



A Way Forward in Developing Globally Competent **Human Resources**

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ABSTRACT

The major objective of this paper is to bring together two ways of thinking in order to create a decision-making framework for developing practical solutions to complex issues. In one bracket of the framework, Ludwig von Bertalanffy's general systems theory provides a way to gain an understanding for the macro-context of a society. Simultaneously, Paulo Freire's ideas on empowering individuals through liberation literacy programs allows for individuals at the grassroots to gain the necessary tools to critically engage their surroundings socially, politically and economically. This paper is derived from a larger qualitative case study. The methodology and design allowed freedom and access to explore abstract ideas hoping to reveal important understandings about how socio-economic institutions can work together. This paper is basically a literature review and analysis of Japan's current state of affairs with a focus on the challenges of building a globally competent workforce for the future. In this paper, as well as the larger study, the case of Japan is used to illustrate and make tangible various ideas, concepts, and recommendations. Although the context is Japan the recommendations can be a model for other nations. This aligns with the main findings, which are that greater cooperation between government, academia, and business, in the Japanese context, need to be fostered while empowering local actors to be more critically engaged in developing solutions to societies challenges. Also, further study of these socio-economic institutions needs to be done because of their complex operational realities.

Keywords: *business, government, higher education, Ludwig von Bertalanffy, Paulo Freire*

1.0 INTRODUCTION

The push for Japanese companies to compete in markets across the world has placed pressure on Japan-based higher education institutions to educate Japanese students as global citizens ready to actively assist making Japanese companies more competitive on a global scale (Iwatani, Orr, & Salsberg, 2011; Kondo, 2014). Combined with these challenges Japan faces domestic socio-economic challenges that will define it for generations to come. With a population that is aging at a rate outpacing the birth rate, and the overall economic situation since the end of the 1980s characterized by deflation and stagnation, Japan is in need of a clear and inspiring vision, as well as decision making framework to mitigate the challenges (Gillispie, 2014). While the population of Africa may not be the graying society that is Japan, and on the whole economies are growing, one-day African nations will have to face such issues that will cause paradigm shifts in policy and socio-economic structures. Developing capacities and resources, now, to address the future is very important to short, medium and long-term sustainable growth.

The positions being presented are derived from a qualitative case study about that value Japan's business sector sees in study abroad as a valuable means in training the workforce of the future, and how students perceive and understand their study abroad experiences in light of various reforms taken and sought by higher education, the government, and business community (Malcolm, n.d.). The case study also explores how Japan's higher education, business, and government sectors need to work more closely and transparently in order to solve complex issues. At the core of this case is a national university in Japan that has received funding from the government. As part of the funding plan the university was suppose to encourage its students to study abroad under the rationale that studying abroad would lead to more globally-minded students with increased language and other skills of value to Japan's business community. The subject matter of this paper is derived from this larger case study (Malcolm, n.d.).

The objective of the current paper is to highlight the underlying theoretical framework of the larger case study. This framework incorporates ideas of general systems theory by Ludwig von Bertalanffy, and concepts on liberation literacy from Paulo Freire. The framework allows for, thus advocating, viewing problems and issues from a big picture and small detail perspective, simultaneously. The author's assertion is that people in each sector – government, higher education, and business – who lead the organizations that shape a nation's socio-economic systems and society should be influenced and governed by a decision-making process that understands the overall macro-environment and the grassroots micro-environment. This paper directly addresses such a practical and philosophical point of view.

While the current paper should be read as a literature review and analysis of the challenges of producing a globally competent workforce for the future, the following literature review section will describe the current problems, issues and situations Japan is facing. The position that Japan is a good case study for policy makers and common people

in all countries to view, dissect, understand, and learn from will be made. Following the background literature review an explanation of the core theoretical framework will be presented. After that, the methodology that guides the larger qualitative case study as well as the current objective of this paper will be described. Following the methodology will be the findings and then recommendations for policy makers in business, academia, and government. The final section of this paper will include future research opportunities based on a particular approach to decision-making and problem solving.

