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Building Livestock Industry Professional Capacity through ITC in East Africa

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Abstract

Novus is committed to supporting African animal agriculture with a multi-step strategy: the delivery of a reliable nutrition solution, attention to the needs of small farmers, and the delivery of technical instruction and education opportunities. Neno Information Communication Technology (ICT) is very much reflecting Novus' culture. It was introduced in 2012 in East Africa for mobile phone communications with customers, not to place orders, but for training and awareness. Farmers using Neno gain knowledge and receive advice in a practical, user-friendly way that is accessible to them at all times. After 18 months, Neno is very successful, and Novus is planning to extend the pilot to Nigeria. The case is positioned at the time of the expansion of the pilot to Nigeria, before the final executive meeting deciding on the Nigeria expansion. This will challenge case readers to reflect on the innovative, inclusive and modern approach Novus follows, its value structure, how it is implemented, before moving to the decision point of whether or not the introduction of NENO to Nigeria is a sound business strategy.

Suggested Market for Case

The case is appropriate for mid-career executive education, for extension education, and for senior undergraduate and MBA students. It is certainly appropriate for agribusiness students but also for veterinarians and technical professionals with a science degree who may use this case to reflect on how in developing markets their role should be much broader than just delivering pure science content, to deliver multidisciplinary solutions. This case is designed to help this professional development and growth process.

Keywords: African Agribusiness; Triple S Bottomline; Neno ICT; Capacity building; Feed industry.

Building Livestock Industry Professional Capacity through ITC in East Africa

Novus International, Inc. provides health and nutrition solutions for livestock, poultry, pets, and people. The organization's team, working across more than 35 facilities around the world, serves customers in over 100 countries. The Novus Vision is to "help feed the world affordable, wholesome food and achieve a higher quality of life". Novus works towards achieving their vision in partnership with customers, universities and global partners. Exhibit 1 illustrates Novus current footprint.



Exhibit 1: Novus global footprint

This success story started as Monsanto Feed Ingredient Division, in turn the result of livestock and poultry feed metabolism studies which in 1959 led to FDA approval of a first feed additive; after building the world largest methionine plant and an expanding global market share, in 1991, Monsanto decided this was not a core and sold it to Mitsui & Co. Ltd. and Nippon Soda Co., Ltd. Novus was launched with 160 employees and 250 million dollars in sales, set on its path of "*Health through Nutrition*". The organization's original portfolio included two products for the poultry industry and a bold vision of "*helping to feed the world affordable, wholesome food*". Novus realized very quickly that core knowledge of health and nutrition related to poultry could be beneficial to other species, and proceeded to take full advantage of this opportunity. Since those early days, Novus has successfully brought to market more than 100 new products that provide health through nutrition for the entire livestock industry, including poultry, beef, dairy, aquaculture and pork. Novus has over 800 employees globally, two thirds of these are working outside of the United States. Total revenue for 2013 exceeded, 1.2 Billion USD.

Novus Vision, Mission and Core Values

Novus is a science-based company with a very ethical and market focused vision, mission, and core values and a strong sustainability emphasis, pursuing the highest possible standards of corporate ethics and integrity in all actions and in respect of all Novus stakeholders. The following foundational cultural pillars were established within the first year of the organization's founding and remain central to driving Novus' long-term strategy today:

Vision

To help feed the world affordable, wholesome food and achieve a higher quality of life.

Mission

Make a clear difference in sustainably meeting the growing global need for nutrition and health. Novus's Core Values bring this Vision and Mission to life.

Core Values

- *Maximize long-term customer satisfaction: anticipate needs and exceed expectations.*
- *Provide products with demonstrable value: research leading-edge concepts and supply preferred products and services.*
- *Act with integrity: treat all stakeholders - employees, customers, suppliers, business partners, our owners and the public – in a fair and ethical manner.*
- *Protect our employees, the public and the environment: make health, safety, security and environmental consideration a priority in all that we do.*
- *Seek excellence from all employees: expect and support alignment, diversity, individual growth, initiative and teamwork.*

Novus Management System, Board and Critical Success Factors

For the past 20 years Novus successes have been built on the disciplined application of the Novus Management System (NMS) a cogent, sound and consistent management framework linking people and their contributions to business goals. The NMS is based on the principles of Requisite Organization (RO) theory. Managers make decisions on the basis of research-proven principles that enable employees to work effectively toward a common goal based on common values, standards and procedures.¹ For example, managers clearly define quantity, quality, time and resources of tasks assigned; this secures trust and clarity, and everyone has confidence and trust in the process because they understand exactly how things are going to happen.²

Board

The Board of Directors is Novus's highest governing body and represents the interests of Novus's shareholders and all stakeholders. The Board determines Novus's long-term strategy, ensures that the necessary practices for risk management and compliance are in place, appoints the executive management and guides Novus management in regard to overall sustainable business practices. The Board reflects Novus' ownership and management structure.

