

3.13 Case Study of Papua New Guinea¹

In the current marketplace in Papua New Guinea there are less than five women in ICT businesses operating in country. There is no current and accurate researched data around the industry and number of women in ICT businesses. Estimates here have been taken primarily from the Papua New Guinea (PNG) ICT Cluster entrepreneurs registrations either than the list of ICT Women Professionals in the Industry in formal employment which has a larger representation.

The preferred and selected candidate has been chosen based on the criteria of number of years of existence (at least 5 years) and also her work in the entrepreneurial, free lancing, and project based roles in ICT. Below is the brief Introduction of the candidate and a detailed profile of the evaluation of her business since its establishment in 2009 and her success story and growth.

3.13.1 Profile of a Woman Entrepreneur



Winifred Kula Amini with Sons at Graduation Ceremony, University of Queensland, Australia in June 2011

About the Founder & CEO – Winifred Kula Amini

Winifred is a Business Analyst and Project Management practitioner that provides support for business improvements and projects requiring integration and strategic automation. This includes reviewing information systems with recommendations to Senior Management. Winifred Kula Amini has over 17 years in Business-ICT Management. Prior to setting up Win-IT Consultancy, she was employed as the Chief Information Officer (CIO) for Post PNG (2006 – 2009) and was responsible for planning and execution of the roadmap for automation such as the rollout of the Enterprise Resource Plan (ERP) Pronto™ software nationwide and re-engineering of the Salim Moni Kwik system (Domestic Money Transfer) enjoyed by many Papua New Guineas today. She has experience leading and carrying out all phases of full Software Development Life Cycle (SDLC) for integrated systems, from requirements, analysis/design, and development and testing

¹ This case study was conducted by Priscilla Kevin, Research Contractor, In4Net Ltd., Papua New Guinea.

applications. Winifred holds a Master's in Business from the University of Queensland, Australia and a Bachelor of Science in Computer Science (With Merit) for the PNG University of Technology, Lae (1999).

Reasons for Starting Up Business

Being a graduate in the field of Computer Science (with Merit) from the Papua New Guinea University of Technology (Unitech) in 1999 and then working in both private and public enterprises, Winifred recognized the need to become more flexible with work, time and family and so she took up the entrepreneurship journey to become an independent ICT consultant by starting up her company over her full time employment. It was official in 2009. Winifred started up her new firm called Win-IT Consultancy leaving behind her full time employment as the Chief Information Officer (CIO) of the largest National Postal Office Network - Post PNG Ltd which has over 30 sites across the country.

At just 28, Winifred was then the Chief Information Officer (CIO) of Post PNG and the first young female on the role of a partially privatised state owned enterprise entity of the Government at that time. Her primary role there was to facilitate and deliver transformational organisational change through ICT automation of the old conventional postal system under the guidance and direction of the former Managing Director Mr Peter Maiden. Transforming an old post office into a connected modern organisation was not easy through a POST Shop Model but it was an exciting transition for the Business and the ICT division. POST PNG had just come out of liquidation in 2001 and it was crucial to initiate and sustain business change and the postal reputation to the public for service innovation and connectivity and not just in implementing another system into the business network.

When Winifred joined Post PNG in 2006, there was only one online post office in Boroko, Port Moresby Papua New Guinea and after her leaving, the Enterprise Resource Planning (ERP) PRONTO™ software Rollout project team under her leadership had implemented from 7 large Post offices to 30 postal sites connected nationwide on the systems. The team under Winifred's direction re-engineered the local Money transfer system known as "Salim Moni Kwik (SMK)" (Domestic Money Transfer) which was heavily reliant on manual processing by the Postal network using the traditional faxing and turned it into the then robust PRONTO™ platform used currently today in real time across PNG.

It was through this great project experiences and her previous roles in her former earlier employment also with superannuation fund organisations that prompted Winifred's confidence to step out and start her own consulting firm in ICT. Her previous experience from the biggest Superannuation fund Nambawan Super Ltd as the Program Analyst and IT Manager and Administrator gave her further confidence to start up her own firm.

With her learnt experiences in full time role, Win-IT Consultancy opened its doors officially in 2009 and started providing consulting services in ICT to support various decision makers, planners and policy makers, project managers and IT managers on realising the important value of ICT for organisational effectiveness and efficiency. Today Win-IT consultancy specialises in Business Analysis, Project Management and Software Engineering.