An effective way to engage, process, and understand the ideas contained in this paper is to remember that the ideas are not concrete, and are not meant to be. The hope is that they will be disseminated and allowed to breathe, so that various populations may dissect and understand them; argue for or against them. Also, a guiding vision is for policymakers to read this paper, eventually trying to work aspects of the ideas into their decision-making processes. There is always a need to explore and refine one's ability to comprehend complex challenges eventually rendering appropriate decisions. Sometimes knowledge is not defined neatly, and we have to allow unformed thoughts to be worked out through our academic and public audiences. This process allows us to find, develop, and implement the ideas that transform and move society in positive directions.

2.0 LITERATURE REVIEW

2.1 Background

Using the earthquake, tsunami, and nuclear reactor meltdown triple tragedy of March 2011 as a reference point, Chandler, Chhor, and Salsberg (2011) commissioned a wide field of experts from the aviation to fashion industries, to government to philanthropic sectors to analyze the then current state of Japan. At that time, Japan faced a unique challenge in how to respond to the triple tragedy of a historically devastating earthquake that launched a once in a lifetime tsunami that triggered the meltdown of multiple nuclear reactors. If those particular situations were not enough, the east coast of Japan had been decimated and needed massive investment in order to reconstruct entire cities and regional industry centers.

All of the above took place not when Japan was at the height of its economic stature during the 1980s, but instead when the economy had been depressed, stagnant and deflated for decades after the end of the 1980s bubble economy (El-Erian, 2011; Vogel, 2011). Chhor (2011) painted Japan as a society faced with mounting challenges that would threaten the egalitarian foundation it had prided itself on for the decades since World War II. Japan has an ageing population that is placing unique burdens on the rest of the people. With age comes a need for support and social safety nets. Pensions will need to be stretched, and medical care will need to be provided. As the retiree population increases, the actual working population decreases. Not only are people living longer, but there is also a birth rate decline. Japanese young people of childbearing age are not having children in the numbers necessary for the population to sustain its way of life; a matter of life and death.

Some characterize the challenges being faced by Japanese society as being the result of lost generations. Reiko (2006) and Smith (2015) discussed how groups of young people called “NEETs” and “FREETAs” grew in the aftermath of the bubble economy collapse and 2008 financial crisis leaving whole portions of the Japanese youth population not in education, employment or training (NEETs), and unemployed or underemployed, content by living with their parents; in a way freeloaded off them (FREETAs). Japanese society needs young people to feel empowered and be successful in order to support the past generations, and make the economy work properly. If the youth population is not fulfilling its potential, Japanese society as a whole will suffer.

Academics to politicians to business leaders have always viewed Japan as a place of great promise. That promise, however, is being challenged as a maturing society tries to revitalize the *Made in Japan* brand in this hyper-connected globalized world of the 21st century (Barton, 2011; Chandler, Chhor, and Salsberg, 2011). Modern globalization has played a willing partner in setting up the challenges Japan faces. It is a reality of life that in the hyper-connected and –competitive world we live the pace of business has increased.

With one click of a button, in almost any place in the world, a person can reach out and touch millions, even billions. One does not need a massive network of factories and offices stationed around the world to be successful, or to affect humanity. A few people with a computer, knowledge, and great amounts of ambition can achieve global success. Japanese companies want to, need to, be a part of this globalized reality (Ohmae, 2005).

Unfortunately, the critique has been that Japanese higher education institutions are not producing the kinds of young people necessary for companies to make the advancements they want to, and need to make (Eades, Goodman, & Hada, 2005; Goodman & Phillips, 2003; Jones, 2011). To counter this trend Japanese companies are recruiting staff from outside of Japan who want to work for Japanese companies (“Globalization clearing new paths,” 2011). This is placing added pressure on Japanese young adults to compete with educated foreign nationals who want to live and work in Japan, and build active cultural, social, and economic bridges to their countries of origin.

The workplace situation used to be that a foreign worker would absolutely need a high level of Japanese language skills to be considered for work at a Japanese company. That is changing. The need for successfully competing in the global marketplace is making Japanese companies change their hiring and operational cultures. Major companies are implementing English as the official workplace language, or at least as the language of business communication (Aoki, 2011; Mikitani, 2016). Japanese companies are looking more closely at foreign nationals who are studying and living in Japan. This new spotlight on foreign nationals as a viable pool of human resource places the traditional Japanese recruit in a perilous position. No longer is just graduating from a university good enough. Now Japanese university students will need to make their university experiences more global and developed. They will need to enter the job market as highly globally competent individuals ready to work for companies looking to take on the international marketplace (“Globalization clearing new paths,” 2011).