Critical Success Factors: Growth, Profitability, People and Reputation

Four critical success factors define Novus' standards for all business goals and priorities, and their alignment with corporate long-term strategy.

Growth

Continually assess and develop the portfolio of products, customers and suppliers, and implement performance-enabling programs and technologies to achieve a long-term competitive position. New product development is the result of intensive research, partnership and licensing agreements, acquisitions.

¹ How Does Novus Inspire Employees with Purpose? <http://sustainability.novusint.com/content/id/43/how-does-novus-inspire-employees-with-purpose> accessed February 24, 2014.

² Novus International Inc., *Industry Speaks: Designing a Scientific Management System for a Growing Science-Based Company*, International Food and Agribusiness Management Review, Vol. 13, issue 3, 2010.

Profitability

Implement improved business processes, measures and supporting systems that will move Novus closer to its customers and deliver increased business value, year-on-year. Committed to consulting with clients, localized research and development, technical support, customer service and logistics, Novus is convinced this proximity to customers increases potential profitability.

People

Enable employees to reach their full potential and remain in line with Novus Management and Integrity Systems, in accordance with Novus' Vision, Mission and Core Values, ensuring a safe work-life balance.

Novus is a knowledge based company appreciating that highest return on investment in employees comes from education and training. Corporate efforts in this area include the Novus Online Learning System, with training in the Novus Management System, the Novus Integrity System, Novus Products and Services, foreign language training, sales safety and productivity software.

Reputation

Expand Novus positive corporate image by augmenting activities and programs demonstrating Novus integrity and aspirations to operate responsibly in a sustainable manner.

Employees have a strong sense of accountability to Novus, co-workers and themselves, beyond assigned tasks and general responsibilities, and a commitment to Novus Integrity System to appreciate that good ethics is synonymous of good business. Novus Management System provides a clear mandate to comply with Novus Integrity System policies, and specific authority to take action when compliance is at risk.

Novus Triple S Bottomline: Solutions, Service and Sustainability

Novus has augmented the traditional triple bottomline of social, environmental and financial performances, by defining the Triple S bottomline, articulated on Solutions; Service to consumers community and industry and Sustainability:

- Solutions, to reduce feed costs, optimize gut health and support maximum genetic potential; Novus has pledged to answer customer pains and industry issues by providing innovative total management solutions that optimize livestock and poultry production, addressing just about any challenges nutritionists and producers face.
- Service to customers, community, and industry; Service is multi-dimensional and core to Novus's presence in the market, a hands-on working relationship to serve, a professional, knowledgeable and friendly service and support from people with appropriate backgrounds, training, understanding and commitment to the solutions and markets around the globe.
- Sustainability, defined along social, meeting food needs, environmental, protecting against excess nutrients, and economic results, optimizing nutrient utilization to maximize return on investments. Novus' vision of helping feed the world affordable, wholesome food so they can achieve a higher quality of life is ingrained in Novus culture and is a driving force in its mission to make a difference in sustainably meeting the growing global need for nutrition and health. Sustainability is a priority for Novus and is a mindset that permeates throughout its operations. Novus explicitly recognizes a social, environmental and economic obligation to deliver products, services and programs to ensure a sustainable future.

Exhibit 2 presents excerpts from the introduction to Novus 2012 sustainability report by Mr. Thad Simons, Novus President and Chief Executive Officer. It is a powerful short document which reflects and defines Novus' culture, its comprehensive ethical and sustainability global focus, its way of dealing with stakeholders throughout the entire supply chain to build efficient and ethical solutions to complex problems.

Exhibit 2: Thad Simons, excerpts from the introduction to Novus 2012 sustainability report.

TRIPLE S:

The way we approach this is by delivering our Triple S Bottom Line, underpinned by our core values which guide us in everything we do. Within this, one of Novus's core competencies ... is creating and maintaining partnerships... key to our sustainable future.

