THE BARBADOS COALITION OF SERVICE INDUSTRIES (BCSI)

Study of the Professional Services Sector in Barbados
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GLOSSARY OF TERMS

1.	Blue Oceans	All the industries that represent unknown market space, untainted by competition.
2.	Bio- informatics	An interdisciplinary field that develops and improves on methods for storing, retrieving, organizing and analyzing biological data. A major activity in bioinformatics is to develop software tools to generate useful biological knowledge. It involves the following areas; computer science, mathematics, engineering, algorithms in artificial intelligence, soft computing, data mining, image processing, and simulation, discrete mathematics, control theory, system theory, information theory, and statistics.
3.	CAGR	Compound Annual Growth Rate
4.	Chemo- informatics	The use of computer and informational techniques applied to a range of problems in the field of chemistry. For example, pharmaceutical companies in the process of drug discovery.
5.	Distributed power generation	The generation of electricity from many small sites such as communities and on buildings rather than central generation plants.
6.	Efficacy testing	Tests the ability of an intervention or drug to produce a desired effect and supports its introduction as a treatment alternative.
7.	Endogenous	Growth originating from a source from within a system or country.
8.	Endogenous	Growth originating from a source from within a system or country.
9.	Genomics	A discipline in genetics that applies recombinant DNA, DNA sequencing methods, and bioinformatics to sequence, assemble, and analyze the function and structure of genomes.

METHODOLOGY AND SCOPE OF PROJECT

This project was undertaken to carry out a study of the professional service sector in Barbados and involved the following components:

- An assessment of the current capabilities of the segments of the professional services sector.
- Identification and analysis of the global competition in order to pinpoint where the major players have left unmet market needs.
- A comparative analysis to determine whether the domestic sector can meet those needs with its current capabilities, and identify the areas that must be strengthened in order to effectively compete.

In order to complete these components the consultants undertook the below activities:

Activity 1- Conducted a review of existing literature on the professional services sector for the purposes of:

a. Isolating the potential of industry development
b. Future positioning of the industry
c. The role which professional services could play in economic development
d. The relationship between national and economic sectoral development, educational needs and the development of the domestic professional services.

Activity 2- Conducted primary research among stakeholders and member associations. This research was done through interviews and focus groups with the entire membership of the BCSI, as well as with every agency identified as a stakeholder. All were targeted for involvement in the research phase.

A. Designed interview and focus group questions in order to identify knowledge and opinions on the domestic services industry.
B. Compiled a complete list of stakeholders in conjunction with the BCSI.
    - The entire list comprised twenty (20) stakeholders from government agencies, departments and statutory boards, educational institutions and private sector agencies.
    - A total of nineteen stakeholders were interviewed.
    - Face to face interviews were conducted with stakeholders.
C. Compiled association groups in conjunction with the BCSI.
    - The entire list comprised forty-two (42) associations across five (5) sectoral groups
    - Five focus groups were convened and nineteen (19) associations attended.

Activity 3- Conducted desk research to identify:

a. The potential priorities for professional services and future high growth potential professional niches.
b. The potential sources of training, education and professional development with local, regional or overseas entities within the areas identified as future high growth and potential niches.
c. Global best practices that Barbados can undertake to develop the professional services sector.
d. Relationships between national and economic sectoral development, educational needs and the development of the domestic professional services.

PURPOSE OF LITERATURE REVIEW

This literature review will examine the global and Barbadian publications that address the relationship between national economic sectoral development, education needs and the development of a domestic professional services sector.

OVERVIEW OF THE SERVICES SECTOR

In "The Great Hope of the 20th Century" (Koln-Deutz, 1954), Jean Fourastie theorized that the services sector is the tertiary sector within an economy falling behind raw materials and manufacturing. This century has experienced a shift called **tertiarization** (European Foundation for the Improvement of Living and Working Conditions). The tertiary sector is now the largest sector of the economy in the Western world, and is also the fastest-growing sector. Although there has been a substantial shift from the primary and secondary sectors to the tertiary sector in industrialized countries, the services sector continues to be treated to as the non-productive aspects of the economy, particularly in the Caribbean.

The basic characteristic of this sector is the production of services instead of end products. Services (also known as "intangible goods") include attention, advice, access, experience, and discussion. The service sector includes education, finance, communication utilities, wholesale and retail trade, and transportation, truck transportation, messenger services and warehousing; information sector services; securities, commodities and other financial investment services; rental and leasing services; professional, scientific and technical services; administrative and support services; waste management and remediation; health care and social assistance; and arts, entertainment and recreation services. (Investopedia.com)

THE GLOBAL PERSPECTIVE

Singapore

Singapore has been noted globally as having transitioned its economy from one that was heavily dependent on primary and secondary sectors to a booming services-driven economy. Human resources has been identified as the single most important source of strategic capital for Singapore. A small country with virtually no natural resources, Singapore has become one of the most developed countries in

Asia primarily due to its strong emphasis on developing human resources and for continuously making significant investments in its human capital.

Human resource development (HRD) has always been a core element in Singapore's strategic economic plans, as reflected in the eight strategic thrusts of its Strategic Economic Plan (Ministry of Trade and Industry, 1993; C. Tan, 1996; Wong & Ng, 1993).

The key features of Singapore's investment in human capital development (which presents a strong model for replication) are:

1. The tripartite relationship (trade unions, private sector and government) ensures that there is agreement over strategies and necessary steps required for national HRD strategies.
2. Another important tripartite relationship is that which exists amongst the Skills Development Fund (SDF), the Lifelong Learning Fund and the School of Lifelong Learning.
3. The strong linkages between industry and Human Capital Development (HCD) clusters.
4. The delivery system for HCD in Singapore involves elements of the national education system and organizations in the private sector, such as professional organizations and commercial schools. In the public sector, universities and polytechnics provide post-secondary education. Vocational training is provided by the Institute of Technical Education (ITE). All institutions provide continuing education to their respective target segments of the adult population.
5. The training needs are determined through a coordinated process by the government and key public sector agencies (such as the Economic Development Board) that are involved in the planning and policy-making process
6. There is a unique combination of factors leading to Singapore's success—a committed government, a network of agencies, and a commitment to the tripartite model.

India

During the late 1990s and throughout the last decade, India has built a brand for being the global source for low-cost, highly skilled services which were specifically applied to the business process outsourcing (BPO) industry. The Indian government engaged in a committed program to develop its economy from a heavy dependence on agriculture to being a pioneer of the knowledge society.

The availability of highly skilled workers had a statistically significant impact on per capita output of the aggregate services sector, with no impact on agriculture and manufacturing by contrast. It was posited that the cause for this may lie in the fact that services are more skilled labour intensive than the production sectors.

The research document revealed that current enrollment levels in higher education were largely determined by past investments in educational infrastructure (number of colleges, universities, etc.). Certain regions in India had a highly skilled workforce in subjects which matched the skill demand of the sectors. This reinforced the trend of the more skills-intensive services sectors being the primary beneficiaries of greater skill availability.

The outsourcing association in India (NASSCOM) successfully lobbied for industry-friendly policies such as:

1. Zero tariff protection, strong intellectual property and data protection laws.
2. Stepped-up deregulation of the telecom market, the creation of software technology parks, and private sector participation in the education system (all of which have helped the growth of the industry).
3. The association provided consulting services to state governments to advise them with regard to telecom infrastructure, physical infrastructure, and IT orientation.
4. NASSCOM plays a central role in representing the industry's interests in the political arena, providing a portfolio of relevant services to its members and consulting services to state governments.
5. The introduction of a national assessment tool to help identify new talent for the industry, and its creation of a National Skills Registry.
6. IT Work Force Development Program, which includes the sponsoring of linkages between firms and academia; a number of leading software companies (for example, Mind Tree, TCS, SUN, Symphony, Aditi Technologies, Intel, Thought Works, and Philips Software) are active participants in this initiative.

In addition, as global and internal conditions started to have a negative impact on the sector’s growth, the key stakeholders engaged in infrastructural upgrades that allowed for the evolution to a "sophisticated global delivery model”. New service lines have emerged in fields such as:

finance	analysis of economic data, business intelligence, management of foreign commodity accounts, and lower-end services such as home loan processing, mortgage services, and debt collection and recovery

medicine	creating medical education databases, doctors' desk reference guides, and notes on drug efficacy; more recently, reading and analyzing patient X-rays, printing (pre-publication of scientific journals)
remote education	providing math tutorials to U.S. school children

Canada

The Canadian Engineering and technology labour market study (J O'Grady) reported that, in order to be competitive internationally, Canadian engineering professionals must offer skills that are in short supply and which therefore command a significant premium. These skills fall into four categories:

1. High level project management skills;
2. Specialized technical skills, usually in design areas;
3. Advanced levels of practical experience; and
4. Familiarity with and access to proprietary technologies.

To address their global competitiveness, Engineers Canada and the Canadian Council of Technicians and Technologists have contributed to centers of excellence in the post-secondary system that could strengthen the supply of specialized and other skills that are so critical to competitive success in the international engineering services market. They have also aggressively lobbied to harmonize international licensing and certification standards in a way that reduces the remaining mobility impediments to Canadian engineering and technology professionals without jeopardizing or weakening the high standards of engineering and technology professions in Canada.

Concerns with the wholesale application of economic growth models

One study, conducted by the Information and Knowledge Management Research Programme (Aug 2010), expressed concerns about the application of exogenous "Northern" models for economic growth on the endogenous factors of a developing country. Endogenous models are those that create growth based on internally originated factors whereas exogenous models of growth are originated from external sources.

In particular, the study focused on the developing countries' consistent shortfall in terms of early adoption of technological advancement. In most cases, these countries attempt to incorporate technology, formulated for the needs of developed countries, into their own environment and are often challenged to optimize it. This was seen as a hindrance to the desired levels of knowledge transfer that was being projected by the World Bank and the United Nations.

The report alludes to the need for attention to governance, cheaper connectivity and adaptation of technologies to the localized needs as significant contributing factors to the development of knowledge societies. The governance dimension is further emphasized by WIPO 2009: 2; "Intellectual property (IP), once seen as a technical matter for legal experts, has today become a central concern for governments, businesses, civil society, researchers, academics and individual creators. In a world where the economic growth of nations is driven increasingly by the creativity and knowledge of their people, effective IP systems – which create incentives for innovation and structures for sharing the results – are key to unlocking this human potential".

Sectoral Relationships

The three countries examined have both qualitatively and quantitatively linked a country's human capital development and investment in said capital via education to high levels of economic growth. They also emphasized the roles of government, academia and industry in ensuring that these links are made. One very important conclusion that can be drawn is the role of industry as an informant and lobbying agent to both government and academia. The role of professional services cannot be de-emphasized in this relationship. The Professional Services component is strategic in providing services to government, industry and education (Figure 1).

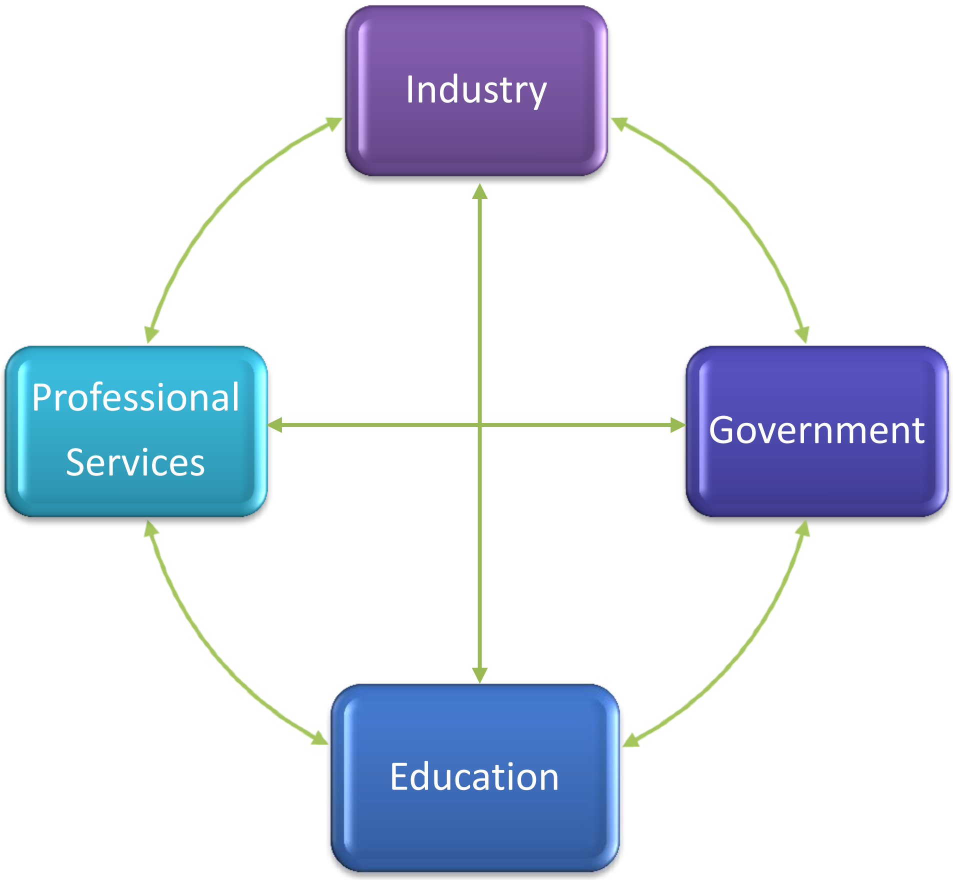


Figure 1- Inter- Sectoral Relationships

*Professional Services

— Advises industry on trends and market opportunities and helps develop and implement strategies that will allow industry to benefit from these opportunities. **(Professional Services to Industry)**
— Provides market intelligence, forecasting educational needs thus allowing academia to be relevant and supply skill needs. **(Professional Services to Education)**
— Provides government with research and strategy detailing how they can position the country to ensure economic growth. **(Professional Services to Government)**

* Industry

1. Engages professional services on three levels:
    - To identify blue ocean opportunities within the market.
    - To build and implement strategies that would allow industry players to exploit blue ocean opportunities.
    - To develop and implement market entry strategies. **(Industry to Professional Services)**

2. Advises government on industry changes and supply shortages within the market and lobbies for adjustments and improvements in infrastructure and policy to support growth. **(Industry to Government)**
3. Directly influences curricula through linkages with academia. This insures that the substance of the course offerings are in keeping with the market needs. **(Industry to Education)**

* Government

— Provides a legislative environment that supports global growth for domestic industries. **(Government to Industry)**

— Uses market information obtained from industry to forecast human resource development needs. Influences curricula especially at the tertiary level (private and public) in order to ensure the domestic skill pool can meet actual and forecasted needs. **(Government to Education)**

— Use local professional services to inform them of global developments and to develop local industry in a way to exploit opportunities. **(Government to Professional Services)**

*Education

— Academia provides professional services with its education and certification requirements. **(Education to Professional Services)**

— Academia develops curriculum to meet the needs of the forecasted labour market needs. **(Education to Government)**

— Develop course content that meets the specific needs of domestic industries. **(Education to Industry)**

Conclusion on the Global Perspective

When seeking a model to tertiarize an economy; i.e. build economic activity primarily from the services sector, the approach has to be multi-dimensional. The countries that are experiencing growth from domestic and international sources are those that have committed to ensuring that their human capital is adequately skilled to attain service excellence and for exportation. These countries utilized a multi-agency approach, coupled with investment in technology platforms and global industry networking, to match the country's workforce skills to current and emerging needs.