Win-IT Consultancy's vision is to help overcome the challenging issues that threaten our people and societies through research and development of cutting-edge IT Solutions. Win-IT Consultancy solutions are designed for addressing people's needs and aspirations in the region and the mission is to promote and foster the development of Innovative technologies that are localised to PNG situation and region.

Research Methodology, Process, and Timeline

The research methodologies used in gathering feedback were done through direct face to face interviews with Winifred Kula Amini in a common shared workplace and coffee shop. Questions were asked in the format by APWINC, and key response notes and points were taken down.

An email was initiated on 17th November 2017 to Winifred Kula Amini to discuss the interview needs and for her consent to participate. On 21st November Winifred via email accepted on behalf of her company Win-IT Consultancy to participate. The set of questions by APWINC were then prepared in an email format and forwarded to Winifred for general feedback on 24th November after her acceptance. Winifred Kula Amini then prepared general feedback to the first two key questions on reasons for starting up Business and the success factors. On 27th November, the first face to face interview with Mrs Winifred Kula Amini was held at the PNG Women in STEM office located at the Workers Mutual Rumana Building Level 2 Gordons Port Moresby Papua New Guinea and had lasted for two hours. Win-IT Consultancy explained the products and services offered under the company and some of the highlights of her projects and consultancy for her business and networks. Engaging questions were further asked by interviewer to understand what contributed to her success and to the unique projects that she pursued and the value her business brought to the clients through her engagements. Her success stories were shared and key points were noted down. Win-IT Consultancy was then asked to submit her latest company profile from which this was received, complied and sent to APWINC required by 29th November 2017. Through the interviews no audio recordings were done but the direct conversations and elaborations were noted down and elaborated further.

The second interview was organised and done on Sunday 7th January 2018 after new year' even at PNG Women in STEM Office Level 2 Workers Mutual Rumana Building, Gordons Port Moresby. Questions were asked around her views and experiences on smart technologies and their

use and current views of ICT in country and general participation of women entrepreneurs in the country. Questions then followed through on obstacles that her company faced in delivering products and services to the market place and to her clients. This interview session lasted for 2 hours. The third and final interview was then done at Crowne Plaza Hotel's coffee shop Level 1 in downtown Port Moresby and focused on the policies and advice for women entrepreneurs and start-ups. This final interview lasted up to 4 hours. Key questions were asked and valued elaborations were shared and noted down. Further questions were asked to expound on two key projects highlighted as part of her company profile on developing a new product and championing standards around ICT Enterprise systems through her projects.

3.13.2 Findings

3.13.2.1 Success Factors

Track Record, Qualification and Experience in the Digital World

Winifred's first contract job in 2009 was with European Union (EU) to build an online website to strengthen the District and Local Level Governments (LLGs), a project under the Department of Provincial and Local Government of the Independent State of Papua New Guinea.

This project engagement involved developing a website that provided information about the various functions of the Districts and the Local Level Government (LLGs) and was delivered successful due to Win-IT Consultancy's professional skills in Website design and development and technology and her company's good and professional development and liaison skills built from past work experiences in dealing with and understanding key customer requirements for any project which involved people, process and skills. The project was Win-IT Consultancy first successful revenue contract and ran for a month which enabled her to build her business reputation and track record in order to gain more clients.

Following in 2009 after the first contract award, Win-IT Consultancy was awarded consultancy role with PNG Ports Corporation as a temporary assisting Chief Information Officer and Quality Assurance consultant on Enterprise Resource Planning (ERP) systems. Her role involved ensuring the software supplier Technology One delivered on requirements and specifications. Win-IT Consultancy also provided advice to the CEO Mr Brian Riches on ICT delivery and setup. PNG Ports Corporation's ICT infrastructure was been built at that time and their ICT division was led by a CIO. The network infrastructure was being managed by another supplier in the Telecommunications and Network space. Win-IT Consultancy was responsible in ensuring the database ERP Technology One™ and relevant ERP business modules such as the fixed assets

register was implemented correctly as needed by the business. Win-IT Consultancy provided the Project management and delivery of key business requirements during her consulting period.