PARTNERSHIPS:

We must utilize partnerships among our supply chain and customers to elevate our activities to the next level. ... (to find the) most effective ways to help (people) grow and thrive and understand that they do have an impact.

EMPLOYEES:

People are critical for our future success. We work hard ... to make agriculture an attractive place to work ... (we) strive to be a stable, caring, inspiring and open-minded employer ... to adapt to change ... because we are an organization committed to learning (and) must keep learning each and every day.

CUSTOMERS:

... our customer needs are changing dramatically around the world, especially in emerging markets such as China and India. ... The issue is not a lack of money. The issue is access to technology. ... we are acting as a catalyst to make this happen.

SUPPLIERS:

It is imperative that all communication channels are fully open and utilized ... "How can small farmers collectively work toward being part of a consolidated supply chain?" We can help make this happen - we have technologies to help farmers be much more productive. This means that we have to go beyond our individual capacity to make a difference and engage in dialog to understand needs and develop shared solutions involving a wide range of partners. If we can get people talking to each other, including suppliers in our supply chain, and customers and other industry players, then we can achieve success.

OUR OWNERS:

We are privileged to be owned by two companies who see the benefits and the potential of our Triple S Bottom Line ... are tied to the sustainability of the agriculture sector and global food security, so we are aligned and complementary ... We thrive on ... forward thinking interchange and it helps us mature as a company.

OUR COMMUNITIES:

In the coming years, we need to continue to drive supply chain optimization, invest in R&D to develop new technologies and continue to partner to find the best ways to go to market ... be closer to our customers and focus effort on what's relevant to them. Aquaculture ... human supplements ... also is a growing market with untapped potential. ... We need effective ways of remaining competitive and adding value with our new offerings. In doing so, we believe we will make a greater contribution to the quality of life in our communities around the world. ... through our core business, based on our core values, we turn values into value and improve life for our communities and our society in general.

Novus commitment to Africa and the NENO ICT pilot program

Novus is committed to supporting African animal agriculture with a multi-step strategy: the delivery of a reliable nutrition solution, attention to the needs of small farmers, and the delivery of technical instruction and education opportunities. Exhibit 3 illustrates.

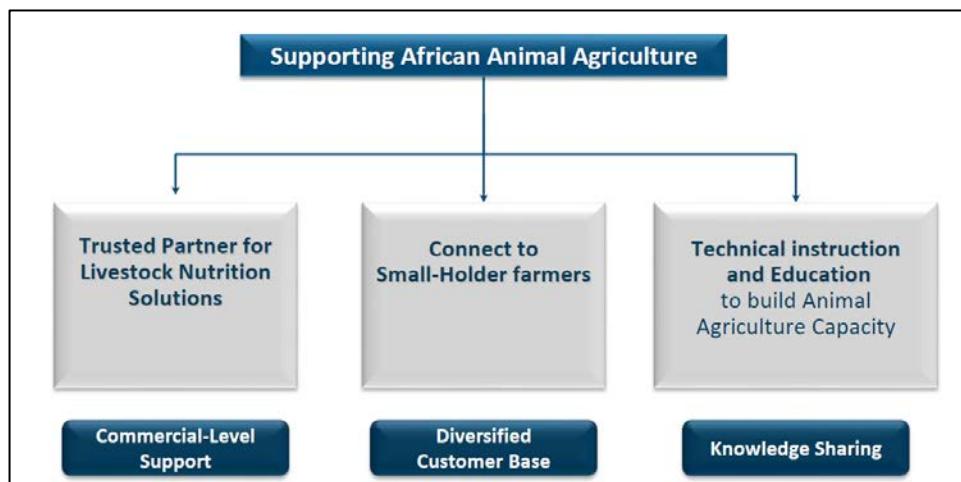


Exhibit 3. Novus initiatives supporting African Animal Agriculture.