THE BARBADIAN PERSPECTIVE

From a review of Barbados' policy documents with regards to the country's approach to increasing its tertiarization, one can observe several similarities to the model employed by Singapore.

Table 1: Comparison of Barbados and Singapore Infrastructure

Barbados	Singapore
Social partnership	Tripartite system
Manpower Research Unit	Ministry of Manpower
Employee Training Fund	Skills Development Fund & National Employee Training Fund
NIS Training Levy Deduction	Skills Development Levy
Technical and Vocational Education and Training Council	Council for Professional & Technical Education
BVTB Apprenticeship Program	OJT (on the job training) 21Plan
Tertiary Qualifications Framework	National Skills Recognition System
Barbados Productivity Council	Standards, Productivity & Innovation Board
Barbados Vocational Training Board Centers	Institutes of Technical Education (ITEs)
Barbados Coalition of Services Industries	National Trade Union Congress (industrial unions)

The National Strategic Plan of Barbados 2005 - 2025

This strategic plan was designed by the Barbados Labour Party-led government in 2005 and articulates a vision of becoming a fully developed society that is prosperous, socially just and globally competitive by the end of the first quarter of this century. Two of the goals which are pertinent to the services sector and its exportability are:

GOAL THREE places people at the heart of the development process. "It promotes the building of social capital. This involves the development of the human resources necessary to function in a knowledge-based services economy and the creation of appropriate family and community values. This calls for a revolution in education which will unlock the productive potential of all Barbadians."

There are two important aspects of social capital: creating the human resource for a knowledge-based, skills-intensive services economy, and creating the values of trust, moral obligation, duty towards family and community, cooperation, discipline and respect for the law that are crucial to any society's successful development.

GOAL FIVE "seeks to enhance Barbados' prosperity and competitiveness in the world economy. This will require rapid and radical transformation in the way we carry out our productive activities. We must identify those areas of economic activity that are viable and competitive, and that can contribute to sustainable growth, employment and overall prosperity for everyone. Focusing on the export of services such as tourism and international business, while exploiting new ones such as culture and health, will all contribute to a more diversified and prosperous economy."

Barbados' National Human Resource Development Strategy

The National Human Resource Development Strategy, in recognizing the significance of entrepreneurship to the country's economic growth and development, surmised that it will be necessary to offer incentives for small to medium enterprises (SMEs) to train their workers and influence educational providers (both public funded and private) to employ flexible approaches in the delivery of their skills, in order to reach a wider clientele.

The Ministry of Education and Human Resources (MEHR) places emphasis on the development of several critical initiatives to support HRD, including curriculum reform; improved certification of knowledge and skills; provision of second chance education; improvement of TVET; and quality assurance.

Within the MEHR is the Barbados Accreditation Council (BAC) whose main role is the registration of institutions offering post-secondary or tertiary education and training, and the accreditation of programmes of study and institutions in Barbados. This accreditation provides recognition of qualifications and transferability locally, regionally and internationally. This transferability is especially important if Barbados is to be successful in the exportation of its services. Exportation can occur through the harmonization of local qualifications to regional and international qualifications (figures 1 & 2), but also occurs through the attainment of global standards by the various sectors. According to the WTO (2013), "there is indeed evidence that a reduction in policy heterogeneity, carried out through mutual recognition of standards or convergence to international standards, has led to increased services trade".

Figure 2: CVQ/NVQ Levels, including the Competencies at each level

Level	Description
Level 5	**Graduate/Professional** Competence in theoretical and practical knowledge in developing strategic solutions to abstract and concrete problems relevant to a particular field of learning or occupation; autonomous with significant responsibility for the management of people and projects
Level 4	**Manager/Entrepreneur** Competence involving the application of a range of fundamental principles and complex techniques with personal accountability for the analysis, design, planning, execution and evaluation of work functions
Level 3	**Technician/Supervisor** Competence in supervisory capabilities demonstrated through the responsibility for the work of others and the allocation of resources with strong problem solving, planning and designing skills
Level 2	**Independent/Skilled Worker** Competence in a broad range of complex, non-routine work activities performed in a wide variety of contexts. Considerable control, responsibility and autonomy are demonstrated and guidance of others is often required
Level 1	**Supervised Worker** Competence in a variety of routine work related activities performed in different contexts most of which requires supervision during the early stage of employment

Source: CARICOM Secretariat

Figure 3: Regional Tertiary Qualifications Framework

Level	Description	Qualifications
Level 7	Learner displays ability to create and interpret new knowledge, and the ability to conceptualise, design and implement projects for the generation and application of new knowledge. They will have mastered the skills and techniques of research and advanced academic enquiry	Academic Doctorates e.g. PhD Professional Doctorates e.g. DBA; DM; EdD
Level 6	Learner displays a mastery of knowledge, all of which are from current frontiers of discovery and understanding in an academic or professional discipline. They will have conceptual understanding that will enable them to evaluate critically current research and new knowledge. Their conceptual abilities will support decision-making in complex and unpredictable contexts, involving professional judgment	Masters degrees; Postgraduate Diplomas; Professional qualifications for accounting, legal and other professions
Level 5	Learner has moved from empirical to conceptual approaches to problem solving. Apply knowledge and skills to difficult and complex problems, requiring initiative and motivation. There is some mastery of academic knowledge as measured by research and development	Baccalaureate; Bachelors degrees; Honours Degrees; Graduate Diploma
Level 4	Learner develops cognitive skills of analysis, synthesis, and evaluation to support decision making. Acquires set of occupational skills to apply to specific occupational area	Associate degree; Higher Diploma; Advanced Diploma
Level 3	Leaner develops knowledge and skills of evaluation and interpretation that will support decision making such as solving problems in the workplace or academic studies	Undergraduate Diploma
Level 2	Learner demonstrates comprehension of underpinning principles of particular occupational or academic area such as learning how and why things are done in particular ways	Advanced Certificate
Level 1	Learner acquires basic knowledge and skills for occupational competence at entry level to a profession or progress to tertiary education at higher levels	Certificate

Source: Adapted from CARICOM Secretariat

As the global topography has experienced events which have required public administrators to amend the country's growth strategy, Barbados' government crafted a Medium Term Development Plan. The main revision was the inclusion of a section of the economic sector development objectives which are summarized below. Particular emphasis has been placed on the developmental activities that are similar to those implemented by NASSCOM India and can be facilitated by the Barbadian professional services sub-group.

TOURISM	Stakeholder consultations, awareness & satisfaction surveys, design economic indices data collection, public relations, marketing, standards, renewable energy, new market entry strategies & implementation, plant renewal, alliance negotiations, implementation of heritage, culture & sports tourism programs
AGRICULTURE	New technology to expand food production (local & exportation), food safety standards, local and external market access, create and promote use of local produce, increase competitiveness as a means of increasing output, sustainable agriculture and to develop agriculture
TRADE & INVESTMENT	Explore new markets within CSME, consolidate venture capital facilities into one agency, certification and training to EU quality standards, alternative energy resources, cluster development research (social & market), innovation driven entrepreneurial culture
INTERNATIONAL BUSINESS	Research and development into new potential clients and products, increase business facilitation – greater use of technology deployment of a well-equipped workplace
SMALL BUSINESS DIVISION	Exploration of franchising to unemployed persons who want to start businesses, offer business support services to match the stages of the business life cycle, continuous business training to small enterprises; promote success stories, strategize to reduce emerging skills gaps, facilitate greater access to finance e-commerce programs specifically for small business
ALTERNATIVE ELECTRICITY	Develop legislation, purchase power agreements, develop renewable energy portfolios and targets, assess the potential for renewable energy (solar, wind, bio-fuel), technical and environmental assessment, capacity building and training, public relations on renewable energy, performing energy surveys and audits, offshore exploration and production and research on renewable energy
HRD PLAN	CVQ certified school leavers, retrain and train teachers in competency based education, upgrade SJPP facilities, ICT based education and training of the pre-tertiary school teachers

Conclusion on the Barbadian Perspective

Barbados has applied the Singapore model for tertiarization and economic growth as evidenced by 1) tri-partite system, 2) multi-agency approaches, 3) establishment of BAC to verify the global accreditation of training, 4) the renewal of the TVETC to design and implement world class occupational standards and 5) the NVQ/CVQ qualifications.

The endogenous factors that secured Singapore's and India's economic growth are not present in the Barbadian context. For instance, Singapore had a thirty (30) year government which provided for a consistent implementation and commitment to the economic plan.

Another point for consideration and of consensus among Singapore, India and Canada's approach is the role played by the services association. In India, NASSCOM was a consultative partner to government, industry and the training institutions. Their contributions as the sector representative shaped the direction for the entry into emerging markets and/or to re-tool the workforce to meet more lucrative market segments. In contrast, the Barbados approach has not positioned the services sector associations as a policy influencer; rather in the interest-power grid the associations could be classified as a "keep informed" stakeholder (see figure 4). This class of stakeholder has high interest in policy but low power to impact the policy processes.

Figure 4: Power/Interest Grid

NSA QUESTIONNAIRE AND INTERVIEW RESULTS

BCSI stakeholders and associations were invited to participate in a series of interviews and focus groups in order to ascertain their knowledge and opinions in three specific areas:

a. *The sector's potential to develop to global performance standards*
b. *The sector's role as an integrative force across the domestic productive sectors*
c. *The capacity that the sector must fill to meet the present and future needs of the productive sectors achieve exports of services*

In total seventeen stakeholders and five sectoral groups contributed to this research:

Table 2- Stakeholder groups contributing to the research

✓ The Private Sector Trade Team	✓ Samuel Jackman Prescod Polytechnic
✓ UWI Open Campus	✓ Barbados Accreditation Council
✓ Ministry of Labour, Human Resource Management & Social Security- Manpower Research Unit	✓ Economic Affairs Division- Research & Planning Unit
✓ Cave Hill School of Business	✓ Barbados Agricultural Society
✓ Ministry of Energy & Telecommunications	✓ UWI Business Development- Consultancy & Research
✓ Barbados Agricultural Development & Marketing Corporation	✓ National Council for Science and Technology
✓ Technical Vocational Education & Training Council	✓ Ministry of Industry, International Business Commerce & Small Business
✓ Barbados Community College and the ISU Unit	✓ ISE Division of BIDC
✓ Barbados Tourism Authority	
✓ Construction Sector	✓ Cultural Sector
✓ Medical Sector	✓ Health & Wellness Sector
✓ Support Services Sector	✓

Overview

The questionnaire was divided into two sections:

1. *Knowledge and Behaviours within the services sector*
2. *Service Sector Growth and Export Development*

47% of the stakeholders interviewed were involved in policy development. That being said, all of the organizations were multifaceted and involved in multiple areas of input including policy implementation and business support.

42% of stakeholder organizations had direct linkages to the services sector. Organizations that operated in Business Support, Customer Service and Policy development had the greatest number of linkages within the services sector.

Knowledge and Behaviors within the Services Sector

Global Performance Standards

Both stakeholders and industry personnel shared similar views on the attainment and maintenance of global performance standards by local professionals.

52% of stakeholders did not believe that the industries they interacted with used globally accepted practices. The industries that were identified as using these standards were those within the accounting, manufacturing and tourism sectors. However, even within these sectors, wide scale use of international standards was seen to be limited for a number of reasons:

A. Costs and internal management systems associated with the implementation and maintenance of international standards could not be borne by small, nor even some large, companies.
B. A lag exists between current international standards and those being used in Barbados for e.g. the international banking industry implemented rules after the recent banking crisis. Currently the global industry has implemented the 2nd iteration of these rules and is moving towards implementing the 3rd iteration, while Barbados is only now seeking to implement the 1st one.
C. Some industries have no international standards e.g. ICT and the creative industries.
D. There is too much focus on the local market.
E. There is a lack of knowledge of and familiarity with international standards.
F. There is also a lack of legislation that requires service providers to operate according to international standards.
G. Clients do not pressure service providers to operate according to international standards.

The associations were very much aware of international standards within their industries, where applicable. The hindrances which impacted on their ability to adhere to global standards were a bit different from those outlined by the stakeholders and were more focused around regulations, specifically:

A. There was no regulatory requirement for association members to adhere to globally accepted practices, neither was there any monitoring to ensure that members at least adhered to a minimum standard.
B. In most cases the minimum standard used by the service sectors were those required to register as a practitioner in Barbados, and in many cases, the registration minimum was not necessarily aligned to a global standard.
C. Persons within the construction sector who are registered with international organizations are forced to pursue continuing education opportunities outside of Barbados in order to consistently meet international standards.

Global Markets

Inadequate organization and lack of partnerships among association members inhibit their capacity to successfully compete for and deliver on global projects. With the exception of the creative sector, it was perceived that the skill level needed to compete internationally was present in Barbados, however, greater collaboration among association members was needed if Barbados was to compete successfully in international markets. In the case of the creative sector, inadequate organization as well as education and technical constraints were highlighted as inhibitors to successful, global project delivery.

Interestingly, the associations admitted that the international markets were not high priority markets for their members; however, with the onset of the economic crisis, more local professionals have started exploring the idea of using international markets to sustain their businesses.

Both groups were asked to speak of their level of alignment to the National Strategic Plan (NSP) and Medium Term Development Plan (MDP). While many of the stakeholder organizations affirmed that they collaborated with other governmental ministries and agencies, they admitted that the NSP and MDP were not always their focus. Not surprisingly, with the exception of the Pharmacists who were guided by the National Drug plan, none of the associations interacted with or were guided by the NSP/MDP.

Outlook on the Services Sector

Current State of the Service Sector- Among stakeholders and practitioners, the opinion was that there was much work to be done within the services sector.

Stakeholders gave more general comments which encompassed issues related to legislation, education and skills, quality of service, cost of accessing services, and best practices. The associations spoke to sector specific issues.

Table 3- Current State of the Domestic Services Sector

Stakeholders	Associations	
The services sector is scattered, disunited and weak. The lack of necessary infrastructural framework undermines attempts to unite the services sector. Without it, nothing can happen to convince government to implement legislation." A major problem is that the government will not legislate until they see something happen, yet nothing can happen without legislation	***Creative and Design Industries***	There is a huge gap in the understanding of the creative sector
Consultants and agriculture knowledge personnel are not being used adequately. Services are generally expensive.	***Support Services***	There is a need to look at new markets.
Small service providers are not using the best practices	***Health & Wellness***	There needs to be a big thrust for certification and/or accreditation of all the schools offering courses in wellness e.g. reflexology and massage therapy. There should also be more control over the type of language used in advertising because it can have negative impact on legitimate professionals e.g. erotic massage
Services offered in Barbados are, inadequate not just hotels but auxiliary services like banks and department stores.	***Construction***	Sector is hemorrhaging; they are experiencing a very slow and rough time right now.
The service sector must increase the competitive capacity to be innovative and entrepreneurial.	***Medical***	There is a glut in practitioners in this sector.
There is a shortage of skills in the sector.		
Some sectors have been heavily hit by the economic crisis		

Capacity to grow domestically- it was suggested that the demand for services increases when other economic streams are non-performing. The general view was that growth was possible in some areas but not in others, therefore, there was a need to look outside the domestic market. In fact one suggestion made went as far as eliminating the domestic market completely and simply looking outside of Barbados for markets. Another reoccurring theme was the need to improve on the current service levels and attitudes across sectors. The figure below provides sector specific outlook on the capacity to grow domestically.