In summary, Japan is in a place of crisis because of many reasons. In the 1980s after a decade of economic rise the economy crashed. The proceeding years were one of stagnation and lost generations of youth entering the workforce underemployed without the skills and knowledge and motivation to pull Japan out of stagnation. Another cause of crisis is the force of globalization on Japan's socio-economic structures. Japan needs to compete with nations like India, China, South Korea, Vietnam, Thailand, Singapore, etc. Nations with youthful, large, industrious, competitive, resourceful, or combinations of all of the above, populations have entered the marketplace with determination. Japanese companies small to large do not have the human resources they feel they need to actively compete on a global scale. All of this is compounded by demographic challenges caused from a rapidly aging society amidst a low birthrate that highlights a population in physical decline. Once the number two economic power in the world, Japan has dropped to number three behind China, and that shift may be equal parts rise of China as well as Japan's stagnation.

Moving forward Japan will need a plan of action that addresses these, and other issues that could cause the once bright gem of the Pacific Rim to dim in luster and quality. The literature in this section made an argument for a new way to envision Japan's issues. There is a need to craft a decision-making process based on a simultaneously holistic and granular view of complex challenges. The following section will describe the theoretical framework that shapes the overall thought process being advocated for in this paper.

2.2 Theoretical Framework

The theories and ideas of Ludwig von Bertalanffy (1969) and Paulo Freire (1996/1970) are put forth as a framework to guide the decision-making process of leaders who ultimately will create and implement policies that are supposed to move Japan through these challenging times. Multiple theoretical approaches are used to develop a singular framework because it is good practice for novice researchers to explore and use multiple theories as part of an overall theoretical approach (Anfara, Jr. & Mertz, 2006). Considering the multiple areas of political, economic, and social engagement being discussed in this paper, no one theory can handle all the dynamics that need to be taken into account. Multiple theories that are shaped into one approach allows for a richer argument and experience to take place (Anfara, Jr. & Mertz, 2006).

Ludwig von Bertalanffy (1969) developed a theory of general systems that posited,

It is necessary to study not only parts and processes in isolation, but also to solve the decisive problems found in the organization and order unifying them, resulting from dynamic interaction of parts, and making the behavior of parts different when studied in isolation or within the whole (p. 31).

Bertalanffy's general systems theory is ground in mathematics and a traditional deductive scientific method of inquiry with language decisively in the vernacular of mathematicians, scientists, engineers, and the like. Bertalanffy's theory, however, is applicable to many other

areas of life because the main proposition he puts forth is that problems and challenges need to be approached from a wholistic point of view. Johnston (2016) posited that general systems theory allows for organizations to work on multiple challenges and goals while maintaining an independence that ultimately supports the overall mission of the organization. "An organization built on general systems theory can continue indefinitely" because "it changes over time and becomes increasingly responsive to developments in the marketplace" (Johnston, 2016, "General Systems Theory," para. 6). Bertalanffy's (1969) ideas of systems integration can provide a platform for understanding how, and arguing why, business, academia, and government in Japan need to work together to diagnose and solve the problems that challenge Japan.

No one system can solve the many societal problems that exist; socio-economic macro-systems must work together. The challenge is that large macro-systems set the conditions and provide framework policies that are supposed to spark and encourage positive movement among society's individual parts. But how do we look at and understand those individual parts using a more humanistic lens? People are not merely cogs in a machine.

The ideas of Paulo Freire (1996/1970) will provide a humanizing element to Bertalanffy's (1969) macro-systems approach. While Bertalanffy talks in science and math terms, Freire speaks about the conscience of humans and how it is necessary to liberate that conscience in order to critically engage one's surroundings—conscientization, praxis, dialogue, codification and de-codification. He sought to accomplish this critical awakening and engagement – liberation – in a very practical manner – teaching literacy skills (Timpson, 1988). When people have the ability to read, write, listen, and speak, they have the means to think critically and empower themselves. The general population needs to be critically literate because the policies that are being drafted to organize society need to be implemented on a municipal level. If local government officials, university administrators, and business leaders cannot understand the policies, or have the literacy to comprehend the policies then nothing will ever change for the positive; the agenda at all levels of society will be halted and incomplete.

