

## **Going beyond Diagnostics and Planning in ICT Initiatives: limitations in the context of Malawi.**

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*"Problems are those things we see when we take our eyes off the goal"*. author unknown.

### **Abstract**

ICT initiatives that could help bridge the digital gap are being introduced at different levels in Malawi; national, organisational and departmental levels. However, the introduction of these initiatives does not always yield the desired solutions. Although the ICT benefits and outcomes are clearly diagnosed, visualised and planned, very little is actually implemented and new challenges emerge as the gap between the planning, knowledge and practice widens. This paper uses two cases to analyse the type of limitations that ultimately deter ICT initiatives from proceeding beyond the 'diagnostics and planning' stage. The two examples were chosen to demonstrate the contrasting limitations between a needs-driven and a donor-driven ICT initiative. The paper concludes that there is need to have a more balanced hybrid-approach to ensure that ICT initiatives make it to implementation.

**Keywords:** *Planning, Implementation, ICT Initiatives.*

## **1 Introduction**

In their mission to achieve widespread social and economic development, most developing countries have realised the role that information and communication technologies (ICTs) play as a tool to enhance the social and economic development. Developing countries have come up with many ICT initiatives to ensure that the development agenda is forged ahead and the digital gap is narrowed. These ICT initiatives are conceived to eliminate the imbalances to both human and non-human ICT resources. The challenge is that not all ICT initiatives that are conceived are implemented.

In seeking to understand the limitations encountered by the ICT initiatives in developing countries, activities that took place in two ICT committees/groupings involved in coming up with development initiatives are discussed. The approaches used by the two committees give contrasting experiences of initiatives within an institution and at a national level.

The paper analyses and discusses the observations made in these two committees, presenting them as two case studies. This is followed by a discussion of the possible hindrances to local appropriation of the planned ICT activities, in search of meaning in the situations.

## 2 Objectives

The paper aims to underscore the need to have goal-oriented ICT initiatives that go beyond the diagnostic and planning phases if social and economical development which uses ICTs as an enabler is to be realised in developing countries. Specific objectives of the paper are:

- To critically look at the way ICT initiatives are conceived, partly using my own experiences.
- The limitations to going beyond diagnosis and planning in the case of Malawi.
- Strategies that can be adopted to reach implementation phase.

## 3 Methodology

Reflectivity was used to review the processes of which I had been a participant, reflecting on my own contributions to the failures and successes of the process. Observations made as a member of an ICT Committee within my organisation<sup>1</sup> and as a Chairperson of the Malawi National ICT Working group are analysed and discussed. Further, use of documentation from the two cases was used to gain an understanding of the contexts in which ICT initiatives are born, planned, implemented and nurtured. This gave an opportunity to develop a complete understanding of the phenomena. I discuss the ICT initiative processes from personal experience, reflecting on and analysing the activities that were taking place.

The author has been a member of Chancellor College ICT Committee for more than ten years (in total) and the chairperson for the National ICT Working Group for one year (from August 2006 to August 2007).

This research did not use systematic data collection procedures, rather documentation in the form of minutes, reports, presentations, photos and reflection from the committees meetings was used to analyse the situation.

## 4 Chancellor College ICT Committee (CCICTC) and National ICT Working Group (NICTWG)

The two case initiatives used in this paper, although they have different contexts, have a number of commonalities which substantiate a comparison of the two. Other than the participation by the author in the two committees, both initiatives operated in a form of committees – bodies “officially delegated to perform a function”. In both cases the committees mandate was to recommend and not to make the final decisions. Whilst one committee is focused at strengthening the college and students and the other at strengthening the population at large, the targets in both cases can be seen as communities. It should also be noted that in each initiative, the expected outcome is that the information technology would bring some positive change within society, organisation(s) and the surrounding environment enabling social inclusion. Social

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<sup>1</sup> Chancellor College, University of Malawi

inclusion being defined as “participation in the determination of both individual and collective life chances” by Stewart (2000) based on a number of factors and in this case ICT is the enabler.

ICTs also facilitate the building of human and social capital through increasing flows of information, and building on knowledge and human capacity for poverty reduction (Urquhart, Liyanage and Kah, 2007).