Figure 5- Capacity of various sectors to grow domestically

Tourism	• Barbados has the capacity to grow domestically in the off peak period. The BHTA developed a proposal which gave tax incentives to persons who took staycations rather than travelling internationally for their vacations as a way of stimulating domestic growth (it was never approved).
Energy	• Petroleum sector- there is capacity for domestic growth specifically in the offshore petroleum program. Renewable energy sector- there are several opportunities for installers, energy auditors, consultancies, but there needs to be capacity building.
Agriculture & Bio-technology	• Agricultural sector- the capacity for domestic growth can occur in marketing and promotion of local products and in product development for e.g. muffin mixes using cassava flour.
Front Line Services	• Capacity for improvement in the area of attitudes
Creative Sectors	• Some sectors have a good product, however, the lack of infrastructure, business sense and and internal structures are hindering progress. For example, some in the sector do not think about registering their companies nor their intellectual property. They do not adequately track what happens in their businesses, or focus on ways to increase sales. All this impacts on the ability to grow.

Of significance, medicine and law were not seen as having much capacity for domestic expansion. It was noted that there are many lawyers and doctors who are unemployed. Instead, what was necessary was a diversification in the branches of medicine and law that are practiced in Barbados.

Capacity to attain global competitiveness- A number of respondents expressed the idea that 5 years was too short a time span to achieve global competiveness. One overriding theme throughout the research was the "black hole" into which implementation of ideas in Barbados disappears. Many strategic plans for improvement and development have already been produced, but the implementation of these plans has never occurred. Thus, one of the significant points emerging from the research carried out is the need to IMPLEMENT if Barbados is to achieve any type of global competitiveness.

The Barbados Accreditation Council identified the exportation of local education as having significant capacity to attain global competitiveness. They stated that some smaller providers have already started to offer their services to an international market. However, to ensure the growth, viability and competitiveness of this industry, there would need to be an assurance of government support. The lack of urgency and compliance which characterizes some players within the sector will also need to be addressed so that further development is not impeded.

Research participants pinpointed a number of factors which need to be addressed in order for competitiveness to be gained:

A. The services sector's dependence on government must be reduced.
B. The barriers to export must be removed, specifically in the areas of capacity to meet international demand (addressed by forming local partnerships) and the lack of alliances that currently exist between Barbadian service providers and international companies.
C. The cost factor impacts competitiveness specifically in the areas of: cost of wages, cost of utilities, and cost of imports. The cost of the inputs drives up prices and reduces competitiveness.
D. The private sector should spearhead any move to improve Barbados' competitiveness. The private sector is more focused on the profit margin, and is therefore in a better position to identify, put in place, and lobby for the structures, etc. that are necessary for increased competitiveness.
E. Addressing the issues identified in the Global Competitiveness report will also help.

Relationships Within and Among Stakeholders and Association

A two way relationship exists between stakeholders and the services sector, but there are a few sectors that have had very little interaction with stakeholder groups. Two examples are the construction sector and the veterinary sector. The agencies interviewed engaged local professionals as service providers to fill their various needs, ranging from the provision of services such as accounting and financial services to the experts in those matters. In turn, service providers relied on stakeholders for policies which improved their respective sectors and for training opportunities.

Approximately 82% of stakeholders stated that they have facilitated some form of education and awareness geared towards the attainment of global performance standards. Some of the more recent areas of training include:

Table 4- Recent training interventions by Sector

Cultural and Creative Sectors	Intellectual property rights
Private Sector Trade Team	Entry standards to the European market for agro- processors and manufacturing. Product specific standards for various markets
BADMC	Crop development and standards
Ministry of Labour	Training seminars, Employment Seminars, employee rights acts
Barbados Community College	Health and Safety
Indigenous Service Export	Export readiness workshops, management
Barbados Tourism Authority	Tour operators do visits and advise partners on certain standards. Quality assurance departments provide feedback to partners.

The associations facilitated training sessions within their meetings as means of ensuring continuous education and development among their members. In fact, members within the medical sector have to complete a certain number of hours of training yearly in order to maintain their registration status.

With the exception of the ISE Division of the BIDC, most stakeholders guide their constituents to funding providers.

Service Sector Growth & Export Development

The stakeholders provided a wealth of responses to the question of what role the services sector can play to help increase the global competiveness of the productive sectors. A reoccurring theme was in the area of human resources. It was believed that the human capital of the country needed to be enriched in a way that would increase productivity and efficiency and that would also allow for the creation of a highly skilled work force which was able to meet the global labour demands. Other notable areas of mention included:

1. *Service Standards*- the level of customer service needs to be radically improved if we are to remain relevant within the tourism market. Service level improvements are needed not only in areas that provide direct interaction with hotel, restaurant and tour staff but are also very much required in all supporting structures and industries including banking, supermarkets and even the availability of international hotel brands on the island.

2. *Direct the innovation of products and processes*- the services sector plays a vital role in the creation of new products by driving research, production efficiency, quality maintenance, and after-sales services.

3. *Market Entry*- the creation of web and graphic designs which meet international standards and customer preferences to be used in packaging and marketing. Additionally, market entry strategies need to be designed specifically to navigate WTO regulations and international trade laws in order to ensure that these products have access to the necessary markets.

4. *Use of technology*- the development and implementation of technology which aids with reduction in costs and delivery times, and increases market share expansion as needed.

Professional Service Sector Qualifications and Experience

Stakeholders were asked to discuss whether or not the professional services sector had the qualifications or experience to meet the needs of the productive sectors. The responses were mixed; however, lack of experience was a recurring theme.

Stakeholders expressed concern over the limited exposure of persons operating within the professional services industry. One of the causes suggested was that much of the institutional knowledge was captured in the minds of organizational stalwarts and have not been preserved in a way that would benefit younger professionals. Another contributing factor raised was that local professionals have very limited international exposure (exposure can be as simple as travel) and this impedes their relevance.

Access to the necessary qualifications was not seen as a problem; however, the Ministry of Labour suggested that persons within the sector were not seizing opportunities to pursue relevant qualifications. Moreover, the BADMC expressed concern over whether or not the needs of the market were considered when choosing a degree or area of specialty. Continuing education was also highlighted as an area that must continually be pursued by the professional services sector.

Another point raised was the shortfall of qualifications within critical areas. For example, it was noted that, despite the many lawyers graduating yearly, there are currently no lawyers win Barbados that specialize in energy regulations, even though energy has been identified as a critical sector.

The ISE Division of the BIDC drew attention to the fact that local professionals do not have international networks and this lack of networks was a major impediment to taking advantage of international opportunities.

Emerging Markets

The interviewees and focus group attendees had a wealth of ideas regarding markets that Barbados could exploit successfully. Some of them were emerging markets; others were markets that Barbados has not fully actualized. Many of the ideas produced were specific to the areas within which the interviewees and focus group attendees were operating.

- ICT
    - Development of software to run barns and farm management
    - Development of mobile apps
    - Development of games
    - Barbados is very far behind as it relates to ICT, therefore, rather than trying to be innovative, it should follow the example of the Scandanavian countries who have adopted and adapted existing technologies to suit their needs (NCST)
- Diversification of Tourism
    - Medical tourism
    - Faith based tourism- e.g. hosting a regional choir festival with attractive prizes that would catch the attention and involvement of choirs throughout the Caribbean
    - Health & wellness- e.g. holiday programs aimed at recovery from depression that not only includes sand, sea and sun but also wellness aspects like reflexology and counseling.
- Manufacturing
    - Furniture especially to be used in domestic accommodation
    - Processing of local materials- e.g.
        - Processing and using Barbadian clay for facials
        - Processing the "bajan cherry" into powders or elixirs to be used in vitamins, etc.

        - Processing of *Mucuna Pruriens* better known as "cow itch" which has many medicinal uses, including treatment of depression, and Parkinson's disease
        - Processing of Barbadian cotton which can be used for packaging in the health and wellness industry
- Agriculture
    - Agro-processing
    - Bio-technology- e.g. use of sugar cane to make plastic
    - Hydroponics
    - Sustainable land use and planning
- Renewable Energy
    - Smart cars
    - Smart homes
- Creative sector
    - Culture
    - Creative arts
    - Culinary
- Offshore pharmaceuticals
    - We can conduct research on drugs, trials and open testing labs for pharmaceuticals. We can use existing legislation to govern this.
- Engineering
    - Refinery engineering
    - Fire engineering
    - Energy engineering

Persons were asked to identify projected matches between current capacity of the professional services sector and the emerging industries. Some of the more general points made were:

- There needs to be a multi-disciplinary approach to business involving law, IT, etc.
- Most emerging industries are based on a creative mind and Barbados is no less fortunate creatively. Our downfall is in our capacity to adapt to the requirements of the international markets, or penetrating the international markets.

Industry specific responses are seen below

ICT	ICT startup capital is small and we have as much chance as any other country to break into that market.
Tourism	There is an excess of health professionals in Barbados. They can be channeled into the Health & Wellness industries. However, this needs to be supported by state of the art equipment. Constraints to moving on this industry would be labour costs and access to finance. Internationally, there are long waiting lines for certain types of operations that Barbados has the capacity to conduct. However, we lack the right type of facilities for these types of operations as the Queen Elizabeth Hospital is not an ideal location.
Agriculture	We don't have the knowledge base to exploit the bio-technology elements.
Renewable energy	We need to build more capacity within renewable energy
Creative	Fashion- business facilitation services, hand holding services, Music- Project Management skills

Finally, persons were asked to identify the markers of an enabling environment with regards to the export of services. Among the associations, market demand, harmony within the CSME, and the pursuit and attainment of global standard qualifications were seen as enabling markers. According to the stakeholders the below items are necessary in order to ensure the exportation of Barbadian services.

Infrastructure

BSOs like BCSI and BIDC need to provide more market information geared towards helping professionals to move from the domestic to global market

A market view that is bigger than Barbados. Service providers must be more willing to leave Barbados and go where work opportunities present themselves

Technology extension officer-someone who can identify the type of technology needed for improvement and determine how to adapt it to domestic needs

Understanding of global standards as well as infrastructure that accesses and tracks conformation to global standards

Affordable access to

- Broadband technology
- Advice- legal, financial, regulatory, intellectual property, intellectual management, business advice

4G network and FDI

New legislation and persons who can write legislation

Rights of movement for professionals, intellectual property and movement of information

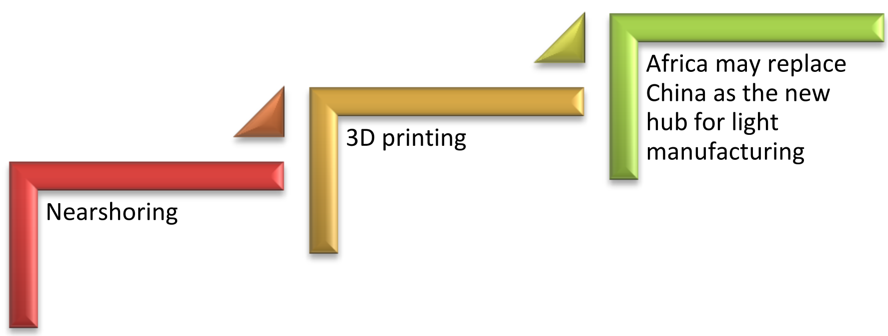
Networks in the source countries

ASSESSMENT OF RESEARCH RESULTS AND MARKET ANALYSIS

Six sectors were identified as priority at the onset of the research: Manufacturing, Creative Services, Tourism & Hospitality, Construction, Education and Health Services. This section of the paper will take the results of the market research and perform an analysis that provides insight into where the sectors need to develop and the gaps that need to be filled to ensure that they capitalize on opportunities. The ICT sector has also been identified as a critical sector.

A. Manufacturing

The international manufacturing sector is poised to enter a "transformative" period (KPMG, 2012). Some of the changes that have been made have the potential to significantly impact manufacturing in Barbados and includes:



- ✓ Near shoring- disasters like the tsunami in Japan and the Arab springs caused wide spread disruptions in global supply chains. This resulted in many manufacturers rethinking their reliance on "centralized manufacturers, logistics, or warehousing operations" (KPMG, 2012). To combat this manufacturers have been moving their facilities closer to their end markets. Barbados' proximity to the North and Latin American markets makes it an ideal location. Socio economic factors like a stable political environment, an educated population and strong transportation lines are favorable factors, however, Barbados' lack of natural resources, as well as the cost of shipping could be possible hindrances to this scenario.

- ✓ 3D Printing- 3D printing is the process of making physical objects using a digital model. It is believed that eventually 3D printing may erode component manufacturers as printing the objects they want may be a simpler and more cost effective solution.

- ✓ Africa- with rising labour costs in China, many manufacturers are currently seeking to identify new locations for their factories. As such there has been much conversation around Africa being a prime location for the light manufacturing industry. Investing in Africa has some challenges attached, such as a lack of adequate infrastructure (e.g. inadequate road networks and political instability), however, there are also many factors which make it a prime location for manufacturing, including adequate supplies of cheap labour, a wealth of raw material, proximity to markets, etc.

The manufacturing sector in Barbados engages in what can be termed "light manufacturing" and is involved in the production of products like "cement blocks, clay tiles, garments and textiles, paint, paper products, furniture, electronic components, chemicals, edible oils, soap and food products" (Business Barbados 2013). The sector contributed an estimated 5% to GDP in 2012, with improvements being noted in the area of food processing, electronic components, chemicals and beverages and tobacco (Central Bank, 2013). The primary market for locally manufactured products is the domestic market, with some exportation occurring regionally and internationally.

The sector faces a number of challenges which impedes its ability to compete on the global stage. Some of these challenges include:

- The inability to exploit economies of scale
- High import cost exacerbated by a lack of natural resources
- High input cost- electricity, labour etc.
- Small pool of skilled labour required for some of the more technical positions
- Access to necessary financing opportunities
- Narrow product range

The question to be answered is this: Is there any room for Barbados to develop in manufacturing. The examples of Lenstec and Gildan provide examples of how Barbados can grow its manufacturing industry.

Lenstec	Gildan
• Lenstec designs , manufactures and distributes intraocular lens implants and injections systems to the global ophthalmology market. • The Barbados plant is the manufacturing and production base of the company.	• Gildan is a leading supplier of activewear to the screen- print, sporstwear market in the US, Canada and Europe. • The Barbados facility is responsible for sales and marketing, logistics, sales support and administration for the entire organisation.

Although both companies are manufacturing companies, their relationship to Barbados is different and provides insight into how Barbados can maximize its attractiveness to investors in order to further develop the market.

1. *Focus Area 1*- manufacturing which involves highly scientific, innovative and technological processes
2. *Focus Area 2*- administrative hub for manufacturing companies

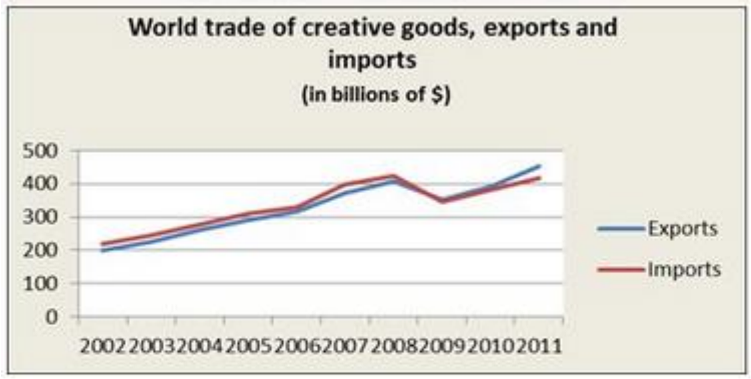
Barbados has the human resource capital and developmental infrastructure necessary to be successful in either area. What is required is a stronger relationship between Education and Business to ensure that the courses being offered at the various educational institutions are a right fit for the business ventures that are being attracted to the country.

