



Microsoft®

UNIDO/MICROSOFT

**REPORT ON
MARKET SURVEY FOR REFURBISHED
COMPUTERS IN UGANDA**

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October 2007

Final version

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List of acronyms

Acronym	Description
UNIDO	United Nations Industrial Development Organization
DBIC	District Business Information Center
MSME	Micro Small and Medium Enterprises
ICT	Information Communication Technology
PC	Personal Computer
VAT	Value Added Tax
MSME	Micro, Small, Medium Enterprise
DICTS	Directorate for ICT Support

1 Executive Summary

In January 2007, United Nation Industrial Development organization (UNIDO) and Microsoft Corporation partnered to build access to more affordable quality PC hardware and solutions in Uganda. The aim was to support micro, small and medium-sized Ugandan businesses through the use of Information and Communication Technology (ICT). The model is based on a single facility that imports and refurbishes used PCs. These PCs are then sold through a reseller partner channel that spans across the whole country. The targeted end customer segment are MSMEs—defined as businesses with fifty(50) people or less. Through this partnership, Microsoft in particular, would augment the services of the District Business Information Centres (DBICs), six of which have already been established by UNIDO in Uganda. Districts currently covered include Arua, Jinja, Masaka, Mbale, Kabale and Soroti. More are in the pipeline with Mbarara and Kampala expected to be operational in the near future.

As part of these efforts, UNIDO commissioned the Directorate for ICT Support (DICTS), Makerere University to undertake a research study to determine the marketability of quality branded second hand computers among MSMEs. This report is the culmination of this study, which covered 473 Micro Small and Medium Enterprises (MSME) across 8 districts in Uganda. The participating districts included Arua, Jinja, Kabale, Kampala, Mbale, Mbarara, Masaka and Soroti. The survey was conducted between 1st and 15th August 2007 with the primary aim of determining marketability of quality branded refurbished computers among MSMEs. In addition, the study explored the availability of potential channel partners amongst the MSMEs for the reselling and maintenance of refurbished PCs to individual MSMEs in their localities

The sample consisted of 473 MSMEs from across eight districts. Of these, 418 MSMEs are customers—who could potentially purchase refurbished second hand PCs, while 55 MSMEs are channel partners—who could potentially be part of a franchise to sell refurbished PCs in the various districts. Table 4 shows the detailed breakdown of MSME type according to the districts that participated in the study.

Table 1: Sample distribution by District and Type.

MSMEs Interviewed: By District	Number Interviewed				
	Customer	%	Partner	%	Total
Kampala	87	20.8	19	35	106
Mbarara	50	12.0	4	7.3	54
Masaka	46	11.0	5	9.1	51
Kabale	50	12.0	6	11	56
Arua	49	11.7	5	9.1	54
Mbale	50	12.0	5	9.1	55
Soroti	37	8.9	6	11	43
Jinja	49	11.7	5	9.1	54
Grand Total	418	100	55	100	473

From the analysis of the results of this study, it is clear that there is a demand for quality refurbished second hand computers across Uganda. It is also apparent that to successfully run a business around quality refurbished second-hand computers a number of issues will need to be taken into consideration. The key findings and actionable recommendations that may guide the UNIDO/Microsoft partnership on how to start and manage a successful franchise selling refurbished computers in Uganda are detailed below: -

First, there is a need for sensitisation and skills development on different levels. Many MSMEs have no appreciation of why they need to use computers in their business operations or how they can effectively incorporate computers in their operations. A successful campaign will not only improve the performance of MSMEs, but also create a bigger market for refurbished computers. Currently, many MSMEs who do not own but use computers tend to rely on other businesses like secretarial bureaus, print shops, Internet cafes, etc. In most cases, a skilled attendant performs tasks for MSMEs, helping to compensate for the skills that MSME owners may lack. Avenues that help MSMEs to improve their computer skills will certainly help increase demand for refurbished computers.

Second, many MSMEs that do not own or use computers perceive them to be very expensive. In addition, affordability of computers is the most influential factor, when it comes to choosing the type of computer to purchase (new PC, second-hand PC, brand-name PC, other-name PC). All of this highlights the need to carefully address the issue of affordability and cost. There is an apparent need for credit arrangements to facilitate more MSMEs to own and use computers in their operations, which could be organised in conjunction with micro-finance institutions. The perception of affordability and better return on investment could be addressed via segmented bundling of services. On the partner side, many potential channel partners do not have experience with financial loans as a means of financing their businesses. Credit or loan facilities for partners, some of which may be passed onto customers will go a long way in building the viability of the franchise.

