsourcing, is reversing, and insourcing and backshoring are rising, a phenomenon recognized by the United Nation Conference on Trade and Development (e.g. Fratocchi, Di Mauro, Barbieri, Nassimbeni, & Zanoni, 2014; Sirkin, Zinser, & Hohner, 2011). While a Deloitte survey on IT work found that nearly half the respondents had terminated an outsourcing contract before completion, and a third of which brought the work back in-house, they also reported that four fifths of the respondents said that they were satisfied or very satisfied with their insourcing (Deloitte, 2013). Further, studies by The Boston Consulting Group and the Massachusetts Institute of Technology (MIT) also speculate that insourcing or backshoring of manufacturing will increase in the years ahead (Sirkin, Zinser, and Hohner, 2011; Burkart, 2012). It is, therefore, important to understand this phenomenon – the reasons for it and its implications.

Reasons for such a change include considerations for cost (rising labour, transportation and energy costs, tax differentials, exchange rates, etc.), quality control (provider reliability, availability of internal expertise), customer satisfaction, security (protection of intellectual property and information privacy), speed to market, effect on innovation (proximity of operations with R&D), and overall risks and uncertainties (e.g. political and environmental stability) (Burton, 2013; Burkart, 2012; Deliotte, 2013; Kim, 2013; Sirkin, Zinser, & Hohner, 2011). The outsourcing cost advantages that were so appealing to organizations a decade ago have been gradually eroding, especially when productivity-adjusted labour cost is considered. With regional and local economies struggling, bringing back manufacturing and services is also viewed as an effective strategy to revitalize economic growth at home.

The positive effects of insourcing on society are also receiving great attention. When General Electric Corporation (GE) spent $800 million to bring work back from countries like People's Republic of China (PRC) and Mexico to the GE Appliance Park, many of its suppliers opened plants in its proximity and, thereby, reviving the whole community (Fishman, 2012). Employment will increase and, consequently, so will consumer power. However, insourcing does come with a set of challenges, particularly in relation to human capital, infrastructure, and the increased level of resource commitment that is required to support both the transition from outsourcing to insourcing and to maintain the work as an insourced component of business operations. To ensure insourcing effectiveness and success, organizations, the government, employees and their unions, as well as the community, all have a role to play. Strategies and processes must be well aligned.

This paper starts with a discussion of the definitions of insourcing and related terms. It then addresses the major trends and examples of insourcing and backshoring (including co-sourcing) and their implications for business in the evolving environment of volatility, uncertainty, complexity and ambiguity (VUCA) (Bennett & Lemoine, 2014). This paper proposes a framework to address the challenges of changing global supply chain strategy (especially off-shore manufacturing and services) and assesses the kinds of decisions required to reverse this trend, favoring offshoring and outsourcing over backshoring and insourcing. This aspect is explored from both the viewpoints of the developed countries adopting insourcing and backshoring and those emerging economies reliant on outsourced and offshored work that are receiving the negative impacts of the recent changes.

Insourcing and Backshoring/Reshoring

Sikula et al. (2010, p. 3) define insourcing as the situation where "an organization uses especially internal labor and personnel, but other resources as well, to supply the operational needs of its enterprise". Along a similar vein, Burton (2013, p. 37) describes insourcing as the reversal of outsourcing to mean "transferring jobs from a domestic or foreign contractor or supplier to the internal operations of a business". Hence, the simplest view of insourcing is about bringing work in-house, and involves the dimension of the source of resources.

Insourcing is closely related to reshoring or backshoring, which generally refer to the geographical dimension with regards to transferring of operations from abroad (including foreign locations owned by the company or other companies) to the home country (Burton, 2013, p. 3; Holz, 2009, p. 156; Kinkel & Maloca, 2009, p. 155). On the contrary, the use of production operations overseas (one's own firm or otherwise) is regarded as offshoring. Insourcing, however, refers to the use of internal instead of external resources. The two dimensions described above give rise to the typology as shown in Table 1.

	Internal Resources	**External Resources**
Domestic Location	Insourcing and backshoring	Outsourcing and backshoring
Overseas Location	Insourcing and offshoring	Outsourcing and offshoring

Table 1: Typology on sourcing and location

Insourcing and Backshoring Developments

Many large manufacturing companies in the US private sector have insourced and/or backshored work back to the United States. Some examples commonly cited by researchers (Burkart, 2012; Economist, 2013; Kim, 2013; Ohio Energy; Sirkin, Zinser, & Hohner, 2011; Spector, 2013) and industry are:

- GE opened plants in Texas, Colorado, and Pennsylvania creating 16,000 new jobs between 2009 and 2013;
- Whirlpool opened a plant in Tennessee;
- GM reversed its outsourcing policy and decided to do 90% of IT work in-house and to re-open a Missouri facility;
- Ford Motors announced the return of 2000 jobs and invested 2.3 billion dollars in two new plants in Kentucky and Missouri;
- Otis Elevator brought work back to South Carolina;
- Caterpillar, a heavy equipment manufacturer, backshored to Texas; and
- Apple has been observed adopting insourcing to secure microchips for iPads.