According to Bayella Thiam, Executive Manager, Sales and Distribution, Africa, serendipity and careful application of NMS core values and critical success factors have delivered significant successes despite difficult conditions: *"In North Africa, the markets have been challenged in the past years. Economic uncertainty, effects of the Arab spring, issues with European currency and the Eurozone and high feed costs have all combined to make this one of the most challenging years in this market. However, we have seen growth in agribusiness in sub-Saharan Africa. Investors are coming and there is a momentum to move forward. Doing business in Africa requires different ways of thinking, for example, most people do not have bank accounts, so other solutions are required. Novus' retail approach is innovative and adapted specifically to the needs of customers in this market, and will substantially increase the number of retail outlets which offer the Novus range of products."*³

In 2012 Novus piloted in East Africa a very innovative mobile livestock sales and marketing information support system called NENO Information and Communication Technology (ICT). NENO means "Word" in Swahili, a widely used language in East Africa, the descriptive term NENO in East Africa refers to the concept of trust. NENO ICT was conceived as a platform to improve management practices related to livestock nutrition, specifically in the broiler, layer and dairy industries. The mission was increasing industry growth, improving producer operations and ensuring long-term business sustainability. With a cell phone penetration of over 80%, mostly on basic 2G and SMS services, compared to only 16% for internet,⁴ the choice of mobile phones provided a relevant answer and a competitive advantage for Novus as marketing and commercial tools.

³ Novus 2012 Sustainability Report.

⁴ Nmachi Jidenma, CNN Opinion, Marketplace Africa: <http://www.cnn.com/2013/11/07/opinion/real-mobile-revolution-africa-smartphone/> and Internet World Stats: <http://www.internetworldstats.com/stats1.htm>.

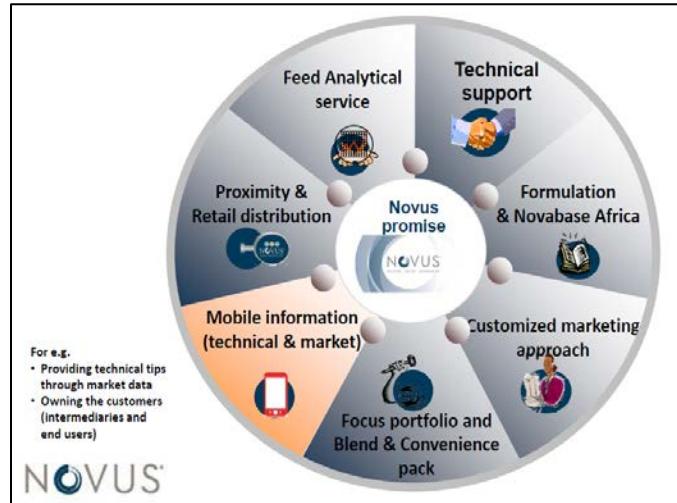


Exhibit 4. NENO ICT, component Novus Africa Promise

As seen in exhibit 4, NENO ICT is a simple platform enabling a diversified portfolio of activities. The mobile phone is not used to place orders, but for training and awareness, it becomes a cost-effective way of reaching farmers and other actors in the livestock value chain, to be made aware of the advantages of improved nutrition in animal feed as it pertains to their income, and to understand how to better manage their livestock with regard to nutrition and how this can directly translate to better income. The platform enables the creation of supportive partnerships and meaningful connections through the value chain of protein production, a core business fro Novus. Tips and insights from livestock, market, weather content providers are coordinated by Novus and are sent to millers, dealers and farmer helping them gain knowledge and receive advice in a practical, user-friendly way that is accessible to them at all times. NENO is a tool to market Novus' solutions, not just to sell products. Exhibit 5 details NENO's current structure and content. The SMS program keeps customers engaged and builds a trust relationship with the price and technical advice, by providing technical advice on how to manage livestock at particularly strategic times in the year, providing market prices to millers and farmers, and by delivering timely, useful educative messages to farmers. Through NENO, a diverse base of producers, from small holder to production scale, can access a consistent, accurate stream of content

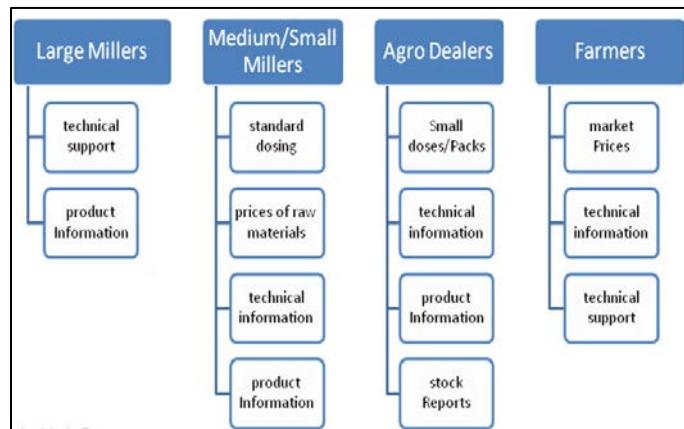


Exhibit 5. NENO ICT, its structure and content.

