

A Growing Success

HOW TECHNOLOGY IMPACTS MANUFACTURING 3D PRINTING IN TRADITIONAL MANUFACTURING MEMBERSHIP SUPPORT SERVICES TRADE AND INVESTMENT CONVENTION DEPLOYING BUSINESS APPLICATIONS

6

Ilg

LABEL COMPANY



The Central Bank, in its review of the fourth quarter of 2013, has shown that the future of the local manufacturing sector is very optimistic. The nonenergy sector has shown a quarter to quarter growth of 1.9% with manufacturing and construction growing by 2.1% and 2.5% respectively (SEIB March 2014). The aforementioned growth is a clear translation of the impact that monetary policies can have, once implemented efficiently. In addition, local companies have also started investing in new technologies, retooling and streamlining their operations to meet current challenges; this emphasizes the positive effect of public and private sector partnership on the business sector's contribution to Gross Domestic Product.

In light of the above, the Trinidad and Tobago Manufacturers' Association recognizes the pivotal role that the manufacturing sector must play in stimulating the economy and promoting sustainable growth. TTMA will continue to work with the government of Trinidad and Tobago to create an enabling environment for businesses as we play our part in the diversification process. The implementation of necessary legislation is imperative for a vibrant manufacturing sector, which is important to our nation's prosperity. An example of our commitment to diversification is demonstrated in the Association's lobbying efforts for the implementation of legislation critical to the needs of manufacturers, including the Beverage Container Bill, Border Control legislation, Procurement legislation and the Fair Trading Bill.

Prom the desk of the **President**

The sector faces a number of challenges but we welcome the reengineering being undertaken to improve the processes involved in doing business, which has resulted in better service delivery times for company registration, work permits, Import/ Export Permits and Licenses, and Certificates of Origin, all through the implementation of the TTBizlink IT platform. A reduction of government bureaucracy and improved efficiency will increase our members' ability to compete locally and globally. This country's manufacturers have the capacity and expertise to compete in certain areas, but the inefficiencies of the regulatory agencies in various Ministries hinder trade. Institutional strengthening is a fundamental issue that must be addressed in 2015, through the improvement of Border Control agencies to create a facilitating environment for manufacturers.

2014 has witnessed the continuation of several trade negotiations, in which the TTMA Secretariat continues to play an integral role. The Canada-CARICOM free trade agreement, the TT/Guatemala agreement, TT/Panama trade agreement and the TT/EI Salvador trade negotiations are anticipated to create new opportunities for businesses in Trinidad and Tobago. Sectors that are expected to benefit from the agreements include manufacturing, agriculture and financial services.

Apart from these trade agreements which will assist in opening up new markets, trade development and market access are critical issues. The TTMA Secretariat is working assiduously to ensure that new markets are being explored to secure more inputs and increase demand for Trinidad and Tobago's products and services. This is evident in the Association's up-coming Trade Mission to Guyana to promote the manufacturing industry of Trinidad and Tobago.

The Trade and Investment Convention is another platform provided by the TTMA to assist the business community of Trinidad & Tobago to promote and grow their operations. TIC 2014, in keeping with the initiative of facilitating access to international markets and creating new business linkages, attracted participation from Venezuela, Guadeloupe, Martinique, Brazil, Canada, Cuba, Haiti, China, Italy, Jamaica, Guyana, Suriname, Barbados, the Dominican Republic, the USA, the UK and other countries. The Trade and Investment Convention, since its inception, has facilitated an estimated US\$ 500 million in trade deals since this event began fifteen years ago.

In an effort to be more efficient in its deliverables to the membership, the TTMA has initiated several projects under the Business Development Unit (BDU). One such project is the implementation on the BDU's Member Liaison Initiative. The BDU has experienced positive reception from stakeholders from this initiative and expectations from its contribution are high for facilitating development.

We look forward to working alongside the manufacturers of Trinidad and Tobago to create a more enabling business environment. The TTMA believes that targeted measures to encourage innovation, investment and productivity are needed in order to develop the local manufacturing sector and sustain long-term economic growth.

Nicholas Lok Jack President



VISION Statement

To be the voice of manufacturers in Trinidad and Tobago, creating value and providing world class service to our membership.

BOARD OF DIRECTORS

Mr. Nicholas Lok Jack (President) Mr. Christopher Alcazar Mr. Craig La Croix Mr. Robin Lewis Mr. Robin Phillips Mr. Darren Leigh Mr. Travis Ali Ms. Franka Costelloe Mr. Roger Roach Mr. Anthony Farah Dr. Rolph Balgobin Mr. Ashmeer Mohamed





2nd Floor, TTMA Building #42 Tenth Avenue, Barataria P.O.Box 971, Port of Spain Tel: (868) 675-TTMA(8862) Fax: (868) 675-9000 Email: info@ttma.com URL: www.ttma.com



868.645.4133 interact@cgfxstudio.com]

How Technology is Changing the Face of Manufacturing

Technology has changed and continues to change the manufacturing sector. Some refer to this change as the new industrial revolution.

Change is underway in the manufacturing world and digital technology is the driving force behind it. Most notably, technology has changed the manufacturing sectors' reliance on the human labour force, manufacturing companies' ability to be competitive and the manufacturing industry's innovation processes.

The advent of machinery and technology has decreased the need for and cost of human labour. On the other hand, manufacturers are claiming that they are unable to find workers who have the necessary technological skills for modern manufacturing. Therefore, while technology has impacted the manufacturing industry significantly there is still a void which exists in the labour market.

Investment in technologically advanced machinery and equipment has affected the cost of labour for modern day manufacturers. Highly adaptive, low-cost machinery now allows for manufacturing operations to be less sensitive to the cost of human labour. Thus, technology allows for the manufacturer to retain a low-cost labour-intensive work force without depending on the human labour force. Even as advanced economies develop more automation capabilities, the practice of importing labour for the purposes of accessing cheap labour is becoming less and less viable.

The negative impact technology has had on manufacturing as it relates to labour is the issue of skilled labourers. The most obvious impact of industrial mechanization is that it eliminates many unskilled job positions. However, manufacturers have expressed the difficulty faced with sourcing workers who have the necessary technological skills for modern manufacturing. Industrial robots are mere automatons which humans program to perform simple tasks. Those said tasks require decisionmaking, creativity and adaptation for which human perception is necessary. The outputs of machines are in no way comparable to that of the human labour force. Although, machines are not without limitations. However when a task is done right by robotics, productivity tends to increase dramatically.

The global competitive landscape of manufacturing has been transformed by the impact of technology. Increased productivity and high outputs at a rapid speed illustrate the positive way in which technology has affected the manufacturing sector. Consequently, bigger manufacturers are earmarked as competitive because of their ability to speedily produce high quality goods. On the contrary, some Small and Micro Enterprises (SMEs) are unable to afford expensive technologically advanced production lines. This deters their productivity and inhibits their capacity to become competitive.

In order to attain a competitive edge in the market-place, manufacturing companies must produce high-quality products at a low cost. To achieve this, many companies have noticed that technology plays a vital role. As such, many

How Technology is Changing the Face of Manufacturing

manufacturers make long term mechanization investments especially those who are able to afford the required technology which allows manufacturers to produce high-quality, low-cost goods at a competitive rate.