A similar development is also seen in the public sector. America's President Obama has indicated that job creation and investment within the country are important priorities and both federal and state governments have been offering strong incentives to make US manufacturing more competitive (Kim, 2013; Sirkin, Zinser, & Hohner, 2011; Courtemanche, 2012). Federal agencies (other than the Department of Defense) have been

required by America's legislative branch to establish guidelines for insourcing for both new operations and previously outsourced work, while the Department of Defence has been planning to curb outsourcing and increase civilian employees by over 33,000 (Needham, 2009; Sikula, et al., 2010, p. 9).

Overall, one study sponsored by the Council of Supply Chain Management Professionals found that 40% of US manufacturing firms surveyed reported a backshoring trend (MSU Research, 2012). In the healthcare field, five out of six surveyed by the American Society for Healthcare Engineering and the Association for the Healthcare Environment expected the volume of outsources work to fall (Carpenter, 2012).

Outside of the United States, there is also evidence of backshoring activities in European countries. For example, Kinkel and Maloca (2009, p. 154) analyzed German data on 1663 firms and found that offshoring has "lost momentum", that 2.5% of all surveyed firms had backshored activities between 2004 and 2006, and that one-fourth to one-sixth of offshoring operations were brought back within four years of offshoring. Varying degrees of backshoring amongst European countries, between 2007 and mid-2009, ranging from 2% of surveyed companies in Germany to 7% in Spain, Denmark and Finland, were reported by Fratocchi, et al. (2014), citing Caterpillar, Bosch, and Philips as some of the backshoring manufacturing firms.

Outsourcing and Offshoring Problems

Outsourcing and offshoring skyrocketed around the turn of the century, because contract (outsourced) work, especially work done overseas (offshored), was expected to provide much cost advantage. Such an advantage largely stemmed from the low labour cost in PRC and other less developed countries. The trend began with outsourcing of unskilled work, like garment manufacturing. Then, the service sector, particularly call centres, followed as some countries offered personnel with expertise firms sought, such as IT skills in India. This was also driven by low cost of service providers. However, there were firm-level problems that started to emerge as well as changing economic factors that have been eroding the once-appealing cost advantage. Firm-level concerns for outsourcing organizations typically include poor worker motivation and quality control (sometimes due to poor working conditions), risk to intellectual property, disconnect between production/operations and R&D, lost sales/customers, as well as the extra cost of support, coordination, and monitoring (Deloitte, 2013; Kim, 2013; Sikula, et al., 2010). Offshoring tends to accentuate those problems, relative to insourcing, due to the greater distance and environmental differences (legal, economic, political, social, technological, and others). For example, control and coordination may be more difficult (lack of supply chain "visibility") while legal, cultural, and technological differences may make easier for theft and misappropriation of intellectual properties in some countries without being detected and/or penalized. Quality of services rendered by foreign call centre personnel has also been found to be substandard due to the language barrier (accents can make the message hard for the consumer to understand) and unfamiliarity with the North American customer service practices (Economist, 2013). Moreover, offshoring has other disadvantages beyond those common to outsourcing. Loss of potential sales can be experienced if a firm cannot respond to changing local customer demand and/or deliver highly customized products in a timely fashion. Overseas scandals (sweatshop operations), safety and terrorism concerns, reduced speed to market, and longer supply chains giving rise to more risks, like those related to natural disasters or wars, are just

a few additional concerns for the outsourcing firm (Kim, 2013; Sikula, et al., 2010). All these concerns for the outsourcing firm have prompted reconsideration of the sourcing strategy.

In terms of the financial advantages of offshoring, many reports offer evidence that the cost gap between China and US production is rapidly decreasing. For example, The Hackett Group found the cost gap to have shrunk by almost 50% over a recent eight-year period (Esler, 2012). Boston Consulting Group found that, in China, the wage rate had been increasing by 15–20% per year, whereas, in comparison, US wage increase has been averaging about 4% per year between 2005 and 2010, reducing the labour cost savings to only 10– 15% when adjusting for the US's higher productivity (Burkart, 2012; Sirkin, Zinser, & Hohner, 2011). Recent Chinese legal changes have provided workers with more labour relations rights (allowing for strikes) and better benefits (severance pay), which are generally seen as undesirable from the employers' cost perspective (Sirkin, Zinser, & Hohner, 2011). Other major cost increases for offshored Chinese production include rising land cost, especially among the coastal regions, increasing transportation and utility costs due to oil/coal price jumps (oil price went from $20–$30 a barrel in 2001 to $100 a barrel in 2012 (Ivalua Insights, 2012), and continuing strength in the Chinese currency, all combined toward closing the China versus US cost gap (Sirkin, Zinser, & Hohner, 2011). Moreover, as pointed out by Burton (2013), some firms outsourcing operations either did not take into account the hidden costs of production overseas or grossly underestimated it. These costs were estimated to be around 14–16% of a products' purchase price. Such costs for offshore operations include greater inventory cost, higher amount of scrap and warranty repairs, unexpected logistics issues, more planning, scheduling, coordinating, and monitoring expenses, as well as lost opportunities for fast product development and delivery (Burton, 2013). Hence, the various costs of outsourcing and offshoring must be considered in choosing the sourcing alternative.

