

Indigena Solutions, Tensions in an Aboriginal IT Impact Sourcing Firm

Ron Babin, Ryerson University, Toronto, Canada

Brian Nicholson, University of Manchester, Manchester, UK

Megan Young, Ryerson University, Toronto, Canada

ABSTRACT

This paper explores the role of cultural tensions in the operations of an Information Technology Impact Sourcing (ITIS) venture called Indigena Solutions. The company was based in Vancouver Canada and was intended to provide meaningful careers to a marginalized group, namely Canadian Indigenous Peoples. The company provided on-shore IT services such as help-desk support and software testing. With the support of Accenture and with initial success at high profile clients such as BC Hydro and Vancouver City Trust, the company lasted about seven years. Indigena was declared bankrupt in 2017. This research demonstrates the cultural tensions inherent in creating an Impact Sourcing venture, with challenges of location, the inability to attract Indigenous workers to a non-traditional career, and the underlying challenge of structural racism, despite the recognized social responsibility and commitment to help a marginalized group. The research was designed as a case study using an interpretive approach. The originality of this research rests on the exploration of why Impact Sourcing in a developed country failed to meet the needs of the marginalized Indigenous Peoples community. This research contributes to the body of work that explains tensions inherent in ITIS. Practitioners may find this research valuable as they consider the challenges of establishing and successfully operating an ITIS firm.

KEYWORDS

Enterprise, Impact Sourcing, Indigenous Peoples, Outsourcing, Social Responsibility

INTRODUCTION

Information technology impact sourcing (ITIS) is defined as ‘the practice of hiring and training marginalized individuals to provide information technology, business process, or other digitally-enabled services’ (Carmel, Lacity, & Doty, 2014, p. 401). Prior research (ibid) has pointed out that people could be marginalized by many factors such as remote location, religion, ethnicity or gender and the promise of Impact Sourcing is to benefit such marginalized people by providing employment opportunity in IT outsourcing centres. Much of the prior ITIS research to date is hopefully optimistic and has demonstrated the benefits for individuals and communities (e.g. Heeks & Arun, 2010; Madon & Sharanappa, 2013; Nicholson, Malik, Morgan & Heeks 2015). Another stream of ITIS

DOI: 10.4018/JGIM.2020040109

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

literature, emanating mainly from practitioner reports and white papers, rests on the assumption that the desire to help marginalized people is unproblematic and tends towards unitary goals across all stakeholder groups (e.g. Kubzansky, 2011; Avasant, 2012; Everest, 2014). Implicit in this uncritical perspective on ITIS is a form of technological determinism akin to the literature that marvels at the globalizing potential of computing and telecommunications (e.g. Coyle, 1997; Friedman, 2006). This doctrine extends into some ITIS literature to represent technology “weightlessly” transferring labour un-problematically in the “flattened world” to anyone, anywhere with sufficient computing, bandwidth and skills and thus offering gainful beneficial employment to marginalized people in a ‘one size fits all’ method. A smaller but more critical ITIS literature has emerged focused on the particular circumstances and challenges of ITIS in improving the economic and social condition of marginalized people. A good example is Sandeep and Ravishankar’s (2015a) case study from rural Himalayan India which points out that the marginalized local community may not unilaterally welcome incoming ITIS with joyful “open arms”. Their analysis shows how community resistance against ITIS ensued despite the well-meaning development goals of the provider firm. In another example again from rural India, Malik, Nicholson and Morgan (2013) point out how women faced opposition from family and community to being involved in ITIS work as this clashed with local cultural norms.

This paper builds on this more skeptical literature focusing on the uniqueness of particular marginalized groups and identifying tensions and contradiction evident in ITIS. The focus is on heterogeneous groups and individuals with multiple perspectives that are both historically and culturally rooted in norms, values, traditions and belief systems. There is a paucity of research in ITIS that explores this facet and thus the paper combines the dialectical tensions conceptual lens (Gibbs, 2009) with a framework of culture (Gallivan and Srite, 2005; Gregory, Prifling & Beck, 2009) illustrated by drawing on a case study of ITIS at Indigena Solutions located in Vancouver, Canada.

Indigena Solutions, began operations in 2011 with the goal of Indigenous Peoples community transformation and enablement through individual achievement, but was declared bankrupt in 2017. The original motivation for this research was to understand why an Impact Sourcing venture with a valid social mission was having such commercial difficulty; now the case can be viewed as a post-mortem assessment of an Impact Sourcing failure. With this background, the following question will be addressed:

How do dialectic tensions constrain or enable the effectiveness of Impact Sourcing?

We ask this question because of the growing interest in Impact Sourcing, initially defined by the Monitor Group and the Rockefeller Foundation (2011) and increasingly examined by scholars (Heeks & Arun, 2010; Lacity et al, 2012, 2014; Malik et al, 2013; Carmel et al, 2014; Sandeep & Ravishankar 2015a, b) and consultants (Avasant 2012; Everest Group 2014). In 2017 the Rockefeller Foundation in collaboration with Business for Social Responsibility (BSR) established the Global Impact Sourcing Coalition (GISC)¹ which has defined standards for Impact Sourcing.

Our paper contributes to the theoretical understanding of culture tensions and their negotiation in ITIS initiatives adding to the relatively few ITIS studies with a focus on marginalized Indigenous Peoples communities in North America. One similar Impact Sourcing case, Cayuse Technologies, described by Lacity et al (2012), also explores the role of Indigenous communities in IT outsourcing. More specifically, this paper builds on prior work exploring tensions of ITIS particularly Sandeep and Ravishankar (2013, 2015a, 2015b) who examined the “paradoxical orientations of commerce and social upliftment” (2013, p. 1). Practical implications of this paper focus on the management of these tensions and conflicts which are inherent in many ITIS models.

This paper is structured as follows. Firstly, the theoretical frames that guide the research are explained, with an overview of the relevant ITIS literature. Secondly, the research methods are described. Thirdly, the case is described in terms of three tensions identified from analysis of

qualitative data. Lastly, a discussion is presented that describes the ongoing need to balance and negotiate the cultural tensions.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Impact Sourcing

ITIS is defined as “employment for high potential but disadvantaged people in the services sector” (Troup, 2014). The Rockefeller Foundation further defines “disadvantaged” to relate to individuals who are “...considered disadvantaged in their local context” (Biteye & Badshah, 2014) which can include economic, social or physical challenges (ibid, 2014; Verma, 2014a). Examples extend from marginalized individuals and groups in developing countries, including traditional outsourcing provider markets such as rural India, to prison inmates in the United States (Lacity, Rottman & Carmel, 2014).

ITIS is currently viewed as a distinct and relatively new component of the outsourcing sector, yet that distinction will likely fall away as the concept becomes more ingrained in the norms of the industry and accepted as a practice (Biteye & Badshah, 2014). There are between 235,000 and 245,000 full time employees engaged in the impact sourcing sector (Verma, 2014a) which represents an increase from 2010 figures of 144,000 full time employees (Kubzansky, 2011). In Africa, India and the Philippines, the growth of ITIS is occurring at a faster rate than the business process outsourcing sector (Verma, 2014a).

The reported benefits of ITIS to vendors and clients are many and include lower costs, a stable and motivated workforce, lower rates of attrition, a large labour market of qualified individuals and reliable performance with minimal security issues (Kubzansky, 2011; Troup, 2014; Verma, 2014b). Lacity et al. (2012) identified Cayuse Technologies as an Indigenous Peoples ITIS example in the United States that experienced many of these benefits. However, ITIS is not without challenges and tensions. Sandeep and Ravishankar (2013, 2015a, 2015b) have explored the challenges of balancing business and social goals, they write: “potential clients and investors were particularly keen on the cost and quality of services provided whereas employees and community members viewed social IT sourcing organizations as a means to gainful employment and the ancillary benefits of holistic community development” (2013, p. 13). The authors refer to the balancing of social and business goals as presenting “paradoxical logics” for which “the balancing act of divergent orientations was vital to the sustainability of the organizations’ business models” (2013, p. 13). Further, they note that the “one size fits all” view of ITIS is inappropriate, they write: “impact sourcing innovations may be difficult to replicate in different parts of the world”, (2015, p. 12) so that models of Impact Sourcing in Africa may not work in India, or in North America. Finally, they stress the importance of aligning the Impact Sourcing goals with the community: “informants observed that they were able to get the full support of the local people for their business operations only after they immersed themselves into the socio-political affairs of the community... entrepreneurs need to break bread with local community leaders and spend what might initially seem like a lot of time getting to know the community and reassuring them of the company’s good intentions” (2015, p. 13).