In 2012 to 2015, Win-IT Consultancy was engaged to roll out the Papua New Guinea Government Integrated Information System (IGIS) of which she was the project consultant in project managing the setup and implementation of the site at Telikom Rumana Port Moresby. IGIS is PNG Government's largest information integrated network system to connect all government departments together on one central system stored in a central data centre. As a consultant, Winifred was able to project manage and deliver the components of the project on time working closely with the department of ICT, the Government reps and suppliers such as Huawei in completing and delivering the system as per government requirements.

Promote Best Practice and Global Standards through Consulting

In 2015, another significant project was awarded to Win-IT Consultancy as a female entrepreneur with the Kumul Petroleum Holdings (KCH) the holdings firm for national mining and oil assets. Win-IT Consultancy was engaged to assist with Project Management Documentation for the implementation of their paperless Enterprise Resource Planning (ERP) system project worth over PGK 200,000 in a project time frame. Win-IT Consultancy's skills in translating initiatives into proper project management charters with accuracy and speed enabled Winifred's company to be considered for high level project management projects and to deliver on the project successfully.

In 2016, Win-IT Consultancy was awarded further the Mineral Resources Authority (MRA) consultancy role to project manage the delivery of a replacement ERP for the business. The project consulting involved delivery and management of the ERP supplier and the implementation of the new software ERP to MRA business and was considered successful on go live at end of 2016. Win-IT Consultancy was engaged to manage and deliver the software to full spec as per the Terms of Reference. Win-IT Consultancy also conducted the tender process and evaluation of the preferred ERP supplier for the organisation which then allowed for the organisation to screen suppliers according to the TOR evaluation template that was developed by Win-IT Consultancy. Through the company's model, other organisations are also following suite in evaluating their ERP systems and the preparation of their tender documents and supplier evaluations. The project ran up to 6 months consultancy engagement.

Following In 2017, Win-IT Consultancy was awarded the Transport Sector Support Program project which was attached to the Papua New Guinea Civil Aviation and Security Authority (CASA). The project involved Winifred as the first time BA (Business Analyst) which showcased engagement and embracing of Technology with Business and in evaluating their policies. Win-IT Consultancy was chosen based on the company's years of experience (over 18 years industry

experience) and her unique skill set as the principle consultant for the role both in Business and Technology. The project was a 60 days contract and was remunerated in Australian dollars to a local contractor. Winifred's unique expertise in Business Analysis, Project Management and Software Development enabled her to deliver successfully on the project role with CASA PNG.

Resilience to Develop New Product

Although Win-IT Consultancy primary service is in project management and consulting, Win-IT Consultancy wanted to develop its own innovation product for the market place. In 2015, Win-IT Consultancy entered the first entrepreneur accelerator program called Kumul Gamechangers in Port Moresby Papua New Guinea. Through this program, Win-IT developed an innovative digital product called the E-Ticket Haus project which was short listed out of 12 start-up entrants. The E-Ticket Haus is a single window for event management targeted mainly at tourism events and involves the integration of QR codes to event tickets and accessibility to venues through the tickets. Win-IT Consultancy was a finalist out of 40 and then shortlisted to 12 start-ups entrants through the business plan competition program in the Kumul Game Changer program. The E-Ticket Haus software solution captures and lists events by tourism, business conference, sports, entertainment (night clubs and concerts), box office movies or cinema and exhibitions from which customers could then buy tickets online to attend the event in the country or in the city. Win-IT Consultancy together with the team of 2 staff, 1 software developer, 1 software designer and 1 manager who are actually all family members to design and develop the ETicket Haus product and pitch to the program panellists under KGC. Win-IT Consultancy learnt to pitch and also to develop the financials to bring the product to life and to present it to the market place. In early 2016 Win-IT Consultancy was invited by the PNG Sports Foundation to produce electronic tickets for their first event games at the newly built central sports facilities in the main city. The opportunity landed Win-IT Consultancy in developing the technology further to promote and scale online ticket systems for city events. However the product and platform is yet to be deployed online and adopted by partners to promote e-ticket systems for residents and visitors and event planners.

It was through many of this similar projects that enabled Win-IT Consultancy to be considered as a vendor or solutions consultant on public tenders for similar consulting roles as a woman owned business in ICT but also an opportunity to showcase women in ICT entrepreneurs who can deliver on the job to both large and small corporate clients and high value contract deliverables.