B. Creative Services

According to the UNCTAD Global Database on the Creative economy (2013) global trade in creative goods and services reached a record US$624 billion up from US$559.5 billion in 2010. The sector can be divided into two:

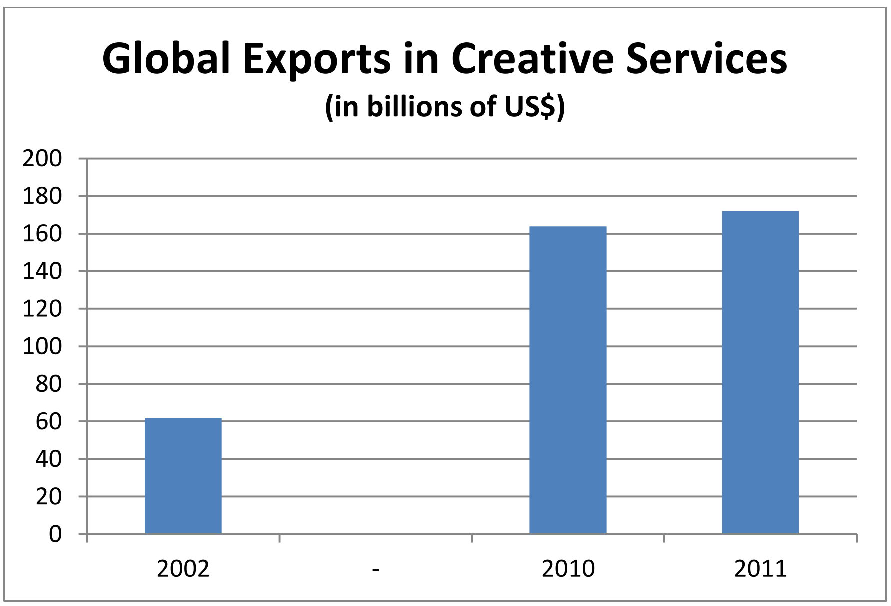
1. Creative goods- music, art work, antiques, clothing, books, souvenirs
2. Creative services- architecture and related services, cultural and recreational services, audio-visual services, advertising, research and development services

Of the two sectors, creative goods have experienced the strongest market success reaching just below US$500 billion in 2011.



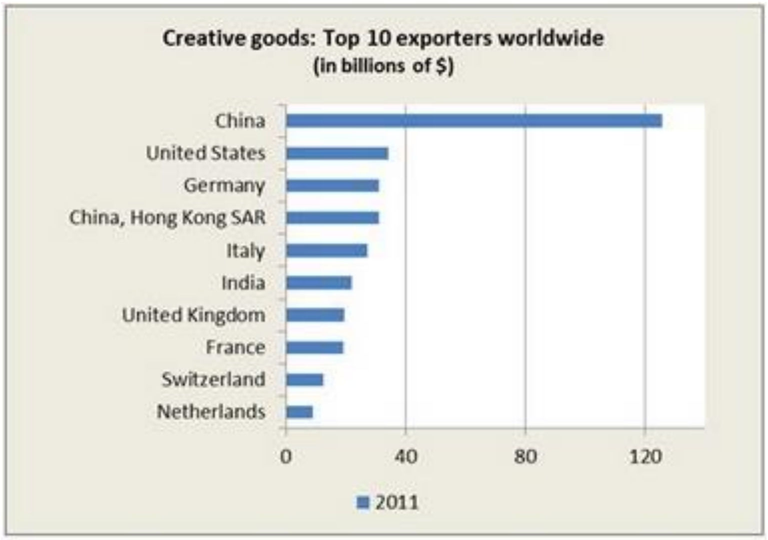
Source 1 UNCTAD, based on official data in UN COMTRADE database

Creative Services export was at US$172 billion in 2011 which is roughly a 5% increase from the previous year.



It was noted that part of the increase noted between 2002 and 2011 was a reflection of the fact that more governments are compiling statistics on their creative sectors.

It is estimated that the average annual growth rate between 2002 and 2011 was 8.8%. Growth of creative exports was strongest in developing countries averaged around 12.1% for the same period. However, outside of China, there are very few developing countries in the top 20 exporters of creative goods.

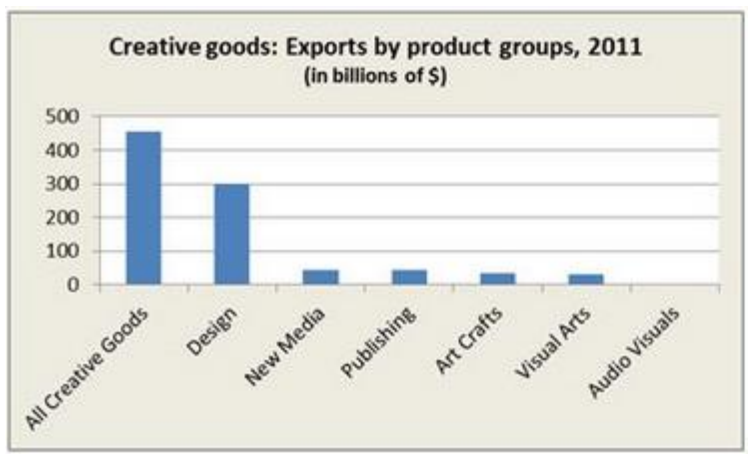


Source 2: UNCTAD, based on official data in UN COMTRADE database

A number of trends stand out in the creative industry.

1. According to UNCTAD growth is expected to continue in the creative industry and will reflect lifestyle changes of consumers especially those associated with "social networking, innovation, connectivity, style, status, brands, cultural experience and co-creations".

2. The largest demand for creative goods and services has been in the area of design. In 2011 design goods contributed $301 billion to the market accounting for 66% of exports in creative goods. The key sectors include interior design products, fashion and jewelry.



3. Statistics show that new media has been the fastest growing creative sector.

4. Publishing and print media have been experiencing challenges in the face of electronic publishing and distribution; however, it still recorded US$43 billion in 2011.
5. The visual arts sector is highly competitive especially because of the significant commercial gains that can be gained. Additionally, the art market is one that usually experiences quick rebound in the wake of financial instability.

Creative goods: Exports, by economic group, 2002 and 2011 (in millions of $)								
	World		Developing economies		Developed economies		Transition economies	
	2002	2011	2002	2011	2002	2011	2002	2011
All Creative Goods	198'240	454'019	73'890	227'867	123'169	222'597	1'181	3'555
Art Crafts	17'503	34'209	8'256	10'653	45	172	9'201	23'383
Audio Visuals	455	492	417	400	3	2	35	90
Design	114'694	301'262	60'970	127'239	362	1'800	53'362	172'223
New Media	17'506	43'744	13'071	28'918	23	219	4'412	14'607
Performing Arts	2'754	-	2'478	-	26	-	250	-
Publishing	29'908	43'077	26'061	33'650	690	1'321	3'157	8'106
Visual Arts	15'421	31'127	11'916	21'631	31	40	3'474	9'456

Source 3- UNCTAD, based on official data in the UN COMTRADE database

6. Changes in digital technology and ICT have significantly impacted the music industry. Most music is now commercialized via online formats and according to UNCTAD there is currently no available global data for digital music. However according to the International Federation of the Phonographic Industry, there has been a steady decline in revenues experienced by the global industry from 2005 to 2012.

7. The experience economy- A significant trend within the cultural sector is the emphasis on "experience". This is seen in the trend where people place more value on "the experience" as opposed to "the physical thing". Having an experience is prized enough to be seen as currency or a gift for e.g. Korean companies use free tickets to cultural events, musical, movie premiers etc. as rewards for loyal customers. In Paris, guided tours by persons interested in contemporary art are hosted by the artists themselves as opposed to a tour guide.

Year	Revenue	Change
2005	$20.7 billion	-3%
2006	$19.6 billion	-5%
2007	$18.8 billion	-4%
2008	$18.4 billion	-8%
2009	$17.4 billion	-5%
2010	$16.8 billion	-8.4%
2011	$16.2 billion	-3%
2012	$16.5 billion	+0.3%

Within the Barbadian context, the creative sector is listed as a critical sector. During the economic crisis, the creative industry was one of the sectors that emerged as a key growth area, with an annual growth rate of over 8% outperforming most other sectors (Business Barbados, 2013). Despite this, there is still a widening deficit in the trade of cultural goods i.e. Barbados imports more than it exports. A look into the domestic culture sector shows that Barbados' strength lies in the provision of cultural services namely live performances, tours and concerts.

How can Barbados utilize its strengths to capitalize on global trends?

1. *Focus area 1*- create a greater link between tourism and culture in order to build an authentic Barbadian experience. This will add greater value to domestically produced creative goods.
2. *Focus Area 2*- Match local performance artistes with performance agents in order to increase international performances and tours.

As was noted in the research findings, the local creative sector needs expertise in business development, marketing and artiste management. The talent pool exists but management and exploitation of this talent is one of the downfalls that needs to be addressed.

C. Tourism and Hospitality

Tourism plays an important role globally, accounting for 6% of global exports and 9% of global GDP. Europe has consistently retained its place as the world's top regional destination, followed by Asia and the Pacific and the Americas which include the islands of the Caribbean. Tourism travel generally takes place intraregionally accounting for four out of five tourist arrivals, with the largest outbound tourists markets coming from developed economies in Europe, the Americas and Asia and the Pacific. However, increases in disposable income are seeing outbound markets emerge in Asia, Central and Eastern Europe, the Middle East, Africa and Latin America.

Emerging Trends

Changes in population growth and lifestyle are set to impact the global tourism sector. One of the major forecasts is the increasingly fragmented nature of tastes and markets. This trend will have significant impact on marketing and communications making it increasingly challenging to accurately segment and target an audience.

Summary of key lifestyle trends

- The appeal of increased leisure time will remain strong in developed markets and will grow in developing markets, resulting in more time available for tourism and travel.
- In the longer term emerging markets like Asia will become 'leisure societies' like those in the West.
- However, people in general, and in established markets particularly, do not **feel** wealthier. This sense of financial constraint will sustain an increased interest in budget travel (even, occasionally among affluent travellers).
- People also feel an increased sense of time pressure (despite in many cases having more leisure time). This puts an increased focus on the 'value for time' offered by travel and tourism.
- The trend towards increased globalisation will boost tourism, as people are increasingly 'international' and 'cosmopolitan' in their outlook. This is true in emerging markets as well as developed ones (the United States of America may be a slight, temporary exception here as a reaction to 9/11).
- We expect to see increasing concern about ethical issues in future as younger people tend to be more concerned about issues such as global poverty and more supportive of foreign aid.
- Similarly, there will be increased concern about the environmental and sustainability in future, as today's younger consumers who are more concerned about these issues, form a bigger proportion of the tourist market.
- The ageing of the population and the growth of inexperienced tourists from emerging markets may boost traditional tourism activities and limit the growth of some of the more extreme aspects of adventure tourism.
- In emerging, as well as developed markets, access to information technology is now a key driver of awareness of other countries and their tourism offers.
- All of these developments, in combination, suggest an increasing fragmentation of tastes, in both developed and emerging markets.

Source 4: UNWTO Demographic Change and Tourism (2010)

Other key areas mentioned within the report are:

1. Shifting family structure from horizontal to vertical, where families tend to be spread across many generations. This suggests the tourism attractions must cater to very varied tastes
2. A major attitudinal shift is an increasing sense of adventure and the willingness to try new things. This trend seems to be age-related rather than generation related. Given this, as people age, their preferences may tend toward more traditional types of vacations.
3. Unique experiences which allow persons to express their individuality and cannot be duplicated elsewhere are elements that people want to experience in their travels.

What do these trends mean for the domestic tourism and hospitality sector? It means a move away from the traditional approach to marketing Barbados as an "aspirational" destination, to creating a package that matches Barbados' expertise and resources to the needs of potential markets.

Coming out of the last economic crisis, tourism has been rebounding globally; however, according to the UNWTO World Tourism Barometer, South America and the Caribbean were the only two regions which experienced weaker than anticipated growth in the first half of 2013. Further to this, a review of tourism statistics for 2012 revealed that Barbados' tourist arrivals dipped by 5.5%. The only other regional country that experienced a slump on this level was Grenada (5.1%). The question is: what can Barbados do to revitalize this sector that is so significant to its economy?

1. *Focus Area 1*- Strengthen the linkage between the creative industries and tourism in order to build a uniquely Barbadian experience that offers value for money.
2. *Focus Area 2*- Increase market reach throughout the regions of the "Americas".
3. *Focus Area 2*- Strengthen the linkages between health and tourism. With an increasingly older population in the developed world paired with local expertise in health, Barbados has the capacity to tap into the health tourism market.

D. Health and Wellness

Euromonitor estimates that the health and wellness industry will grow by US$27 billion in 2013 and reach the US$1 trillion mark by 2017. Much of the growth is expected to be in the area of fortified/ functional products. In fact, products traditionally enjoy much higher profit margins than services and as a result a number of service providers have been diversifying into the product market in order to improve their margins (PWC, 2013).

PWC identified that the industry is facing a "talent crunch" i.e. there is a dearth of skilled talent which often results in:

4. High manpower costs
5. High attrition levels
6. "War for talent"

This problem also highlighted the importance of accreditation and quality certifications.

Conversely, in 2010, SRI International "conservatively" estimated the wellness industry to be valued at almost $2 trillion globally. This figure is based on a definition of the industry that included 9 segments.