Khan et al. (2018) have proposed a conceptual framework to assess how an ITIS balances the conflicting demands of social and commercial logics. This research examines how “impact sourcing providers seek to deliver on their dual value promise by often engaging the very marginalized populations they intend to help, as their workforce, to then provide commercial/business value to their clients ... under what organizational theorists have termed ‘dual institutional logics’, in this case both social and commercial value logics.” (p. 539). Khan et al. acknowledge the tensions between achieving commercial goals while at the same time delivering a social mission.

The motivation for this paper is to explore the cultural tensions and challenges of ITIS, particularly in a developed country. At the start of the research Indigena was struggling, at the end Indigena was bankrupt. While prior research explains very well the potential value and success of ITIS, there is a paucity of research that explains why or how ITIS fails. The motivation for this paper is the fill that gap.

CULTURE AND IT OUTSOURCING

Culture, broadly understood as shared meaning, understanding and sense making, has a long history of inclusion in IS research generally (Leidner and Kayworth, 2006) and in IT offshore outsourcing (Krishna, Sahay & Walsham, 2004; Gregory et al., 2009; Nicholson & Sahay, 2001, 2004; Walsham, 2002) highlighting the need for managing diverse organizational and national cultures. We draw on Gallivan and Srite (2005) who offer a holistic definition of culture starting with “values, meanings and norms” (p. 298) which are structured as “layers of social identity, like layers of an onion, [which] reflect how deeply held or superficial certain beliefs may be in shaping people’s beliefs and behavior” (p. 300). The layers of social identity in the model are (from broad to narrow): Religion, Ethnic Group, National, Professional or Occupational, Organizational, Workgroup, and Individual. The authors suggest that the model reflects “the multiple, complex forces that shape individuals’ beliefs and behavior” (p. 302).

Gregory et al. (2009) suggest that an IT project with multiple cultures (e.g. onshore Europe versus offshore India) will require the development of a “negotiated culture” that “is the sum of compromises and innovations or behavioural adaptations that are negotiated around the subjective and objective cultural differences between client and vendor staff” (p. 237). Gregory’s model requires “cognitive cultural intelligence” (knowing what to do and how to do it), “motivational cultural intelligence” (the necessary attitude towards exerting effort) and “behavioural cultural intelligence” (the necessary skills and behaviours to interact with people with different social backgrounds). These three “facets” of cultural intelligence are the antecedents of a Negotiated Culture, described as “adapted behavior” which leads to “trust in interpersonal client-vendor relationships, the effective resolution of conflicts and the emergence of shared understanding” (p. 238). However, Krishna et al. (2004) caution that “major differences in norms and values cannot be harmonized since they derive from deep seated differences in cultural background, education and working life” (p. 65).

ORGANIZATIONAL TENSIONS AND ITIS

Gibbs (2009) and Tracy (2004) describe an organizational tensions framework that “recognizes organizations as conflicted sites of activity and takes as its starting point the ‘dilemmatic’ nature of organizing arising from the paradoxes, contradictions and ironies which naturally exist in organizations” (p. 907). Gibbs (2009) describes dialectic tensions in global IT firms, building on the concepts of organizational tensions described by Trethewey and Ashcraft (2004). The dialectic tensions framework aligns with Sandeep and Ravishankar (2013) regarding ITIS ventures as containing “inevitable tensions and misunderstandings with the community” (2015a, p. 1). Sahay, Nicholson and Krishna (2003) also draw on a dialectical tensions frame and described the tensions in Global Software Alliances, in terms of “place and space”, “standardization” and the “challenge of cross cultural communications.”

Gibbs (2009) defines cultural contradictions as “competing directions” and “opposing forces” stemming from competing allegiances of global teams (p. 906). Dialectic tensions are more than simple contradictions, because they “allow for the merging of opposites by embracing both poles as ‘both-and’ options” and “are thought to engender positive outcomes as they involve creative thinking that generates new options” (Gibbs, 2009, p. 908).

Following Gibbs’ conception, there is an “ongoing process of negotiating contested meanings in the form of tensions enacted from differing interpretations of work roles, values and processes” (2009, p 928). In short, Gibbs’ framework identifies the dialectic tension, the stakeholders impacted by the tension, and the responses to the tension. As Gibbs suggests, several de-coupling characteristics, such as cultural diversity and geographic dispersion, act as “centrifugal forces that pull teams apart” (p. 909). Gibbs’ tensional lens coupled with concept of negotiated culture derived from Gregory et

al. (2009) helps to explain “the ways such tensions are negotiated” (Gibbs, p. 911). Table 1 provides a summary of the theoretical framework.

RESEARCH METHODS

This study follows an interpretive case study approach (Walsham, 1995, 2006).

The primary method of data collection was semi-structured interviews, conducted within Indigena, with channel partners² and with Indigena clients, following the guidance in Myers and Newman (2007). Semi-structured and unstructured interviews were used as their flexibility helps researchers gain a deep understanding of the meanings given by participants to the phenomenon under study; a necessity in order to identify and gain insight into tensions, conflict management strategies and underlying culture (Silverman, 2013).

In total, 23 interviews were conducted in person or by telephone over a five-month period in 2015, with one additional interview conducted at Venture Funds Inc. in 2016. A final interview was conducted with Indigena’s CEO in late 2017. In addition to the interviews, relevant documents provided by the interviewees were reviewed. Three specific groups were chosen based on a purposive sampling approach (Saunders, Lewis, & Thornhill, 2015) in tandem with Indigena’s management executive team:

- Indigena staff and management;
- Current customers of Indigena, including BC Hydro and Vancouver City Credit Union; and
- Indigena channel partners, including Accenture and another global IT services firm.

Table 2 provides a list of persons who participated in the interviews.

An initial interview guide (see Table 3) presents broad, open questions in order to cultivate a relevant discussion with each interviewee. These initial questions were extended into discussion of the tensions and culture dimensions as worldviews became apparent.

Secondary data included “other publications on the sectoral context being studied” (Walsham, 2006, p. 323). In this case, the issues must be viewed in the context of Indigenous Peoples culture and history including the treatment of Indigenous Peoples in North America over the past 150 years of Canadian history.

Permission was obtained for the study of Indigena in 2015 with enthusiasm reflected in the number of executives, managers and employees volunteering to be interviewed. Full cooperation was also

Table 1. Theoretical framework

Concept	Description	Key Literature
IT Impact Sourcing	Using information technology to create employment for people who are disadvantaged in terms of economic, social or physical challenges.	<ul style="list-style-type: none"> ● Biteye & Badshah (2014) ● Kubzansky (2011) ● Lacity, Rottman & Carmel (2014) ● Sandeep & Ravishankar (2013, 2015a, 2015b)
Culture and IT Outsourcing	Shared values, meanings and norms that shape beliefs and behaviours of individuals, organizations and communities. Negotiated culture is an adapted behaviour between two competing cultures.	<ul style="list-style-type: none"> ● Gallivan and Srite (2005) ● Gregory, Priffling & Beck (2009) ● Leidner and Kayworth (2006) ● Nicholson & Sahay (2001, 2004)
Organizational Tension	Organizational paradoxes, contradictions and ironies that create competing directions and opposing forces	<ul style="list-style-type: none"> ● Gibbs (2009) ● Tracy (2004) ● Trethewey & Ashcraft (2004)

Table 2. Interviewees for Indigena Case

Classification	Role	Company	Format
IT Impact Sourcing firm	Executive A	Indigena Solutions	In-person & Phone
	Executive B		In-person
	Manager C		“
	Manager D		“
	Manager E		“
	Manager F		“
	Employee A		“
	Employee B		“
	Employee C		“
	Employee D		“
	Employee E		“
	Employee F		“
Utility Provider	Client A	British Columbia (BC) Hydro	“
	Client B		“
Financial Institution	Client C	Vancouver City Credit Union	“
	Client D		“
	Client E		“
Channel Partners	CP-A	A global IT services firm	Phone
	CP-B	Accenture	Phone & In-person
	CP-C		Phone
	CP-D		
	CP-E		
Other	Other-A	The Rockefeller Foundation	
	Other-B	Venture Funds Inc.	In-person

Table 3. Indigena interview guide

Indigena Executives, Managers, Employees	Customers	Channel Partners
<ul style="list-style-type: none"> • Please tell us about your company, and your role within it • Explain the business model: Do you consider Indigena a social enterprise? • What would you identify as Indigena’s primary challenges? 	<ul style="list-style-type: none"> • Please tell us a about your company, and your role within it • Could you please describe your current outsourcing strategy? • How do you balance social responsibility with economic considerations when making sourcing decisions? • Could you tell us a bit about your relationship with Indigena? • Do you have any feedback for Indigena? 	<ul style="list-style-type: none"> • Please tell us a about your company, and your role within it • Could you please describe your experiences working with Indigena? • What would you identify as Indigena’s primary challenges?

provided by Indigena management in relation to interviews with clients and partners, with Indigena providing introductions when requested. Each interview consisted of two researchers meeting with the interviewee, at the interviewee work location. During each interview, extensive hand-written notes were recorded by the research team. Following the guidance given in Martensson & Lee (2004) and Walsham (1995) the team decided not to audio-record the interviews, because the presence and use of an electronic recording device would have inhibited the respondents when sensitive issues related to exploring challenges, tensions and culture were being discussed. At the end of each day, and between interviews, emerging themes were identified and discussed by the research team. At the end of the interviews, the researchers' notes were written up in full and reviewed, and overall themes were identified.