Freire (1996/1970) asserts, with regard to young people, not being critically engaged to one's surrounding environment will eventually lead to the creation of a class of people directly antithetical to people businesses say they need, want and value. In Japan's case this means a population of fureetas and NEETs instead of globally competent young people ready to engage the global marketplace. Moreover, if the regular people who are affected by government policies do not understand them, or have the wherewithal to be critically active with the implementation of policies they will be excluded from the decision making process; they will cede their power and overall agency.

To summarize, the ideas of Bertalanffy and Freire provided the theoretical framework that guides and influences the positions presented in this paper. Bertalanffy's (1969) general systems theory provides a way of understanding the relationship between academia, business, and government, while Freire's (1996/1970) liberation literacy ideas will frame how to humanize and shape the critical thought processes of those who

create, implement, and ultimately receive policies. The next section on methodology will contain information about the nature of this paper, and overall design of this exploration.

3.0 METHODOLOGY

3.1 Qualitative Paradigm

3.1.1 The Larger Study

As mentioned in the introductory section, the ideas in this paper are derived from a larger qualitative case study conducted by the author (Malcolm, n.d.). (At the time of writing the current article, the larger qualitative case study was in the data gathering and analysis stages.) The objective of the case study was two-fold. One, to explore the perceptions of hiring managers from companies that recruit from a particular Japanese national university, which received funding from the central government to encourage students to study abroad, about how they value study abroad as a means to create a globally competent workforce, and to what degree they value such experiences when recruiting university graduates. And two, how the students who studied abroad for one academic year perceived their study abroad experience with regards to what makes a globally competent workforce Japanese companies say they need, and the central government has taken policy actions to create.

Surveys and questionnaires were sent out to hiring managers and students through official university channels, and follow-up interviews were done with selected participants who indicated willingness to be part of the interview portion of the case study. The amount of interviews was determined by the frequency of reoccurring themes documented. When saturation was reached the interview sessions were concluded. Individual sessions were over ninety-minutes, digitally recorded, partially transcribed, and in some cases transliterated because Japanese was spoken. Work was conducted with various national university staff at the case site in order to contact student participants and arrange company visits.

Along with these data sets, publicly available documents regarding government and institutional funding proposals were collected, as well as national and international media reports, mid-year government target reports, and academic analysis from journals and white papers. Yin (2008) advocated and advised collecting a wide range of data when conducting a case study in order to get the deepest, thickest, and most comprehensive view of the subject. With the emphasis on rich data collection, along with the dynamic and ever-changing social, economic, and political environment the overall methodology rightly exists in the qualitative paradigm, and using a case study design was the most appropriate way to conduct the aforementioned research effort.

3.1.2 The Current Paper

As a derivative of a larger case study (Malcolm, n.d.) the current paper seeks to expand on the concepts and ideas within that study. The propositions made and positions taken in this paper are also firmly grounded in the qualitative paradigm of research because the ideas do not appear in perfectly accessible forms (Ohmae, 2005). They are sometimes messy and ugly and hard to understand; hard to map out. With persistence, dedication, and observance to applicable and appropriate methods and frameworks ideas eventually become something more; something that grabs hold of people to help educate them (Ohmae, 2005). This paper is grounded in this qualitative train of thought and practice.

The purpose of this paper was to assert a way of thinking that could assist specific groups of people – policy makers, academic administrators, business leaders – in perceiving and constructing their worlds, and ultimately making decisions that affect others. Quite purposefully the author was “seek[ing] answers to questions that stress *how* social experience is created and given meaning” (Denzin & Lincoln, 2005, p. 10).

Therefore, there were no rigid hypotheses or empirical data sets collected; there were no tests; and, the findings are more implicit than explicit. This paper has been a literature review and analysis of the current state of Japan regarding challenges faced with developing the workforce of the future amidst the backdrop of complex issues and situations. Japan has been used as a singular case because the research base of the author is Japan, and his knowledge of the Japanese landscape is more applicable than in other contexts. However, the challenges and theories in this paper are not unique and only applicable to Japan. One way or the other all societies face demographic issues that compound economic issues that compound educational issues. A decision-making process that could view all problems at once, and on multiple theoretical, philosophical, and pragmatic levels was necessary to explore. The following section discussing findings will illuminate the above points.