Further, both committees did not have any fiscal clout to further their recommendations into action. The operations of both these committees were not on a regular or full time basis, and they would only meet during meetings. Both committees did not have a pre-schedule as to when meetings should take place. Although the NICTWG would have as agenda item ‘Date of next meeting’, the most common input under that agenda item was “The secretariat will announce the date of the next meeting later”. The lack of pre-set dates for meetings impacted on the level of preparedness by members and their ‘relaxation’ when it came to task deadlines. Like most members I was operating in a voluntary atmosphere and was hampered by the needs of work and other commitments.

On the other hand, the most notable difference was that CCICTC had all members from the same organisation while the NICTWG comprised members from different organisations (government departments, private sector, NGOs and academic institutions).

#### **4.1 The Chancellor College ICT Committee (CCICTC)**

The Chancellor College ICT Committee dates back to the early 1990s, and has changed names along the way from Chancellor College Computer Committee to Chancellor College IT Committee to the current name. Chancellor College is one of the five constituent colleges of University of Malawi. The University of Malawi recognises the benefits that ICT brings and have encouraged all its colleges to set up committees that would promote ICT initiatives. Perhaps what is lacking is an understanding of the “complexity of the processes and culture shift required to achieve that potential” (Tearle, 2003) by some of the colleges including Chancellor College. Since its inception, the Chancellor College ICT committee’s goal had been setting up a computing centre that could be offering the entire college computing services to improve the ICT services. The committee has had different representation from the faculties, the library and administration (at times the student body and the academic union would also be represented).

Over the years a number of efforts and initiatives have been instigated by the committee (and individuals) and a number of proposals for a computer center (Mundy, 1990; Nkhalambayausi, 1993; Mtema, 1996; Fabiano, 2000) have been written. The computer center was (and still is) expected to be an important enabler of ICT activities and a necessary IT infrastructure for the college. The center would, among other services, enhance the potential of e-learning, extending educational opportunities to those who can not secure a university place, promote research amongst staff and students in various disciplines as resources such as computers, Internet, e-journals and other electronic references can be made available through the center.

My own initiatives included revisiting the idea of writing a proposal for a computer center at some point; developing a personnel strategy for the ICT center and developing a draft business plan for the center among other things. Although the idea of the proposal was good, I lacked sufficient persistence in soliciting funds to make the idea a reality. The personnel strategy included a marketing manager, an idea which was not acceptable to many, the reason given being financial resources. However, the other personnel recommended were acceptable though not yet implemented.

My major failure was not being able to come up with sufficient impetus to enable locally generated funds to become available. However, my own department was able to generate both local funds and foreign resources for the computer laboratories

#### **4.1.1 Activities of the CCICTC 1990 – 2007**

In the earlier years most of the college ICT activities were initiated by individuals in the section of Computer Science in the Mathematical Sciences department. In the early 1990s, ICT was not perceived as having the potential to offer solutions by most members of the college community. However, the few who had the vision of the ICT need pursued the idea of having a computer center for all at college level, the need to have standards for computer acquisition to enable compatibility, the need to have an advisory team to recommend the type of computers to be bought whether one is buying as an individual, as a department or as a college. From late 1990s to the 2000s, there was a shift as the college administration took a leading role and had representatives from all faculties and administrative departments in the ICT committee. Although standards were set, reality demonstrated that these standards were not adhered to.

Although the ICT committee had set up these standards, not all members of the college were aware of them. It was not clear whose mandate it was to disseminate the information between the committee itself and the college administration who were serving as the secretariat. In some cases individuals and departments were gifted computers by donors making it difficult for them to dictate specifications for the hardware.

Further, not all ICT activities that were taking place within this period were thought about by the committee although the committee would adopt such initiatives later. For example the college e-mail/internet project and the setting up of a college local area network started as a project in the Physics department; the installation of satellite for faster internet connectivity was a brain child of the Library consortium; the laying of the fiber-optic backbone was also an initiative by an individual in the Mathematical Sciences department. All these initiatives were later the responsibility of CCICTC. Not only did the committee adopt the initiatives, but also the systems administrator for the college ICT network.

The common tasks by the committee were planning on the way forward in terms of ICT implementation within the college – what resources are required both equipment and human, an agenda item which kept repeating meeting after meeting, year after

year and not much was put in practice. Some of the notable tasks were the development of proposal for the computer center, developing the organogram for the ICT services department, and development of the ICT services department business plan. These tasks were being done by subtasks of the main committee where a few members would be involved in the development process to allow for feed back from the other members of the main committee.