Per contra, the chance to produce at a competitive rate may not always be given to all manufacturers. High technology costs such as the implementation of an expensive production line is sometimes beyond the reach of an average SME. Thus, not only will such manufacturing companies depend heavily on the human labour force but the speed of outputs may be slower consequently affecting the manufacturer's ability to perform in a competitive environment.

Technology is transforming innovation at its core. Companies are testing new ideas at speeds and prices which were once unimaginable. Technology is offering manufacturers the ability to innovate more efficiently and inexpensively. Innovative manufacturing companies will shift away from traditional research-anddevelopment methods and managers will change the way they solicit ideas.

Manufacturers are now able to explore and test new ideas, because the price of failure is so much lower. This brings changes for corporate culture, forcing managers to give more employees a say in the innovation process. With testing so cheap, easy and accessible, there's less need to ration it as they have in the past. As more people get involved in experimentation, manufacturers will also need to change their focus in education and training efforts for innovation.

Merging Traditional Manufacturing with Additive Manufacturing (3D Printing)

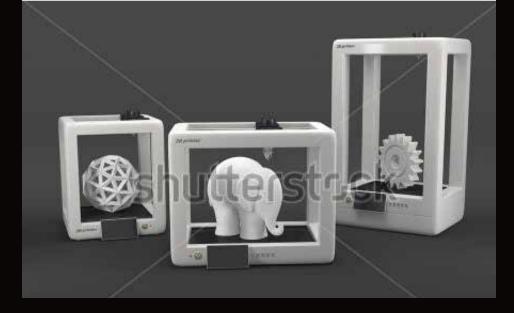


"A machine that could make almost anything." This phrase has been used to (accurately) describe the power which 3D printers wield. To date, such machines have "printed" various articles with different uses, including track shoes, intricate machinery parts, and a foetus. Thus, 3D printing (otherwise known as additive manufacturing) can be likened to activities typically seen in sciencefiction movies. However, 3D printers are no longer fictitious – they are now factual – and it is therefore imperative that manufacturers comprehend the implications of the technology as quickly as possible.

It is possible that this technology will be dispersed throughout the world. The personal computer (PC) was initially technology that,

"A machine that could make almost anything."

over a period of time, became cheaper to produce and (simultaneously) more affordable to the household consumer. This has resulted in the PC being a household item. Also, the PC has evolved from the bulky desktop of the 1980s, to many portable versions, including laptops and tablets. If the 3D printer was to follow the PC's pattern in becoming widespread, there will be many manufacturers who will possess the capability to produce (virtually) anything at any given time. This can impact on the global value chain, as components which are typically



outsourced by manufacturers may now be sourced from within the manufacturer's host country. Additionally, there is the possibility that a large network of additive manufacturers may be created. Such an infrastructure can be described as cloud manufacturing, which is a network of manufacturing resources (e.g. machinery and software) that can be utilised with minimal management effort. Users of cloud manufacturing can simply request the component, and the most apt manufacturer would produce the component, irrespective of the location of the manufacturer.

Currently, manufacturers are forced to store physical inventories of their goods, to ensure that there is always a constant supply for the consumer. There are several costs attached to the storage of inventory:

The cost of space (e.g. rent and heat) The cost of money tied up in inventory The cost of insurance and security

The cost of deterioration and obsolescence of the inventory items.

Conversely, digital inventories would reduce the aforementioned costs. Digital inventories (or ready-to-print design files), can be stored on a computer (or in the cloud), eliminating the need for large warehouses, and the insurance and security for those buildings. Additionally, there would be no cost attached to obsolescence. For ease of understanding, one can consider the advantages of digital file storage when compared with physical file storage. As an added bonus, 3D printing technologies have untapped potential to work with recycled or earth-friendly printing materials.

However, one must still be cognisant that finished goods can also be produced by utilising this technology. This can adversely affect manufacturers in Trinidad and Tobago and in other similar countries. Competing in the global environment has not been easy for companies in small island developing states. The numerous supply-side constraints have been identified in various pieces of literature, and suggestions to overcome these limitations (e.g. niche marketing) have been posited to provide manufacturers in these economies with a competitive advantage. However, many manufacturers in Trinidad and Tobago still continue to compete in the industrial market instead of in the customised market. The industrial market consists of other manufacturers in other countries which possess larger economies, access to cheaper resources (land, labour and capital), or larger domestic market sizes (or all of the aforementioned). Arguably, local manufacturers should compete in the customised market, especially since the Caribbean culture is something that can be marketed as exotic. Competition in the customised market can be easily facilitated by additive manufacturing, as the 3D printer can create tailor-made objects for use by the manufacturer.

In addition to customised goods and intricate man-made components, 3D printers can replicate elaborate abstract items which previously could not have been man-made. The conch intricate design is very complex, and could not have been replicated by conventional machinery. However, a conch can be manufactured utilising additive manufacturing. Additionally, designers have been forced to use conventional design software, which would be supported by conventional manufacturing processes. However, designers can now utilise organic design, which is less rigid, and opens the door (wider) for artistic expression. Thus, barriers of resources and skill which existed in the world of conventional manufacturing are removed courtesy additive manufacturing. Designers are able to unleash their potential via the technology.

To date, the technology has been used in the Caribbean region already. A manufacturer in Jamaica had indicated that an intricate component of his equipment had been damaged (due to wear and tear). Fearful that the component may have been costly (to source as well as to purchase), he used a 3D printer to create the component. He indicated that by utilising the 3D printer, the downtime of his machinery was less than if he had attempted to source the component.

This technology possesses both negative and positive implications for the workforce and the global supply chain. Some jobs may become obsolete, while some new jobs may be created. The dependence by companies on certain countries for cheap raw materials may cease, as these raw materials may be manufactured by the manufacturer himself (thus altering the global supply chain). Further credence to that possibility is added when one considers cloud manufacturing. Therefore, additive manufacturing is not (necessarily) a substitute for traditional manufacturing. Actually, the two can work in tandem, with the end result being reduction in cost for the manufacturer. From production of hard-to-find components to the potential of cloud manufacturing, from assisting manufacturers in the production of their exotic goods to assisting in the production of their mass produced goods, 3D printing can auger well for local businesses.

References: Honigman, Brian. "How 3D Printing Is Reinventing Retail." Forbes. http://www.forbes.com/sites/centurylink/2014/06/03/how-3d-printing-is-reinventing-retail/ (accessed July 25, 2014). Lipson, Hod, and Melba Kurman. Fabricated: The New World of 3D Printing. Indianapolis: John Wiley & Sons, Inc, 2013.



TTMA Membership Intelligence and Support Services



Т

he Trinidad and Tobago Manufacturers' Association (TTMA) recognizes its role in consistently supporting the diversification and overall well being of the T&T economy, by sustaining the development of a robust manufacturing sector.

Not only must the manufacturing sector increase its contribution to Gross Domestic Product (GDP), but it must also develop into a diverse, well-resourced, technologically savvy, information centric and innovation driven component of our economic structure. TTMA is striding toward this new definition of its sector, summarized by its new tagline – 'Transforming the manufacturing sector into a driving force'.