4.0 FINDINGS

Through the collection, review, and analysis of literature framed by the ideas and concepts of Bertalanffy (1969) and Freire (1996/1970) there are two main findings from this current exercise. First, greater cooperation between government, academia, and business, in the Japanese context (and others), needs to be fostered while empowering local actors to be more critically engaged in developing solutions to societies challenges. And second, there is further need to study and understand how socio-economic systems like government, academia, and business work in unison on large institutional and small grassroots levels.

However we, as a global system, move forward we should move forward with the objective of forming peaceful relationships that create a strong yet pliable fabric of interwoven societies constantly seeking to critically understand each other and build on that understanding in peaceful and mutually beneficial and sustainable movements. This is not an easy task to say the least. Sometimes non-linear approaches are needed to explore, understand, and develop ways of thinking and acting in the presence of daunting challenges.

The larger case study (Malcolm, n.d.) that was being conducted during the writing of this paper points to philosophical and subjective findings, in part. Staying faithful to the qualitative nature of this exploration, the arguments in this paper also point to philosophical and subjective findings. The arguments were meant to address the abstract realm of qualitative research because the theoretical framework proposed in this paper was meant to address how people make sense of their world, and that is never an objective process; each person has his or her own way of seeing and making sense of the world. What was needed was a process that embraced that subjectivity. This paper adds to the literature that seeks to understand the realm of human nature and the decision-making process.

5.0 RECOMMENDATIONS AND CONCLUSION

5.1 Recommendations

Japan is facing some very challenging situations from a shrinking population to low birth rate to a deflated and stagnant economy. Government, academia, and business are being called on to combat these challenges by finding solutions that will ignite the ingenuity and innovation that have been characteristics of the Japanese post-World War II history. This section will provide some suggestions and recommendations policy makers could integrate into existing policies to mitigate the various challenges facing Japan. The described general systems Freirian literacy theoretical framework will be applied to show how each solution can incorporate understanding for the macro-environment while empowering local understanding and involvement, at the same time maintain a focus on building relationships based on peaceful and mutually beneficial outcomes.

Currently the Ministry of Education, Culture, Sports, Science and Technology (MEXT) is using government's financial influence to fund grant programs targeted at tertiary institutions of education (U.S.-Japan Bridging Foundation, 2015; MEXT, 2014; MEXT, 2011; Japan Society for the Promotion of Science (JSPS), 2010 a & b; MEXT, 2009). The purpose of the grant programs is to incentivize and spur Japan's institutions of higher education to internationalize campuses by bringing foreign nationals to Japan, and encourage Japanese students to study abroad. The following ideas suggest ways to enhance government funding initiatives, incorporate the business community, and call to action the various areas and levels of government.

An addition to the various funding schemes could require any proposal to have programs that specify a social justice agenda, or guidelines that assert some kind of social-critique education component. This kind of program could require engineering students who study abroad to show the environmental impact awareness of a project they could be involved in. Also, the project should be empowering to the local population, so not only would engineering students studying abroad learn how to apply their knowledge through a practical project, but they would also learn how to communicate with other peoples because they will have to teach the locals about the project. This is a foreseeable

win-win for all sides. The students gain practical field skills, which they can apply to a future job; the local community receives a tangible asset in return for hosting and participating in young peoples' education; and the corporate sectors of both nations build market interests they can further develop for capital benefits. This academic relationship can also be developed into other areas. The positive possibilities are endless.

The plethora and various iterations of MEXT grant programs are mainly targeted at tertiary education institutions. MEXT also has programs targeting high schools – Super Science High School (Japan Science and Technology Agency (JST), n.d.) and Super Global High School (Clavel, 2014; Super Global High School, n.d.). These particular programs designate high schools that focus on STEM – science, technology, engineering, and math – education. In general these are schools that provide high quality education. By building their competencies at a young age the government looks to encourage a new generation of scientists, engineers, and people to positively shape Japan's future. To enhance these programs MEXT could offer funding streams and requisite criteria that encourages already designated Super Science High Schools and Super Global High Schools to build partnerships with high schools in foreign countries creating a network of sister schools focused on STEM and general education leadership activities. This could also involve student exchanges between schools. If students have a positive study abroad experience at a young age, they will more likely consider study abroad in their college years. And if they do not they will at least have a study abroad experience they can draw upon later in life that may positively affect their jobs and careers.