The ICT committee would in turn report to and pass their recommendations to the college administration. The implementation process as it became apparent was not easy and straight forward. The college administration also had to go through its own processes and priorities. Over the years, ICT initiatives were not top of the list of priorities resulting in overburdened systems administrator and poor quality ICT services. The ICT committee however was persistent in reminding the administration of the urgency of the matter.

#### **4.1.2 Current Status of ICT at Chancellor College**

Despite efforts to have a computing center in place over the past years, that dream is yet to be realised. The ICT infrastructure at Chancellor College remains asymmetric with a few departments having computing laboratories meant for their students and in some cases for staff. The only common place where students can access computers and Internet is the library computing center. Although this might sound ideal, reality demands a fee for students to access the library computing center and this brings in a gap between the *have* and *have not* amongst the student community. Further, in comparison with the student community, the capacity for the library computing center is very small and therefore not sufficient to cater even for those who are willing to pay. This is not reducing the gap between those “actually using” and those who are “potential to use” (Cf. Tearle, 2003, pp.568) the center.

The different departments with computer centers have acquired their computer centers using different means, reflecting departmental financial clout, donor or collaborative input, consultancy sourced funds or through other income generating activities. As of 2007, departments of Demography, Economics, Education, English, Mathematical Sciences were among the few owning computer centers open to students. Department of Biology’s computer laboratory was restricted for staff members only. The number of computers in these laboratories range from two in the Biology department to over forty in the Mathematical Sciences department. The acquisition processes of these computers also vary from department to department and for most departments it reinforces the hybrid-approach discussed later in section 6.3 as a solution. Much as the acquisitions were based on real needs the departments of Demography, Economics and Education were donor funded; whilst my own Mathematical Sciences department acquired the initial consignment of computers in early 1990s using donor funds, the second batch (after initial batch became obsolete) was funded by college and the department raised its own funds for the last batch of computers currently in use.

### **4.1.3 Local Area Network**

The college has a local area network which until 2005 was all laid using ethernet cables. The ethernet cables were used regardless of the distance between two points, without repeaters. In 2005 the backbone of fiber optic cables was installed using money donated by the Press Trust. The remainder of the network still uses ethernet cables which hang from point A to B in a haphazard manner. The haphazard way which the ethernet cables hang slows down (to a certain extent) the Internet speed, affecting the already (s)low Internet bandwidth.

### **4.1.4 Internet**

While Internet is getting cheaper in the developed world, the reality at Chancellor College is that the Internet bills remain high, overstretching the college budget. The college Internet is provided via vSAT and the high bills registered for Internet act as a deterrent for other ICT investment initiatives. Other than the high bills, spam and viruses are also challenges that contribute to slowing down of the Internet and the lessening of the already stumpy bandwidth. The recommendation by the ICT committee that members of staff or their departments should be responsible for paying their internet bills is not honoured by all the departments. Where payment of internet bills is concerned, there is no common interest across departments although everybody complains when there is no internet service.

## **4.2 Benefits of ICT Center at Chancellor College**

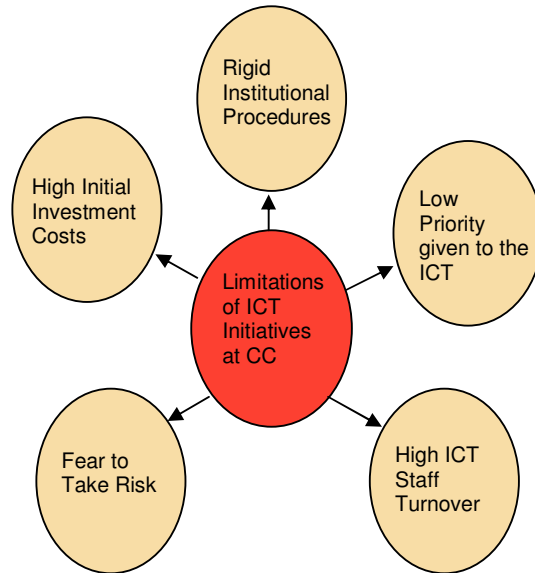
Having an ICT center at Chancellor College would realize both direct and indirect benefits. Communication can be improved thereby reducing the costs on telephones and strengthening research both within and without the college. The pending e-learning projects can be implemented and above all there would be a sustainable link with the outside world. Students can also have a chance to practice their computing skills, at the same time students can do literature searches using the Internet.