To this end, the TTMA's Business Development Unit (BDU) has embarked on a massive exercise to shore up the effectiveness of the Association's service delivery to the entire membership. Central to this exercise is a new emphasis on data management and data development; the BDU has recognized that the vast majority of its internal and external stakeholders require current, relevant data and analysis to inform its decision making, advocacy and support. There has long been a dearth of such information as it pertains to not only the manufacturing sector, but also many other productive sectors in Trinidad and Tobago. Plans are therefore being finalized within the TTMA at this time to forever change that reality, insofar as it pertains to manufacturing and related sectors; in so doing, it is expected that the overall 'intelligence' of the TTMA concerning the membership will be increased.

One of the BDU's early initiatives to increase membership intelligence was a survey which focused on Business Development challenges being faced by members. Not surprisingly, Labour & Training was identified as the number one factor, followed closely by the need for greater Market Intelligence and Business Information, and also overcoming challenges dealing with Government Bureacracy. Given these findings, the BDU has begun to put in motion a series of activities to start dealing with each of these core issues simultaneously.

With respect to Labour and Training, an online facility is being established that will allow TTMA's members to advertise job vacancies both internally (amongst members) and also to the general public (on the TTMA's website). Dedicated to employment within the manufacturing sector, this online portal will be promoted at the various tertiary level, vocational and other skills development institutes nationally; partnerships with such institutions to facilitate this process are presently being formed. When fully operational, the facility – titled the TTMA's Employee Advertisement Programme (EAP) - will allow prospective employees to be aware of the vacancies that exist in manufacturing via the click of a button, effectively simplifying their search for employment.

Additionally, the TTMA is in discussion with both the National Training Agency (NTA) and the University of Trinidad and Tobago (UTT) regarding Apprenticeship Programmes and Mentorship of young entrepreneurs respectively. For the apprenticeship programmes, specific sub-sectors within manufacturing that possess the greatest needs are to be identified. Once this is agreed upon by both organizations, apprentices will then be sought after to ensure

TTMA WILL BE ROLLING OUT A SERIES OF BUSINESS DEVELOPMENT SURVEYS TO UNDERSTAND THE NEED FOR MARKET INTELLIGENCE WITH GREATER SPECIFICITY

the programmes' success.

As far as the mentorship programme is concerned, TTMA is being asked, through its members, to provide mentors for young persons who are either about to start new businesses or entering into existing industries. This partnership holds the opportunity to furnish several of our manufacturers with intelligent, motivated young university graduates endowed with the capacity to take the reins of the sector's growth in years to come.

With respect to Market Intelligence, TTMA is currently developing a Member Information Centre (MIC) that will always be kept up to date with the latest news, business trends, legislation, trade data & status of trade negotiations, highlights from nationwide seminars & workshops attended by TTMA, as well as all other relevant notices to the membership. Additionally, TTMA will be rolling out a series of business development surveys to understand the need for market intelligence with greater specificity. Over time, the MIC will then become a repository of more relevant information, as it will be informed by the survey findings. These findings of all major surveys will be circulated in summary form to the membership; specific survey results will be used to sharpen the TTMA's advocacy and

representation of its members to the wider stakeholder environment. TTMA's Marketing & Communications Unit will select some of these survey results for publication on its website (in summary form to ensure the confidentiality of its members' specific feedback).

The next developmental area under active consideration is government bureaucracy. While the government must be commended on working to reduce the impact of bureaucratic systems plaguing the business sector, many regulatory agencies continue to function below 21st century, internationally competitive standards. TTMA has had moderate success in its advocacy for improved government service delivery. With the advent of powerful data analysis emerging from its new thrust, TTMA aims to become more targeted in its approach to lobbying and advocacy, as such analysis can be the foundation of all press releases, position papers, presentations and correspondence to government agencies. As an illustration, a public statement on the impact of government bureaucracy may be - '75% of the manufacturing sector affected by inefficient (agency name called) document processing, leading to millions of dollars in lost revenue '. This would serve to strengthen the demand for improved service on behalf of affected members, and the country as a whole. Any additional areas of support needed from the TTMA will also be addressed systematically.

All of these new initiatives depend critically upon the support and cooperation of TTMA's membership, as they will be regularly asked to provide the "raw-material" data that will be collated and analyzed, leading to the realization of these noble objectives. The macro objective is to, in the long term, increase the manufacturing sector's GDP contribution, and sustain its growth for years to come.

For further information on the TTMA's Membership Intelligence and Support Services, please contact Mr. Marc Sandy, Team Lead, Business Development Unit at 675-8862 extension 241 or via email at research@ttma. com



BECOME HACCP Compliant today!

CARIRI CAN HELP YOUR BUSINESS BECOME HACCP COMPLIANT!

Is your product ready for the export market?

Are you under-estimating the potential of your processing operations?

Have you tried expanding your processing operations to meet HACCP requirements but failed to meet the challenge?

If your answer is YES to any of the above questions, it's time to contact CARIRI to easily find a solution to your problem.

The Food Industry is growing and developing at a fast pace and the criteria for reaching export markets is becoming more and more stringent. Competition amongst food manufacturers and processors is escalating and the safety and quality of food provided to consumers have never been more crucial given the development of new international laws and regulations

CARIRI's Food Technology Unit provides HACCP training and consultancy, including HACCP plan development and HACCP implementation. Let us partner with you to ensure that your food products are of the highest quality, safe and export ready.



Contact us today to engage in discussions that can help you become HACCP compliant!

Caribbean Industrial Research Institute U.W.I. Campus, St. Augustine, Trinidad and Tobago, West Indies Telephone: (868) 299-0210 Ext. 5053, 5172 Telefax: (868) 662-7177 E-mail: biotech@cariri.com

Why Limit Yourself



Every Trinbagonian knows that once given the opportunity we can be competitive across any platform and that's across any facet, intellectual, athletics and in commerce.

By Shaun Waldron

MANAGER CREDIT & BUSINESS DEVELOPMENT EXIMBANK

We are distinguished by our demeanor, hard work and entrepreneurial spirit, all of which are manifested in our goods and services for the world to see. But the question is, are our goods and services broadcasted to the world? Are we taking advantage of the opportunities presented to us? Are we limiting ourselves? Thanks to globalization or global connectivity, every local entrepreneur and company has the opportunity to showcase to the world just how good their product or service is. The world is your marketplace and companies that embrace their export potential and global opportunities will be the leaders of the future and our local companies must take advantage of the global connectivity of the world today. Global connectivity has to become part of your daily vocabulary, daily activities and your DNA if you want to grow, become relevant and sustain your growth.

Trinidad and Tobago has a population of 1.2 million people, while the world has a population of 7.2 billion, so why limit yourself to 0.00017 % of your market potential? Closer to home if we look at the Caribbean exclusive of Trinidad and Tobago but inclusive of Cuba, Haiti, Dominican Republic and the US Virgin Islands that's a population of 41 million or 35 times the population of Trinidad and Tobago. So again why limit yourself? It's recognized that there are mixed signals out there about the global economic recovery, global risks, challenges and opportunities, but global connectivity is the key to both country and individual business development, sustainability and growth. We have to change the mentality that Trinidad and Tobago is the end all for our products and services and start thinking globally and past any perceived barriers. Think bigger, think further, and think internationally. Start exploring opportunities in markets that are strong, rebuilding or developing, globalization has always been here, it's just moving a lot faster now.