Quality Business Affiliations and Networking

Win-IT Consultancy's experience since 2009 enabled her to build a business track record overtime and to promote her work through referral networking. It enabled her business to grow in revenue generation, track record development, build-up of referral networks and experience since 2009 up till present. Through her project consulting works, Win-IT consultancy evolved from just using

printed advertising (company profiling) to a more social connected networked company using the Internet to reach her high end customers. Overtime value was recognised and large contracts were awarded and done successfully even with the challenges of operating as a sole trader.

Winifred's company affiliation to various business and industry and exchange programs and groups such as PNG ICT Cluster, the U.S Embassy International Visitors Leadership Program (IVLP) and the PNG Australia Alumni has expanded her work and field of expertise on industry & business subject matters both in domestic and international markets.

The good support of family in balancing entrepreneurial responsibilities and family duties and trade-offs such as support for rental accommodation and regular income from full time employment has helped her to venture more into her projects and services to her clients.

Win-IT consultancy is still operating today mainly because the clients have appreciated and have supported her company to continue to provide her services by facilitating and delivering change through strategic automation projects that is fulfilling as the company works alongside professionals and inspiring people driving change to eliminate duplication through the use of ICT, improve efficiency and productivity, reduce cost of doing business and bottom line having a zero fraud tolerance.

Win-IT Consultancy as an ICT business, also believes that ICT constitutes a powerful tool for poverty reduction and improvement of the overall living conditions and governance, provided that ICT continues to remain as a tool and not mistaken for goals themselves and or continue to be considered as a cost centre rather than as a value adding asset to any organisation.

Characteristics and Methods Used in Managing Business as a Woman

Win-IT Consultancy had to quickly adopt an administrative model as its first pathway to growing her business. She mentioned that it is expensive to hire personnel especially when revenue is not regular and contract-based.

“As a sole operator, you usually began as just one person in the business doing all things. I had to learn fast to try to see if I could build around a more structured business environment. The easiest way to do that was to hire within family to assist.” mentions Winifred.

The hiring of a family member was primarily based on trust and affordability as a start-up company. Win-IT Consultancy employed its first staff who was her younger sister to assist with administration. But this can sometimes have an adverse effect if family commitment to the

business is affected personally and therefore can become a hindrance to advancing the company's business goals.



Win-IT Consultancy & Others - Australian Business

Win-IT Consultancy wanted to grow its personal knowledge base and skills in business management being a company in ICT and she was able to do that by enrolling her and her employee sister to go through training programs such as the Australian Business Volunteer (ABV) on the Your Entrepreneurship Scheme (YES) program run under the PNG ICT Cluster initiative on Financial Business mentoring and coaching in order to help incorporate proper business structure and good business ethics for her business. The training was completed successfully, seeing her and her sister graduate from the 4 week program in learning how to manage a start-up. However as business continued, the administration model in hiring a family member to do the job eventually didn't work out due to family matters interfering with business matters and so Win-IT Consultancy had to now outsource the role to an account specialist.

She learnt during that change that outsourcing has its benefits to a small business where it helps an owner concentrate on delivering their services and products and allow for the admin support staff to carry out the routine task needed. The change now meant that Win-IT Consultancy had to pay a reasonable monthly fee to the admin partner to manage her business whilst she focused on delivering the service which has helped her progress in her business.

3.13.2.2 Challenges

Lack of Access to Funding and Proper Cash Flow Management

“There are many trade-offs in starting a business in Papua New Guinea.” Mentions Winifred.

Some of the key challenges include the access to secure additional funding for new innovative product development in the business. For example there are no funding categories in banks to support software development of a new product or solution. Access to secure funding was also lacking due to zero assets as a start-up to use as security or collateral to develop an innovative product that has potential to generate revenue and to grow the business.

The challenge also goes into cash-flow management and regular income activity based on project which are mostly short term basis. Other factors such as the high cost of setting up a good office space within good location and managing rentals, stable and reliable administration support and lack of intellectual property rights protection and legal protection on ideas and products to innovate and bring to the market as an ICT business contributed much to success of bringing a new product to market.