The ICT center can also be used as a source of income by way of offering short and professional computing courses and consulting services to organisations outside Chancellor College.

## **4.3 Limitations of the CCICTC Initiative**

The CCICTC has a number of limitations ranging from human resource to issues of policy.

- Operating under an institution with set procedures makes it difficult to deviate from the rules. The excuse has always been that the priorities for ICT investments compete with the basic student provisions like teaching and learning materials, food and salaries for staff. The benefits that ICT can bring are disregarded. At one level, therefore, our committees were working as toothless brainstormers whose suggestions could be filed. A direct line to the college planning department was lacking.



- High initial investment cost which has already been alluded to is also a limitation. The belief that one needs to invest to earn money is not part of the logic here. One would think that by now (since the early 1990's) Chancellor College as an organisation would have developed an ICT investment strategy. This can be explained by the next two points.
- Fear to take risks. Despite the continuous recommendations from the ICT committee to appoint permanent ICT services staff there has been some degree of uncertainty that this might only increase the payroll check and not the ICT implementation process.
- High staff turnover has also had an impact on the slow way to implementation as over the years some of those who were forceful in pushing the idea forward had left, bringing in new members into the committee and starting the process all over again. The turn over had also affected the position of the network system administrator and it became apparent that the particular strengths and/or weaknesses of the person in that position would give an impression that either – all is well, there is no need to add new staff or that there is need to beef up the human resource. I was one of the long term staff and committee members. In this role I saw colleagues come and go. Although suggestions could be agreed, once dynamic members at the committee and higher echelons left we were back a few steps.

Another limitation for this committee was that the laid out plans would be repeated one meeting after the other. Instead of asking how the plans can be materialised, the grouping was quick to conclude that the plans, though they were sound, could not be achieved due to financial problems. Could it be that as a committee we were always waiting for some one to give us a 'fish to eat' when we actually knew how to catch that fish, yet we kept blaming circumstances around us?

#### 4.4 The Nature of CCICTCC

The Chancellor College ICT Committee was need-driven and its central premise was to establish a computing centre that would be used to provide computing and other ICT-related solutions to the whole college, staff and students alike to enhance the college's e-developments. This committee can be seen from a community perspective, without reliance from government or donor funds (Hearn et al., 2005). While efforts to secure the required investment for establishing a computing centre were being made by the ICT committee, the organisation as a whole did not seem to value the initiative, and very low priority has been given through out the years.

The committee has sustained over the years because meetings for this committee never incurred direct costs. It only incurred 'indirect financial costs' (Heeks, 2003) as a lot of time and effort was invested and is still being invested.

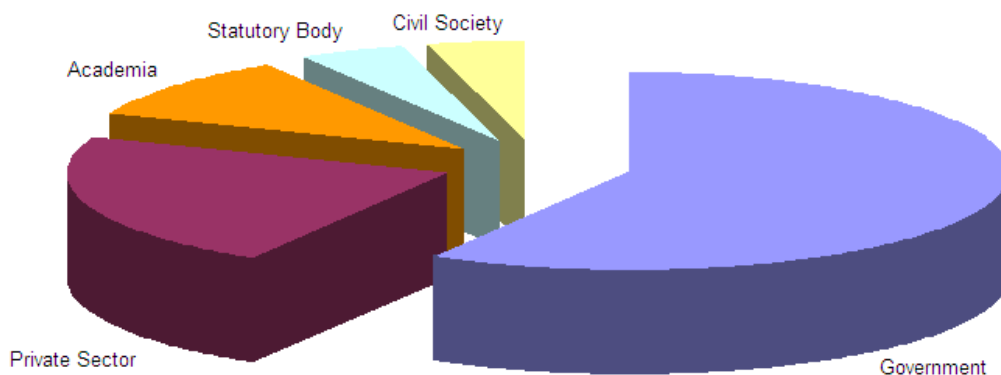
Despite some departments picking on the model for ICT implementation, this did not build up to a common college ICT initiative. Each of these departments was only interested in meeting their own needs and they ended up having their own ICT support person(s). Thus apart from individual failures, including my own, the lack of a central person to coordinate college ICT initiatives and sell these to the Head of Departments, Deans of Faculties and College Administration was a crucial weakness. In this sense the Chancellor College ICT initiatives were a microcosm of the problems encountered in the National ICT working group.