So the question is, what can local companies do to take advantage of global connectivity? This question has to be a call to action for any business that is serious about not only growth, but domestic and international growth. The first thing to remember is, it's all about relationships, both building them quickly and sustaining them. If you are committed to growing and doing business globally you will have to learn about the market that you want to look at. While the internet and market research is helpful, there is no substitute for firsthand information; that means getting on a plane and taking a trip to visit the country you are interested in. Meet with distributors, go on the trade with them, and meet with regulators and government officials. Get an overall feel for the market and country and most importantly make personal connections. The second thing is getting the requisite financing needed to ensure that your product is of the best quality, your plant and staff is properly trained, you have the ability to adequately supply orders placed. Ensure you have the right financing product at the right rate, because while you will be competing on quality you have to ensure you don't price yourself out of the competition for customers.

In my various meetings with managers and CEO's, the issue of barriers and restrictions to exporting come up and usually the same issues are discussed. 1) Country regulations and complexity of the regulations 2) Finding markets to look at 3) Financing options. I consider these concerns not as real barriers but as perceived barriers simply because all three concerns have simple solutions that can be found right here in Trinidad and Tobago. While I believe you have to be self-driven and champion your own cause, you don't have to go it alone. There are several local organizations that can help you take advantage of overseas opportunities; ExporTT and the TTMA can assist in the identification of new markets and Eximbank can provide the requisite financing allowing the reduction of costs, improvement in guality and market your export products. The growth of an economy is directly related to exports. Therefore, our aggressive support of exports, will nurture a stable economic environment, which not only provides our country with a robust export initiative, but also establish a strong nonhydrocarbon sector, that will produce a healthy well balanced economy. You have to keep your network going, stay in contact with the business relations fostered, you never know when you will need each other. So consider this a call to action to every company operating within Trinidad and Tobago, get out there and create networks, get new markets, get new clients and always remember don't limit yourself.



A BIRD'S EYE VIEW OF THE TRADESHOW FLOOR

TTMA hosts the 15th Annual Trade and Investment Convention

The fifteenth annual Trade and Investment Convention (TIC) was held from July 2nd – 5th 2014 at the Centre of Excellence, Macoya. The event was hosted by the Trinidad and Tobago Manufacturers' Association and sponsored by the Ministry of Trade, Industry, Investment and Communications, First Citizens, TSTT Blink-Bmobile and Balroop's Sound System Limited.

The Convention officially began with the Opening Ceremony, held at the Andre Kamperveen Hall. This year saw the first attendance by booth exhibitors to this prestigious event. The ceremony was well attended by specially invited guests, government officials, ambassadors, airline and hotel officials, TTMA's board of directors and past presidents.

TTMA President, Mr. Nicholas Lok Jack offered opening remarks which was followed by presentations by TIC sponsors, Mr. Larry Nath, Group Chief Executive Officer of First Citizens, Mr. Rakesh Goswami, Executive VP of Enterprise Services, TSTT and the Honourable Minister of Trade, Industry, Investment and Communications, Vasant Bharath.

TIC 2014, in keeping with the initiative of facilitating access to international markets and creating new business linkages, attracted participation from Venezuela, Guadeloupe, Martinique, Brazil, alongside displays from Canada, Cuba, Haiti, China, Italy, Jamaica, Guyana, Suriname, Barbados, the Dominican Republic, the USA, the UK and other countries.

The Convention continued its trend of facilitating international country pavilions and saw the introduction of a new pavilion



MINISTER BHARATH (CENTRE) OFFICIALLY OPENS TIC 2014, AT RIGHT: TTMA PRESIDENT NICHOLAS LOK JACK AT LEFT: MINISTER BHOENDRADATT TEWARIE

hosted by Venezuela; other international and regional pavilions included Brazil, Martinique and Guadeloupe. The Venezuelan delegation occupied four large pavilions creating the largest pavilion ever hosted at a TIC forum. This proved extremely attractive to local and international buyers and further cemented the Convention's reputation as a nexus for Caribbean-Latin American trade generation.

Pavilions were also occupied by TIC's major sponsors along with local exhibitors including Electrical Industry Holdings Limited, MDC-UM Business and Home Furniture and the Tobago House of Assembly.

Overall, TIC 2014 attracted over 350 international buyers representing 47 countries such as Sweden, Belgium, Italy, Chile, Peru, Costa Rica and Colombia. The highest concentration of buyers came from the wholesale and retail trade sector followed by the Government services sector. Exhibitors hailed the Convention as a success based on the strong networking and business linkages formed.

TIC upheld its feature on business education through a number of sessions held in the seminar spaces of the Andre Kamperveen Room, the Ken Galt Room, and the Nelson Mandela Room. Seminars were held simultaneously, with 22 seminar spaces being booked, spanning a wide range of topics beneficial to the business community.

In light of the need to facilitate and promote manufacturers in a dynamic and growing global economy, significant emphasis was placed on Business to Business (B2B) Coordination. This year saw the introduction of an executive lounge for the purpose of facilitating immediate business transactions generated on the tradeshow floor. This service was offered to both buyers and exhibitors to conduct business meetings. Exhibitors and buyers were also given the opportunity to pre-arrange meetings with potential business partners. This new service was met with enthusiasm by exhibitors and buyers who welcomed the opportunity to expand and concretize their business to business ventures.

After four days of business to business meetings and transactions, the Convention concluded with the TIC 'CoolDown' a networking event held for local, regional and international exhibitors and sponsors. This lavish event was held on Friday 4th July at the Garden Sanctuary, Centre of Excellence, Macoya. The environment allowed for a less formal continuation of the business relationships previously developed and affirmed on the trade show floor.

A solid marketing, public relations and advertising campaign attracted approximately 5,600 business representatives to the Convention allowing for excellent growth and investment opportunities.



INNOVATION FACILITATION: CHALLENGES AND CARIRI'S EFFORTS IN CAPACITY BUILDING





By Robert Nunes

Although it is widely acknowledged that Trinidad and Tobago is home to some of the most creative and talented people to be found anywhere in the world, a key deterrent in the country's thrust to achieve economic sustainability, at the core of which is a diversified economic base, is our seeming inability to translate creativity and talent into value added, tradeable goods and services on a sizeable enough scale; which is where Innovation, the business mantra of the 21st. century, enters the fray.

While the topic has been bandied about and has been at the forefront of the national developmental agenda for some time, to the point where some may arguably speak of "Innovation fatigue", the stark reality is that the country has considerable ground to cover in inculcating Innovation into the national psyche, as is evidenced by Innovation being ranked among the pillars with the lowest scores in the 2013 - 2014 World Economic Forum (WEF) Global Competitiveness Index (GCI); and thus remaining a major competitive weakness. This therefore begs the question whether, notwithstanding the relatively widespread coverage of the topic, there is a thorough enough understanding and appreciation of the meaning and nature of Innovation among the key economic actors, viz. Industry, Government and Academia; or whether the perception is such that the complexity, risk and unpredictability inherent in Innovation constitute deterrents to its active pursuit by a large segment of local industry. We predicate the rest of our comments with a simple, basic definition of Innovation: Creativity being implemented.