The researchers used a qualitative analysis approach to analyse the data. As interviews were completed the research team would review and clarify notes to identify emerging themes and constructs. A narrative account in the form of a summary of interview themes was produced after each round of interviews and due to the interpretive nature of the study, the analysis was kept open to multiple interpretations, biases or distortions to the narrative (Klein and Myers, 1999).

As the interviews progressed, the key themes were compared to the extant literature to identify appropriate theoretical foundations to respond to the research questions. The theoretical framework was revised to take account of the empirical findings, with the data analysis process iterative to ensure constant interaction between theoretical and empirical data (Silverman, 2013). Intensive discussion between the researchers, continued reading of the relevant literature and writing preliminary papers presented at conferences led to the theorization presented in this paper. Thus, the approach was emergent and iterative involving an ongoing interaction between the researchers, the summary themes derived from fieldwork, theoretical frames and comments from a network of colleagues, reviewers and conference participants.

One member of the research team was of Indigenous Peoples ethnicity, referred to as a Status Indian³. During interviews and analysis of findings, her experience as an Indigenous person born and currently resident in Canada helped the research team to interpret the findings from both an etic and emic perspective. An etic view is how outsiders see and interpret a phenomenon, whereas an emic view is how insiders/participants interpret the phenomenon as part of their world (Scupin, 1998).

Most of the interviews for this case were completed in 2015. In 2016, the principals of the Venture Funds Inc.⁴, made a strong request not to publish the details of the challenges facing Indigena, the reason given was that a publication could make their success in the market even more difficult to achieve. Late in 2017, the research team learned from the President that Indigena was no longer in operation.

CASE DESCRIPTION

The income, employment rate and education disparity between Indigenous Peoples and non-Indigenous suggest that the Indigenous Peoples population should be viewed as a marginalized and disadvantaged population (Calver, 2015; De Silva, 1999; Kendall, 2001).

Designed as a commercial enterprise with a social mission, Indigena provided technology delivery and business process services to clients in North America. The company was founded in 2011 and was located close to a major Canadian city, Vancouver. Indigena's goal was to create a high quality onshore IT services company at a competitive price. Indigena's initial clients included the Vancouver City Credit Union, BC Hydro and a mining company with potential development opportunities associated with natural resource projects. Indigena employed approximately 55 people of which 11 employees (20%) self-identified as an Indigenous person. Indigena's work was focused on software and information technology support, including a software-testing centre of excellence. Work was performed at the Indigena's offices, as well as at client sites. Indigena executives did not provide detailed revenue or profitability information, but did state that after five years of operation, they expected to be profitable by 2015.

From the Indigena website:

Founded in 2011, Indigena is a First Nations-owned IT and business process services provider operating a Business Solutions Technology Delivery Centre located in the lower mainland of British Columbia. Indigena provides Application Maintenance, Application Testing, and Infrastructure Services all the way to managing IT and business functions on behalf of clients. Indigena opened its first delivery centre in July 2012. We operate with a unique workforce development model, aligned to focus on a core set of offerings. Our belief in community transformation and enablement through individual achievement is at the heart of our journey.

The majority ownership of Indigena was with a Canadian Indigenous Peoples tribe known to as Tsawwassen First Nation (TFN). However, TFN was not active in the management of Indigena, nor were its members employed at Indigena and the Indigena offices were not located on TFN lands. A minority owner was the Venture Funds Inc.⁵

A third participant at Indigena was Accenture, although there was no ownership relation. Accenture Canada was instrumental in the creation and founding of Indigena, using the experience of Cayuse Technologies, located in Oregon USA, as an example. Cayuse was established with help from Accenture in 2006, is 100% owned by Native Americans, is located on an American Indian reservation and has grown to employ 450 people. Accenture maintained a connection with Indigena with two Accenture employees, referred to as Manager C and Manager F (see Table 2), working at Indigena as part of a management contract. Accenture methodology and documentation were displayed throughout the Indigena office and Accenture identified Indigena as one of its global delivery centres.

From the start, Indigena faced challenges in developing new business. Publically, senior executives at potential client companies would embrace the concept of an Indigenous Peoples outsourcing company, but few contracts followed the warm sentiments; clients appear reluctant to contract with Indigena as an outsourcing service provider. Indigena relied on Accenture for its business development, but had to engage in internal competitive bidding processes to participate on Accenture contracts.

CASE ANALYSIS AND DISCUSSION

Analysis of the case data revealed that Indigena was fraught with contradictions due to the complex nature of ITIS and the cultural tensions it presented. In comparing the perspectives of Indigena employees with Indigena customers, regarding the company's social responsibilities and business model, a clear contradiction was evident. When we asked employees "Do you consider Indigena a social enterprise?" and when customers were asked, "How do you balance social responsibilities with economic considerations when making sourcing decisions?" their response usually began with "Yes, however..." and they would explain the underlying tensions and contradictions. Employees would discuss the difficulties faced by Aboriginal Persons in a predominant non-Aboriginal work environment and industry. Customers would discuss the need for high quality, low risk and competitive pricing when buying external services along with their corporate commitment to social equity. The rest of this paper will unpack and discuss these fundamental tensions and contradictions as they played out in the practices of Indigena managers, employees and customers.

Three dialectic tensions became evident during data analysis, described below in detail, as follows:

- The tension between long established Indigenous Peoples culture and careers versus careers in the IT industry;
- The tension of location on Indigenous Peoples reservation versus city location;
- Impact sourcing goals versus structural racism.

INDIGENOUS PEOPLES CULTURE AND CAREERS VERSUS IT SERVICES CULTURE AND CAREERS

The first key dialectic was one of cultural challenges associated with the inclusion of Indigenous People into the IT services culture and working environments. This is relevant because some projects required Indigena personnel to work on client sites, as opposed to remaining in the Indigena offices. The IT services culture required personnel to be present at the Indigena office location or a client location, during working hours, Monday to Friday. Of course, the Indigena work involved using computers connected to the internet, which could be at the Indigena office, at a client location or at home. Personnel worked in teams, collaborating to solve client IT services problems, such as software testing, server support, etc. Indigena clients paid for work performed. Clients expected timely delivery of services and high quality (i.e. very few defects) and these criteria were used in the annual evaluation of Indigena employees' performance. Those who performed well were promoted and given pay increases and those who performed poorly were asked to leave Indigena. Cusumano and Selby (1998) and others have described the competitive IT services culture, including descriptions of the competitive commercial strategies and self-critiquing competitive software development approach at Microsoft.

A channel partner made the following comment, identifying what could be a concern of potential clients, and highlighting the importance of preparing Indigenous employees for an office work environment:

Indigena has heavily invested in training resources, a lot of the resources (people) come to them... but they're not necessarily workforce ready in the mainstream corporate point of view. They're always going to have that training need and the need to socialize people with traditional office culture. That was quite a big challenge and the other aspect of that... is getting them used to working in the city centres at client sites (CP-A).

Cultural differences between Indigenous employees and non-Indigenous persons extended to issues such as bereavement leave, a challenge that was identified by several of the interviewees. CP-D had moved from a consulting firm in the U.S., where she focused on outsourcing, in order to help with the creation of Indigena and noted that:

Indigena was providing a unique opportunity to many First Nation people... as we could flex our HR policies to allow for some of those cultural differences... for instance, bereavement leave - if one of your employees, their family members passed away, not even a close family member, their nation may not be where Indigena is, they would need about five to six days of paid bereavement leave... In the U.S., Accenture never granted more than 1 or 2 days paid bereavement leave to any of its people/employees, just because in the U.S. that sort of thing isn't considered necessary (CP-D).