## **5 The National ICT Working Group**

The National ICT Working Group (NICTWG) was formed by the Principal Secretary of the Ministry of Information and Technology in August 2006 with a goal to start developing the National ICT4D Plan of Action and review the draft National ICT Strategic Plan. The goal was later revised and the NICTWG was to look at all National ICT issues. The ICT issues include: sourcing funds, lobbying for ICT issues for example, checking that ICT issues are well budgeted for. In addition, the NICTWG should be working hand in hand with other ICT bodies i.e. Information and Communication Technology Association of Malawi (ICTAM). The setting up of the NICTWG with its revised goal provided an opportunity to achieve greater coherence among ICT players and initiatives national-wide. The NICTWG had ministerial backing as was alluded to by the Principal Secretary.

The initial membership of the group was 29 including 5 members from the Department of Information Systems and Technology Management Services (DISTMS), which is the Secretariat for the group. Later the NICTWG incorporated a representative from ICTAM. This gave a government representation of 55%, 21% private sector, 10% Academia, 4% Statutory Body, and 4% civil society.





The vision guiding the NICTWG is complementary to that of the NICTWG Secretariat and the vision articulated in the draft ICT Policy for Malawi, whose development process was developed by United Nations Economic Commission for Africa (UNECA).

### 5.1 The NICTWG Terms of Reference

The NICTWG had terms of reference (TORs) developed to guide its operations.

- The grouping was mandated to ensure that the cost of computers and the duties and levies paid on their importation was affordable.
- Ensuring the development of local content for the existing local web sites to encourage wide use of ICTs within society.
- Encourage organisations to share costs for Internet connectivity i.e vSATs (case of Lilongwe city where organisations next to each other would each shoulder huge vSAT bills).
- Liaise with other stakeholders like the Ministry of Energy and Mining to ensure that electricity extends to rural areas for rural dwellers to have access to ICTs such as computers and Internet.
- Keeping track of the different ICT initiatives at national level to avoid duplicating efforts.

In addition to the TORs, the NICTWG had the potential to evaluate the ICT-based projects in Malawi in different sectors and build onto the best practices and lessons learnt.

### 5.2 Activities of NICTWG 2007- 2008

The group held a number of meetings to strategize the way forward for ICT developments in Malawi. The NICTWG through its secretariat hired consultants for the Development of National ICT Strategic Plan and later the group conducted consultative meetings involving a wide range of ICT stakeholders in the three regions of Malawi to get feed back on the strategic plan. In addition, representatives of the group attended three regional meetings; two outside Malawi and one in Malawi.

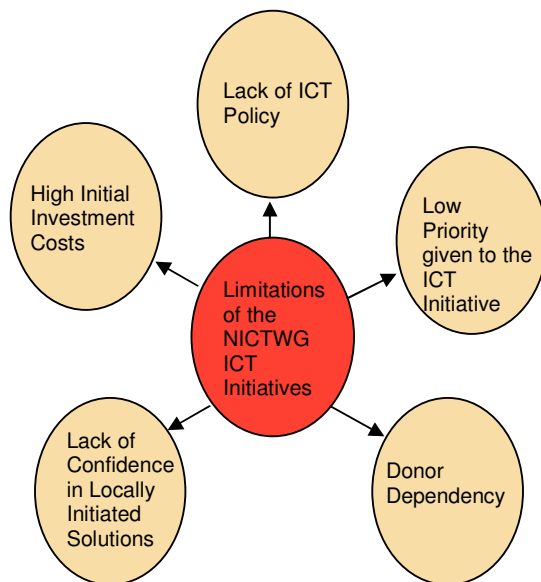
The NICTWG did not have any funding except travel refunds through the Secretariat for those travelling from outside the venue of the meeting. The lack of allowances in a way affected the participation to the meetings.

### 5.3 Background of the Context in which NICTWG Operates

Malawi's population is predominantly rural (about 80%). 53% of the population living below poverty line (CIA, 2008) and an adult literacy rate of just over 60% in the country. "The challenges facing ICTs in Malawi are numerous and mostly, these are compounded by the fact that a large population of the target group that could benefit from the use and access of ICTs reside in the rural areas where most of the ICTs are not available" (Kanjo, 2005). With a population above 13 million (Britannica World Data, 2008), the country had 85000 telephone lines, 135100 mobile phone subscribers, and 36000 Internet users by 2003. Malawi has a small industrial sector largely geared to processing agricultural products.