through SMS information alerts. Each Novus sales people has access to a (protected) internet platform and completes a profiling for each customer visited, for any seminar and any training offered. A

structured SMS program is defined for each species and by type of problem, and each sales person defines the dissemination plan for their area according to type of customer, so that each sales target will receive a tailored SMS message. Beyond the delivery of information, NENO supports communication between producers and experts. Through the NENO framework, producers have direct access to technical experts who actively work with them, often through dedicated visits, to help manage livestock at strategic times of the year. Subscribers to the NENO platform are invited to participate in ongoing, instructor-led-training events in their region and receive detailed invitations to regional training session events, known locally as "Novus Days".

Going forward: a much larger second pilot?

NENO first pilot has delivered better knowledge for farmers, better productivity, improved livelihoods and more food to feed Africa's populations. Producers love it:

"Since I received a message from Novus NENO my farming took a new twist. The market alert message enabled me obtain a reliable market for my broilers. (I was able to sell) my broilers at a reasonable price. If it was not for Novus NENO I would have stopped this business." Mr. LUTAAYA, Uganda.

"My birds had cut their egg production from 69% to 40%. I had tried everything the vets had to prescribe in vain. Though I had attended Novus days I never considered using the solutions in my feed. It was one of the usual evenings counting my eggs of the day when I received a message from Novus NENO Uganda that changed everything. I honestly followed the nutritional advice though I did not really understand the communication well. Since I was desperate I tried it out and the results are amazing. My birds can now afford to pay for their feeds and also pay something for my household. Thank you Novus for this." Mr KIBIRIGE, Jinja.

Exhibit 6 illustrates Novus' moving forward strategy: commitment to NENO, awareness of its rich potential, and the determination to pursue it as part of its Africa Promise to deliver more.

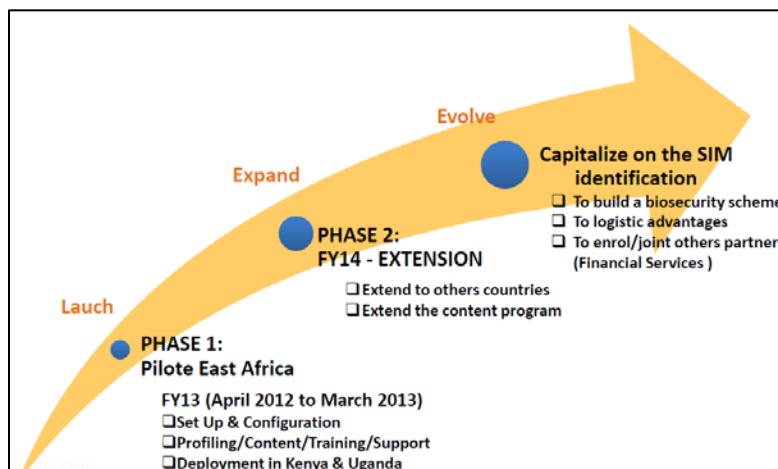


Exhibit 6. NENO moving forward strategy.

Very early in 2013 Novus executives understood well that the developing success of the first pilot in East Africa could only mean a great opportunity to move forward with NENO ICT, both moving further with it in the pilot market, as well as deploying it to other markets.

Early in the Fall of 2013, Thad Simons, President and CEO, Luis Azevedo, Executive Director, Africa and Latin America Sales and Distribution, Bayella Thiam, Executive Manager, Sales and Distribution, Africa, and Tricia Beal, *Chief of Staff* met to discuss the expansion of a second pilot to Nigeria. Novus executives understood well the crucial importance of the good results of the first pilot which provided leverage and credibility entering Nigeria.

It was a sunny day, a good omen; the discussion was upbeat but also cautious and careful given the size of the commitment necessary to Nigeria, a much larger market than East Africa.

Going forward: reviewing NENO ICT East Africa pilot.

The discussion started with a review of what led to NENO East Africa pilot, which was born from the quick awareness of and desire to capitalize on the mobile boom in Africa, a unique opportunity to efficiently deliver on Novus Commitment to Africa: deliver more. Indeed the East Africa pilot was an act of faith on the capacity to build on Novus core values, a simple technical platform, and Novus' specialized IP. The main objectives of the pilot were to reach a sizable number of farmers, including small farmers, this was achieved, reaching 3,000 subscribers in 8 months; to build a solid market base for Novus solutions and products; to ensure that players from the entire supply chain had B2B access to the system. The most important challenges in this deployment were the need to secure that the content met all of Novus best way criteria, from its ethical commitments to accurate scientific content; the effective capture of the mobile phone tool, with the capacity to work even with essential phones on 2G; the development of sound educational and marketing services.