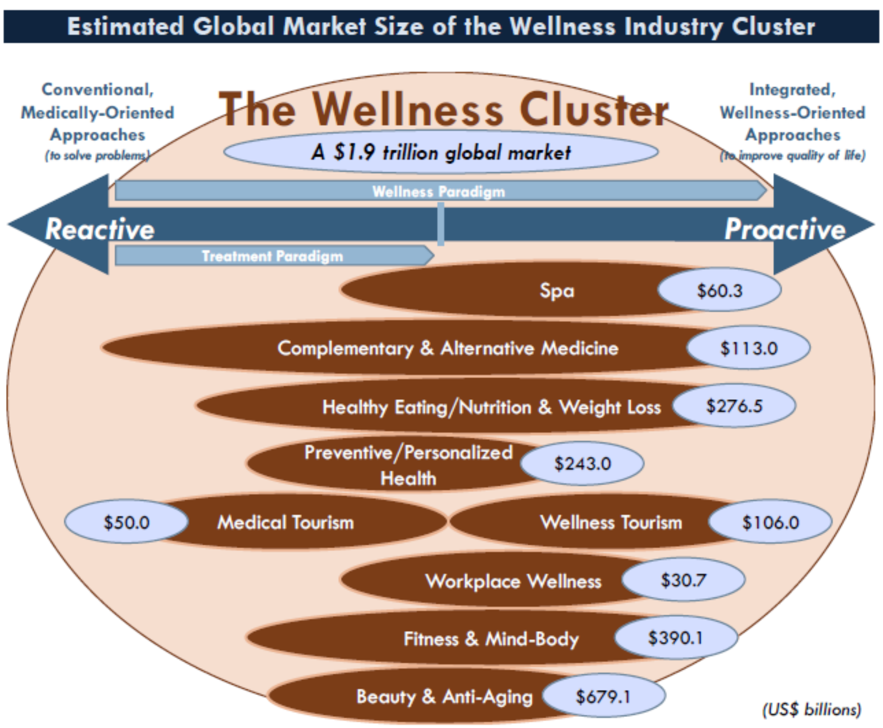
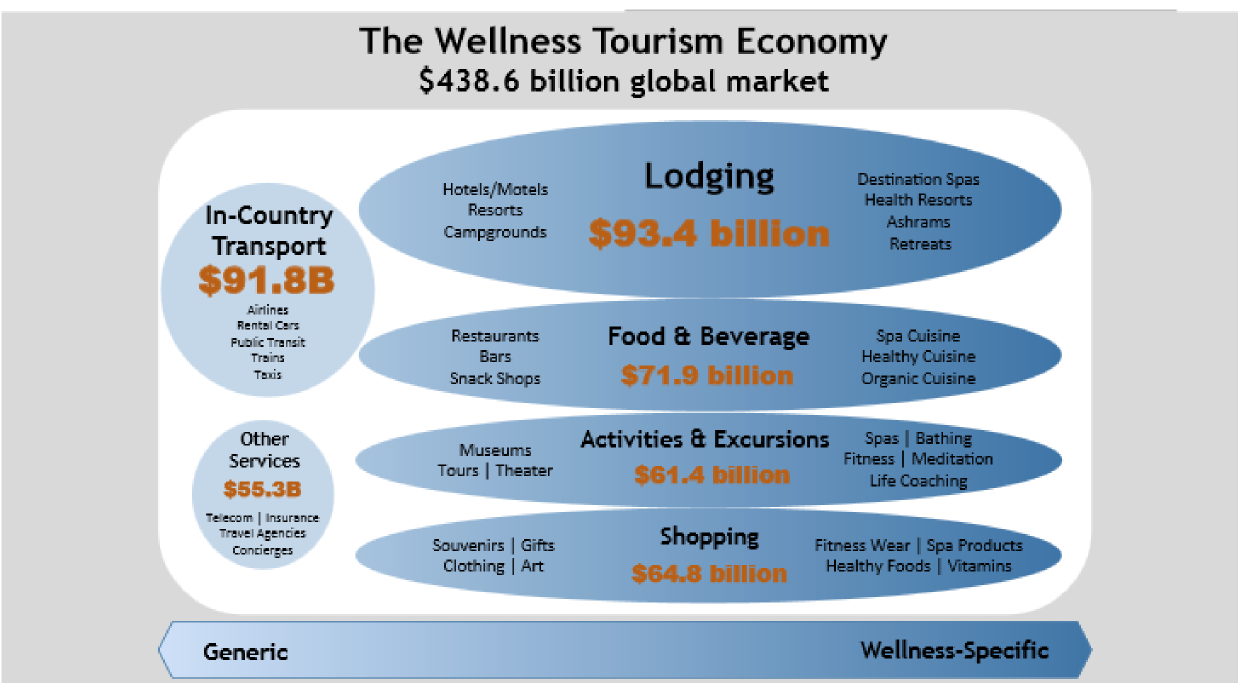


Figure 6- SRI International- "Spas and the Global Wellness Market"- 2010

Overall cluster and sub-sector market sizes were estimated by SRI by extrapolating from consumer spending and industry size data from a wide variety of secondary reports and sources across the sub-components of each sector, as defined above. Key data sources include: Nutrition Business Journal, IHRSA, Markets and Markets, Euromonitor, Global Industry Analysts, LOHAS/NMI, Kaiser Family Foundation, PWC, and Deloitte, and others. Where market data was only available for selected countries and regions, or where the data did not match the sector definitions outlined above, the SRI team made estimations and adjustments using standard economic parameters. SRI International- "Spas and the Global Wellness Market"- 2010

The rationale for this approach in valuing the health and wellness industry was the over-emphasis on products to the detriment of services. Health and wellness products have a significant overlap with manufacturing and bio-technology. Given the comments that were made in the research, Barbados has the potential to exploit local material for use in the production of health and wellness products.

Of even greater potential for immediate domestic benefit is the exploitation of health and wellness services and more specifically "wellness tourism". Wellness tourism is the intersection of the tourism industry and the global demographic lifestyle and health trends that make up the wellness industry. According to SRI, wellness tourism accounts for US$438.6 billion.



The examples provided in each sub-category are illustrative and not exhaustive. *Source:* SRI International

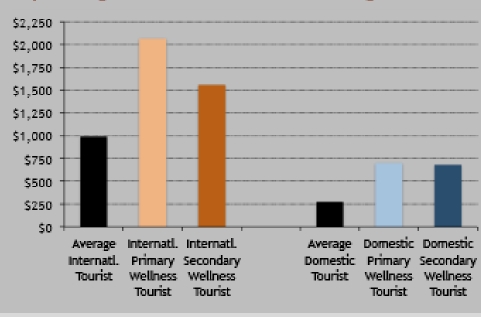
[6] Note that, following the conventions for calculation of international tourism statistics, international airfare is excluded from the calculation of wellness tourism expenditures.

Characteristics of the industry include:

1. Wellness tourism accounts for about 14% ($438.6 billion) of all domestic and international tourism expenditures
2. Domestic wellness tourism is much larger than international wellness tourism, representing 84% of wellness tourism trips and 68% expenditures. This also provides a significant opportunity that can be leveraged to attract international wellness tourists.
3. Wellness tourism is expected to grow by more than 9% per year through 2017, nearly 50% faster than overall global tourism

Characteristics Of Wellness Tourists

Wellness tourists are "high-yield" tourists, spending 130% more than the average tourist.



An international wellness tourist spends about 65% more per trip than the average international tourist.

A domestic wellness tourist spends about 150% more per trip than the average domestic tourist.

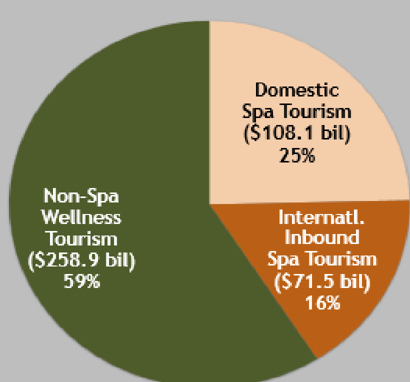
- *Primary-purpose international* wellness travelers represent the smallest segment, but they spend more per trip ($2066).
- *Secondary-purpose domestic* wellness travelers constitute the largest segment, but they spend less per trip ($680).
- Wellness tourists currently tend to be middle-aged, wealthy, educated, and from Western and/or industrialized countries.
- The top source countries for outbound international wellness travelers are currently in Europe and North America.
- Future wellness tourism growth will be driven by countries and consumers in Asia, Middle East, and Latin America.

Source: SRI International for wellness tourism data; Euromonitor for general tourism data.

Another significant area with wellness tourism is Spa tourism.

Spa Tourism and Wellness Tourism

Spa tourism represents about 41% of wellness tourism expenditures.



Source: SRI International

- Spa is a core business within wellness tourism and accounts for a significant portion of the wellness tourism economy.
- In 2012, spa tourism represented a $179.7 billion market, with 224.9 million spa trips made both internationally and domestically.
- In 2007, SRI International estimated spa tourism at $106.0 billion, with 142 million spa trips. This represents 11.1% average annual growth in spa tourism expenditures over the last 5 years, and 9.6% average annual growth in the number of spa trips.
- Non-spa wellness tourism expenditures are made by tourists in many other types of wellness-specific and "generic" activities and businesses, as presented on Pages iii and v, including healthy hotels, fitness, yoga, retreats, preventive health checkups, lodging, restaurants, retail, and so on.

E. The International Business Sector

Important also to Barbados' economic development is the International Business and Financial Services (IBFS) sector which contributed approximately $878 million (9%) to domestic GDP in 2011. According to the Minister of Industry, International Business, Commerce and Small Business, the budgets for public health and public education is almost as much as the IBFS contribution to the economy. The International Business Sector, although categorized as a sector in itself, covers a variety of business areas, including those covered in this report specifically manufacturing, tourism and hospitality, health services. As such, the report will not cover the International Business sector as a separate sector in itself. However, two elements within the IB sector will be briefly examined, those being BPOs (Business Process Outsourcing) and KPOs (Knowledge Process Outsourcing).

BPO- Business Process Outsourcing

In 2012 the BPO market grew by 12% and HFS estimate that it is anticipated to grow at a rate of 5.1% in 2013 and 6% CAGR to 2017. Financial/ accounting and HR Outsourcing were the fastest growing areas. Over the years the industry has matured resulting in changes to the current structure and future trends. Socio-economic conditions have also had significant impact on the industry including the fact that the government of the United States has become aggressive in reducing foreign outsourcing in order to grow their domestic market. Identifiable trends include:

1. Outsourcing is moving into more strategic activities causing competition for talent between outsourcing companies and clients.
    a. Outsourcing companies are able to offer talented workers flexibility, as well as work that is both reliable and exciting. Client companies, on the other hand, are experiencing cutbacks which oftentimes impact the benefits associated with permanent employment. At the same time, they are unable to offer the flexibility that outsourcing companies are able to offer.
2. Near-shoring is increasing.
    a. This is particularly true in areas that require higher cost, high-talent labour markets. This is especially seen in markets where quality is a "crucial differentiator" e.g. according to HfS Research the US is currently seen as the most desirable location for IT expansion. In fact IT outsourcing contracts diminished by 20% between 2011- 2012, and is expected to drop a further 15% by 2016 (The Talent Project, 2013)

b. Near shoring offers the opportunity to contain costs without compromising standards because high quality talent is still accessible in locations that offer less cultural and language barriers.

3. More mid-size companies are getting involved in outsourcing as compared to larger companies who are decreasing their process outsourcing.
   a. There was an 18% increase in medium size companies who intended to expand their BPOs.
   b. There was an 11% decrease in large companies who were planning increase their BPOS.
4. The formalization of the sector has led to an increase in the numbers of professional associations for both individuals and organisations involved in outsourcing. This has led to increased governance in the relationship between clients and outsourcing providers through organisations like the IAOP- the International Association of Outsourcing Professionals which is a "global, standard- setting organisation and advocate for the outsourcing profession" (IAOP, 2013).

KPO- Knowledge Process Outsourcing

The industry is expected to be valued at about USD$17 billion by 2014 with India accounting for about 70% of the industry. This is, however, slower than was predicted in previous years.

- KPO areas experiencing above average growth are- banking, finance, securities, insurance and research and analytic services, LPO services- Legal, Para- legal and Intellectual Property), and publishing
- KPO areas that are lagging behind are- data management, search and analytics, translation and localization services and architectural services

These trends suggest that Barbados needs to be very strategic in the way it positions its industry.

Focus Area 1- Highly technical and strategic process outsourcing in the areas experiencing above average growth- research and development, high tech manufacturing, LPO services etc.

F. The Construction Sector

The global construction sector accounted for approximately 12.2% of global GDP in 2012 and is forecasted to grow by 70% from $8.7 trillion to $15 trillion by 2025 accounting for 13.5% global GDP (Global Construction 2025). It was also forecasted that 60% of this growth will occur in three countries: China, India and the United States. Most of the growth within the sector will be fueled by:

- Population growth
- Growing number of middle households
- Urbanization

Trends within the industry include: Green construction, affordable housing, energy efficiency, increased efficiency (increased use of technology to reduce time frames and increase quality).

Within the Barbadian context the construction industry is divided into three segments (Business Barbados, 2012):

1. Building Contractors- residential, industrial, commercial and other buildings
2. Civil Engineering Contractors- roads, highways, bridges, tunnels and other infrastructure related projects
3. Specialty Contractors- carpentry, painting, plumbing, electrical work etc.

The economic crisis resulted in a decline in the demand for office retail industrial, condominiums, and hotels leading to a reduction in new projects and increased competition among contractors. It also caused many contractors to streamline their operations resulting in the use of higher standards, inclusion of new services such as value engineering and construction designs that provide reductions in post construction maintenance and operating expenses.

However, according to Business Barbados 2012, domestic contractors are looking to government to continue stimulating growth in the construction sector through reductions in VAT and building projects. However, reliance on government to bolster the industry will result in further stagnation as the government has cut its budget as a method of reducing costs.

In order to revive the sector the local construction industry will have to implement new methods to attain new business including:

Focus Area 1: Exploring regional and international projects
Focus Area 2: Cooperation for increased capacity

Focus Area 3: Exploring new methodologies to reduce project costs and time
Focus Area 4: Using and developing new methodologies to increase energy efficiencies in tropical climatic conditions.

G. Educational Services

The education sector is the second largest global market after healthcare accounting for US$4.5 trillion in 2012. With demographic changes and high levels of spending in emerging economies, the sector is expected to grow at an annual compounded growth rate of 7% between 2012- 2017 resulting in a market size of US$6.3 trillion.

Education has always played a significant role within the Barbadian context and consecutive governments have allocated significant portions of GDP towards education. The country has also continued to experience major global success in the areas of education ranking 12th out of 122 countries on the education pillar of the World Economic Forum's "Human Competitiveness Report".

Barbados is in a prime location to offer English as course of study especially as it is surrounded by Spanish speaking nations. For internationally mobile students, English Language Teaching was estimated to be valued at US$7.14 billion dollar industry, with England attracting 35% of the market. The estimated market for English Language Teaching with students who are studying English in their home country was US$50 billion in 2012. The sector is forecasted to grow by 25% per annum over the period of 2012- 2017 with the largest component being students who study English from their own countries. Currently Barbados offers English Language teaching, but this is an area that can be further developed with much success.

*More information on the areas within the educational services sector and how Barbados can leverage it, is provided under the report section entitled *"High Growth Industries"*

H. ICT

The Global ICT market was valued at more than US$3 trillion in 2011 and expected to reach the US$4 trillion mark by 2013. Emerging markets are estimated to account for US$230 billion of that market.

According to the World Economic Forum, Global Competitiveness Report, Barbados ranked 25th out of 122 countries on the "Technological readiness" pillar. The ICT sector is Barbados is well developed and a discerning and demanding local market has played an instrumental role in the development of the sector.

Additionally, the government has placed much emphasis on the development of ICT. In fact in 2000, the then government implemented the "Edu-Tech" programme which was aimed at ensuring that Barbadian students were able to "participate in an increasingly demanding age" (Parris).

The ICT industry holds great potential for Barbados and more on the areas within the ICT sector and how Barbados can leverage it, is provided under the report section entitled *"High Growth Industries"*

I. Trade Services

According to the OECD's statistics on international trade in services 2012 (data based on 2010 figures, see figure):

1. The top seven exporters of services are the United States, United Kingdom, Germany, France, Japan, Spain and the Netherlands, in descending order.