Similar sentiments were expressed by Client A, who noted that, in terms of his experiences working with diverse groups of First Nations, if there was a "death in the community, everything shuts down." while the community mourns the deceased. This can be a fairly significant departure from the expectations of IT services culture, and can pose a challenge in managing schedules, client deliverables and deadlines to those who are unfamiliar with Indigenous Peoples culture.

Indigena had a mandate to recruit and hire Indigenous people because of its majority ownership by the Tsawwassen First Nation. Despite this mandate, however, there were only 11 Indigenous employees – which was approximately 20% of the total workforce – and employees were not members of the TFN (Manager D). This was in line with the history of Indigena as, in its early phases, "we could never get anybody interested in working for us" (CP-C). As well, the research team noted that none of the Indigena management level were Indigenous Peoples.

There was an interesting statement made by Client B at the end of her interview, where she asked whether or not First Nations people were actually interested in pursuing careers within the IT industry. Indigenous Peoples business and employment has historically been in the resource sector and in industries such as construction, forestry and mining (Manager D, Employee E). Working in an IT outsourcing firm was not a common Indigenous Peoples' role, especially for women (Manager D, Employee E). Hiring only First Nations staff, despite the mandate to hire Indigenous Peoples, was difficult, as Manager E has noted that, in many cases, First Nations employees did not have the skills necessary for specific projects. This sentiment was echoed by Manager D, who stated that: "When you look at the service offerings that Indigena has... the roles all require highly skilled IT people with years of experience."

Representatives of Indigena, clients and channel partners repeatedly mentioned the importance of relevant training and finding people with the right skill sets. Manager C noted that it could be challenging to find people with very specific skill sets and those individuals with niche expertise can be costly to recruit and retain. Indigena has lost some business opportunities and potential contracts because they were unable to find sufficiently trained personnel fast enough to meet client needs.

Many educational resources and programs are available for Indigenous Peoples in Canada. These range from programs available at post-secondary institutions, such as universities or colleges, to those available through private training facilities. Manager D noted that the history of Indigena and her history with the organization are tied to the Vancouver Aboriginal Skills and Employment Partnership program which was funded through Human Resources and Skills Development Canada and required commitment from industry. Accenture was involved with this program, which provided the first employees for Indigena, until the program ended in approximately 2012.

Another program was described by Manager D: Project Raven, a program whose goal was to increase the capacity of computer technology in the Indigenous Peoples workforce. Certain courses were offered only to the Tsawwassen First Nation and Indigena, through its partnership, promised to interview and potentially hire successful graduates. Of the 12 who completed the training, only two submitted resumes and interviews, with one being hired by Indigena. That individual had since left the company.

The challenge of receiving funding and support from specific First Nations communities was also discussed. Manager D stated that First Nations communities have an interest in supporting and developing the community which means that when training dollars are allocated, officials will look to see what meets the needs of the community. In Manager D's experience, this often leads to training support for fields such as construction, forestry, heavy equipment operators, teachers, and early childhood educators. Once again it was stated that IT is seen as an uncommon Aboriginal career (Manager D, Employee E).

Employee E amplified this challenge. She stated that usually, Indigenous men worked outside in logging, construction, hunting and fishing activities, while Indigenous women were expected to care for the home and family. This interviewee also stated that "Breaking this tradition can be difficult, especially in small, remote communities with a tightly knit culture and thousands of years of history". Employee E spoke of her difficult and challenging journey to leave her community, seek education in IT while "giving up" her new-born son to her parents when she moved to the city. Her father, supporting his daughter, understood the importance of computer technology because his job had been eliminated by automation of his workplace, at the loading facility at a regional sea port. Finally, Employee E (and Executive A) spoke of the negative attitude of the chiefs and elders, who saw companies such as Indigena "stealing our young people", effectively robbing the future development of the community.

Traditional Indigenous Peoples culture is quite different from the IT services culture. Indigenous Peoples communities are located on reservations in rural areas much closer to nature, not within an industrial suburban centre where Indigena was located. Typical careers choices for Indigenous Peoples are often related to outdoor activity, such as hunting or forestry. Relating this to traditional

Indigenous Peoples spiritual practices lies a belief that all life is interconnected; both animate and inanimate parts of the natural environment and that humans should live in harmony with the natural world, and embrace the abundant gifts of nature that support survival and prosperity of all humans (Deloria, 2003). This differs significantly from the IT service culture manifested at Indigena, working in a suburban industrial office.

An examination of salaries shows that some careers in natural resources offered higher levels than Indigena. The average wages of entry level forestry workers were \$40,000 to \$50,000 per year (Bouw, 2014) while the maximum salary for a junior associate at Indigena was \$31,550, a figure that rose to \$40,000 for associates (Manager D). Average wages for forestry workers coupled with a lack of local IT jobs for Indigenous Peoples could help explain why training resources are allocated away from technology training. The level of educational qualification required for a lumberjack for instance is much lower than that required for an IT professional, although it requires other attributes, such as strength, fitness, and a comfort with the wilderness work environment.

The interviewees did note that Accenture provided a wealth of online learning courses for Indigena employees, but these were not easy to pursue because they would often be taken on personal time, outside the office.

TENSION OF LOCATION ON INDIGENOUS PEOPLES' RESERVATION VERSUS CITY LOCATION

Indigena was originally located in the downtown area of Vancouver, using available space provided by Accenture, while a more appropriate location was being sought (Manager D). The selected office site was located outside of Vancouver, about one hour from the city. Being able to reach the location by public transit was described by Manager C as “awful,” as there are no public train stops in close proximity and staff would have to rely on a public bus with infrequent service.

Although the Tsawwassen First Nation was a majority owner of Indigena, the facility was not located on TFN reservation land, and was thus not eligible for tax relief for individuals or the corporation. It was noted during the course of the interviews that “we wanted it on Tsawwassen First Nations lands, but they didn’t have any buildings there” (CP-C).

The location of Indigena was a recurring theme during discussions with Indigena executives and management. It was noted that the location is difficult to access using public transit (Manager C, Manager D & Executive B) and that its location off-reserve would be a drawback to potential First Nations staff (Manager D, Executive B). It was noted by Executive B that the salaries offered by Indigena would have to be considerably higher in order to compete with the tax-exempt income earned by First Nations who worked on reserves.

The question of why Indigena was not located on First Nations land was also posed by an Indigena client (Client A), which suggests that the location of the company has also been questioned by external stakeholders. There appeared to be uncertainty as to whether there would be any benefits for clients if Indigena was located on native land - Client B stated that, in her experience, there were no tax savings for invoices should a business be owned by First Nations and located on reserve. This fits with the sales tax guidelines and regulations as defined by the Canada Revenue Agency (2015). There are other potential financial considerations related to being located on reserve, however. Based on the current ownership structure, should Indigena be located on-reserve, it was likely that their overhead costs would have been lower as they are owned by the TFN and would likely not have to pay market rates to a commercial landlord.

The location of Indigena also presents a unique challenge in terms of retaining employees. Vancouver has a strong technology community; August 2014 data indicates there were “18,750 ‘emerging’ technology companies”, with over 1,320 job openings listed on The City tech job sites (Burgmann, 2014). Many employees were new immigrants to Canada, who used Indigena as a first job (Executive B & Manager D). Indigena’s location, close to a major city with many other economic

options, made it easier for employees to find other employment as they developed their experience. Manager C stated that ex-employees described the commute as one of their primary reasons for leaving Indigena.

IMPACT SOURCING GOALS VERSUS STRUCTURAL RACISM

In the first meetings with the executives at Indigena the research team was greeted by the Vice President of Human Resources (VP of HR) who has an Indigenous Peoples background. She welcomed the research team and offered bannock, which is traditional bread served in Aboriginal communities. Bannock is popular at Indigenous Peoples pow-wows because it is quick and easy to prepare. By offering bannock to the research team, the VP was extending a welcome to the non-indigenous people who were coming to study Indigena. During the interview with the VP, a significant change altered her demeanor. One of the research team members revealed that she too is a Status Indian, with an Indigenous Peoples heritage. The reaction and response of the VP was markedly different, changing from cautious and reserved to more trusting and open. Perhaps the VP became more comfortable knowing that a fellow Indigenous Person was part of the team.