Notwithstanding the factors that may be at play, it is undeniable that without Innovation, we will be unable to claim our rightful place in the global economic arena. Competitiveness and Innovation are intrinsically interwoven. Without Innovation, our firms will be unable to compete, economic diversification will be unachievable and our economic fortunes will continue to be dependent primarily on the vagaries of the energy-based sector.

Innovation, Knowledge and Entrepreneurship are now the prime determinants of competitive advantage, with practically all countries aggressively pursuing the creation, growth and attraction of knowledge-based, high value-added economic activity as their primary developmental strategy.

As far as Innovation is concerned, therefore, recognition and awareness must be transformed into effective Innovation on a national scale, which means that mindsets, attitudes/behaviours and enabling environment need to be radically transformed for sustainable development to be achieved.

The issues of capacity building for Innovation and Enterprise Creation, and enhancing competitiveness assume critical importance and can only be successfully addressed in a holistic and coherent manner, recognizing that there are a number of pillars which constitute the foundation of the new knowledge economy, key amongst which are Innovation Capacity, Entrepreneurship, Human Capital, ICT, Economic Policy and Economic Performance. ICT, in particular, which has radically transformed marketplace dynamics, has levelled the playing field somewhat and affords developing countries the potential for Innovation and competitiveness enhancement. With the support of Government, the Caribbean Industrial Research Institute (CARIRI), having recognized the critical importance of Innovation to the country's economic survival and growth, has taken up the mantle to play a pivotal role in the charge to create an innovation driven economy and, in this regard, has initiated efforts at building capacity for Innovation in both the public and private sectors. This is consistent with the dictates of its strategic planning framework which envision the Institute as a national focal point for Innovation, contributing more substantively to the country's socioeconomic development.

At the public sector level, the Institute has conducted Innovation Capacity Building Programmes, aimed at fostering a culture of Innovation in the public service; the objective being to expose different levels of staff to the fundamental tenets of Innovation, that is, providing a proper understanding of the Innovation dynamic, including tools and techniques to stimulate innovative ideas and implement them in the workplace.

Furthermore, as concerns Capacity Building for Innovation at the private sector level, the Institute launched, in June, 2013, its Centre for Enterprise Development (CED), which is located at Freeport. The CED incorporates four (4) units

A BUSINESS HATCHERY, WHICH WOULD CATER FOR PROVIDING BUSINESS SUPPORT SERVICES TO START-UPS, WITHIN THE FRAMEWORK OF THE BUSINESS INCUBATOR

that support enterprise development from "ideas through to businesses". Towards this end, the CED houses a Business Incubator, which provides an environment in which qualified companies and individuals can access the full range of business support services necessary to ensure that they have the best possible chance of achieving success after graduating from the Programme; an Innovation Incubator, which is designed to facilitate development of innovative ideas through to proof of concept; Technology Bays, which would facilitate commercialization of technologies via demonstration of production process; and an ICT Centre comprising a Mobile Application Development Centre (MCentre) and a Developer's Studio (Tekmania) which would cater for development of ICT related project initiatives.

A Business Hatchery, which would cater for providing business support services to startups, within the framework of the Business Incubator, is in the process of being established. This will be accessible in the first instance to select graduates of the Idea to Innovation Programme which is an initiative of the Ministry of Planning and Sustainable Development, under the Council for Competitiveness and Innovation (CCI). Further developmental plans are based on the selection of University graduates who may have developed projects and are interested in implementation.

The CED is expected to contribute significantly to accelerating Innovation and Entrepreneurship in Trinidad and Tobago.

CARIRI is cognizant of the critical importance of networks/networking in the Innovation process and is actively pursuing such activity with key stakeholders, viz. Public sector organizations, Universities, Private sector companies/organizations, Research and Technology Organizations (local and foreign) and Regional and International Organizations, to advance the national Innovation agenda.

CALENDAR



SEPTEMBER 17TH

DAY WORKSHOP: Centered on Standardization and Certification, National Quality Infrastructure, ISO 9001:2008, ISO 9001:2015, and ISO 14001:2015. Venue: Trinidad & Tobago Bureau of Standards, Macoya Time: 9 a.m. – 4 p.m. Contact: The Trade Unit for more info at 675-8862 ext 248/234/225 or tradeassist@ttma.com

SEPTEMBER 22ND

PRODUCTS RECALL SEMINAR: Appreciation, understanding and managing the risk of having your products in the marketplace. Contact: The Marketing Unit for more info at 675-8862 ext 242 or communication@ttma.com

OCTOBER 2ND TO OCTOBER 5TH

TRADE MISSION TO GUYANA: The Trade Mission is scheduled in time with GuyExpo 2014 Contact: The Trade Unit for more info at 675-8862 ext 248/234/225 or <u>tradedesk@ttma.com</u>

DECEMBER 12TH

TTMA CHRISTMAS PARTY House of Angostura 7 p.m. -11 p.m.

Best practices in Selecting and Deploying Business Applications

By Derrick Villeneuve, Director of Strategy, Davyn



Derrick Villeneuve

When it comes to innovation, there is no one area that holds the key to success. You can innovate with respect to your people, capital equipment, processes, or technology in the form of business applications that let you do more with your data. This article focusses on the last item and how you can get more out of your investment in IT technology.

One thing I commonly see in Trinidad and Tobago is that organisations have delegated the responsibility for selecting business applications to their IT departments. In almost all cases this is a big mistake. Just because an application runs on a computer does not mean IT should own it and take the leadership role in the selection and deployment of such business applications. The function of an IT department is to provide infrastructure to run the applications we need to operate our businesses effectively and efficiently. The ownership of selecting and using such business applications should belong to the departments that actually use them.

So if you are looking for a customer relationship management solution, this should be driven by Sales and Marketing, an inventory system solution by Operations and an accounting solution by Finance as examples. There are exceptions, but in many cases IT simply does not have the knowledge, experience and background to make proper decisions about the solutions that the operations side of the business requires. At most, their role should be that of coordinators or project managers for the process of finding, selecting and implementing these solutions.

The next area I think can also be improved is the process used to go about selecting these applications. In at least 50% of the cases I see organisations release a Request For Proposal (RFP) which is poorly written and contains a lot of excess and unnecessary requirements. We all love checklists and you can easily go online and pull a requirements listing that you think would be great to throw into an RFP. In some cases you will hire a consultant and they will still supply the same checklist. It takes a lot of time and understanding to review software applications. You have to find the solutions you want to review, put together an RFP, comb through responses, and sit through demos and rounds of questions and answers. There are things you can do to make this easier on your staff and the vendors, one of which you will eventually choose and continue to work with.

You need to focus on what is important. If

you start by picking the top solutions for an area you can be assured that the core functionality is there. So if you are looking for a financial system you don't need to ask "Can you enter a journal entry?" You should leave that stuff out. Your questions should be focused on the critical needs for your business such as the desire to manage financial budgets in Excel or the ability to provide special pricing. Another way to look at it is to determine what will differentiate you from your competitors. This is not going to be the basic system functions. It is going to be the functions that give you better visibility and analyses of critical business data or help you manage processes and become more efficient so you can deliver an improved experience to your customer.