### 5.4 Limitations of NICTWG

- The lack of ICT Policy at a national level. More than ten years since the start of developing an ICT policy for Malawi, the policy is still in its draft form. The positive side is that we now, in 2008 have the final draft. The lack of an ICT National policy makes it difficult to have clearer perceptives of the ICT initiatives with respect to the ICT policy. The delay in finalising the policy limits inclusion of emerging ICT issues relevant to the nation into the policy.



- High investment costs have become the default and most commonly mentioned limiting factor in most initiatives. Yet Gaved and Anderson exemplify how ICT initiatives increase or maintain social capital and in turn improving on the quality of life (Gaved and Anderson, 2006). This means that making the initial

investments, no matter how huge can be worthwhile and investment costs can be recovered over a certain period.

- Lack of confidence in locally initiated solutions. This indirectly increases the investment costs as most ICT solutions are outsourced to experts from other countries.
- Donor dependency, even for initiatives that could easily be implemented with internal resources. An observation made was that most of the meetings were convened to meet certain donor deadline and agenda. It was difficult to make a clear distinction whether the NICTWG was operating as an independent body or pursuing donor agenda to the secretariat. The lack of clarity is as mentioned in the posting below:

The NICTWG is a COMESA initiative to encourage the participation of both public and private sector participation in policy formulation and implementation in the all COMESA countries.

I am therefore amazed that the Government of the Malawi, through DISTMS [the NICTWG secretariat] went on to announce in the papers and on their website without the knowledge of the Chairperson of the NICTWG...

Does the NICTWG still exist in Malawi? I have not heard of any meetings in recent months nor heard of any follow up to the previous agreements or arrangements made...

It is not the fault of the Chairman, I would think the problem is in the Secretariat which happens to be the Ministry of Information and Civic Education (Mtande, 2008).

But on the other hand, as donors met some costs, their agendas were positively leveraged.

- Low priority given to ICT initiatives. ICT development is not a national priority. While Permanent Secretaries were often very sympathetic, it was not clear that there was enough political will for ICT initiatives.
- Not enough regulatory frameworks to cater for all the different fields in ICT. Much as the ICT equipment is regulated, the applications (software) is not.

## **6 Need-Driven Approach vs Donor-Driven Approach**

### **6.1 Need-driven Approach**

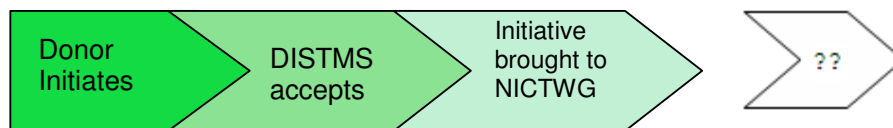
The need-driven approach, while preferable, has a number of problems. One has to be clear as to whose needs it is addressing. Thus at Chancellor College each department saw its own needs as paramount. The numerous proposals put forward since early 1990s at Chancellor College may be an indication that not everybody saw or appreciated the need to have an ICT Centre. While there is clear evidence that ICT is an efficient development tool, the challenge is to ensure that all stakeholders are aware of such benefits. Another challenge is the cost factor where the need may be appreciated but fail to envisage the long-term cost benefit.

The need-driven approach also depends on whether the initiators have a voice across the community where the initiative is to take root and the culture of the community itself. At Chancellor College, the ICT initiatives have along the years been weighed down by the culture of committees. While each representative had his/her own agenda, they nevertheless attended the committee meetings, sometimes as if going through the motions. Such committees may not be capable of providing solutions and may not be answerable if universally agreed solutions are not provided.

## 6.2 Donor-driven Approach

A major limiting factor with donor-driven initiatives is the issue of ownership. The local counterparts see the initiative as belonging to the donors whereas the donors believe that once they have initiated, the locals should easily adopt it.

Despite initial assurance of political will by the top government official who chaired the first NICTWG meeting, the implementation of the articulated plans have been slow. As in other initiatives, leadership is crucial particularly if there is need to implement the project. With donor-driven approach and in the case of NICTWG, the flow was as follows:



The flow presented in the diagram was challenging as the aim of a NICTWG was to come up with national ICT initiatives befitting a wide range of stakeholders not government only. It was not clear whether these donor-initiated initiatives were to be lead and implemented by DISTMS or by the NICTWG and this had implications on commitment of the NICTWG as it was difficult to determine where ownership and control should be. In this case, the actual control is held by the donor. In the end, issues discussed in the NICTWG meetings were never implemented the way the stakeholders wanted as DISTMS had the interest of the donor and the funder to protect.