At the level of society, offshoring can have significant social cost, such as unemployment of workers, which leads to reduced consumer spending that can fuel an economic downturn. Outsourcing and offshoring are, also, often contentious issues in labour-management negotiations, potentially giving rise to unproductive dialogue, distrust, and job actions, such as "work-to-rule", wherein labourers refuse work tasks beyond contractual requirements, and outright strikes. Even though terminating employees' service is usually not contravening legal standards, especially under employment-at-will doctrine in which employees can be dismissed for almost any reason (or when adequate notice or wages in lieu of notice is given in other doctrines), dismissing of good employees is often morally undesirable, especially in smaller communities where alternative employment opportunities are scarce and employers are expected to assume a degree of corporate social responsibility. Outsourcing and offshoring employers may therefore also risk not being able to attract talented employees in future. Moral responsibility is not only limited to the domestic situation. Sweatshop operations have led to heavy consumer criticisms and even boycotts. The Bangladesh factory fire incident of April 2013 (Butler, 2013) underscored the fact that substandard factory conditions can carry significant potential costs in terms of legal responsibilities, compensation, and lost customer support.

Table 2 summarizes, along the categorization used in Lam and Khare (2016), the types of outsourcing and offshoring costs that can be disadvantageous.

Production-related Costs	• Labour/wage costs • Overhead costs, e.g., land cost, utility cost • Inventory costs
Logistics-related Costs	• Shipping and transportation costs • Long-scheduling costs • Insurance costs
Quality-related Costs	• Re-work and waste material costs • Cost dealing with customer dissatisfaction • Loss future sales due to poor quality
Risk-related Costs	• Greater potential exposure to safety hazards, natural disasters and terrorism with certain overseas production • Risks of job actions (i.e. strikes) are higher in some countries than others • Risks of fines and consumer boycott if production facilities overseas do not meet legal or moral standards (e.g. sweatshop operations) • Risk of intellectual property theft
Opportunity-related Costs	• Slow pace to market due to long shipping time means losing potential sales • Distance and lack of integration between manufacturing and R&D could result in less innovation or new products • Low responsiveness to increasingly more customized consumer needs also means losing potential sales
Societal Costs	• Displaced unemployed workers, affecting workers' livelihood and government welfare programs • Lower consumer spending due to less domestic income • High impact on community if outsourcing and offshoring happened in small communities due to lack of alternative employment.
Other Hidden Costs	• Costs of more challenging coordination and monitoring • Cost of cash flow (more cash tied up in longer production pipeline) • Cost of conflicts or conflict resolution due to unfamiliarity with the offshore firm's environment, culture, and style of working • Cost related to morale and productivity of employees if they become less committed as a result of lack of job security.

Table 2: Outsourcing and offshoring costs

Determinants of Insourcing

Firms that have encountered various problems with outsourcing and offshoring are beginning to more fully appreciate the benefits of insourcing and backshoring. However, taking work back in-house is as big a strategic decision as it is for the initial outsourcing and requires similar levels of due diligence and planning. Most importantly, the firm must first determine if insourcing and backshoring is a strategically sound decision and if there is capability within the firm and the domestic location to do so. According to a Deloitte survey, the three primary drivers of change in such situations are the need to improve customer service, to gain better control, and to be more cost effective (Deloitte 2012).

In terms of strategic choices, organizations experiencing difficulties with outsourcing and offshoring can (a) insource to their own domestic facilities, (b) insource to own offshore facilities, (c) outsource to other domestics organizations, or (d) continue to outsource and offshore, but to other vendors. The focus of this part of the paper is on the first two insourcing categories. Sikula et al. (2010) outlined eight factors for insourcing decisions, namely, communication, employee morale/loyalty, control, security, transportation, innovation, customer satisfaction, and speed to market. Cervinka et al. (2012) propose that insourcing is appropriate where it is necessary to maintain one's know-how and to keep information about customers confidential, or where the work is complex. Caputo and Palumbo (2005) add further considerations for insourcing, such as the firms' familiarity with the product, core competence, alignment of the strategies between the firm and the vendors, and possibilities of achieving economies of scale. Deloitte (2013) also presents a list of strategic considerations for insourcing previously outsourced work. The first consideration is whether the work to be done is of a strategic nature. If the work provides strategic advantage and is at the core of the business, outsourcing to vendors could cause significant reputational risk, so the work is better to be done in-house and probably closer to home where monitoring is less complex or challenging. Second, whether to terminate an outsourcing contract and bring work back in-house depends on the ease of contract termination and specific contract provisions, such as, among others, whether the organization is allowed to hire the vendor's employees to work, whether the vendor services can be reduced gradually, and whether there is good intellectual property protection. Third, the more the firm is able to influence the vendor's behaviour during the transition to in-house, the more favourably predisposed that firm will be to insourcing. Fourth, organizational readiness is a major consideration in terms of whether the firm has the necessary resources available for deployment for the insourced activities. Fifth, institutional knowledge must be able to support insourcing in that the policies, processes, systems, required information, and measurements are all in place. Sixth, similarly, physical infrastructure must be accessible or able to be quickly built to support insourced activities in a cost-effective manner. Last, but not least, the insourcing decision must be based on sound a business case by comparing its cost effectiveness with other alternatives, such as re-tendering.

The insourcing determinants are summarized in Table 3, with indication of their applicability for insourcing or backshoring.