So you have the right business solution. Now you can just deploy it and everything is going to be perfect. Easy right? Not so fast. I spent several years working for Microsoft and interacting with customers and prospects. Microsoft has a range of applications and it was normal for multiple partners to be engaged with the prospect pitching the same or similar solutions. They would ask me which solution was best. My answer was that, more important than the solution, was to pick the right partner. This was not an area I could play favorites but I encouraged the customer to review each of them and evaluate their capabilities first. You can have the very best software but if the company you are working with to deploy it does not have the resources or expertise, you can easily end up with something completely unusable. Ensure that you interview each

vendor you are thinking of working with. Review their capabilities, certifications or status with the respective software vendor and most importantly check at least three customer references. If they hesitate or take a long time to provide references you should be very concerned. Trinidad's business community is such that it is also easy to check with your business contacts and find out what the track record is for that vendor.

So now, with the right software and consultants you should be off to a perfect implementation! Unfortunately there is one more hurdle and this comes back to the first point we made which is who "owns" the application in your business. It most certainly should not be IT unless it is an infrastructure solution such as email or anti-virus software. The operations side of your business needs to be engaged and committed to the successful roll out of this application. IT is there to help with the technical stuff. They are not key to the success or failure of the deployment. If you are like most companies, your people are not sitting around twiddling their thumbs either so this is going to be extra work for them in addition to their regular responsibilities. Ensure they have the time, motivation and executive support to get this done. Educate them as to why this is critical to the success of your business and, as a result, their job. If you are lax at your follow up, and you do not dedicate the right resources to the project it could still fail and you are once again left with something lacking or unusable and a lot of wasted time and money.

Your business can and will greatly benefit from the right business application software deployed in the right way. Unfortunately it is one of the most complicated projects you can undertake, particularly if the software is complex like an Enterprise Resource Planning [ERP solution]. Take the time to understand what you want from the solution and how you will achieve the Return on Investment [ROI] on the deployment. Treat this with the same diligence you would to acquire an important piece of capital equipment you deploy to your shop floor.



Making Your Business Better!

Contact Davyn today for a free ERP Consultation at: <u>derrick@davyntt.com</u> | <u>www.davyntt.com</u> | 868-674-9788

new members

COMPANY NAME	ADDRESS	EMAIL	TEL.
AMCOR RIGID PLASTICS CARIBBEAN LIMITED	#2, ORANGE GROVE ESTATE, TRINCITY	Philippe.bruchet@amcor.com	640-8824/682-028
ASA ENTERPRISES LIMITED	#14 RAMKISSOON TRACE, MC BEAN, COUVA	OHSNACKS@TSTT.NET.TT	(868)-679-7651
CHAGUARAMAS DEVELOPMENT AUTHORITY	AIRWAY ROAD, CHAGUARAMAS	CEOASSISTANT@CHAGDEV.COM	(868) 634-4227
COLUMBUS COMMUNICATIONS TRINIDAD LIMITED	#29 VICTORIA SQUARE, PORT-OF-SPAIN	WAMCDONALD@COLUMBUS.COM	(868) 224-2677
DEO'S RADIATOR AND GAS TANK LINING SERVICE	CORNER BEJUCAL ROAD AND URIAH BUTLER HIGHWAY, CHARLIEVILLE, CHAGUANAS	Ramlochanjamuna@hotmail.com	(868) 665-5373
ECO INDUSTRIAL DEVELOPMENT COMPANY TOBAGO LTD.	ISSAC T. MC LEOD BLD., SISLYN THOMAS RD. COVE ECO-INDUSTRIAL BUSINESS PARK CANGE BAY RD., TOBAGO	Marketing@e-idcot.co.tt	(868) 635-2683
ethylchem limited	LOT A11-6 AMAZON DRIVE, PT. LISAS INDUSTRIAL ESTATE, COUVA	ADMIN@ETHYLCHEM.COM	(868)-636-2458
FLAME INDUSTRIES LIMITED	40-44 SUTTON STREET, SAN FERNANDO	ALTHEA@SSLTT.COM	(868) 657-5194
GLOVE MANUFACTURING COMPANY OF TRINIDAD & TOBAGO	#28, EXCHANGE LOTS, COUVA	D_BABWAH@HOTMAIL.COM	(868)-636-4040
GULF INSURANCE LIMITED	1GRAY STREET, ST. CLAIR,PORT OF SPAIN	INF0@GULFINSURANCELTD.COM	(868)-622-5878
HIBBIZ CO. LTD.	#1 EXTENSION, EL SOCORRO, TRADEZONE, SAN JUAN	STUARTFS@HOTMAIL.COM	(868) 675-5052
MONSTER MEDIA GROUP LIMITED	#1 HUMPHREY STREET, ST. JAMES	CHRIS@MONSTERMEDIAGROUP.COM	(868)-628-9221
NRS SERVICES LIMITED	#24 ATTALEA CIRCLE, ROYSTONIA, COUVA	NRS_SERVICES@HOTMAIL.COM	(868) 683-1477
SIGNWAVE LIMITED	13 BELLE SMYTHE ST., WOODBROOK	COLIN@SIGNWAVETT.COM	(868)-622-1800
STINGRAE CARIBBEAN LIMITED	BUILDING E-2, DEMERARA DRIVE, POINT LISAS	SALES@STINGRAECARIBBEAN.COM	(868)-679-1111
SUCRO CAN CARIBBEAN LIMITED	SHIPPING TERMINAL NORTH SEA, POINT LISAS,COUVA	VMARAJ@SUCROCAN.CA	(868) 636-2776
TRINIDAD CHOCOLATE FACTORY LIMITED	5, BAYVIEW AVENUE, GROVE PARK, OTAHEITE	RJTROTMAN@GMAIL.COM	(868) 677-3455
TRINITY PAINTS LIMITED	1 NORTH EAST DRIVE, TAROUBA ROAD, MARABELLA	RESHMA.S@TRINITYPAINTS.COM	(868) 658-1538



GUYANA

FULL NAME: CO-OPERATIVE REPUBLIC OF GUYANA

POPULATION: 756,000 (UN, 2011)

CAPITAL: Georgetown

AREA: 214,969 SQ KM (83,000 SQ MILES)

Guyana can boast of its remarkably rich ecology. Tropical rainforests - filled with distinctive plants and trees, teeming with exotic birds, insects and mammals - are a big draw for eco-tourists. However, political troubles, MAJOR LANGUAGES: ENGLISH, INDIGENOUS LANGUAGES, CREOLE, HINDI, URDU

LIFE EXPECTANCY: 67 YEARS (MEN) 73 YEARS (WOMEN) (UN)

ethnic tension and economic mismanagement have left the former British colony with serious economic problems. Guyana, formerly known as Guiana was inhabited by semi-nomadic Amerindian tribes who lived by hunting and

MONETARY UNIT: 1 GUYANESE DOLLAR (G\$) =100 CENTS

MAIN EXPORTS: BAUXITE AND ALUMINA, SUGAR, GOLD, RICE, SHRIMP, MOLASSES, RUM, TIMBER GNI PER CAPITA: US\$2,900 (WORLD BANK, 2011)

INTERNET DOMAIN: .gy INT. DIALING CODE: +592

fishing – notably Arawaks and Caribs. It was divided by European powers into Spanish Guiana (Venezuela), Portuguese Guiana (Brazil), French Guiana, Dutch Guiana (Suriname) and British Guiana (Guyana). Guyana is a republic, divided into administrative regions, with an executive President and parliamentary legislature. The 1980 constitution, amended in 2001, provides for an executive presidency and a unicameral legislature, the National Assembly, with 65 members directly elected by proportional representation: forty (40) at a national level and twenty-five (25) at a regional level.