Million USD

	Exports				
	2006	2007	2008	2009	2010
EBOPS 2010 classification					
Australia	33 466	41 016	44 164	40 844	47 576
EBOPS 2002 classification					
Austria	45 634	54 254	63 569	54 497	54 484
Belgium	59 445	74 443	88 221	84 017	87 058
Canada	60 286	64 988	67 930	59 743	69 166
Chile	7 830	8 962	10 823	8 634	10 797
Czech Republic	14 148	17 279	21 783	19 295	20 910
Denmark	52 163	61 389	72 572	55 131	60 444
Estonia	3 604	4 501	5 175	4 411	4 533
Finland	17 494	23 235	31 922	27 884	27 807
France	128 574	149 234	165 364	144 047	145 491
Germany	187 220	222 324	256 935	238 688	243 736
Greece	35 583	42 890	49 898	37 484	37 717
Hungary	13 691	17 211	20 112	18 399	19 410
Iceland	1 831	2 208	2 093	2 324	2 455
Ireland	71 592	93 015	99 531	93 262	97 792
Israel[1]	19 185	21 148	24 310	21 983	..
Italy	98 774	111 931	115 391	94 185	98 833
Japan	117 336	129 027	148 743	128 242	141 286
Korea	56 842	72 995	90 635	73 580	87 282
Luxembourg	50 637	64 820	68 096	58 148	66 686
Mexico	15 827	17 082	17 496	14 497	14 937
Netherlands	96 620	111 593	125 880	113 808	118 005
New Zealand	8 122	9 420	9 092	7 849	8 723
Norway	33 278	40 399	44 848	38 446	..
Poland	20 535	28 665	35 240	28 679	32 746
Portugal	18 388	23 214	26 169	22 669	23 273
Slovak Republic	5 409	7 021	8 464	6 282	5 824
Slovenia	4 481	5 673	7 260	6 039	6 136
Spain	106 331	127 705	143 042	122 548	123 851
Sweden	49 588	63 206	70 264	59 481	66 246
Switzerland	54 838	65 820	77 171	75 964	83 347
Turkey	25 606	29 027	35 243	33 655	34 440
United Kingdom	236 050	289 082	285 376	244 735	250 044
United States	421 532	492 578	537 875	508 456	550 746
EU27	1 351 472	1 633 504	1 805 176	1 565 583	1 624 509
Euro area	555 135	674 141	749 626	657 013	685 396

Figure 7: OCED statistics on international trade in services as at 2010

Based on the same statistics, the top seven (7) international services importing countries are ranked below.

Table 5: Top 7 International Importers of Services- OCED statistics

Country	Services Imports Millions USD
United States	404,919
Germany	267,928
United Kingdom	166,731
Japan	157,395
France	132,242
Italy	110,785
Ireland	107,187

Canada
Chile
Germany
Ireland
Italy
Japan
Korea
Mexico
New Zealand

Figure 8: *Net Importers of Services - OECD Statistics 2010

* *Net Importers of services are those countri* *greater than their exports of services.* Net importers of services are especially important because they identify countries that have a deficit in supplying their services needs, and point to potential markets that Barbados can target, especially in the areas where their service needs and our service capabilities are aligned.

Services Strategy Benchmark - United Kingdom

The United Kingdom was identified as a "good-fit" benchmark for the Barbados services industry, not only because of the similarities between the structures of the sectors, but also because their new services strategy did not include heavy reliance on governmental support for success. A number of the areas identified can be adjusted to fit the Barbadian context.

The United Kingdom has revised their international services export strategy in a report entitled "Strength to Strength" where they ranked the USA and themselves as the world's number 1 and 2 exporters of services. The below table notes the industries in which these countries have dominated.

Table 6 US and UK top 5 international services export industries

Rank		
1	Education	Financial Services
2	Health Services	Professional & Business Services
3	Professional & Business Services	Pharmaceutical
4	Information	Insurance
5	Leisure & Hospitality	ICT Services

Two noteworthy trends observed between the USA and the UK are: 1) the USA has sought to grow its services industries by *reversing the foreign outsourcing of such activities* and 2) the UK has aggressively sought to *align its domestic services with international projects and support consortia* to ensure a high rate of contract award.

These strategies by the top two players in the international services exports arena have significant impact on the methodologies of small, developing nations in their approach to growing the export of their services.

1. First, the reduction in offshore outsourcing by US firms means less opportunities for professional services providers from that source country.

2. Secondly, the UK's well organized and funded strategy to grow its professional and business services industries even at the SME level will create greater competition for their Barbadian counterparts in the bidding for and winning the smaller projects.

3. Thirdly, it requires countries like Barbados to be calculated in the approach to the development and growth of its professional and business services industry. Specifically, it requires the identification of segments within emerging/high growth industries that are a good fit to Barbados' existing capabilities or that require moderate upgrading of skills. One such sub-sector is the bio-informatics segment of the bio-technology industry.

UK's New Strategy for the Services Sector

The United Kingdom's recently (July 2013) published strategy for their services sector is a modern take on the approach employed by Singapore in the early 2000. It is considered more applicable to the Barbadian context as the strategy does not rely heavily on government to drive the tactics but puts the industry and its member associations at the forefront of the implementation.

In this model, the professional and business services industry plays a dual role; the first as an **"industry"** (economic activity) and second as "**enablers**" in the economy. Through their advice, networks and capabilities, it is expected that they will facilitate growth in other businesses, large and small- ***Growth is Our Business*** (This is the title of the policy document)

Tactics

1. ***The Growth Voucher program*** of $30 million to encourage firms to seek professional advice and help identify what type of advice positively impacts business growth in the small and micro businesses. The projected outcome is twofold: the service sector will grow, and the non-services business will be boosted by the advice received.

2. ***The Professional Business Services Council (PBSC)*** is investigating the adoption of new business models where firms, desirous of optimizing their labour cost and having the flexibility to respond to projects, can utilize professional and business service providers on these one-off projects.

3. ***Upgrades to the skills pool*** have been created by employing alternative routes of entry into the Professional and Business Services (PBS) sector other than academic degrees; in particular, they have coupled certification with Higher Apprenticeships. Moreover, these alternative routes have been used to create greater engagement with the skills system (TVET) to raise the aspirations of young people to increase their employability in the sector.

4. ***Special envoys*** were created for the sector to promote the UK PBS as they travel in the normal course of their businesses. Additionally, a named contact in each key market was identified who would feedback information on things such as upcoming projects and market intelligence.

5. ***Committed to 2 trade missions per year*** to the identified markets.

6. ***Developed a marketing campaign to promote UK PBS excellence***.

7. ***Supporting UK PBS firms in identifying and winning contracts in high value opportunities globally***. The support will be in the form of communicating the opportunities, assistance in navigating the legal and contractual requirements and connecting consortia and supply chains. The goal is to have more PBS business winning high value contracts.

8. ***Lobbying for the removal of any domestic or international legislative or regulatory instruments which hinder sector growth,*** i.e., navigate the hidden barriers to market entry. Engage the diplomatic corps in each identified territory to bridge the gap by providing local insights.

9. ***Provision of enhanced services for the SME sector*** to either join consortia or attract contracts suitable to their capabilities. The International Chamber of Commerce programme provides access to business advice, expertise, trade support and networks.

Supporting Structures

1. Regional treaties and agreements that facilitate market entry;
2. The world's largest financial and advertising firms are domiciled in the UK and distribute projects to their foreign offices (constituting their dominance in export of financial services);
3. Legislative and regulatory regimes that require the engagement of professional and business services by all types of entities;
4. Strong government support in bidding for high value opportunities;
5. Access to world class skills via the establishment of higher apprenticeship systems and globally acceptable certifications such as ISO for the EU market.

Key Success Factors to the Strategy

1. Willingness of executives to act as special envoys on their routine business trips;
2. A significant pool of patents and proprietary research that requires commercializing;
3. UK's reputation in the international services industries and their performance record on large global projects;
4. The UK government's ability to reduce or remove barriers to entry for their PBSs and to gain favorable terms in trade agreements.

UK Tactics	Possible Domestic Modification
Growth Voucher	The Barbados Gov't does not have the financial resources to establish a $30 million voucher program, however, a tax incentive can be given to encourage firms to seek professional advice from local service providers.
Professional Business Services Council	Barbados Coalition of Service Industries are in a position to facilitate matches between local professionals to facilitate the successful completion of projects
Upgrades to the Skill Pools	Strengthen linkages between TVET institutions (private & public) and industry to ensure that the skills being

	taught meet with the needs of the industry and create greater prestige in alternative methods of training
Special envoys	Barbados already has a core of professionals that are heavily involved in international work that can be used as special envoys. These professionals range from small and medium sized consultancies to those employed by global service providers like PWC and Deloitte.
2 Trade Missions per year	The BCSI is in the prime position to organize and execute trade missions on behalf of its members that are focused on exportation of domestic skills. Having also been engaged in the assessment of and pairing where necessary of local providers that can meet the anticipated needs of the locations
Marketing Campaign	The BCSI can facilitate this in collaboration with domestic a marketing agency
Identifying and winning high value contracts	The BCSI is in a prime position to facilitate this tactic.
Lobbying	Again the BCSI is in a prime position to lobby government for the removal or implementation of domestic legislation that will either hinder or help the growth of the service industries. The impact on international legislation may be less because of the size of Barbados,
Enhance services for the SME sector	The BCSI again is in a prime position to act as facilitator for this tactic

The Professional and Business Services Industry

- The **US** and **Europe** are the largest markets for consulting services.
- The emerging markets are China and Brazil.

Major companies include Booz Allen, Deloitte Consulting, IBM Global Services, and McKinsey & Company, (all based in the US), as well as Accenture (Ireland), Roland Berger (Germany), and Tata Consultancy Services (India).

Relationship between Global Standards/ Certifications and Exports

Theoretically, the removal of tariff barriers to trade should have led to significant increases in exports. However, the removal of tariffs have led to the introduction of non- tariff barriers such as technical regulations and performance requirements which in themselves act as barriers to exports. These barriers are especially challenging to developing countries who often lack the financial resources to ensure compliance to international regulations.

In order to surmount these challenges many developing countries are seeking to align their national standards to international regulations for e.g. ISO 9000 system. This alignment of market standards should increase market access within developed countries by certifying that products and services are reliable in terms of quality and safety. In fact research carried out by Swann (2010) revealed that operating according to international standards had a positive or at least neutral impact on the performance of exporting nations. One exception to this occurs in the case of agricultural products.

Building on previous studies, research conducted by An & Maskus (2008) revealed that although standards alignment and mutual recognition agreements (MRAs) were associated with increased exports to developed countries, only MRAs significantly promoted exports by developing countries. A contributing factor to this result is MRAs allow for the recognition of standards without incurring the costs associated with duplicative testing, inspection and certification. A case study of the domestic architectural association attests to the significance of MRAs. Since the signing of the EPA between CARICOM and the European Union, CARICOM professionals have struggled with exploiting the opportunities available through the agreement. However, the success of the architects through the signing of the MRA can give possible insights into how to ensure increased exportations of domestic services.

HIGH GROWTH INDUSTRIES

The top four services industries that have experienced growth globally are:

Bio-technology

- Human health - bio-informatics, sequencing platforms and services, genomics, chemo-informatics, drug efficacy testing, transcriptomics
- Agri-business and technology - improved crop yield leading to food import substitution

Renewable energy

- Distributed solar and wind power
- Grid monitoring software and applications
- Offshore petroleum drilling explorations

Private Education

- Career development
- Technical certification
- Online primary or secondary education tutoring

Technology

- App and software development
- High skilled technical support centers
- NFC and mobile payments
- Cybersecurity

Barbados' Potential Place in the Growth Industries

The government of Barbados has identified "*health and wellness*" and the "*cultural and creative*" sectors as priority industries for Barbados. These two along with the four high growth areas previously mentioned: *Bio-technology, Renewable and New Energy, Private Education* and *Technology* are areas that Barbados can exploit for economic gain with some upgrades to the existing skills base. These upgrades will require an integrated relationship between *industry* and *education*.

Important also to Barbados' economic development is the *International Business and Financial Services (IBFS)* sector which contributed approximately $878 million (9%) to domestic GDP in 2011. According to the Minister of Industry, International Business, Commerce and Small Business, Donville Inniss, the combined budgets for public health and public education is almost as much as the IBFS sector's contribution to the economy. Although it is classified as a sector by itself, it covers a wide range of economic areas. Within the Barbadian context, the IBC sector encompasses a number of critical sectors identified by the government specifically, manufacturing, tourism and hospitality and health services. More importantly there exists greater room for expansion in the emerging sectors identified in the report. In fact, a more targeted approach to the IBC sector in Barbados that is characterized by a move away from some of the traditional BPO/ KPOs fields like data processing and call centering to areas such as bio-informatics, research and development and technology, along with the continued development of the finance related areas such as banking and insurance, will see increased economic results.

The market entry strategy for these markets should involve the establishment of service provision relationships with the top firms operating within the industries. Moreover, further research should be undertaken in order to understand the nuances of each market and determine the methodology best suited for market entry.

The below table provides information on the four high growth sectors along with health and wellness and the cultural and creative industries.

- *Potential Segments*- refers to areas within the industry that are best suited to Barbadian skill sets
- *Global Value*- the global value of the entire industry
- *Top Firms*- top global companies, with whom Barbados can pursue the possibility of inward investment relationships
- *Relevant Skills*- skills needed in the "potential segments" that already exist in Barbados
- *Skills Gap*- the skills needed in the "potential segments" that are not available in Barbados and would have to be developed and/or sourced in order for the potential segments to succeed
- *Items in Blue*- professional services skills that either exists or are required for the sectors

Table 7- Barbados' Potential within the High Growth Industries

Industry	Potential Segments	Global Value	Top Firms	Relevant Skills in Barbados	Skills Gap (Skills needed for the industry that are lacking in Barbados)
Biotechnology	Bioinformatics (all types)	20.9% growth US $2.9 billion	Accelrys Inc. (U.S.), Affymetrix Inc. (U.S.), Life Technologies Corp (U.S.) Illumina, Inc. (U.S.) CLC bio. (Denmark)	1. Bio-chemist 2. Biology majors 3. Medical doctors – general & specialists 4. Programming experts 5. Data managers **Business developers** **Market researchers**	1. Data mining experts 2. Algorithm designers – expert level 3. Industry specific software specialist **Market entry brokers** **Contract brokers/ negotiator**
	Agro-processing or agribusiness	Primarily for domestic consumption and export to the Caribbean diaspora		1. Food technologist 2. Agro-economists 3. Standards experts 4. Consumer behavior researchers **Marketing Strategists** **Graphic Designers**	1. Innovative packaging 2. Market entry specialists 3. Agri-business regulators (see note at page 26 on Protected Geographical Status)
	Environmental Consulting	Growth rate not available US $25 billion	Veolia Environmental Services North America Tetra Tech (US) RPS Group and Environmental Resources Management (UK); Arcadis	1. ISO 14001 EMS auditors 2. Impact Assessment specialists 3. Civil Engineers 4. Environmental Engineers	1. Expertise in environmental issues in Australia, Brazil, Canada and South Africa 2. Oil & Gas expertise

Industry	Potential Segments	Global Value	Top Firms	Relevant Skills in Barbados	Skills Gap (Skills needed for the industry that are lacking in Barbados)
			(Netherlands); AMEC Earth & Environmental (Cda); Bechtel, CH2M HILL, and URS		3. Global regulatory and legalities
Renewable Energy or New Energy	Distributed solar & wind energy	The potential for Barbados and the region is vast; particularly in the light of the falling cost of PV panels due to China's oversupply to market	Suntech, China JA Solar, China Trina, China Yingli, China Motech, Taiwan	1. Solar PV Installers 2. Solar PV Technicians 3. Solar PV Design Engineer 4. Energy efficiency engineers & analysts **Solar PV Sales & Marketing**	1. Energy market analyst 2. Energy regulators and legal counsel 3. Power settlement accounting 4. Winding Specialists 5. Wind material engineers 6. Wind/Solar Site Managers 7. Turbine generator technicians 8. Relay field technicians
	Grid mapping software			1. Management Information Systems Analysts 2. Network Administrators & Managers **Business Development Managers** **Civil Engineers** **Software trainers &**	1. Software specific specialists 2. Grid map analysts