Another example how core concepts from the theoretical framework can manifest in a MEXT funding proposal is to create study abroad programs in unison with organizations like JICA (Japan International Cooperation Agency) so that students can get a hands on grassroots experience while in university. JICA has a wide network of international partners. By encouraging colleges and universities and businesses to work with JICA more people can be involved in the valuable projects JICA implements. This also could create a new pool of people who want to join and work for JICA. All that said, such knowledge could be useful to businesses that want to expand operations internationally. Such experiences would give students opportunities to apply their knowledge in non-traditional ways; mechanical engineers do not always have to work in factories, they can interact and talk with people. By getting to know the local population in a foreign country the students who have these experiences will be able to use that knowledge to build more efficient and effective bridges between corporate Japan and potential market places. The understanding could assist in circumventing messy and costly exploratory work companies get into when looking for new markets outside their familiar zone of influence.

All of the ideas and work do not have to be solely MEXT government programs. If the mentality of an interconnected macro-micro approach is adopted, as advocated for through the theoretical framework, then other ministries like the Ministry of Economy, Trade and Industry (METI), which aligns more directly with the Japanese corporate sector, can find

ways to assist businesses with programs that innovate the training and development of human capital in a socially conscious way. For example, smaller businesses that lack the financial resources can use government grants to send employees abroad for exploring and discovering new market opportunities. This could also be accomplished through JICA. As an organization designed to be in touch with local populations, JICA offers the perfect opportunity for companies to send workers abroad to learn about foreign markets, while providing necessary humanitarian assistance to an area.

In reverse, the government can actively seek out foreign companies that match the profile of small companies in Japan. By providing more funding and human resources to agencies like JETRO (Japan External Trade Organization) to open schools and learning organizations abroad that would educate the local populations about mutually beneficial opportunities in Japan, the government can help companies without the resources scale up their businesses in innovative ways. Much of this would require ministries like METI and MEXT to work more closely together as METI could handle the business side while MEXT handles the education side.

When viewing any policy proposal through this general systems Freirian literacy lens there should be a focus on critically understanding an entire system, its composite parts, how they interact, and the critical literacy skills necessary to translate the policies to those who have to implement them. That last clause is of vital importance because without the proper critical awareness of how the policies affect “real” people the socially positive affects may become muted in favor of pure capitalist gains.

Finally, Japan is not one government ministry, one level of government. There are other ministries, and each needs to work together in order to solve major challenges. All ministers should be involved in tackling the major priorities identified by political, social and economic leaders. If all leaders from the various ministries are simultaneously included in problem solving major challenges, this will send a signal down the bureaucratic chain that all perspectives will be included during the decision-making process. Furthermore, this signal needs to be sent throughout the prefectural and municipal chains of command thus activating the entire nation. Currently, problems are segmented and thus get lost as each level of government from the federal to the local re-prioritize as they see fit. Japan cannot operate as separate systems working independently to solve crises. All the systems of Japan must work together, in unison, to meet the challenges of the day.

5.2 Implications for Future Research

Two major areas for future exploration and research include a deeper and more thorough look at the value of study abroad to businesses as they recruit and hire new talent, and a critical accounting and analysis of what skills are necessary for recruits to be considered valuable to organizations. Some suggested questions that need to be asked are, what do students who study abroad – short- or long-term – gain while studying abroad? When, during a study abroad experience, do students acquire the skills deemed valuable by prospective companies? What instruments are in place, or need to be created to track

such growth and awareness? How do companies, academia, and government judge such dynamics? These are complicated questions, but questions that can provide substantive knowledge for understanding what could make the global marketplace shrink or grow. The value governments, businesses, and academia place on study abroad as a significant tool to shape and change the market environment by building the global competence of the employees that make up the human capital of the marketplace needs to be studied more thoroughly.

Another area of research that builds off the information presented in this paper is the question of skills. What skills are necessary for global competence, and greater market competition? Do employees need highly developed linguistic skills? Do employees need the ethnographical and anthropological knowledge of a culture and society in order to build the significant human relations necessary to expand in a new area? Do scientists and engineers need an equally significant liberal arts component to their hard sciences education? Do institutions of higher education need significant interdisciplinary programs to allow for a complete and “global” education? The idea that successfully adjusting to globalization may require the local mindset to shift, look inward, but then find innovative ways to express that localness to the world needs to be explored.

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