Many of the interview subjects noted, without any prompting, that racism remains a factor in the business environment, especially when focusing on the First Nations connections of Indigena. This appears to have had a particular effect in creating challenges to winning new business contracts.

Client B pointed out that there are “lots of biases and prejudices out in the field,” including discrimination, and that they have encouraged their contractors to hire Indigenous Peoples. Client C noted that there is a “negative perception of Aboriginal communities” that has to be managed, including the challenges associated with their cultural and workplace assimilation.

Manager E noted that during business development discussions, he would lead with what was described as “the First Nations angle,” but that “people have a preconceived notion of working with First Nations people.” This was proven to be an obstacle in terms of business development and required a frank discussion with Indigena’s executives. An Indigena representative relayed a story, when discussing the challenges of finding clients, of a prospective client bluntly stating that the problem was Indigena’s association with the First Nations.

There was also a question of stereotypes, as per Executive B, “do Aboriginals do IT work?” Much of the career and skills training, as identified by Manager D during earlier discussions, suggested a focus on natural resources. Client A had noted, in his interview, that Indigenous Peoples generally focused on employment in areas such as environmental restoration work and landscaping, as opposed to IT services. There was a reported gap in perception between the work that Indigenous Peoples were expected to do and the work that was offered through Indigena. This was echoed by one of Indigena’s channel partners:

Probably face a little bit of prejudice in using them... the question of “will they be able to perform at the level that you would expect from any other IT service organization?” Just a prejudice that jumps to the front of lots of people’s minds when they say, do I want to give this to an Aboriginal company. Still a challenge - probably much less in the public sector than the private sector - but it is still a challenge (CP-A).

One of the individuals who worked with Indigena during its early phase had quickly identified potential obstacles in business development, stating that:

In many buyers/potential buyers minds - non-First Nations potential buyers - putting together, in their heads, IT or high tech or anything technical services and First Nations workforce is like trying to hold two diametrically opposite things in their head at the same time and they struggled/recognized that (CP-D).

A representative (Other-A) from the Rockefeller Foundation noted that preconceptions and racism can be unavoidable in the field of Impact Sourcing, comparing the search for providers to that of a hiring manager with two resumes in hand: one from a candidate who went to a small local college, the other a candidate who attended a top university. Procurement departments, like hiring managers, will likely hire the person with a flashier resume despite the fact they will probably move onto something else quickly. Other-A is certain that case studies and referrals, which demonstrate clear success, will help to overcome any prejudicial notions.

In late 2017 an email message from the President of Indigena communicated that the company had been placed into bankruptcy, which was described as “quite a shock”. Although Indigena had made progress, “it was going to take too long to get to profitability.” During a telephone interview the President confided that the social goal of employing Canadian Indigenous Peoples was overstated, and “customers didn’t care”, they simply wanted reliable “IT services at a low cost”. In the end, Venture Funds Inc. removed its support and Accenture moved clients from Indigena to offshore, lower-cost service locations in India. Indigena’s assets were auctioned off in late 2017.

DISCUSSION

The original question of this case study research is: How do dialectic tensions constrain or enable the effectiveness of Impact Sourcing? Clearly the tensions described in the Indigena case did constrain the effectiveness of the Impact Sourcing venture, to the extent that the company failed to achieve both its social and commercial goals and the investors closed the company.

Indigena displays organizational tensions in its quest to be both an Indigenous Peoples ITIS organization and a profitable outsource business enterprise. At the same time, the business community that buys outsourcing services displays a tension between the need to do “good” (i.e., buying from an Indigenous Peoples service) versus the need to mitigate the inherent risk of outsourcing to an established, proven reliable provider. This finding concurs with Gregory et al. (2009) who point out “the intercultural dimension increases complexity of [outsourcing] projects and adds risk” to outsourcing projects (p.224).

Regarding location, Indigena is the opposite of Cayuse Technologies, in that Cayuse is located on a Native American reserve, with a shuttle service to bring aboriginal and other employees directly to the work location. As described by Carmel et al. (2014), Cayuse Technologies is remotely located, not easy to access, and has a strong social connection with its local First Nations community as a desirable employer.

One cultural tension involved Indigenous Peoples moving into the IT services culture and away from the historical career paths in environmental (mainly outdoors activities) work culture. Historically accepted norms of Indigenous Peoples careers in forestry, construction, mining, etc. are fundamentally different from the office based IT services culture. For example, Tada (2012) notes that “Aboriginal peoples have a view that focuses not on individuals, but on society as a whole” with basic values of “collective and cooperative behavior” and “non-competitiveness” (p. 80-81). This contrasts sharply with the competitive global IT services market, as documented by Cusumano and Selby (1998). The fact that the IT service culture is also global and virtual exacerbates the contrast between the two. Some of the sub-tensions are as follows:

- Indigenous Peoples work usually has traditionally involved an out-doors rural setting with a physical element, close to nature. The work varies according to the seasons: hunting in the fall, fishing in the summer, etc.;
- The IT services culture is based on an office environment in an urban centre with formal educational requirements for both career entry and progress. Work routine is highly structured, working Monday to Friday, 9am to 5pm. Work is focused on computers connected to the Internet. The technology constantly evolves, with new software, new applications, etc.;

- Initial compensation for IT services is lower than the normal Aboriginal work;
- As employee E suggested, Aboriginal elders may discourage the IT services career because it takes young people away from their Aboriginal communities, from the rural reservation to the urban city;
- As Indigenous Peoples make the transition to the IT services culture, they face structural racism.

These tensions were overwhelming to Indigena employees, and potential new Indigenous People hires, as the IT services culture competes in a global market where services are distinguished by quality and cost regardless of location. The clear challenge that Indigena faced was the difficulty in bringing Indigenous employees into the competitive business of delivering IT services. Although Indigena was able to rely on the methods and experience of the larger Accenture organization, there were insufficient numbers of experienced Indigenous employees that can provide leadership and direction to the organization. There were no Indigenous managers at Indigena. Hence, a difficult position for Indigena to sell to prospective buyers when only 20% of the employees were Indigenous Peoples and a key selling proposition was to help a marginalised population as an IT Impact Sourcing venture. Indigena demonstrated sufficient operational performance (employee retention, customer satisfaction, completing projects on time, etc.) to be a credible market participant but lacked scale and reputation in a highly competitive IT services market. With the challenges of not being able to attract, hire and train sufficient numbers of Indigenous employees and a highly competitive IT services outsourcing market, Indigena struggled and then failed.

Table 4 on the following page depicts the three dialectic cultural tensions. Overarching is the need for a negotiated culture (Gregory et al., 2009), which is the constant balancing between the two sets of tensions. As Gregory suggests, cognitive, emotional and behavioural cultural intelligence are required on the part of both sides, “through a curiosity to learn about cultures”, to create a set of

Table 4. Cultural tensions and negotiated culture at Indigena

Layer of Social Identity (Gallivan and Srite, 2005)	Indigenous Peoples Culture (Tada, 2012)	Indigenous Peoples Cultural Sub-Elements	Cultural Tensions (Gibbs, 2009) Resolved Through Negotiated Culture (Gregory et al., 2009)	
			Indigena Culture Sub-Elements	Indigena Culture
Individual or Workgroup	Traditional Indigenous Peoples Culture and Careers	Outdoor work, close to nature	Office work, in a cubicle – responsive to client demands	IT Service Culture and Careers
		Closely tied to community – people and location	Work at client site, constantly changing	
		Work varies by season, in harmony with nature	Structured work hours – Monday to Friday, 9 to 5	
		Careers in forestry, construction, mining, hunting, etc.	Internet and IT dependent; constantly changing technology	
Organizational	Location	On reserve, close to nature	Suburban industrial office complex	Location
National or Ethnic Group	ITIS Social goals (Carmel et al., 2014)	Employ disadvantaged people	Clients’ perceived risk of outsourcing to Indigenous people	Structural Racism in Canada (Reading, 2013)
		Develop skills for the Information Economy	Limited uptake from well-intentioned buyers	

“compromises, innovations and cultural adaptations that are negotiated around the subjective and objective cultural differences between client and vendor staff” (p. 237).

The left side of Table 4 identifies the current cultural characteristics for the Indigenous Peoples community, while the right side of the table identifies the cultural characteristics of IT impact sourcing at Indigena. The middle column signifies the tensions that were described to the researchers during the interviews. These tensions reflect the dialectic forces, the “push and pull” between the aboriginal culture and the IT Impact Sourcing culture.