Lack of Business Management Skills

In starting up her company, it required minimum capital expenditure, and the company had to try to separate personal financing from business. Poor bookkeeping and lack of business management skill also contributed to the challenges in managing tax obligations and creditors and debtors being a technical ICT person and learning to run a business at the same time. The challenge also was in doing all things solely and not delegating to other resources because of the fear of failure if someone was assigned the task to do for the client. Other factors contributing to challenges included accommodation costs and the general high cost of living making business unprofitable in terms of meeting the costs.

Lack of Tax Concessions and Incentives

In Papua New Guinea, there is a lack of tax concessions for start-ups. For a woman in business to acquire loans in Papua New Guinea, it was difficult due to zero collateral. Most assets are generally owned by the men as Papua New Guinea is mostly a patrilineal society. The challenges also for on-time tax payments and compliance, consistent cash-flow to sustain operations, and the lack of marketing and sales forecasting further contributed to challenges for Win-IT Consultancy as a start-up business in ICT. There was also the different pay scale for gender in few organisation which can be discouraging when considering project value contracts and hiring the right people at the right profitable margin.

Lack of Mentor and Coaching Networks

Another challenge was the lack of readily available mentors and coaches to assist start-ups and new emerging entrepreneurs. Winifred received most of her help from families, her parents and friends and networks on how to manage and grow her business but not so much in the professional space from business specialist networks, accounting experts and marketing and branding

professionals to assist with business planning and progress. Most of Win-IT Consultancy training was either through self-taught or through close friends, parents and family and can at times be difficult in learning the specialised areas needed to run the business efficiently and correctly. It was also costly to engage experts or specialists to assist with various business needs.

Overcoming Barriers and Receiving Support in Running the Business

As a sole trader it can be difficult to voice entrepreneurial challenges, challenges faced by women businesses and challenges that are related to industry to relevant authorities and policy makers and the government and private sector.

Win-IT Consultancy appreciated the power of collaborating with others to create one voice for the industry and business and so took lead in setting up the European Union funded Pacific Islands Private Sector Organisation led initiative called the PNG ICT Cluster initiative in PNG and the Pacific. The initiative opened doors to mentoring programs such as the Australian Business Volunteer (ABV) and Your Enterprise Scheme (YES) Mentoring programs for ICT entrepreneurs and allowed for ICT entrepreneurs including women to be seated at various tables and to negotiate for better rates and environment for entrepreneurs. It also allowed to advocate for conducive business environment through the ICT cluster initiative to support innovative high tech ICT start-ups and promote the importance of ICT as an enabler and contributor to wealth. Win-IT Consultancy volunteering also contributed to discussing Intellectual Property Rights Protection and valuation pathways for PNG ICT Companies and importance of research and development through policy and funding and has been fundamental to progressing the initiative for entrepreneurs in the Industry.

It is still difficult though as a start-up micro small to medium sized business to try to volunteer at the same time on initiatives that support and advocate for the environment to improve business and to be profitable. Win-IT Consultancy ensured to continue to maintain a steady flow of income through contracts to sustain one's operation and this has been encouraging to her company to continue to work to see change for the good of the business environment and the industry through government and academia support and to succeed as an ICT business woman. Win-IT Consultancy is also a dedicated as a full time registered member to the PNG Business Council which seeks to represent interests of Businesses in PNG.

With the market experience and engagement on high valued projects, Win-IT Consultancy has been now considered to program and manage an E-District Model under the cluster initiative to implement the vision of the cluster as the Silicon Valley of the Pacific by delivering a rural Digital model in PNG. As an entrepreneur consulting on projects, it can either be seen as making a trade-off and or getting paid on the job to deliver valued solutions for a client and Win-IT Consultancy

has delivered some modelling on projects that have delivered valuable impact to social and economic development for PNG and as a woman owned business. It's this track record that has allowed for Win-IT Consultancy to be considered as a preferred candidate for various roles on emerging ICT projects.

3.13.2.3 Policy Recommendations

Effective Banking Facilities

Some of the key required policies for women entrepreneurs are effective banking facilities that promote start-up business kits for women businesses and at the same time provide a project management and guiding aspect from start of lending through to completion of the loan project. Most times, women seek funding without the proper project management aspect to ensure their seed funding is maximised and returned on time to the lender and can end up defaulting in their loan or funding and a failed project.