The Guyanese economy recorded Gross Domestic Product Growth (GDP) of 5.4% in 2011, the sixth year of consecutive growth. Real GDP was targeted to grow by 4.1% in 2012. The growth of the economy was driven mainly by growth in the various sectors, mainly the extracting gold and bauxite industries. Additionally, Guyana's export earnings in 2011 grew by 27.6%, with the mining and quarrying sector expanding by close to 20% and gold alone seeing growth of just over 33%. See table below for percentage growth rates of specific industries. (See Table 2)

Since the late 1990s the government has divested itself of many industries seen from the table below. The sugar industry - a key source of foreign exchange and Guyana's main employer - has been hit by the loss of preferential access to EU markets and a cut in European sugar subsidies, however continues to be a major export of Guyana. A new Procurement Act and implementing regulations have been adopted. The Act covers procurement at the national, ministerial, government agency, and regional levels. It contains mandatory open tendering and various provisions for transparency and accountability in procurement processes, which represents an improvement over the previous legislation. Preferences are granted to domestic goods and supplies and to small businesses.

Guyana is an integral part in the development of CARICOM as it is a member of the CARICOM Single Market, which means that all imports from Trinidad and Tobago are dutyfree. Through a combination of regional, bilateral and preferential agreements, about 75 percent of Guyana's exports enter destination markets duty free, with many others receiving dutyreduced access.

Guyana over the years has signed many bilateral agreements that has strengthened its ties with foreign countries and investors. One of these agreements was between The Republic of China and Guyana in signing an Agreement on Economic and Technical Co-operation in December 2012. Under this Agreement, the Government of the People's Republic of China will provide RMB¥30,000,000 (equivalent to US\$4.8M or G\$998.0M) for the implementation of bilateral co-operation projects to be agreed

upon by the two Governments.

Guyana is seen as an entrance to South America. Its location allows for access to the English-speaking Caribbean while neighbouring two of the most important economies on the continent - Brazil and Venezuela.

Guyana has a Memorandum of Understanding between the Ministry of Agriculture of the Republic of Guyana and the Ministry of Agriculture of the Federative Republic of Brazil in the Area of Philosanitary Security for Products of Vegetal Origin; signed as part of a bilateral agreement in 2012.

According to "Doing Business 2014 data" provided by the World Bank Group, Guyana ranks 115th out of 189 economies in doing business, 80th in protecting investors and 94th for starting a business in Guyana.

As stated before, Guyana's other main export industries are: mining, mainly of gold and bauxite. Efforts are also being made to diversify the fishing and forestry sectors, through the development of aquaculture and wood processing industries, respectively.

Guyana is seen as a rich and diverse market that has much potential for its locals as well as international prospects. In light of the economic developments indicated above in the country profile of Guyana, the Trinidad and Tobago Manufacturers' Association (TTMA) will be organizing a trade mission to Guyana taking place over the period October 2nd to October 5th, 2014. The trade mission is anticipated to increase the relations between Guyana and Trinidad and Tobago. Additionally, the trade mission is scheduled in time for GuyExpo 2014. GuyExpo is Guyana's largest Trade and Investment Exposition. It is seen as a lucrative platform for showcasing Trinidad and Tobago manufacturers while creating more business with Guyana's business community. For more information about the trade mission to Guyana, kindly contact the Trade Unit of the TTMA at 675-8862 Ext 248/234/225.

Table 1: Economic Indicators for Guyana

GDP	LAST	PREVIOUS	HIGHEST	LOWEST	UNIT
GDP	2.85	2.58	2.85	0.17	USD Billion
GDP Annual Growth Rate	5.20	3.90	11.36	-13.19	Percent
GDP per capita	1276.80	1225.04	1276.80	658.98	USD
GDP per capita PPP	2929.70	2810.93	2929.70	1563.50	USD

Table 2 showing Industry Growth Rates (in Percentages %)

SECTOR/INDUSTRY	2010	2011	2012	2013
Agriculture, Fishing and Forestry	2.3	2.7	3.7	3.7
Mining and Quarrying	-5.4	19.2	14.8	3.0
Manufacturing	0.3	6.8	2.4	4.4
Services	7.3	4.6	4.4	6.3

Sources: Trading Economics, Bureau of Statistics, Guyana, BBC Country Profile of Guyana, Guyana WTO Review 2009, Ministry of Foreign Affairs, Guyana

Economic Review

GLOBAL ECONOMIC REVIEW

According to Euronews, the US economy barely grew in the first three months of this year but this is blamed on harsh weather which hit everything from corporate spending to home building. As a result, the IMF cut its growth forecast for the US to 2% down from its April forecast of 2.8%. Consumer spending which accounts for more than two-thirds of US economic activity increased by 3% in the second quarter of 2014.

The Eurozone economy got a welcomed push in that the region's economy recovered at the end of the first quarter. Both the manufacturing and services sectors, jumped in January and February, although they fell slightly in March 2014. The tensions of Russia and Ukraine weighed heavily on Germany, Europe's largest economy, and on its trade partnership.

The Japanese economy increased by 1.6% in the first three months of 2014, due to a surge in capital spending.

ECONOMIC PERFORMANCE OF THE CARICOM COUNTRIES

Jamaica for the first time in nearly 20 years recorded a fiscal surplus of 0.1% of GDP. Furthermore, the World Bank predicts that Jamaica will end 2014 with economic growth of 1.1% and 2015 with 1.3%.

The Barbados economy is estimated to have fallen by 0.4 % during the first quarter of 2014; a slight improvement in comparison to 2013 when there was a decline of 1.2%.

The performance among the Organisation of Eastern Caribbean States (OECS) has not been uniform. GDP (gross domestic product) growth statistics indicate that the region contracted for two consecutive years in 2009 and 2010, with high disparities across the grouping. These disparities ranged from in excess of 15 % in the case of Antigua and Barbuda to a contraction of approximately 2.7 % in the case of St. Vincent and the Grenadines. According to Dr. Patrick Antonie, six years after the onset of the global economic crisis, there is evidence that the economies of the OECS are showing signs of rebound.

MACRO-ECONOMIC PERFORMANCE OF TRINIDAD AND TOBAGO

According to the Central Bank of Trinidad and Tobago, the latest information shows that the economy expanded by 2.1% on a yearon-year basis in the fourth quarter of 2013, rebounding from a 0.4% decline in the third quarter of 2013. Activity in the energy sector rose by 2.4% in the fourth quarter of 2013, an improvement over the last quarter which declined by 3.9%. Growth in the non-energy sector stood at 1.9% in the fourth quarter of 2013, with the manufacturing and construction sectors growing by 2.1 and 2.5 % respectively.