The left column corresponds to the layers of social identity described by Gallivan and Srite (2005) and the upper levels of the table correspond to the individual or workgroup layer of culture, the middle levels of the table represent the organizational layers of culture. The bottom of the table is the national or ethnic layer of culture. The resulting culture for Indigena is the product of several layers interacting together, as suggested by Gallivan and Srite, “layers of identity converge and interact for each individual” (p. 300). While Indigena may have influence over the middle layer, the top and bottom layers will be the most difficult to negotiate, particularly the national (Canadian) culture which includes the structural racism.

Cultural tension occurs when an individual or the organization is not able to reconcile the demands of the left side with the right side. For example, the research team heard of the importance for an Aboriginal staff member to attend a funeral for a member of the community who was not a close direct family member, which conflicted with bereavement leave policies of Indigena or of a client. We also heard of the importance of participating in the annual Indigenous Peoples hunting activities that take place in the fall, which were conflicted with deadlines on a client project. Many of these tensions are obvious and can be negotiated. However, the most difficult tension in the eyes of the Indigena executives was the unspoken structural racism which was in direct contrast to the social goals of ITIS.

During Canada’s early national formation, in the 1880s “racial classifications were used to create and maintain discriminatory social hierarchies” (Reading, 2013). During that period, racial differences were seen as “meaningful and unchangeable [and] some races [were seen as] ‘naturally’ inferior, and consequently racial categories should be written into political, legal and social systems” such as the Indian Act of 1876 (Reading, 2013). As Tada (2012) points out, there was an assumption “that the Native population would be immediately assimilated into Western society” (p. 78).

Reading (2013) describes structural racism as “the economic, social and political institutions and processes of society and the moral and cultural systems that underpin them”, and how “the ideological concept of race is given material power in the social order, as it becomes linked to political and economic structures and systems” (p. 4). The literature indicates that Indigenous Peoples have higher rates of unemployment than non-natives, similar workforce participation rates (despite negative perceptions of work ethic), and that there is an evident pay gap between the two groups (Calver, 2015, Richards, 2014, Kendall, 2001).

Gibbs (2009) suggests managers who are able “to treat tensions as complementary dialectics are able to transcend oppositions, whereas lower level [persons may be] less able to cope with tensions, experiencing them as contradictions or paradoxes which constrained and disempowered them” (p. 905). The tensions can become either “productive or detrimental” depending on how they were managed. The Indigena case shows that ongoing cultural tensions required a need for a negotiated culture to bridge the tensions, in order to retain and develop Indigenous employees and to build the Indigena business.

Internal and external tensions were evident between the internal perspectives of Indigena Executives, Managers and Employees, compared to external Customers (see Table 3). Internal tensions existed within Indigena, such as the location, the nature of work, the lack of a significant Indigenous Peoples workforce (only 20% of Indigena). External tensions involving customers comprised of the risk of an untried ITIS sourcing option and racism that hindered purchasing decisions. These tensions were independent but the interaction of internal and external could be devastating. For example,

reluctant customers may demonstrate bias against Indigena workers who then further question the nature and validity of ITIS work.

CONTRIBUTIONS, LIMITATIONS AND FURTHER RESEARCH

The theoretical contribution of this paper lies in two main areas. The paper has demonstrated the applicability of a dialectical tensions lens to ITIS in a developed country context. In so doing, it builds on the as-yet-small body of work from Sandeep and Ravishankar 2013, 2015a, b) offering detailed explanation of tensions as fundamental challenges to ITIS. As well, this research has combined the tensions framework (Gibbs, 2009) with a model of negotiated culture (Gallivan and Srite, 2005; Gregory et al., 2009) for the first time to explain the enactment and outcomes of ITIS tensions where multiple actors are directly involved. This combination shown in Table 4 has potential for much wider application in ITIS and other multi-stakeholder initiatives that are becoming increasingly prevalent in implementation of digital information systems. Our research identifies internal and external tensions but did not focus on how the internal tensions may exacerbate the external ones (or vice-versa) and this may be a worthy topic for future research.

Our main suggestion for practitioners is to recognize and appreciate the cultural complexity surrounding ITIS endeavours, the situated and historically embedded prejudices and stereotypes; the role of tradition, norms and values and that such cultural tensions are very likely to be present in some shape or form in any ITIS intervention with marginalized people. Accordingly, training programs and management decisions may anticipate the tensions and incorporate negotiation strategies informed by the theoretical model illustrated with the findings of our analysis. This ITIS management process should encourage the development of cultural understanding in project teams, for example by incorporating it into training methods.

A further suggestion for practitioners is to consider that ITIS may not be embraced by the marginalized population that it is meant to serve. In this case, alternate traditional careers for aboriginal workers were more attractive than working at Indigena. Practitioners should carefully consider the fit of the ITIS model, how it competes or serves the interests of the marginalized population and community, before proceeding with implementation. In this case, the success of Cayuse Technologies was accepted as evidence that the ITIS model could be replicated in another jurisdiction, which clearly was not possible and this finding concurs with Sandeep and Ravishankar (2015) that the impact of impact sourcing is context dependent.

A final suggestion to practitioners is that the social benefits of ITIS must be demonstrable and clearly visible to the stakeholders it serves. In this case, the Indigenous Persons community did not embrace, did not participate, did not see the benefit of the Impact Sourcing; They did not approve or appreciate the benefits realized or potential. At the same time, the limited commercial success that ultimately lead to the bankruptcy of Indigena was not sufficient. Indigena was neither commercially successful nor socially impactful.

Overall, for those who will conceive, support, implement and operate ITIS ventures, including governments, NGOs, business organizations and entrepreneurs, this research suggests that cultural tensions may be a significant impediment and should not be underestimated. ITIS ventures must anticipate that tension before start-up and must constantly monitor and manage the inevitable tensions.

Table 5 summarizes the key suggestions to Impact Sourcing practitioners.

For other Impact Sourcing stakeholders such as investors or government organizations, suggestions are similar. Investors and governments must provide more than funding; proactive participation with the venture and with the community will be needed to manage the cultural tensions. Communities that adopt ITIS ventures are rightfully cautious but also need to understand the need for commercial viability of ITIS. In the end, a commercially unprofitable ITIS will follow the same path as Indigena, unless government or other funding is available to provide start-up support and ongoing operational funding guarantees.

Table 5. Impact sourcing implications and actions for practitioners

Finding	Implication of Practitioners	Suggested Action
Impact Sourcing contains cultural complexity and the potential for historically embedded prejudices. The role of tradition, norms and values from cultural tension are very likely to be present in some shape or form in any ITIS intervention with marginalized people.	Impact sourcing managers must understand and anticipate the cultural tensions within the marginalized community that it serves.	Spend considerable time and effort gaining support of the marginalized population. Work with community leaders to confirm their support for Impact Sourcing. Anticipate and manage cultural tensions.
The marginalized population may not embrace ITIS.	Constantly communicate and reinforce the value of the impact sourcing venture to the community. Reconfirm commitment from community leaders regularly.	Prioritize social impact or commercial success, not both simultaneously. If commercial success (e.g. profitability) cannot be attained, external funding support will be needed from government or other sources within the community.
The social benefits of ITIS must be demonstrable and clearly visible to the stakeholders it serves.	Align ITIS benefits with the expectations of the community.	Measure and report social impact progress.

A limitation of this case study is its basis on one small software firm. However single case research design is generally accepted with many precedents (e.g. Eisenhardt and Graebner, 2007; Levina and Vaast 2005) but sometimes criticized for generalisation potential. Following Walsham (1995, 2006) guidance on generalization of case studies, this paper focuses on theoretical development in the form of a combined framework and from the empirical case offering rich insight.

Finally, regarding future research, ours did not focus on how the internal tensions may exacerbate the external ones (or vice versa); this is a worthy topic for future researchers. Impact Sourcing is an attractive concept for socially responsible organizations. Implementation can be challenging.