Decision Factors	Favouring Insourcing	Favouring Backshoring
Nature of Work		
- Work of strategic advantage or involves firm's core competence	Yes	Depends*
- Maintenance of know-how/intellectual capital	Yes	Yes
- Work highly complex	Depends on internal vs. external expertise	Likely
Customer Service		
- Speed to market	Likely	Yes
- Maintenance of confidential customer information	Yes	Yes
- Innovation and responsive to customer needs	Yes	Yes
Product Quality		
- Control and monitoring	Yes	Yes
- Reduction of rework cost	Yes	Likely
Organizational Readiness		
- Internal expertise inshore	Yes	Yes
- Internal expertise offshore	Yes	No
- Ability to hire vendor's personnel	Yes	Depends*
- Internal systems and processes in place to handle work	Yes	Depends*
- Familiarity with own offshore locations	Yes	No
- Internal infrastructure to support extra work	Yes	Depends*
Product Costs & Logistical Concerns		
- Security from disasters or unexpected events	Yes	Yes
- Rising offshore costs (wage, land, utilities, etc.)	Yes	Yes
- Rising transportation cost	Yes	Yes
- Internal economies of scale	Yes	Depends*
- Ease of terminating vendor contract	Yes	Depends*
Other Intangible Factors		
- Communication with employees	Yes	Yes
- Employee morale and loyalty	Yes	Likely
- Maintenance or enhancement of domestic employees' skills	Yes	Yes
- Good corporate citizen by boosting community's business activities	Yes	Yes

* Depends on capabilities of own offshore facilities

Table 3: Insourcing/Backshoring decision factors

Other than insourcing and backshoring, there is a less commonly used alternative called co-sourcing whereby the outsourced work is performed at a location such that both internal and

external members involved with the product or service work alongside each other. For example, the partnership between Eli Lilly (a pharmaceutical firm) and AMRI (a contract research and manufacturing organization), in which a team of 40 synthetic chemists from AMRI in Indianapolis work closely with Eli staff to support that pharmaceutical firm's drug-discovery programs in 2012, has been cited as an effective alternative to the traditional outsourcing model (van Arnum, 2012). This relationship is able to ensure speedy innovation and product development and quick adjustments to project needs due to the real-time information exchange between the parties involved. This model also fosters a collaborative and problem-solving atmosphere where people are willing to share ideas and communicate constantly. However, this is not a new concept as it was practiced in late 1990s by Micro Compact Car Company (then a subsidiary of DaimlerChrysler and manufacturers of the SMART Car), which allowed suppliers to provide their services on the assembly line in Hambach, France (Arnold, 2000). Another example is in the financial industry where AlixPartners or similar companies provide a team of management people to work inside the organizations that are recovering from near-bankruptcy situations (Rosenberg, 2007). This can be a situation of insourcing, if those management members become employees, or a situation of co-sourcing if they are external members working in conjunction with the welcoming organization's employees. Co-sourcing can be seen as a hybrid approach that has the potential to reap the benefits of both insourcing and outsourcing and lead to huge tangible cost-savings as well as intangible benefits such as a more integrated and committed workforce. The success of this strategy depends on the availability of physical space for co-location, compatibility of the cultures of the two firms with both groups of employees embracing the collaborative approach and complementarity of the skill sets of the groups.

Stakeholder Roles and Implementation Challenges

A number of main actors play prominent roles in achieving insourcing and backshoring success. These include governments, organizations and their management teams, employees and those worker's unions and the community at large.

Government

Governments can exert a huge influence on organizational insourcing and, especially, backshoring activities. Regulations on import tariffs can raise the price of imported goods, making them much less attractive compared with domestic production through backshoring. Even within a country, taxes on land, oil and gas, and other factors of production can also have a significant impact on the selection of production sites. Legal restrictions on employment of foreign workers, employment standards provisions, and labour relations codes can all affect the availability of human resources, the ease of union organization, and the level of labour cost. By stricter enforcement of the law, governments can also curb outsourcing practices for organizations trying to gain advantages from labelling workers as contract staff in order to bypass the need to pay employees benefits when the workers do exactly the same work as regular employees.

Governments can also provide the necessary infrastructure and other positive incentives and programs to facilitate backshoring (Eliasson, 2005). Building an efficient transportation network within the country can prompt organizations to build plants at less popular, but more cost-effective, locations. While better and more efficient port facilities may encourage importing, they can also promote domestic production and exports. In other words, through improvement in the infrastructure such as port facilities and transportation networks,

governments increase market efficiencies for both importers to and exporters from resident location, which in turn, reduce the cost of goods and benefit the resident citizens.

Governments are responsible for the overall educational plan of their populations. The skills and competencies developed by various academic programs, as well as specific vocational certifications, prepare the domestic workforce for future human capital needs and put human resources at a competitive advantage as compared with foreign counterparts. Where labor supply in the skill areas needed is a concern, immigration policies can help to relieve the pressure of such shortages, particularly in the short term while such skills are being developed domestically (Kim, 2013). After all, the level and composition of workforce skills are important factors affecting backshoring.