Industry	Potential Segments	Global Value	Top Firms	Relevant Skills in Barbados	Skills Gap (Skills needed for the industry that are lacking in Barbados)
				consultants	
	Petroleum Exploration	The potential for Barbados is yet to be defined but funding has been secured by the Ministry of Energy for implementation		1. Geophysicists 2. Production engineers 3. Drilling technicians 4. Well log analysts **Health & Safety standards consultants/trainers** **Environmental engineers** **Research analyst**	1. Energy regulators and international legal counsel 2. Standards Monitor 3. Power traders 4. Well drilling engineers 5. Trainers in well management software
Private Education	Career development	20.3% growth rate p.a. In the US $3 trillion	Apollo Group Inc. Cambium Learning Group Career Education Corporation CL Educate Ltd Daekyo Co. Ltd Educomp Solutions	- Certified practitioners to post graduate level	✓ Mapping career pathways ✓ Entrepreneurship & "intrapreneurship" as a skill linked to business profitability
	Technical certifications			• Medium level skilled practitioners	1) Full range of globally recognized technical certifications
	Online Learning			1) Educators from primary to graduate level 2) Subject matter experts **Marketing professionals** **Business Developers**	i. Proficiency in e-learning platforms and course delivery
Technology	Mobile apps and software	29.6% growth rate p.a. US5.8 billion (2012)	Ebbex US Fueled US Fuzz Productions US	1. Highly trained programmers, developers	Network brokers to link the developers with clients

Industry	Potential Segments	Global Value	Top Firms	Relevant Skills in Barbados	Skills Gap (Skills needed for the industry that are lacking in Barbados)
			Intellectsoft UK Komarov AUS Blue Whale Apps US		
	Near Field Communications (NFC) and Mobile payments	44% growth rate (projected to 2017) Gartner Research US $163.1 billion (2012)	Google Wallet Corduro Monitise Ellum MChek Serve Brain Train	• Highly trained developers and banking platform specialists **PR specialist to promote its use**	• Regulatory negotiators
	Cyber-security	11.4% growth rate p.a. US $63.7 billion (2011)	HP Dell Symantec Kaspersky Labs Q1 Imperva Cogneto Network Streaming	• Ethical hackers • Firewall developers • Programmers and Encryptioners	• Certification in the global protocols
Health and Wellness	Health and wellness tourism	US$2 trillion (2010)	Hotel Spas- Travaasa Curves Jiva Spas Shizen Spas Mandara Spas Hyatt	• Spa technicians • Beauty technicians • Hair technicians • Nutritionists • Scientists • Personal Trainers	• Global certifications • Technicians that will use traditional Barbadian methods and products into treatments

Industry	Potential Segments	Global Value	Top Firms	Relevant Skills in Barbados	Skills Gap (Skills needed for the industry that are lacking in Barbados)
	Health and wellness products		Product Companies- Pepsi Co Abbott Pharmaceuticals		
Culture and Creative	Arts	US$624 billion (2011)		• Directors • Musicians • Writers • Composers • Sound Technicians • Light Technicians • Producers • Talent Coaches • Band Managers • Instrument Technicians • Live Audio Technicians • Promoters • Costume Designers • Stage Managers • Furniture Designers • Jewelry designers • Artistes	• Booking agents • Managers • Business Developers • Set Designers
	Crafts				
	Fashion				
	Film, Video, Photography				
	Software, Computer games & electronic publishing				
	Music, Visual Performing arts				

Relationship between High Growth and Traditional Industries

It is important to note that the high growth sectors identified in the research are not a move away from the critical sectors outlined by the Government. Rather, these industries are segments within the critical sectors that would provide Barbados with the highest yields for inputs. This is because these industries are *"high demand, short supply areas"* globally. Based on the findings of the research with regards to the Centers of Excellence and the skills that Barbados does not yet possess (or have in limited supply), there is a relatively short time span required to fill the skills gap.

Industry	Potential Segments	Relationship with Critical Sectors
Biotechnology	Bio-informatics (all types)	*Manufacturing *ICT
	Agro-processing or agribusiness	*Health and Wellness *Tourism and Hospitality
	Environmental Consulting	*Construction *Manufacturing
Renewable Energy or New Energy	Distributed solar & wind energy	*Manufacturing *Construction *ICT
	Grid mapping software	
	Petroleum Exploration	
Private Education	Career development	*Education Services *ICT
	Technical certifications	
	Online Learning	
Technology	Mobile apps and software	*ICT
	Near Field Communications (NFC) and Mobile payments	
	Cyber-security	
Health and Wellness	Health and wellness tourism	*Health Services
	Health and wellness products	
Culture and Creative	Arts	*Creative Services *ICT
	Crafts	
	Fashion	
	Film, Video, Photography	
	Software, Computer games & electronic publishing	
	Music, Visual Performing arts	

Special Note on Bio- technology (Agro processing sector)

The agro processing industry within the EU has developed a standard from which domestic producers can benefit. The **Protected Geographical Status** (PGS) is a legal framework defined in European Union law to protect the names of regional foods. **Protected Designation of Origin** (**PDO**), **Protected Geographical Indication** (**PGI**) and **Traditional Specialty Guaranteed** (**TSG**) are distinct regimes of geographical indications within the framework. The law (enforced within the EU and being gradually expanded internationally via bilateral agreements between the EU and non-EU countries) ensures that only products genuinely originating in a particular region are allowed in commerce and identified as such using the seals shown below.

This status provides Barbados with a competitive advantage for many of its locally produced products.

Professional Associations for High Growth Industries

Industry	Potential Segments	International Professional Associations
Biotechnology	Bio-informatics (all types)	1. Bioinformatics Organization www.bioinformatics.org 2. International Society for Computational Biology www.iscb.org 3. Division of Cambridge Health-Tech Institute US www.bio-itworld.com
	Agro-processing or agribusiness	1. International Food & Agribusiness Management Association www.ifama.org 2. Agri-Marketing www.agrimarketing.com 3. Trinidad & Tobago Agribusiness Association www.ttaba.com
	Environmental Consulting	1. National Association of Environmental Professionals www.naep.org 2. International Safety Quality Environment Association www.isqem.com
Renewable Energy or New Energy	Distributed solar & wind energy	1. International Renewable Energy Agency www.irena.org 2. International Energy Agency www.iea.org 3. International Solar Energy Society www.ises.org 4. International Renewable Energy Alliance http://baringo.invotech.se 5. World Wind Energy Association www.wwindea.org
	Grid mapping software	1. Telecoms for Smart Grids www.smi-online.co.uk 2. World Smart Grid Conference www.worldsmartgridforum2013.org
	Petroleum Exploration	1. Association of Energy Service Professionals www.aesp.org Will be governed by the financing secured by the Government of Barbados
Private Education	Career development	1. American Society for Training and Development – International www.astd.org
	Technical	Based on the professional designations

Industry	Potential Segments	International Professional Associations
	certifications	
	Online Learning	1. World Association for Online Education www.waoe.org 2. International Association for Online Education Accreditation www.iaoea.org
Technology	Mobile apps and software	1. Application Developers Alliance www.appdevelopersalliance.org 2. Internet & Mobile Association of India www.iamai.in
	Near Field Communications (NFC) and Mobile payments	1. Mobile Payments World www.mobilepaymentsworld.com
	Cyber-security	1. Internet Association www.internetassociation.org 2. Cyber Security Research Alliance www.cybersecurityresearch.org
Cultural and Creative Industry	Arts Crafts	1. American Institute of Graphic Arts (AIGA) http://www.aiga.org/ 2. National Association of Independent Artists https://naia-artists.org/ 3. International Council of Graphic Design Associations (ICOGRADA) http://www.icograda.org/ 4. Craft and Hobby Association 3. www.craftandhobby.org/
	Fashion	1. The Fashion Group International http://www.fgi.org/ 2. The Fashion Industry Association http://www.thefia.org/ 3. The Council of International Fashion Designers (CIFD) http://www.miamifashionweek.com/Council_of_International_Fashion_Designers.html 4. The Association of Stylists and Coordinators (ASC) 4. http://www.stylistsasc.com/
	Film, Video, Photography	1. The International Association of Panoramic Photographers *www.panoramic**association**.org/* 2. International Association of Photographers (IAP) http://iapimages.com/ 3. Digital Video Professionals Associations 1. http://www.dvpa.com/

Industry	Potential Segments	International Professional Associations
	Software, Computer games & electronic publishing	2. International Game Developers Association (IGDA) 1. http://www.igda.org/
	Music, Visual Performing arts	2. Society of Illustrators, Artists, and Designers (SIAD) 5. http://www.siad.org/
Health & Wellness Industry		1. International Association of Wellness Professionals http://internationalassociationofwellnessprofessionals.org/ 2. National Wellness Institute http://www.nationalwellness.org/ 3. Global Spa and Wellness Summit http://www.globalspaandwellnesssummit.org/index.php/spa-industry-resource/associations 4. Caribbean Spa and Wellness Association (C-SWA) http://caribbeanspawellness.com/ 5. Caribbean Hotel & Tourism Association (CHTA) 5. http://www.caribbeanhotelandtourism.com/

Centers of Excellence for High Growth Industries

The research revealed two types of Centers of Excellences: 1) those attached to Universities and 2) those attached to companies. The Centers of Excellence attached to companies were ruled out because of accessibility. Accessibility would be hard if not impossible to achieve due to confidentiality and intellectual property rights. Those attached to Universities are best fits, because of the open access to knowledge that is embedded within universities. Additionally, in some cases there was only one listed Center of Excellence in the sectoral area. The below table identifies these Centers of Excellence.

Sector	Industry	Skill Sets	Center of Excellence	Contact Information
Bio technology	Bio informatics	Medical, pharmaceutical, computer programming and computer analytics	New York State Center of Excellence in Bioinformatics and Life Sciences-	cbi-info@buffalo.edu
			Australian Research Council ARC Centre of Excellence in Bioinformatics (Headquartered at the Institute for Molecular Bioscience at The University of Queensland)	m.ragan@imb.uq.edu.au
			Tuskegee University- Center for Computational Epidemiology, Bioinformatics & Risk Analysis (CCEBRA)	http://www.onemedicine.tuskegee.edu/CCEBRA/index.htm
	Food Technologist for Agro-Processing or agribusiness		Illinois Institute of Technology- Institute for Food Safety and Health	http://www.iit.edu/ifsh/research_centers/ncfst/
			Ohio Centers of Excellence| Agriculture, Food Production & Bio products (Ohio State University)	https://www.ohiohighered.org/coe/ag-food-production-bioproducts
			Center/ Integrated Study of Food Animal and Plant Systems	http://www.tuskegee.edu/academics/colleges/caens/caens_research_centersprograms/centerintegrated_study_of_food_animal_and_plant_systems.aspx
	Drug Testing			
Technology	Mobile apps and software	Networking, IT Optimization, web development, data mining, project management, IT security, IT architecture, Messaging/	Midlands Technical College- Center of Excellence for Technology	http://www.midlandstech.edu/technologycenter/
			Appcampus- Aalto University Finland	http://www.appcampus.fi/faq
			Nuratech Centre of Excellence	http://nuratech.biz/mobile-app-training/about-mobile-app-training.html
	NFC & Mobile		Mona School of Business & Management Center of Excellence	http://coe-msb.org/about

Sector	Industry	Skill Sets	Center of Excellence	Contact Information
	Payments	Communications, database, business process modeling		
	Cyber- security		Academic Centres of Excellence in Cyber Security Research (11 UK universities are involved)	http://www.epsrc.ac.uk/research/centres/Pages/acecybersecurity.aspx
Renewable Energy	Renewable Energy	Law, engineering, Installations, electricians, health and safety, welding and fabrications, technicians, geologists, geophysicists, math, science	Center of Research Excellence in Renewable Energy	http://ri.kfupm.edu.sa/core-re/education.htm
			University of the District of Columbia	http://www.udc.edu/cere/center_of_excellence_for_renewable_energy
			Centre of Excellence for Green Energy and Sensor Systems	http://www.becs.ac.in/academics/centers/greenenergycentre
			IRENA Scholarship Programme- MASDAR Institute of Science and Technology	http://www.irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=35&CatID=110&SubcatID=156&RefID=156&SubID=162&MenuType=Q
	Distributed Solar & Wind Energy		Central New Mexico Solar Center of Excellence	http://cnm.augusoft.net/index.cfm?method=templates.CustomTemplatePreview&ContentID=108
	Grid mapping software			
	Petroleum Exploration			
Private Education	Career Certifications	STEM	Center of Excellence in Education- Grensboro Virginia	http://www.cee.org/
	Technical Certifications			
	Online Primary & Secondary School Tutoring		The Nystrand Center of Excellence in Education	http://louisville.edu/education/research/centers/nystrand/
			Central Michigan University- College of Education and Human Services- Center of Excellence in Education	http://www.cmich.edu/academics/educ_humanservices/units/EHSCenterForExcellence/Pages/default.aspx
			Institute of International Education- Centers of Excellence	http://www.iie.org/Who-We-Are/Centers-of-Excellence
Cultural and Creative Industries	Music and Theatre Arts	Advertising Graphics, Art Education, Studio Art, Degrees in Art, CSU Chorus, Jazz Studies, Music Education, Music	University of Cincinatti College- Conservatory of Music (CCM)- Music and Theatre Arts	http://ccm.uc.edu/
			Wright State University- Collaborative Education, Leadership and Innovation in the Arts (CELA)	
			Central State University's Center for Excellence in Fine and	http://www.centralstate.edu/academics/CHAS/music_art/index1.

Sector	Industry	Skill Sets	Center of Excellence	Contact Information
		Performance	Performing Arts (CEFPA)	php
	Fashion	Research, illustration, flat sketches and garment construction, business, fashion theory, development and marketing of fashion goods, merchandising for apparel manufacturing, retail operations, management, buying, fashion forecasting and promotion	Kent State University- The Shannon Rodgers and Jerry Silverman School of Fashion Design and Merchandising	http://www.kent.edu/artscollege/fashion/about/
	Gaming		Shawnee State's Center of Excellence in Immersive Technology	
			Abertay – Centre of Excellence in Computer Games Education	http://www.abertay.ac.uk/about/facilities/excellence/
Health & Wellness				

RECOMMENDATIONS

Association Specific

1. The associations will need to be structured as economic entities rather than the tendency to be a social grouping for like-minded persons.
    a. The committees and boards will need to dedicate a minimum set of hours per month to realize significant growth in the associations' ability to develop their members.
    b. There needs to be greater affiliation with the international professional bodies that cover their professions or industries.
    c. Associations will need to develop a strategic approach to increasing the profile of the professionals and their capability to perform to various international standards.
2. Associations should designate a core of association members to focus on "business development". This group will be tasked with researching the emerging markets and how their members can benefit. The business development plan can then be escalated to the BCSI for support.

Coalition Specific

1. Leverage the coalition's status globally to access, either free or at a reduced cost, the emerging industry reports that provide insights and data on the trends. This intelligence can be employed to assist the associations' business development teams in the implementation of their strategy to access the global market.
2. Facilitate missions where sector ambassadors are funded, in part or whole, to attend the seminars that the various donor banks/agencies host to train consultants on their procurement processes. This can be done in a train-the-trainer format.
3. The Coalition needs to engage in data collection across their association members. This data can then be used to identify trends, map relationships, show growth patterns and position sectors to better match existing capabilities to emerging trends.