Further, there was a fall of natural gas production which impacted the energy sector in the early months of 2014, with the production and exploration, and refining sub-industries contracting by 5% and 2.3% respectively.

The inflation rate in Trinidad and Tobago was recorded at 3.08% in May of 2014. The Unemployment Rate in Trinidad and Tobago decreased to 3.70% in the first quarter of 2013 from 4.70% in the fourth quarter of 2012.

Private sector credit by the consolidated financial systems grew by 3.2% in September 2013 compared with 2.9% in August 2013. Also, Consumer lending increased by almost 6.0% in September 2013, slightly lower than the 6.3% posted in the previous month.

MANUFACTURING SECTOR OF TRINIDAD AND TOBAGO

The Central Bank in its review of the fourth quarter of 2013 stated that the non-energy sector stood at 1.9% and would be expected to continue this economic trend well into the year of 2014. This momentum has slowed because of foreign exchange struggle faced by some of the manufacturers for business operations. the TTMA in an effort to highlight this plight has released statements to the media. TTMA has been informed by its members that the situation continues unabated, with commercial banks maintaining a queuing system and only supplying a small percentage of the requirements of local manufacturers' needs.

Other sectors such as the construction sector has experienced increased growth of 12.5% in the fourth quarter of 2013. This increase was related to several public sector projects including highway construction and housing and some private sector developments.

On the trade balance side, Trinidad and Tobago imports mainly mineral fuels, lubricants and related materials followed by machinery and transport equipment as seen in table 1

The table shows the value of trade by sector in 2012. (See Table 1)

On the export side, Trinidad and Tobago's main export products, as seen from table 2, (by sector) includes Mineral fuel, Lubricants and Related Materials and closely followed by the Chemical Sector and Manufactured Goods.

The growth of Trinidad and Tobago's market expansion has been amplified with the pursuits of bilateral agreements which have fostered new economic and trade ties with new countries. Several trade agreements include the CARICOM and Canada Agreement, the CARICOM and Cuba Agreement and the Trinidad and Tobago and Panama Agreement. The agreement between Trinidad and Tobago and Panama is a Partial Scope Trade Agreement, which is expected to result in economic benefits for both countries. This agreement will strengthen the existing trade relationship between the two countries, as it will afford further market diversification and penetration. The signing of this agreement is the manifestation of both governments foreign policy impacting positively in the areas of trade, investment, tourism and cultural cooperation.

Table 1 :CENTRAL STATISTICAL OFFICE - TRADE SECTIONDataset: VALUE OF TRADE BY SECTIONS OF THE SITC (2012)

SECTORS	IMPORTS
FOOD AND LIVE ANIMALS	5,329,224,361
BEVERAGES AND TOBACCO	548,263,660
CRUDE MATERIALS INEDIBLE, EXCEPT FUELS	3,043,732,537
MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS	31,199,467,289
ANIMAL AND VEGETABLE OILS, FATS AND WAXES	374,490,184
CHEMICALS	4,259,674,457
MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIALS	5,723,444,834
MACHINERY AND TRANSPORT EQUIPMENT	18,752,545,965
MISCELLANEOUS MANUFACTURED ARTICLES	3,030,615,120
COMMODITIES AND TRANSACTIONS N.E.S.	52,007,695
Total	72,313,466,101

Source: Central Statistics Office

Table 2 :CENTRAL STATISTICAL OFFICE - TRADE SECTION Dataset: VALUE OF TRADE BY SECTIONS OF THE SITC (2012)

SECTORS	DOMESTIC EXPORTS
FOOD AND LIVE ANIMALS	1,158,754,478
BEVERAGES AND TOBACCO	1,274,570,050
CRUDE MATERIALS INEDIBLE, EXCEPT FUELS	275,247,888
MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS	32,303,766,237
ANIMAL AND VEGETABLE OILS, FATS AND WAXES	19,426,057
CHEMICALS	20,363,617,670
MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIALS	4,027,478,442
MACHINERY AND TRANSPORT EQUIPMENT	3,260,662,099
MISCELLANEOUS MANUFACTURED ARTICLES	476,697,978
COMMODITIES AND TRANSACTIONS N.E.S.	37,381,362
Total	63,197,602,259

Source: Central Statistics Office

Bibliography

2.Euronews, April 04, 2012, US economy stalls in early part of the year, harsh weather blamed, available at http://www.euronews.com/2013/04/26/us-q1-growth-rose-but-less-than-forecast/

3.World Bank Report Projects stronger growth for Jamaica 2014, available at http://jis.gov.jm/world-bank-report-projects-stronger-growth-jamaica/

4.Trinidad and Tobago Express Newspaper , October 3rd ,2013,TnT , Panama sigh trade deal , available at http://www.trinidadexpress.com/news/TT-Panama-sign-trade-deal-226331641.html

5. Trinidad and Tobago Express Newspaper, July 2nd , 2014 Central Bank pumps 100million into market , available at http://www.trinidadexpress.com/business/Central-Bank-pumps-US100m-into-market-265626851.html

6.Trinidad and Tobago Daily Guardian , June 19th , 2014 TTCA President : 'Unrealistic' for construction workers to expect energy sector pay, available at http://www.guardian.co.tt/business-guardian/2014-06-19/ttca%E2%80%88president-%E2%80%98unrealistic%E2%80%99-construction-workers-expect-energy-sector

7. Caribbean Region Quarterly Bulletin , available at http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=38175715

7. Thomas White international , 2014 , Asia Pacific First Quarter review, available at http://www.thomaswhite.com/world-markets/emerging-asia-pacific-first-quarter-2014/

8. Thomas White International , 2014 , Europe Second Quarter 2014 REVIEW , available at http://www.thomaswhite.com/world-markets/emerging-europe-second-quarter-2014/

9. Thomas White International , 2014 , Americas First Quarter Review , available at http://www.thomaswhite.com/americas/

10.Government of Trinidad and Tobago, Fall in natural gas, available at http://www.ttconnect.gov.tt/gortt/portal/ttconnect/SharedDetail/?WCM_GLOBAL_CONTEXT=/gortt/wcm/connect/gortt+web+content/TTConnect/Home/Government + Ministries 11.Central Bank of Trinidad and Tobago Quarterly Review 2014, http://www.central-bank.org.tt/content/quarterly-publications

12.Central Statistics Office (Tables on import and export data)

^{1.}Euronews , June 16['], 2012 , IMF slashes US growth forecast, available at http://www.euronews.com/2014/06/16/imf-slashes-us-growth-forecast/

EXPORTERS, READY TO REACH OUT TO GLOBAL MARKETS? WE'LL PROVIDE A LENDING HAND

If you're a manufacturer of any size looking to grow your business by exporting to regional and international markets, we can help. Call or visit us today to find out about our range of export financing loan and insurance products, all offered at the most competitive rates.

You benefit from:

- Small Business Export/Import Financing
- Export Credit Insurance
- Pre and Post Shipment Financing
- Short-Term Working Capital Facilities
- And more

Empowering exporters for the future

For a consultation call us at 628-2762 or 628-1382

30 Queen's Park West, Port-of-Spain • Email: eximbank@eximbanktt.com • www.eximbanktt.com