REFERENCES

- Aboriginal Affairs and Northern Development Canada. (2010). *Aboriginal Content - Procurement Strategy for Aboriginal Business* [Interpretation bulletin]. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1100100032811/1100100032822>
- Aboriginal Affairs and Northern Development Canada. (2014). *Procurement strategy for Aboriginal business: 2012 annual report - Aboriginal Entrepreneurship Branch*. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1428519695278/1428519777541#fnb1>
- Anderson, R. B. (2002). Entrepreneurship and aboriginal Canadians: A case study in economic development. *Journal of Developmental Entrepreneurship*, 7(1), 45–65.
- Anderson, R. B., Dana, L. P., & Dana, T. E. (2006, February). Indigenous land rights, entrepreneurship, and economic development in Canada: “Opting-in” to the global economy. *Journal of World Business*, 41(1), 45–55. doi:10.1016/j.jwb.2005.10.005
- Avasant. (2012). Incentives & Opportunities for Scaling the “Impact Sourcing” Sector. Retrieved from http://avasant.com/images/uploaded/busi/Incentives_and_Opportunities_for_Scaling_The_Impact_Sourcing_Sector_Full_Report.pdf
- Biteye, M., & Badshah, A. (2014). Impact Sourcing: The Opportunity Ahead. Retrieved from <http://www.rockefellerfoundation.org/blog/impact-sourcing-opportunity-ahead/>
- Bouw, B. (2014, February 26). I want to be a forester. What will my salary be? *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/report-on-business/careers/career-advice/i-want-to-be-a-forester-what-will-my-salary-be/article17117602/>
- Burgmann, T. (2014, August 14). City tech scene: Buzz or bubble? *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/>
- Calver, M. (2015). Closing the Aboriginal Education Gap in Canada: Assessing Progress and Estimating the Economic Benefits. *Centre for the Study of Living Standards*. Retrieved from <http://www.csls.ca/reports/csls2015-03.pdf>
- Canada Revenue Agency. (2013, November 21). *Indian Act Exemption for Employment Income*
- Canada Revenue Agency. (2015). *GST/HST and Indians*. Retrieved from <http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/frstntns/menu-eng.html>
- Canada Revenue Agency. (2015, July 21). *GST/HST and Indians*. Retrieved from <http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/frstntns/menu-eng.html>
- Carmel, E., Lacity, M. C., & Doty, A. (2014). The impact of impact sourcing: Framing a research agenda. In *Information Systems Outsourcing* (pp. 397–429). Springer.
- CBC News. (2015, June 2). Truth and Reconciliation Commission urges Canada to confront ‘cultural genocide’ of residential schools. *CBC News Politics*. Retrieved from <http://www.cbc.ca/news/politics/truth-and-reconciliation-commission-urges-canada-to-confront-cultural-genocide-of-residential-schools-1.3096229>
- Coyle, D. (1997). *The Weightless World: Strategies for Managing the Digital Economy*. Massachusetts Institute of Technology Press.
- Curry, B. (2015a, May 31). What is the Truth and Reconciliation Commission? *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/politics/what-is-the-truth-and-reconciliation-commission/article24717073/>
- Cusumano, M. A., & Selby, R. W. (1998). *Microsoft secrets: How the world’s most powerful software company creates technology, shapes markets, and manages people*. Simon and Schuster.
- De Silva, A. (1999). Wage discrimination against natives. *Canadian Public Policy*, 25(1), 65–85. doi:10.2307/3551402
- Deloria, V. (2003). *God is red: A native view of religion*. Fulcrum Publishing.

- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50(1), 25–32. doi:10.5465/amj.2007.24160888
- Everest Group. (2014). The Case for Impact Sourcing. Retrieved from http://www.everestgrp.com/wp-content/uploads/2014/09/RF-The-Case-for-Impact-Sourcing-Final-approved_vf.pdf
- Friedman, T. L. (2006). The world is flat [updated and expanded]: A brief history of the twenty-first century. Macmillan.
- Gallivan, M., & Srite, M. (2005). Information technology and culture: Identifying fragmentary and holistic perspectives of culture. *Information and Organization*, 15(4), 295–338. doi:10.1016/j.infoandorg.2005.02.005
- Gibbs, J. (2009). Dialectics in a global software team: Negotiating tensions across time, space, and culture. *Human Relations*, 62(6), 905–935. doi:10.1177/0018726709104547
- Gregory, R., Prifling, M., & Beck, R. (2009). The role of cultural intelligence for the emergence of negotiated culture in IT offshore outsourcing projects. *Information Technology & People*, 22(3), 223–241. doi:10.1108/09593840910981428
- Guidelines. (n.d.). Retrieved from <http://www.cra-arc.gc.ca/brgnls/gdlns-eng.html>
- Heeks, R., & Arun, S. (2010). Social Outsourcing As A Development Tool: The Impact of Outsourcing IT Services to Women's Social Enterprises in Kerala. *Journal of International Development*, (22): 441–454.
- Kendall, J. (2001, June). Circles of disadvantage: Aboriginal poverty and underdevelopment in Canada. *The American Review of Canadian Studies*, 31(1-2), 43–59. doi:10.1080/02722010109481581
- Khan, S., Lacity, M., & Carmel, E. (2018). Entrepreneurial impact sourcing: A conceptual framework of social and commercial institutional logics. *Information Systems Journal*, 28(3), 538–562. doi:10.1111/isj.12134
- Klein, H. K., & Myers, M. D. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *Management Information Systems Quarterly*, 23(1), 67–94. doi:10.2307/249410
- Krishna, S., Sahay, S., & Walsham, G. (2004). Managing cross-cultural issues in global software outsourcing. *Communications of the ACM*, 47(4), 62–66. doi:10.1145/975817.975818
- Kubzansky, M. (2011). Job Creation through building the field of Impact Sourcing. Monitor Inclusive Markets.
- Lacity, M., Rottman, J. W., & Carmel, E. (2014). Impact sourcing: employing prison inmates to perform digitally-enabled business services. *Communications of the Association for Information Systems*, 34(1), 913-932.
- Lacity, M. C., Rottman, J. W., & Carmel, E. (2012). *Emerging ITO and BPO markets: Rural sourcing and impact sourcing*. IEEE Computer Society.
- Leidner, D. E., & Kayworth, T. (2006). Review: a review of culture in information systems research: toward a theory of information technology culture conflict. *Management Information Systems Quarterly*, 30(2), 357–399. doi:10.2307/25148735
- Levina, N., & Vaast, E. (2005). The emergence of boundary spanning competence in practice: Implications for implementation and use of information systems. *Management Information Systems Quarterly*, 29(2), 335–363. doi:10.2307/25148682
- MacDonald, J. (2014, May 29). How a B.C. native band went from poverty to prosperity. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/report-on-business/rob-magazine/clarence-louie-feature/article18913980/>
- Madon, S., & Sharanappa, S. (2013). Social IT outsourcing and development: Theorising the linkage. *Information Systems Journal*, 23(5), 381–399. doi:10.1111/isj.12013
- Malik, F., Nicholson, B., & Morgan, S. (2013). Assessing the social development potential of impact sourcing. In *Proceedings of 6th Annual SIG Global Development Pre ICIS Workshop on ICT in Global Development*, Milan, Italy. Academic Press.
- Martensson, P., & Lee, A. (2004). Dialogical Action Research at Omega Corporation. *Management Information Systems Quarterly*, 28(3), 507–536. doi:10.2307/25148648