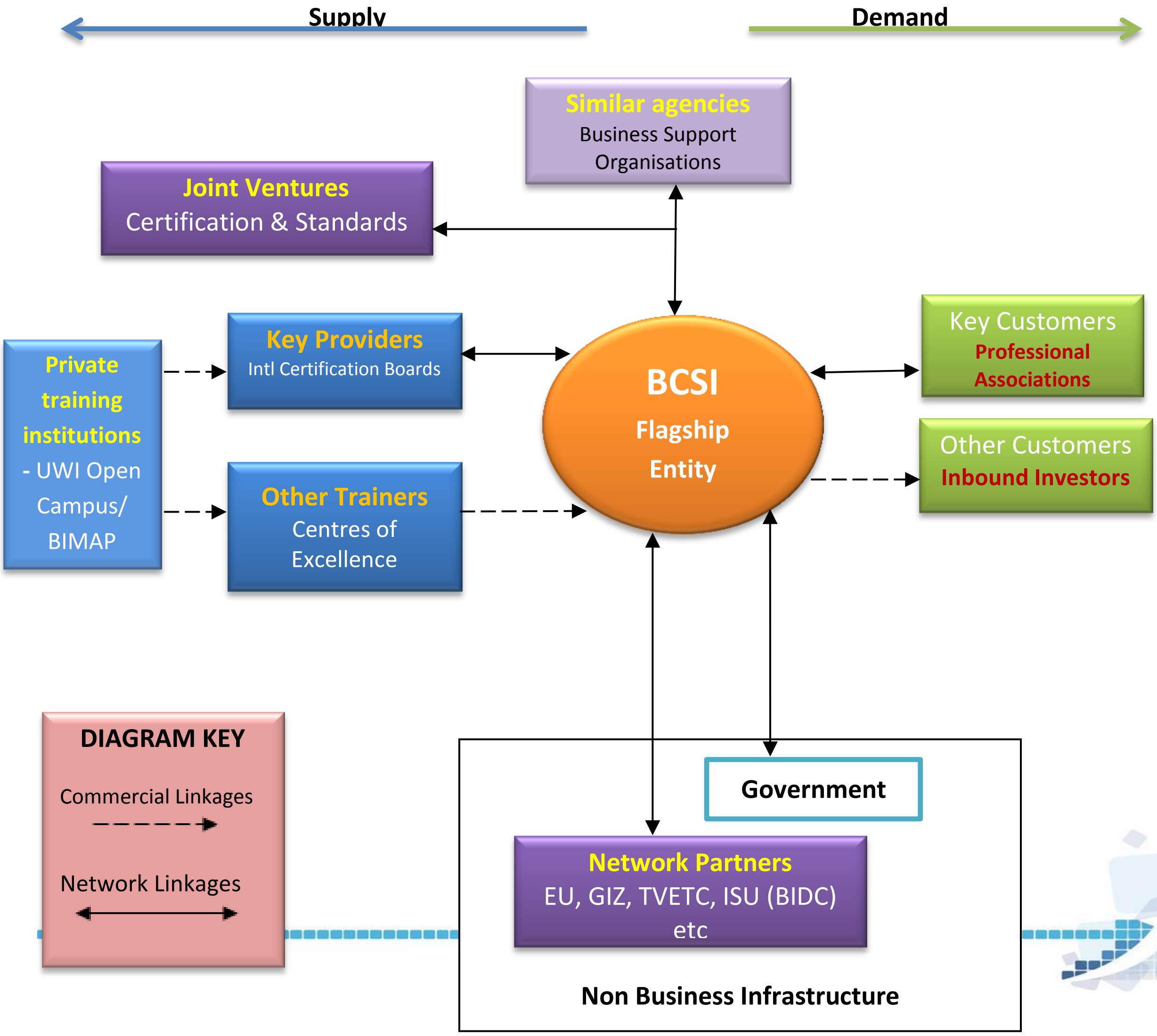
Government Specific

1. Government's major contribution to the success of the services sector is the creation of an enabling environment that allows the industry to grow and thrive.

- Consultations with industry associations for the purpose of identifying environmental constraints that can be removed through the enactment legislation
- The passing of legislation that facilitates domestic growth of the industries. One such e.g. is the passing of legislation providing tax incentives to companies who seek advice from local service providers in the areas that directly impacts the growth.
- The passing of legislation should be expedited with monitoring and evaluation processes imbedded to allow for agile adjustments where necessary.

2. Develop a strategic approach to work force development that includes:
    - Enrollment quotas/ projections for fields of study at the University of the West Indies that are linked to government financial support. This would result in high demand- low supply areas receive significantly higher levels of government support than low- demand- high supply areas
    - Upgrade TVET institutions and curriculum to increase their relevance to a wider cross section of sectors and potential students

Suggested Relationship Model between BCSI and its stakeholders



Flagship Firm

- drives both inbound and outbound logistics impacting the exportability of Barbadian services providers,
- maintains relationships with the professional associations and network partners
- acts as a central point for all things related to the strengthening of the services sector and engages in initiatives to ensure stakeholders are informed and involved in the advancement of the sector

Network Partners

- support organizations that ensure adherence to quality standards and facilitate the adoption of innovative techniques and emerging services support tools
- provides or coordinates research and statistical analysis on the performance of services sector
- awards funding for research, strategic planning and implementation

Joint Ventures

- collaborations with entities who may be considered as a competitor but can be engaged in joint efforts to develop and promote the sector

Government

- engages the flagship entity to guide legislation and regulations regarding the services sector
- Ministry of Labour and the Ministry of Education acting as the joint implementing agency for the Barbados Human Resource Development Strategy
- Ministry(s) with responsibility for commerce and international business facilitates the negotiation with market entry brokers, the investment requirements of the top providers in the emerging industries (as identified)

APPENDIX

1. **Stakeholder List**

NO.	AGENCY	INTERVIEWEE	CONTACT INFO	INTERVIEW DATE & TIME	LOCATION
	Ministry of Education only NST interviewed already				
	Higher Education Unit				
14	Barbados Manufacturers' Association director@bma.bb	Bobbi McKay	426-4474		Telephone interview – Bobbi was ill
17	Barbados Private Sector Trade Team	Joel Richards	430-6541	May 27, 2013 2:00pm	Geddes Grant Complex
4	National Council for Science & Technology Charles.cyrus@barbados.gov.bb	Charles Cyrus	427-1820	June 3, 2013 2:pm	Fontabelle – Rice assigned
10	Technical Vocational Education & Training Council	Henderson Eastmond / Samantha Jones	435-3096	June 3, 2013 10:00am	Belleville
9	Barbados Accreditation Council vv-alleyne@bac.gov.bb		429-8760	June 3, 2013 3:00pm	Roebuck Street
1	Ministry of Labour, Human Resource Management & Social Security – Manpower Research Unit persec@labour.gov.bb ggilkes@labour.gov.bb	Gloria Gilkes (PS Secretary)	310-1412	June 4, 2013 2:30pm	Warrens Office Complex 3rd Flr
2	Economic Affairs Division – Research & Planning Unit Louis.woodrosse@barbados.gov.bb economic.affairs@barbados.gov.bb	Patrick McCaskie Mark Durant, Kelza Scantlebury	310-1306/ 1311 1308/	June 5, 2013 9:30am	Warrens Office Complex

NO.	AGENCY	INTERVIEWEE	CONTACT INFO	INTERVIEW DATE & TIME	LOCATION
	Heather Alleyne-Prescott		310-1317		
3	Ministry of Industry, International Business, Commerce & Small Business Grace Skeete Commerce.ps@barbados.gov.bb	Philmore Best	427-5270	June 6, 2013 10:00am	Warrens Office Complex
12	Cave Hill School of Business	Marjorie Wharton	424-7731	June 6, 2013 1:00pm	CHSCB building
6	Barbados Community College and the ISU Unit Shoyte-boyce@bcc.edu.bb	Shirley Hoyte-Boyce Project Officer	426-3351	June 10, 2013 2:00pm	ISU – 2 Mile Hill opposite Advantage Systems
16	ISE Division of BIDC (Invest Barbados)	Moudue Diagne	427-5350 ext	June 11, 2013 10:00am	BIDC – Princess Alice H'way
15	Barbados Agricultural Society	James Paul /Theodore Fraser	436-6683	June 17, 2013 9am	Beckles Rd
13	UWI Business Development – Consultancy & Research Dr. Antony Fisher (230-6673) // Paula Jarvis 417-4972 –anthony.fisher@cavehill.uwi.edu	Sonia Johnson – BDO will be on	417-4541 / 4543	June 17, 2013 2pm	UWI Main Campus
5	Ministry of Energy & Telecommunications PS and Deputy PS, respectively vbrowne@energy.gov.bb rwickham@energy.gov.bb jwiltshire@energy.gov.bb	Valerie Browne Jehu Wiltshire	434-2501 434-2503 Ext 2554	June 18, 2013 10am	To confirm with PS & call back – F/U needed
	Barbados Agricultural Management Corporation	Fay Best Executive Dir.		June 19, 2013 1pm	Fairy Valley Ch. Ch.
7	Barbados Tourism Authority urbanc@visitbarbados.org	Averil Byer or Bernard (Planning	427-2623	June 24, 2013 3pm	Emailed Ms Byer - back in island June 10

NO.	AGENCY	INTERVIEWEE	CONTACT INFO	INTERVIEW DATE & TIME	LOCATION
	beverleyg@visitbarbados.org	Mgr)			
11	UWI Open Campus Ryan.byer@open.uwi.edu	Michelle Wiltshire & Ryan Byer	417-4496 /430-1126	June 25, 2013 10am	Pine site
8	Samuel Jackman Prescod Polytechnic	Mrs. Martindale Registrar	426-1920	June 27, 2013 10am	Wildey

2. **Focus Group Attendee List**

3. No.	President	ASSOCIATION
1	Mr. Andre Brathwaite	Barbados Institute of Architects
2	Mr. Greg Parris	Barbados Association of Professional Engineers
3	Mr. Erwin Edwards	Barbados Association of Energy Professionals
4	Mr. Hal Collins	Barbados Association of Engineering Draughting Technicians
5	Mr. Charles Nicholls	Barbados Association of Professional Valuers
6	Mr. Anstey Scott	Barbados Land Surveyor Association
7	Mr. Clyde Griffith	Barbados Renewable Energy Association
8	Mr. George Ramsay	Barbados Estate Agents and Valuers Association
9	Mr. George Thomas	Barbados Association of Music Entrepreneurs
10	Mr. Neville Legall	Barbados Arts Council
11	Ms. Jewel Forde	Barbados Association of Journalist
12	Mr. David Green	Barbados Film and Video Association
13	Ms. Cassandra Mottley	Fashion and Design Association of Barbados
14	Ms. Undine Rouse	The Craft Union of (Barbados) Inc.
15	Mrs. Andrea DeSouza	Barbados Association of Professional Massage Therapists
16	Ms. Maxine DePeiza	Barbados Association of Reflexologists
17	Vertity Dawson	Barbados Reiki Association
18	Mr. David Simpson	Institute of Chartered Accountants of Barbados
19	Ms. Brenda Pope	Caribbean Institute of Certified Management Consultants
20	Mr. Ronald Bullen	Barbados Association of Bailiffs and Debt Collection Agencies
21	Jason Hynds	Barbados ICT Professional Association
22	Ms. Glenda Gilkes	Human Resource Management Association of Barbados
23	Ms. Blondelle Mullin	Barbados Registered Nurses Association
24	Michelle Belle	Barbados Veterinary Association
25	Dr. Pamela Philips	Barbados Dental Association
26	Mr. Vincent Price	Barbados Association of Security Companies Inc.
27	Mr. Marc Sampson	Shipping Association of Barbados
28	Mr. Bandele Serrano	Barbados Pharmaceutical Society

3. **Interview Questions**

BCSI KEY STAKEHOLDERS INTERVIEW QUESTIONS

The aim of these questions is to obtain the identified stakeholders' knowledge and opinions on the Barbadian services industries with regards to:

1. the sector's potential to develop to global performance standards
2. the sector's role as an integrative force across the domestic productive sectors
3. the capacity gaps that the sector must fill to meet the present and future needs of the productive sectors and achieve export of services

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Information on the agency

1. Name of the agency ____

2. Which industry(s) does your agency interact with? (*prompt for information on new industries such as renewable energy*)

3. Nature of your input: policy development ___ policy implementation _____ export facilitation _____ business support _____ regulatory _____ customer ____ vendor _____ other ___

Knowledge and Behaviours towards the services sector

4. In the services/input areas identified in #3, are there direct linkages to the services sector? Yes _____ No _____
   a) If yes, please state the nature of the linkage ___________________

   ____

5. To your knowledge, are the industries identified in #2, utilizing globally accepted practices? Yes ____ No ______

If yes, can you identify any?

If no, can you identify the hindrances to doing so?

6. Has your agency collaborated with any other ministries/agencies to better achieve the objectives of the NSP/MSP in the areas of service excellence standards and Barbados' global competitiveness?

7. What is your agency's outlook on the services sector?
    a) Current state
    b) Capacity to grow domestically
    c) Capacity to attain global competitiveness in the next 5 years

8. How does your agency engage the services of the local professional services?

9. Does your agency facilitate the education or awareness of its industry stakeholders on the paths to global performance standards? Yes ____ No ___

    If yes, what was the most recent intervention? ________________________

10. What funding or facilitation of the access to funding does your agency provide to assist in the implementation of globally accepted standards?

Service Sector Growth & Export Development

11. What role can the services sector play within the productive industries to increase their global competitiveness?

12. Do you think that the local professional service providers are adequately qualified or experienced to meet the current and future needs of the productive sectors?

13. What emerging industries can be accessed by Barbados?

14. What are the projected matches between current capacity of the professional services and the emerging industries?

15. Identify supporting structures or the markers of the enabling environment that is needed to increase the export of services in any of the 4 modes

BSOs ONLY:

i. How does your organization perceive its role in implementing the goals or objectives that have been laid out in the National Strategic Documents with emphasis being place on best practice approaches

4. **Focus Group Questions**

BCSI KEY STAKEHOLDERS INTERVIEW QUESTIONS

The aim of these questions is to obtain the identified stakeholders' knowledge and opinions on the Barbadian services industries with regards to:

4. the sector's potential to develop to global performance standards
5. the sector's role as an integrative force across the domestic productive sectors
6. the capacity gaps that the sector must fill to meet the present and future needs of the productive sectors and achieve export of services

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Information on the association

16. Association ____

17. What services do you provide ______________________________

Knowledge and Behaviors within the services sector

18. What regional or international standards are you aware of in your sector?

19. Do you operate to any of these standards?

20. If yes, what benefits have you experienced?

21. If no, what constraints do you face that hinders you operating at such standards?

22. What is the capacity of your sector to successfully compete for and deliver on global projects of any size?

23. Do you consider the NSP(national strategic plan)/ MSP (medium term development plan)when you are looking at the future development of your companies?

24. How important is the regional and global market to the future expansion of your organization?

25. What is your outlook on your sector?
    d) Current state
    e) Capacity to grow domestically
    f) Capacity to attain global competitiveness in the next 5 years

26. How do you interact with ministries and BSOs?

27. Does the association facilitate the education or awareness of its members on the paths to global performance standards? Yes ____ No ___
    If yes, what was the most recent intervention? ________________________

28. Has your association ever approached any of the BSOs etc for funding to assist in the implementation of global standards

29. How can the BCSI best serve the needs of your association and its members?

Service Sector Growth & Export Development

30. What role can the services sector play within the productive industries to increase their global competitiveness?

31. Are the local professional service providers adequately qualified or experienced to meet the current and future needs of the productive sectors?

32. What emerging industries can be accessed by Barbados?

33. What are the projected matches between current capacity of the professional services and the emerging industries?

34. Identify supporting structures or the markers of the enabling environment that is needed to increase the export of services in any of the 4 modes

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The European Union's Non- State Actors Grant Programme For Barbados

A Project implemented by the Barbados Coalition of Service Industries

This project is funded by The European