Provision of Seed Funding and Venture Capital Opportunities for Women-led Enterprises

Another policy that should be considered is seed funding and venture capital opportunities for women businesses through promotional programs such as grants or project pitches for investment. Papua New Guinea is still limited in this environment or may do so at very limited capacity and therefore is difficult to promote an investment platform for many upcoming entrepreneurs both for women and men. The other challenge is also the reach to the women businesses in the rural areas and how these financial lending services can reach them faster and to support them.

Tax Concession for Women Businesses

Another needed policy is around formulating good tax concession programs for start-ups and women businesses. The PNG SME policy [11] encourages growth of SMEs but the tax element denies or obstructs growth. For example if a woman was to seek venturing into a telecommunications start-up or business in ICT, the environment is not conducive for growth and profitability as most start-ups would have to pay for rental on the first month, remit taxes and also make the initial investment into the operating licenses. Without incentives the business will take longer to reach break even or even worse fail due to cost of starting up. There are also no tax incentives on ICT staff hiring as one company evolves and wants to expand into other areas such software development or engineering to fix problems. Tax concessions do not exist for the industry and therefore can become discouraging for many but more so challenging mainly for women to venture into new grounds of the ICT service industry and to participate as business owners.

Enhanced Infrastructure

In Papua New Guinea there is also the known issue of high costs of transportation, accessibility and connectivity. Internet costs are high discouraging businesses to access services, tools and expertise to help build businesses online and to trade, the lack of electricity and power sources in rural settings and even urban limits accessibility by women to conduct business. The cost of fuel to commute and visit clients and conduct business also contributes to the challenges faced and there are at present no effective policies to support women businesses in accessing services to carry out a more profitable business that has potential to attract foreign and or local investment.

Promote Women's Welfare

Another impediment to add is the welfare systems and policies to protect women's welfare. At present the child welfare act covering child maintenance stops at 16 years old and the women is left to source income streams on her own to support the children beyond 16 years old if the children remain with her during separation or divorce. Systems and policies do not effectively take course or effect when the women faces the situation and hence must do all things to provide for her family including managing her own business at the same time fend for herself and her children.

More Opportunities for Business Training for Women

Another policy to be considered under community development for women is more training centres to help women business progress in running and managing their business such as basic book keeping, marketing and sales, branding and online connectivity in order to provide and contribute income for the family targeted mainly for the rural areas. Effective programs need to be developed to assist women achieve financial freedom and support through their business in order to also encourage and inspire others to follow.

3.13.2.4 Advice for Women Entrepreneurs

"You need to be well prepared to start up a business. Developing a business plan is important."

Mentions Winifred.

Prepare Thoroughly Before Starting a Business

Most start-up businesses lack thorough preparation before getting into the business. Most often companies or businesses do not set goals before starting and through the course of time they face difficulties in achieving the expected outcomes because they do not know what it is they want to achieve in the beginning when they started. Most businesses develop their business plan right after they have started up the company and not at the beginning. In order to succeed and to know where you want your business to go, it is important to set goals and that your activities are aligned to these goals in order to achieve them.

Make Investment Plans in the Early Years

Another advice to consider is the need to make investment in the first early years. It is commonly known that a business will fail after 5 years or even early after 3 years. With this common known statistic, it is important to start the business first hand with a plan and set minimum achievable goals and have the goals set out by number of years to attain them with specific investment targets.

When you get into business and start generating revenue, you are able to then visit your business plan and set aside your investments in order to achieve your goals for your business and review them on a timely basis.

Win-IT Consultancy expressed that it did lack investment planning in the beginning years of her business and as the years went by for her company she had to re-strategize by looking at her plans and her objectives of being in business. There is a lot of effort and energy wasted if you do not plan well in the beginning.

Persevere and Endure

Despite the setbacks and challenges, Winifred encourages business women to persevere. Without perseverance, one can give up easily as things become harder for the business and for the individual. It is important to balance work, family, love and business and it is not easy but it is needed to continue to grow and develop your business. A savings culture needs to be developed as a habit including a culture of giving your time and part of your earnings to help others. This will in turn enrich one, their business and others.

Take Pride in Your Work and Contribution to Society

Winifred advises that it is not easy as a woman to do business in PNG especially in a field that is constantly changing and cross cutting such as ICT and a field primarily dominated by men but it is important to know that as a woman in business one will be contributing in one way or another to her community, nation and world in aspects of positive social and economic development, and this has been encouraging for her to continue to build up her company. She encourages more women to be bold and to pursue whatever it is you want to do when starting up your business and to continue to strive for the best having in mind to ensure that as individuals to be able to give careful thought and good planning and management to what is needed to succeed in business.