Moreover, governments can entice backshoring by offering direct incentive and rebate programs, particularly such as those that encourage desired types of innovative production or those that involve the employment of a large number of workers. Examples of such incentives include one of $1.3 billion in cash and tax breaks over 15 years from the State of New York for building a $4.2 billion silicon-wafer plant in the state, and another involving a US Department of Energy loan of $1.45 billion to Nissan for investing in a new Tennessee plant (Sirkin, Zinser, and Hohner 2011). Such incentive plans not only help organizations to be more cost-effective but also raise the nation's profile as an innovative leader and revitalize certain communities where new operational facilities are built.

Governments are also often large employing organizations and large customers for many products and services. Hence, they play an organizational role and consumer role as well. These roles will be discussed further in later sub-sections. In short, as large employers, they can help to set trends and act as a role model of insourcing and backshoring by demanding government departments to review their sourcing policies and procedures in favor of such practices. As consumers, they can also voice preferences and demands for flexibility, customerization and fast delivery, which are conducive to favorable insourcing and backshoring decisions.

As with any government policies, there will be political and other challenges in providing any legislative changes. Trade barriers like higher import taxes may affect international relations, potentially increase prices consumers pay and possibly condone complacency among domestic producers by limiting competition. Specific financial support for any particular organization or community will inevitably encounter objections from other companies and communities. Even funding for support of general education programs may be at the expense of that for other social services. Immigration policies can be another controversial area. Organizations may favour a lenient approach for hiring temporary or "permanent" foreign workers, but domestic workers could be leery of losing jobs to these immigrants. Recent developments in Canada are indicative of this dilemma, where allegations were made about employers abusing the temporary foreign worker system by hiring foreign workers in place of Canadian workers despite the government policy requiring that employers prove the need for such workers and that no Canadian is available to do the job. This prompted a halt in the processing of applications for firms in the fast-food industry, where most complaints seemed to have originated, and a subsequent decision to impose gradually stricter caps on the number of such workers that can be hired with the possibility of phasing out the low-skilled stream of the temporary foreign worker program by 2016 (The Canadian Press, April 23, 2014; CBC News, April 24, 2014; Milewski & Mas, June 21, 2014). In sum, government policies,

regulations and funding allocation affect labor availability as well as firm's cost and competitive position. They are often controversial topics without one best solution.

Hence, governments must set clear priorities, balance the needs of various parties, and make strategic planning for the long-term gain of their jurisdiction. Proper communication of the government's strategic and insourcing-promotion plans with communities, and organizations, as well as foreign companies, through efforts of agents and diplomats, is critical to ensuring insourcing and backshoring success. A point to note is that this situation is not static. It is dynamic and changes in environment lead to "attractiveness of locating operations" shifting between outsourcing and insourcing. This requires government to monitor both global and domestic situations on a regular basis and adjust its policies, proactively where possible, from time to time.

Organizations

After deciding to insource based on the factors discussed above, an organization's management must devote substantial efforts and care to the insourcing planning process. This broadly includes acquiring resources, determining resource allocation, building internal infrastructure, communicating the implementation plan (with employees and other stakeholders such as unions), as well as defining and measuring insourcing effectiveness (Clark and Monk, 2013; van Adelsberg & Trolley, 1998). In the following paragraphs we discuss the issues that emerge from this aspect.

To bring work back in-house requires extra financial investments to purchase land, equipment, technology, supplies, and more importantly, human talent. Organizations' expertise in finance, operations, and human resource must be well leveraged and coordinated to achieve effective insourcing. Efforts need to be directed at not just the product design, but also the work design, that is, whose responsibility is the work and how the work is to be done. The option of "buying" (hiring external) or developing (internal) talent is often a human resource dilemma that requires the assessment of the time line and the availability of talent in the market. If the relationship between the organization and the previous vendor doing similar work is good and there are no contractual restrictions on acquiring the talent from the vendor, "buying such talent" may be a quick way of ensuring human resource needs are met. It may also help to provide employment to those vender workers who might be displaced and unemployed otherwise. If outright hiring is forbidden, it may still be possible to make training agreements with the vendor to capitalize on their expertise and to maintain a harmonious relationship despite the discontinuance of the outsourcing contract.

As with any change management initiative, top management commitment to insourcing is essential especially during the transition period. There may be changes in people's roles and in resource allocation. Employees involved in the insourced functions need to feel supported in terms of having the necessary access to various types of resources, and that their security and development needs are addressed. Especially if the function has been outsourced before, employees hired for the function may feel insecure in their jobs. This concern can be alleviated by appropriate human resource strategies, such as fostering a culture where employees are valued and empowered, providing important general and firm-specific skill development opportunities so that employees know they are both in demand within and outside the organization and offering attractive contract terms particularly in the event of severance (as this not only provides tangible benefits for the employees, but also sends a strong signal that the organization is not planning to use layoffs as an easy decision choice). Appropriate human resource measures are therefore critical during the insourcing transition.

Just as important as it is for government to build the external infrastructure, organizations must build or upgrade their internal infrastructure to meet the needs of the new insourced production and delivery. Such infrastructure includes equipment, systems (operational, information technology and human resource) and storage capacity and delivery networks. Policies and processes must also be aligned with the new activities so that they can be well integrated with other activities in the organization. For example, where activities are competing for the same resources, such as time and manpower, priorities must be set with clear objectives, criteria, and procedures. Overall, new or revised policies or processes are needed for the expanded infrastructure.