## 6.3 Hybrid Approach

There is need for a hybrid approach that combines the needs and the resources from the donors. On the one hand, the needs, priorities and strategies required for the ICT initiative have to be clearly articulated on a college and national scale. The ground work should be ready, this way, the conceivers of the initiative can easily identify which areas they would be able to include in their budget and the areas that need assistance. Similarly, cooperates and donors can find it easy to identify the areas that they would be interested and able to assist.

The hybrid approach should also imply having staff across sectors, divisions, departments and sections trained in ICT issues. These can assist in ensuring that once

implemented, the ICT initiatives are well sustained. They can also help in designing future ICT initiatives.

An example can be drawn from the Chancellor College departments of Demography, Economics, and Mathematical Sciences. These three departments' needs were mostly because of their students requirements to use computers. In the case of Mathematical Sciences, the Computer Science students need computers as much as Chemistry students need chemicals for their laboratory sessions. The Demography department also need computers for their students, as does the Economics department and these departments combined their needs and went ahead to solicit funds from donors.

## 7 Discussion

Although the world around us has changed, and is still changing, becoming more and more technology dependent, Malawi seems to be lagging behind; cultural and financial may explain. Having a good ICT vision and plan without implementing the plan can not ensure any development success. As a country, we need new answers to solve the digital challenges which we face at different levels. Stakeholders like donors/development partners can not be initiators or allowed to hold the keys to the processes. There is also a danger in 'blind adoption of initiatives' as they may end up bringing unintended effects, [such as duplication, inappropriate equipment, solutions that do not fit the local situation] (Miscione, Staring and Kanjo, forthcoming).

Evidence is provided that ICT is also helping people take advantage of new opportunities across the developing world (Accenture, Markle Foundation, UNDP, 2007) and forming new social networks for developing and sharing information and experiences. While the CCICTC would enhance the formation of a social network within the college, the NICTWG has a broader scope. However, it can be argued here that what would start as a college 'social network' can easily expand in scale and scope by linking with other networks.

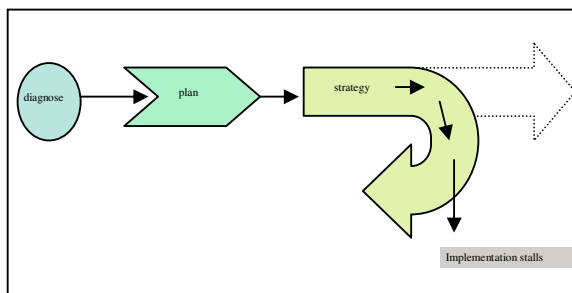
The Chancellor College initiative if successfully mounted would give hope for a national one, if only because it would show academics and teachers doing the theory and not just theorising. "As participants in the social world we are still able, at least in anticipation or retrospect, to observe our activities 'from outside' as objects in the world" (Smith, 1997 after Hammersley and Atkinson 1983). Participating in ICT activities at organisational and national level in my country, I have observed that there are a lot of intelligent thoughts, ideas, views which are presented and exchanged in search of space and opportunity to be implemented. However, most of these ideas never go beyond diagnosis and planning stage. Rarely are they turned into reality and the processes of implementing the developed plans and strategies for the ICT initiatives become arrested at the planning stage (Cf. Hearn et al., 2005).

Heeks (2003) posits that it is the 'design-reality gaps' that may limit the success of ICT initiatives. Heeks categorises the initiatives into three camps: 1) 'total failure', 2) 'partial failure' and 3) 'success' (Heeks, 2003: p2). This paper looks at the broader ICT initiatives including e-government and analyses mostly the category which Heeks terms 'total failure'. The reasons for failure are not just financial; some donor money does go into Malawi and the government can prioritise internal funds for ICT

initiatives. The failure is due to a number of factors: leadership, committee cultures, self-interest and competing interests among other things.

Another factor is that more emphasis is put into finding technical solutions when the initial investments for the technical solutions can not even be met. Naturally the initiatives fail. Further, a lot of the ICT initiatives in the developing countries seem to get strength only when there is a measure of donor commitment in it, whether or not the donor community are doing it to push their own agendas. In some cases, the ICT initiatives lose strength along the way due to human resource capacity on the ground.