3.13.2.5 Summary and Discussion

The research effort has been conducted well with much enthusiasm in understanding what are the challenges facing Women in ICT businesses in Papua New Guinea especially in this time that Papua New Guinea will be hosting the APEC 2018 meeting here in Port Moresby Capital city. The

theme of the APEC summit is Digital Economies and to have an existing Woman in ICT entrepreneur in Papua New Guinea that is carrying out business with large companies goes to show that PNG is inclusive in its social and economic developments.

Today's digital economy is about speed, flexibility and connectivity. The ICT industry in Papua New Guinea has grown overtime and reaches mainly the population in the urban areas through mobile and smart phone technology but much of ICT needs to reach the remaining rural population which is around 80% of the total population where women constitute almost 50% of the population. It is through ICT that we are able to reach others around the globe to trade and also to train and learn. Internet provides the platform for connectivity and sharing information to empower an individual and once a person is able to connect to ICT, he or she is able to then develop and bring a product or service to the country, region or the globe and many start up their ideas through forming a business.

Win-IT Consultancy company is a great example of young emerging Digital ICT entrepreneurs particularly women ICT business owners who are rising to the challenge to provide consultative services to the market place in the space of Government, Academia and Business and to collaborate with others to deliver innovative and much need product and services to solve economic and social problems faced by the country and hopefully expand the reach to the region and the globe.

Win-IT Consultancy has also challenged itself to do better despite the difficult environment of doing business in PNG. There are times when considerations were made to close down business and to return to full time employment but the passion to continue to develop her business into a robust and preferred ICT consulting firm has kept Winifred going for over 8 years now since 2009. Her financial growth may be impeded but her experience as a consultant, business owner and entrepreneur has enabled her to strive and to look forward to bigger large impacting contracts and engagements. With these experiences, Win-IT Consultancy is looking forward to re-strategizing her business plans in alignment with new growing market demand and trends in the country, region and globe and to position her business to engage further in ICT services and products.

Some of the policies raised such as tax concessions, seed funding and capital ventures, more training programs for women entrepreneurs and welfare support systems are important and will assist Women businesses like her to grow and to bring to market innovative products and solutions. Win-IT Consultancy is in the industry that is cross cutting and exists in almost all sectors and therefore can be a positive pillar for her business. However if the environment is difficult and not conducive then this can hinder the opportunities to grow and to create employment and opportunities for others and herself through her business. Her participation with the PNG ICT Cluster also confirms her contribution to making the Industry favourable in order to contribute to

helping ICT businesses like her thrive and also for the ICT Industry to be recognised as cornerstone in development and a contributor to wealth generation.

Winifred goes onto encourage that it is difficult to do business but it is an individual's perseverance and commitment towards her goals and aspirations in her business that will allow her to succeed. Much of this will require good business planning which must be done at the beginning rather than after starting up. An investment mindset is encouraged to ensure that you know where to invest your money in alignment with your goals as you earn revenue from your business.

Despite being a sole trader and wanting to build staffing in her company, Winifred has gone on to invest in training on business management and in acquiring various skills to enable her to deliver on her contracts and services. This is a good sign that a start-up woman business needs help and goes out to find it and invest in the training. Her training attendance to the Australian Business Volunteer YES (Your Enterprise Scheme) has helped her to develop her cash flow and budgeting, marketing and sales and basic book keeping. Through the ABV program it has given her confidence in herself and her business to continue to deliver on her services and products.

The research indicates that Women in ICT business entrepreneurs are emerging in Papua New Guinea and with programs such as WeCreate, National Development Bank funding, Kumul Game Changers, the Women's Business Centre, the PNG ICT Cluster and educational exchange programs such as the U.S Embassy International Visitors Leadership program (IVLP) and other supporting framework, there will be an increase in Women in ICT businesses as the environment become conducive to do business.

Win-IT Consultancy has demonstrated endurance as a small business in running large valued impact projects and it is such businesses in the Industry that can be harnessed, supported and promoted well in order to encourage others to do the same and create similar opportunities for themselves and others and to contribute positively to the country's economic and social development.

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