Even if the policies, processes, and systems are in place to guide insourcing activities, there needs to be a clear communication plan to ensure the necessary messages are properly conveyed to all those involved. In any change situation, a one-way communication is not desirable. In the case of employees, for example, they are often in the best position to offer good feedback on new structures and approaches. After all, they are the ones who do the work and know the more subtle repercussions of any changes. Moreover, a top-down approach without consultation does not generate buy-in. As for departmental managers, their role is more than that of just employees. They are the ones to oversee the complex changes and coordinate cross-functional activities. Therefore, their support of the insourcing-related policies and processes largely influence insourcing success. In sum, proper communication and consultation with stakeholders are crucial in insourcing decisions.

One question to be asked in insourcing implementation is how well the organization's culture is prepared for the change. A culture that embraces continuous improvements, new approaches, and innovations can be very conducive to insourcing success. Contrarily, if the organizational members tend to have a set way of doing things and resist changes at every step, insourcing will be problematic. Moreover, when there is an influx of new activities and employees, the well-established culture of the organization may be challenged. New organizational members may not know or share similar norms, values and expectations of the existing members. Thus, if the existing culture is a good one to maintain, then care must be taken to continue fostering it. Cultural values are shared through explicit messages from the leaders, organizational policies, ceremonies, rituals, stories, and even symbolism. Again, a two-way communication is key to successful integration in this regard.

A crucial step in any implementation process is monitoring and review. The goals and targets for insourcing as well the measurement indicators for success need to be determined and translated into performance standards for individual employees involved so that efforts can properly be directed and rewarded. Employees will also be in a better position to offer constructive feedback from their knowing the goals and expectations of the organization. Taking feedback and then reviewing and revising processes accordingly can ensure that what Argyris and Schon (1996) termed "double-loop learning" takes place, where thorough understanding of the causes of underlying problems leads to appropriate long term remedial actions rather than temporary quick fixes. In other words, applying "double-loop learning" to the review and monitoring of insourcing processes is both practical and constructive.

In sum, the main organizational challenges in insourcing usually relate to resources (financial and human), infrastructure and work design (equipment, systems, processes, capacity and networks), culture and communication, and performance management. This section has provided some suggestions to handle the challenges but most importantly, the challenges should be anticipated in advance and addressed proactively wherever possible. Again, for

organizations, this is a continuously evolving situation. Investments have to be matched with efficiency gains. Continuous monitoring and adjustments are required to control and improve the situation.

Employees and Unions

Employees and unions are both important stakeholders in insourcing decisions. They can even "make-or-break" the initiative. Whether unions cause organizations to be less competitive by raising wages and whether higher union labour productivity is more than sufficient to compensate for the higher wages are issues beyond the scope of this paper. However, there is little doubt that in a unionized environment, management and the union are in a long-term relationship and the more they can partner in addressing the challenges concerning the work and employment aspects, the better the chances of insourcing success. For example, Ford Motor's backshoring of 2000 jobs back to the US was due to the favourable agreement that it made with United Automobile Workers (UAW), especially on the new hires' wages (Sirkin, Zinser, & Hohner, 2011). Rather than focusing only on wages, the organization and the union can also jointly work on raising productivity through training and development, total quality management initiatives, incentives to reduce wastes and increased efficiency (such as gain sharing and profit-sharing), and overall increase in employee morale (such as negotiating some degree of job security, having policies on code of conduct that treat employees with respect, and establishing open communication channels for feedback). In situations like this, where both the substantive outcomes and the relationship matter, a collaborative (integrative) negotiation approach is more appropriate than a competitive (distributive) one (Lewicki, Orlander, & Hiam, 1996). Indeed, insourcing can provide a good opportunity for reclaiming union work and reviving union membership (Zullo, 2004). Thus, management and union joining hands in dealing with insourcing issues is advantageous to both parties.

Employees can also make it easier for the organization to bring work back in if they show they can handle the extra workload, they have the skills (or are willing to learn the new skills) to do the work, and they can work well as a team with new employees who need to be hired. For employees, insourcing means extra opportunities for upwards or lateral movements that can enrich their work experience and potentially make their jobs more secure (as there is more work and they have higher seniority than the new hires). In the transition period, there will likely be uncertainties about the workflow and individual roles. Employees' cooperative attitude and feedback along the way are most invaluable to the organization.

Community

Insourcing and backshoring can help revitalize communities by bringing in employment opportunities, which can boost consumer spending. Hence, communities should consider playing an active role in enticing organizations to adopt these two initiatives. As examples, communities can help by showing support for re-zoning of land to make it easier for building facilities, promoting a business-friendly environment where citizens and businesses can hold meetings to determine overall developments and needs, and building affordable residences and desirable amenities to attract new migrants who will come for the new jobs in the community.

For the workforce in the community, the willingness to constantly upgrade their skills through courses and practicums and to be prepared for new insourced jobs when available, and to purchase domestic products instead of imports in order to support backshored

production are just some of the ways that can help increase the pace of insourcing and backshoring. Therefore, community is an important stakeholder in insourcing and backshoring.