Reflectively, then, the two case studies above give contrasting views of how ICT initiatives were conceived and planned and the challenges faced when it came to implementation. Being a participant in the process gave me an opportunity to reflect on where we went wrong and the limitations we faced. As someone once said “observing and participating are integral to understanding the breadth and complexities of the human experience” (Anon) reflexivity gives the power of hindsight from which we can learn (Cf. Hammersley and Atkinson, 1983: 128; 2004).



In both committees it was easy to identify the gaps which need to be filled so that both the college and the nation are not isolated from the global ICT infrastructures. Much as the diagnosis was made with plans and strategies, the sad reality is that the ideas never went beyond planning phase. From the observations made, this is attributable to many causes including:

1. ICT initiatives being donor initiated and this can have ‘incompatibilities between cultures and technologies’ (Davison, et al., 2000).
2. Donor dependent ICT initiatives.

*(Both 1. and 2. can be due to lack of self-reliance and innovativeness or lack of economic resources and muscle).*

3. Human resource capacity thinning on the ground. As issues of *brain-drain* or *brain-circulation* come into play, the ICT sector is no exceptional. This makes continuity of the initiatives difficult as those who leave take away the institutional (committee) memory.
4. Lack of ICT Policy.
5. High initial investment costs. This can also be put as *–wanting it all at once*. In the situation where resources are not sufficient, implementing an initiative in phases can be a viable option.
6. Lack of affordable and sustainable telecommunications infrastructure.

7. Lack of confidence in locally initiated solutions.
8. Not prepared to take risks.
9. Not enough awareness to the masses of the benefits that the ICT initiatives can bring along.
10. Minimum sharing of emerging/best practices ICT issues around the globe.  
Although it is argued that latecomers can take advantage of the lessons from developed countries, this can only be realised if one is exposed to those lessons and understand fully the benefits of and how to adapt the lessons to own situation.

Another observation, though not directly contributing to failure to implement the ICT initiatives is the gender imbalance in both committees. In the NICTWG there was only a 24% representation of female members whereas the CCICTC female representation ranged from 12% to 25% within the ten year period. Davison, et al., 2000; Heeks, 2003 also point out that ICT(s) is biased by gender.

I have always wondered why companies and organisation stick to their vision, mission, strategy, and business plans; and see them all the way through implementation but when it comes to public/government bodies, they relax after planning.

A critical look at both groupings indicates a shortfall of certain skills. Much as the groupings comprised educated professionals, they were hardly any members with business planning skills or those with such skills never saw the need to utilise them in these groupings. For example, the CCICTC formed a sub-committee (the author was a member) to look into ICT personnel requirements (organogram) for the proposed ICT center. Among the proposed personnel, a marketing manager was also proposed, the rationale behind it being that s/he could come up with a business plan and strategy for generating funds for the centers sustainability. However, at one of its meeting in 2006, the full CCICTC committee recommended that the marketing manager should come later. To date (two years later), none of the personnel that were recommended have been employed.

To arrive at a good balance in the Information Society, it is good to involve stakeholders at different levels – International, National, Government, Community, Private Sector, Civil Society, Academic, and Individual levels. This is more so because local appropriation of initiatives can only be achieved if the lower levels are involved in the initiatives and this ensures sustainability. Sustainability goes hand in hand with bottom up approach, which has backing or support of the top management.

Knowledge that ICT can play a great role in turning the tables of development seems not enough for both Chancellor College ICT Committee and the NICTWG. Investing in ICT initiative seems to be of less priority regardless of the gains which can be brought about. Critical analysis of the situation reveal the need for a strong will by different players to make things happen. In both cases, one can conclude that there is what I term ICT *priority and commitment aptitude* missing.

Day and Cupidi give another face to why ICT developments may not go beyond a certain timescale. They articulate that ICT developments should be described as ‘initiatives’ rather than ‘projects’, arguing that projects have a short-term nature and that can be detrimental to sustainability (Day and Cupidi, 2004).

## **8 Conclusion**

When we diagnose and plan without implementing, it is like hearing and seeing without doing and it is hard to understand something you have not done. Factors influencing failure of ICT initiatives have been thoroughly discussed in different academic papers (Cf. Doherty et al., 1998; Avgerou and Walsham, 2000; Heeks, 2002), the gist of this paper was to go beyond the design and reality gap mismatch (Heeks, 2002) and poor planning as causes of failure and establish the causes of failure to implement once the initiatives have been planned and designed.



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