The pilot was going smoothly, requiring some ongoing fine-tuning: the definition of a clearer albeit somewhat narrower focus on the health and science services that are core to Novus, leaving an all-encompassing but generic content for a more focussed, more in depth content; the addition of personal service to deliver complex solutions, not suited for short SMS delivery, with on site visits, a true innovation for Africa, after a first connection via NENO; the quick addition of local languages to provide value to farmers with extension activities in both English, Swahili and other regional languages; the use of Novus Days to collect questions and to connect questions with extra content.

NENO was made possible by the partnership with Esoko providing the technical platform solution, and with Google, a specialized information technology provider for SMS solutions. The cost of technical solutions was reasonable, up to 12k USD/year in first pilot. The real cost was the time invested by Novus professionals to develop the IP of NENO; to complete initial design and technical setup; to commit and complete content customization; to define and vet intellectual content.

After only 18 months, the pilot was effectively delivering on Novus' Africa Promise: deliver more (more than product); was possibly the easiest way to do marketing and communication. Its capacity to deliver on understanding and respecting cultural specificity in Africa was key to do business with farmers, and indeed it capitalized on the use of word of mouth in local communities to reach more farmers, including smaller ones. Novus had created a need for this service, and the need to keep it viable as farmers now counted on it, possibly with a different service focus for larger commercial and for smaller farmers.

NENO was now an important part of NOVUS reputation in East Africa.

Going forward: considering the NENO ICT Nigeria pilot.

In preparing the Nigeria pilot, Novus executives were aware that Nigeria, a much larger country, had more advanced infrastructures and that producer organizations were larger and better organized. This

led to a higher potential target even if focussing primarily on large poultry areas. The main challenge was to be ready for these numbers, both in terms of technical infrastructure and capacity to deliver content, and to adjust to fit the new initiative. This led to the idea to delegate to specialized partners the management of the much larger and more complex technical infrastructure, while focussing on NENO's IP. This underlined, very early, the importance of delicate negotiations with large partners in the private and in the public sector

It was clear that hardware and system capacity needed appropriate technical solutions to be ready for the high number of users, potentially running in the millions. Specific due diligence led to the identification of possible partnership opportunities with the mobile-run government plan lending to farmers to finance fertilizer purchases, with over 10 million farmers, many of them meeting NENO's definition of target customer. Another important opportunity was offered by Poultry Producers Association of Nigeria (PAN), after their endorsement of NENO, with PAN to run NENO on their mobile platform reaching all poultry producers, and Novus maintaining control of NENO's IP and commitment to deliver solutions, in addition to the possibility of positive externalities with other services offered by PAN. At the same time, Novus was well aware of the need to prevent the risk that small farmers could be less served, as business could primarily flow to larger operations.

The discussion clearly identified the absolute need NENO be taken seriously and therefore that all be ready for a flawless delivery on expectations. True, NENO had now an extended reach made possible by excellent results from East Africa, and this was instrumental to make possible the PAN opportunity: NENO was now established. Novus could build on its reputation in partnering with PAN, which provided an opportunity to much higher numbers.

It was certainly a much bigger challenge, but the Novus executive knew it could be done, there were ways to get there! They shared the desire to be working in Africa, and to be proud of it.

Going forward: Issues for the next Executive meeting.

The agenda for the next executive meeting was set. Issues that would need to be answered included:

- a. Was the due diligence completed for the Nigeria pilot? After all, was NENO an easily replicable initiative? What key obstacles should Novus expect moving to Nigeria?
- b. Was Nigeria core to Novus, was it worth the required resources? What could Novus get out of it?
- c. Was the project well specified and properly defined, what were the key risks Novus was exposed to? How could these be controlled?
- d. How could additional services be tied to the core NENO service, perhaps some financial services, or advertising? Could this represent a great opportunity to grow the business or would this corrupt the nature or even just the perception of the current service?
- e. Should Novus try to earn a fee for service for NENO, for example charge a fee for the service perhaps negotiated with and charged directly by the phone carrier, keeping it free for clients reaching a minimum business volume?