As discussed above, insourcing and backshoring involve many stakeholders, including governments, organizations, unions, employees as well as communities, each of which have roles to play that affect the effectiveness of these two initiatives. Challenges are inevitable in implementing changes and need to be addressed with careful planning and proper resource allocation.

Table 4 summarizes the stakeholder roles in economies that benefit from insourcing/backshoring.

Government	• Implement tariffs and taxes (on land, oil and gas, etc.) as well as incentive/rebate programs attractive for domestic production • Review labour/immigration legislation and enforcement to improve skilled labour availability and curb outsourcing • Provide necessary infrastructure, e.g. transportation network • Promote educational and vocational training programs • Adopt insourcing/backshoring practices and preferably purchase domestic products/services within the government departments
Organizations	• Make necessary investments for purchase of land, equipment, supplies and human talent for bringing production back • Direct efforts at product and work design • Communicate and consult proactively with stakeholders • Foster a culture that embraces quality, innovation, and employee empowerment • Consider hiring the displaced outsourcing vender workers or making training agreements with such venders for knowledge transfer • Provide developmental and resource support for employees • Enhance internal infrastructure for insourced production and delivery • Set appropriate and measurable goals/targets for insourcing performance standards that can be translated to the individual level
Employees and their Unions	• Jointly work with the organization to raise productivity through training, total quality management, and reward incentives • Negotiate collaboratively with management to enlarge the pie for both
Community	• Support the rezoning of land for production facilities and construction of transportation networks • Provide a business-friendly environment, affordable commercial/residential spaces, and good amenities to attract businesses and new migrant workers • Upgrade the overall workforce skills to take on new tasks • Purchase domestic products

Table 4: Stakeholder roles in economies favouring insourcing/backshoring

Emerging Economies – Mitigating Insourcing and Backshoring Impact

The new insourcing and backshoring trend clearly has a negative impact on the emerging economies that have previously attracted manufacturing and provision of services from offshore locations. It would be naïve to believe that they would not try to reverse this trend in order to sustain their growth and progress. The question is where agents within those emerging economies start and what roles the government, organizations and markets play in the "fight back". The paper presents the strategic changes needed for these actors based on the cost factors identified in Table 2 earlier.

Government

The government of the emerging economy can have a significant impact on various production and logistical costs that can in turn affect offshore investments. Lower tariffs on imports directly lead to lower cost production, where foreign raw material supplies are concerned. Reducing taxes on oil and gas products can decrease the utility costs involved in production, storage and delivery. Tax rebates and subsidies to select industries fast track the growth of those industries and help with their specialization that gives them a competitive edge in the global market. Monetary policies determine the strength of the domestic currency as well as the inflationary pressures within the economy. A stable currency exchange rate maintained through government market intervention, as in the case of PRC, reduces currency fluctuation risks for foreign investors. While purposely having a weak domestic currency curbs imports and boosts exports, a by-product of this approach is possible inflation within the domestic economy, which can drive up labour and other costs of production (ECR Research, 2014). Therefore, the monetary policies of emerging economies affect the investments and competitiveness of businesses.

In terms of labour and human capital, government legislation and educational investment have a significant impact on such a resource. While labour cost are a major concern for foreign companies, these firms are also concerned about their reputation as ethical employers (and organizations in case of contracted work) as there could be repercussions on customer actions, such as boycotts on sweatshop operations. Regulations that mandate and enforce basic human rights as well as acceptable standards of working conditions and wages, while potentially raising labour cost, are able to increase morale, productivity, and product and service quality. Such an environment entices foreign companies to contract out to domestic providers, as the need for and cost of due diligence in this aspect can be reduced. On the other hand, freedom to strike and taking of job actions could be seen negatively by foreign investors due to the risk of production interruptions. Therefore, a delicate balance of regulatory measures is needed to ensure workers are treated fairly while at the same time, mechanisms are in place to facilitate fast resolution of labour disputes and concerns. For example, alternative dispute resolution, like mediation, conciliation and arbitration could be effective ways of addressing labour matters without disruptive strikes and help in discouraging adversarial work environments. Overall, government educational and vocational policies and investments affect labour pool competency. The supply of skilled labour can address some of the quality concerns of foreign companies. In particular, encouraging local citizens to learn foreign languages and study abroad bridges the knowledge and culture gap between local and foreign economies. The more domestic managers understand the needs, values, and expectations of the foreign companies, the more likely that the local providers will be able to reduce the hidden costs of cross-country coordination, communication, and conflict management, and, thereby, increase responsiveness to foreign market needs.

Governments can also implement other regulatory changes that stem the fear of various risks to which foreign companies may be exposed. Political stability, good national defence, and disaster preparedness are all important factors in alleviating the fear of unexpected crises arising from war, terrorism, or natural disasters. Appropriate occupational and safety regulations combined with necessary training and monitoring will reduce losses due to safety hazards. Strong intellectual property infringement penalties will definitely help in minimizing foreign companies' concern over proprietary losses such as loss sales due to counterfeit products. Strict anti-corruption laws can create a level playing field for honest organizations that want to set up operations in or contract work to the emerging nation. All these regulatory measures will appeal to risk-averse foreign investors.