- McCrudden, C. (2004, November). Using public procurement to achieve social outcomes. *Natural Resources Forum*, 28(4), 257–267. doi:10.1111/j.1477-8947.2004.00099.x
- Monitor Group. (2011). *Job Creation Through Building the Field of Impact Sourcing*. Monitor Inclusive Markets and the Rockefeller Foundation.
- Myers, M. D. (1997). Qualitative Research in Information Systems. *Management Information Systems Quarterly*, 21(2), 241–242. doi:10.2307/249422
- Myers, M. D., & Newman, M. (2007). The qualitative interview in IS research: Examining the craft. *Information and Organization*, 17(1), 2–26. doi:10.1016/j.infoandorg.2006.11.001
- Nicholson, B., Malik, F., Morgan, S., & Heeks, R. (2015). Exploring Hybrids of Commercial and Welfare Logics in Impact Sourcing. In P. Nielsen (ed.), *Proceedings of the 13th International Conference on Social Implications of Computers in Developing Countries* (pp. 78-91). Oslo, Norway: University of Oslo.
- Nicholson, B., & Sahay, S. (2001). Some political and cultural issues in the globalisation of software development: Case experience from Britain and India. *Information and Organization*, 11(11), 25–43. doi:10.1016/S0959-8022(00)00008-4
- Nicholson, B., & Sahay, S. (2004). Embedded knowledge and offshore software development. *Information and Organization*, 14(4), 329–365. doi:10.1016/j.infoandorg.2004.05.001
- Reading, C. (2013). Understanding racism. In *Prepared for the National Collaborating Centre for Aboriginal Health*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
- Richards, J. (2014, April 30). *Are we making progress? New Evidence on Aboriginal Education Outcomes in Provincial and Reserve Schools*. CD Howe Institute Commentary.
- Sahay, S., Nicholson, B., & Krishna, S. (2003). *Global IT Outsourcing: Software Development across Borders*. Cambridge University Press. doi:10.1017/CBO9780511615351
- Sandeep, M. S., & Ravishankar, M. N. (2015a). Impact sourcing ventures and local communities: A frame alignment perspective. *Information Systems Journal*, 26(2), 127–155. doi:10.1111/isj.12057
- Sandeep, M. S., & Ravishankar, M. N. (2015b). Social innovations in outsourcing: An empirical investigation of impact sourcing companies in India. *The Journal of Strategic Information Systems*, 24(4), 270–288. doi:10.1016/j.jsis.2015.09.002
- Sandeep, M. S., Ravishankar, M. N., & Hislop, D. (2013). Establishment of social IT sourcing organizations. In *Proceedings of the Thirty Fourth International Conference on Information Systems*, Milan, Italy. Academic Press.
- Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research Methods for Business Students*. Essex, UK: Pearson Education.
- Scupin, R. (1998). *Cultural anthropology: A global perspective* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. SAGE Publications Limited.
- Tada, K. (2012). Social behaviours in First Nations businesses: An exploration of alternative development. *The Canadian Journal of Native Studies*, 32(2), 77–101.
- Tracy, S. (2004). Dialectic, Contradiction or Double Bind? Analyzing and Theorizing Employee Reactions to Organizational Tension. *Journal of Applied Communication Research*, 32(2), 119-146.
- Trethewey, A., & Ashcraft, K. L. (2004). Special Issue introduction. “Practicing Disorganization: The development of applied perspectives on living with tension. *Journal of Applied Communication Research*, 32(2), 81–88. doi:10.1080/0090988042000210007
- Troup, S. (2014). Impact sourcing 101. *The Pulse of the Montana State Nurses’ Association*, 11, 30–37. Retrieved from <http://assets.rockefellerfoundation.org/app/uploads/20140516194131/Impact-Sourcing-101.pdf>
- Truth and Reconciliation Commission. (n.d.). Our Mandate. Retrieved from <http://www.trc.ca/websites/trcinstitution/index.php?p=7>

Verma, A. (2014a). Sherpas in blue shirts: the fundamentals of a powerful global sourcing model [blog post]. Retrieved from <http://www.rockefellerfoundation.org/blog/sherpas-blue-shirts-fundamentals/>

Verma, A. (2014b). Why impact sourcing is good for businesses and communities [blog post]. Retrieved from <http://www.rockefellerfoundation.org/blog/why-impact-sourcing-good-businesses/>

Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *European Journal of Information Systems*, 4(2), 74-81.

Walsham, G. (2002). Cross-cultural software production and use: A structurational analysis. *Management Information Systems Quarterly*, 26(4), 359-380. doi:10.2307/4132313

Walsham, G. (2006). Doing Interpretive Research. *European Journal of Information Systems*, 15(3), 320-330. doi:10.1057/palgrave.ejis.3000589

Yin, R. K. (2009). *Case Study Research, Design and Methods* (4th ed.). Sage Publications.

ENDNOTES

¹ See Global Impact Sourcing Coalition website at gisc.bsr.org.

² A channel partner is an intermediary organization that works with Indigena to provide services to an end client. Channel partners will combine products and services from different providers in order to deliver an integrated service to an end client.

³ A term defined by the Government of Canada, under the Indian Act, that identifies persons of Aboriginal ancestry who are entitled to a wide range of programs and services from federal and provincial governments. See Appendix A for an overview of Canadian legislation and public policies regarding Aboriginal people.

⁴ Venture Funds Inc., a pseudonym, is a minority investor in Indigena.

⁵ Venture Funds Inc., a pseudonym, is a minority investor in Indigena.

⁶ The term “Indian” is used because it has a specific, legal meaning within the confines of the Indian Act.

APPENDIX: CANADIAN LEGISLATION AND POLICY REGARDING ABORIGINAL PEOPLES

There were two significant events that impacted Canadian government policy with respect to Aboriginal peoples: the 1973 Calder decision, which acknowledged the importance of land rights and that such rights had not been extinguished without knowing surrender; and the 1974 Mackenzie Valley Pipeline Inquiry where Aboriginal groups successfully managed to block a proposed pipeline and obtain a ten year moratorium on further development (Anderson, 2006).

The Canadian Government acknowledged through the Royal Commission on Aboriginal People report, issued in 1996, that “a strategy grounded on economic development is the key to an alternative future” for Aboriginal Canadians (Anderson, 2002).

Aboriginal focused procurement measures were announced by the Canadian Minister of Indian Affairs and Northern Development in 1996 (Aboriginal Affairs and Northern Development Canada, 2014; McCrudden, 2004, 262-263). An Aboriginal Business Directory (“ABD”), which contains the details of companies who state they are in compliance with the Procurement Strategy for Aboriginal Business (“PSAB”), is maintained by Industry Canada (Aboriginal Affairs and Northern Development Canada, 2014). The Canadian Government has defined the requirements for classification and inclusion in the ABD (Aboriginal Affairs and Northern Development Canada, 2010).

There are additional challenges presented through Canadian law where Aboriginal bands are unable to use reserve lands as collateral for loans, making it difficult to obtain financing for economic development projects (Kendall, 2001; MacDonald 2014).

Taxation

There are specific taxation regulations that apply to certain groups of eligible First Nations. The Canada Revenue Agency states that “section 87 of the *Indian Act* exempts from taxation the personal property of an Indian⁶ situated on a reserve” with employment income, based on court rulings, considered to be part of that personal property (2013).

The Canada Revenue Agency has shared four guidelines that need to be evaluated in order to determine the taxation status of employment income:

Guideline 1: When at least 90% of the duties of an employment are performed on a reserve, all of the income of an Indian from that employment will usually be exempt from income tax.

Guideline 2: When the employer is resident on a reserve; and the Indian lives on a reserve; all of the income from an employment will usually be exempt from income tax.

Guideline 3: When more than 50% of the duties of an employment are performed on a reserve; and the employer is resident on a reserve, or the Indian lives on a reserve; all of the income of an Indian from an employment will usually be exempt from income tax.

Guideline 4: When the employer is resident on a reserve; and the employer is: an Indian band... or an Indian organization controlled by one or more such bands or tribal councils, if the organization is dedicated exclusively to the social, cultural, educational, or economic development of Indians who for the most part live on reserves; and the duties of the employment are in connection with the employer’s non-commercial activities carried on exclusively for the benefit of Indians who for the most part live on reserves; all of the income of an Indian from an employment will usually be exempt from income tax (2013).

It is also necessary that the term “employer is resident on a reserve” be defined as it “means that the reserve is the place where the central management and control over the employer organization is actually located” (Canada Revenue Agency, 2013).

There are also taxation provisions relating to Goods and Services Tax or Harmonized Sales Tax as per the *Indian Act*. Generally, however, goods or services purchased on a reserve by a non-Indian

or non-Indian entity are not eligible for any GST/HST relief which suggests that entities must charge the applicable tax on any sales (Canada Revenue Agency, 2015).

Truth and Reconciliation Commission (TRC)

The Truth and Reconciliation Commission (“TRC”) was a key component of the out of court resolution of a class action lawsuit filed against the Government of Canada and four Canadian churches by former students of the Indian residential school system (Curry, 2015). The TRC was “established to contribute to truth, healing and reconciliation” (Truth and Reconciliation Commission, n.d.) with what became a six-year mandate and a \$60 million budget (Curry, 2015). The class action lawsuit was the largest in Canadian history and total settlements to former students, as per the *Globe and Mail*, have, as of May 31, 2015, totaled approximately \$4.2 billion (Curry, 2015). The class action lawsuit was the largest in Canadian history and total settlements to former students, as per the *Globe and Mail*, have, as of May 31, 2015, totaled approximately \$4.2 billion (Curry, 2015).

The summary report, which was issued in June 2015, contained 94 recommendations for change in First Nations policies and programs, and was produced after “testimony from nearly 7,000 witnesses” (CBC News, 2015). One of the primary recommendations included the development of a strategy to focus on closing the education gap between aboriginal and non-aboriginal students (CBC News, 2015).