Besides monetary policies and various regulations, governments can raise their country's attractiveness to foreign companies by investing in infrastructure, such as enhancing the rail, air, and road networks that better connect various production locations to ports. Efficient means of transportation and improved port facilities not only can lower costs, but more importantly, reduce shipping time, thereby addressing the slow pace-to-market concern associated with foreign production. Development of trade zones and industrial hubs is another potentially useful means of attracting offshored relocation, especially for specialized products and services. With organizations having similar needs locating in close proximity, it would be more cost-effective for the government to provide the required infrastructure, facilities and support services to the organizations. For example, government sponsored research and development laboratories, product display centres, training facilities, and hotel services for foreign visitors, can all be planned and established in an integrative way. Such can become internationally renowned locations for foreign investments if promoted by a government and its ambassadors. In all, government action can directly or indirectly affect foreign business investments and relationship.

Organizations

With one of the major reasons for insourcing and backshoring being quality concerns, organizations in emerging economies must be able to address this area to keep foreign investments and operations. Investment in research and development can lead to more innovative ways of producing newer, more efficient, and quality products. Organizations may want to identify their niche and focus on some specialized areas in order to develop their competitive edge. Establishment of reliable quality management systems that include the adoption of internationally accepted quality standards and processes, not just for the purpose of monitoring, but also for double-loop feedback and necessary improvements, can ensure product quality meeting foreign companies' expectations. Moreover, improvement of the IT system can greatly facilitate communication and coordination within the company as well as with foreign outsourcing firms or parent companies. A good IT system also allows for data capturing and analysis on which effective management decisions can be based. In addition, investing in automation, especially in face of rising labour cost, may be worth considering to reduce quality fluctuations and material waste. Hence, quality management systems and management information systems are critical for success.

As intellectual property risks are serious concerns for foreign organizations, especially those with cutting edge innovations, companies wanting to attract contract work from these organizations must have safeguards in place, including clearly enforced confidentiality agreements, code of conduct, and physical security measures to minimize unwarranted access to or leakage of critical product design and development information. Careful recruitment and

selection as well as proper disciplinary policies may also help. Having security measures in place significantly reduces intellectual property infringements.

To combat backshoring, firms in emerging economies must work towards cost containment. While costs are often exogenous factors determined by the supply and demand of the market, organizations can certainly control costs by utilizing more efficient designs and processes, or by having more productive labour. Training and development, especially where firm-specific skills are important, can both raise internal productivity as well as reduce staff turnover.

Employees and the General Public

Employees and the general labour force can help to attract foreign investments and contracts by upgrading their knowledge and skills. A cultural shift towards stronger work ethics and zero tolerance for corrupt practices and intellectual property infringements will appeal to foreign organizations. Cooperative labour relations (especially where unions are involved) and willingness to participate in an organization's employee involvement initiatives can provide added tangible and intangible advantages for the organization. Overall friendliness to foreign investors and an appreciation of the differences in national and organizational cultures will go a long way in creating a welcoming environment for outsourcing and offshoring foreign firms.

Table 5 summarizes the stakeholder roles in emerging economies that are "fighting" insourcing/backshoring.

Government	• Lower tariffs on raw material imports and taxes related to land and utility costs • Establish tax rebates and subsidies to promote growth of preferred industries • Implement monetary policies to stabilize currency; enhance political stability, national defence and disaster preparedness; and enforce strong intellectual property and anti-corruption laws that appeal to foreign investors • Provide a regulatory framework that respects basic human rights and allows for expedited resolution to labour disputes • Improve educational and vocational programs and encourage citizens to learn foreign languages or study abroad to bridge knowledge and culture gaps • Build necessary infrastructure (e.g., transportation network, trade zones and industry hubs)
Organizations	• Invest in R&D to produce newer and better products with more effective means • Establish good quality management (e.g., adopt international quality standards) and management information systems • Put various security measures in place (e.g., careful employee selection, confidentiality agreement, limited physical access) to protect intellectual property and confidential information • Provide appropriate training and development for employees

Employees and the General Public	• Upgrade the overall workforce skills • Push for a culture shift towards stronger work ethics and zero tolerance for corruption and intellectual property infringements • Learn to appreciate cultural differences between foreign and local firms • Adopt more cooperative labour relations strategies and practices

Table 5: Stakeholder roles in emerging economies "fighting" insourcing/backshoring

Conclusion

The main question this paper examines is what drives backshoring or insourcing. Looking at the issue from various angles, one can conclude that the main drivers are the quest of efficiency in operations and serving markets better. A couple of decades ago, outsourcing offered this opportunity as existing domestic systems had grown inefficient. Now the tide has turned and the international supply chain has gained inefficiencies and is not as attractive as it used to be. With the addition of social responsibility issues, backshoring and insourcing has again emerged as a considerable competitor to offshoring and outsourcing. Not all organizations are embracing it fully but they are certainly taking steps to examine the domestic suppliers and their own capabilities to determine if they should backshore. This backshoring and insourcing trend will only stay as long as it can remain efficient and provide organizations a competitive edge in domestic and international markets. With tight financial situations, the tide may turn yet again if the anticipated efficiencies are not gained. The prospect of emerging economies (that are most effected by insourcing) developing strategies to reverse the trend can be good for global economies and businesses as competition would help bring greater efficiencies to the global marketplace.

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Corresponding author: Helen Lam
Email: Helen.Lam@fb.athabascau.ca