Third, most MSMEs that own computers have employees with the necessary user skills to leverage computers in their operations, but when it comes to hardware and trouble-shooting, such skills are in short supply. This presents both a challenge and an opportunity. A challenge in the sense that MSMEs need to be equipped with some basic skills that enable them to understand when their computers have actual problems that need to be addressed and an opportunity for channel partners to develop a relationship beyond just selling computers. To create a successful business model selling refurbished computers, UNIDO/Microsoft will have to develop a relationship that extends beyond the initial sell to help address subsequent issues that might arise. Such an ongoing relationship will help address the poor perception that MSMEs currently have with the performance of second-hand computers.

While it is apparent that computers can improve business operations and MSMEs do indicate plenty of interest in acquiring quality refurbished second-hand computers, the current power situation in the country leaves a lot to be desired. Electricity power supply is unreliable, punctuated by load shedding in most major urban areas. Given that many of our target areas are rural and that individually MSMEs will not be able to afford generators, due thought needs to be given to alternative ways in which MSMEs might be able to provide the required energy to run their computers.

2 Introduction

There is a growing appreciation of the contribution of Micro, Small and Medium Enterprises (MSME) to national economies, particularly of developing nations. While many factors impede the performance of MSMEs, better access to ICT is generally highlighted as one of many factors that can help improve the performance of MSMEs. UNIDO is engaged in a number of activities to promote the growth of small businesses in Uganda. To this end, they have partnered with Microsoft to explore how Information and Communication Technologies (ICT) can be leveraged to support the development of MSMEs in various parts of Uganda. As part of these efforts, UNIDO commissioned the Directorate for ICT Support (DICTS), Makerere University to undertake a research study to determine the marketability of quality branded second hand computers among MSMEs.



Figure 1: Map of Uganda showing Districts that participated in the study

This report is the culmination of this study, which covered 473 Micro Small and Medium Enterprises (MSME) across 8 districts in Uganda (Fig. 1 above). The participating districts include Arua, Jinja, Kabale, Kampala, Mbale, Mbarara, Masaka and Soroti. The survey was conducted between 1st and 15th August 2007 with the primary aim of determining marketability of quality branded refurbished computers among MSMEs. In addition, the study explored the availability of potential channel partners amongst the MSMEs for the reselling and maintenance of refurbished PCs to individual MSMEs in their localities. The major questions, which guided the inquiry, were the following: -

1. What ICT inventories do MSMEs possess?

2. How do MSMEs use the PCs that they own?
3. What are MSMEs' experiences with using their existing PCs?
4. How do MSMEs rate the application and contribution of PCs in their businesses?
5. Is there general interest amongst MSMEs to invest in refurbished PCs?
6. What price ranges would most MSMEs be comfortable paying for refurbished PCs?
7. What are some of the features/packages/add-ons that can be combined with refurbished PCs to enhance their usefulness to MSMEs?
8. What are some of the factors that influence the interest of MSMEs in refurbished PCs?
9. What IT skills level (User and Technical) exists among MSMEs?

The next chapter provides a brief background to the study, highlighting the methodology employed to achieve the objectives of the study. The following two chapters delve into the analysis of results for potential customers and channel partners respectively. The final chapter summarises some of the key findings and makes key recommendations that may help facilitate a successful business in quality refurbished second-hand computers in Uganda.

3 Background and Methodology

3.1 Background

In January 2007, United Nation Industrial Development organization (UNIDO) and Microsoft Corporation partnered to build access to more affordable quality PC hardware and solutions in Uganda. The aim was to support micro, small and medium-sized Ugandan businesses through the use of Information and Communication Technology (ICT). The model is based on a single facility that imports and refurbishes used PCs. These PCs are then sold through a reseller partner channel that spans across the whole country. The targeted end customer segment are MSMEs—defined as businesses with fifty(50) people or less. Through this partnership, Microsoft in particular, would augment the services of the District Business Information Centres (DBICs), six of which have already been established by UNIDO in Uganda. Districts currently covered include Arua, Jinja, Masaka, Mbale, Kabale and Soroti. More are in the pipeline with Mbarara and Kampala expected to be operational in the near future.

3.2 SME Definition

SMEs are defined in terms of a number of characteristics that vary from one country to another. These characteristics may include the number of employees, the size of capital investment, their turnover, their shareholding, their market share, etc. In Uganda, the Micro and Small-Scale Enterprise Policy Unit (MSEPU) has created an official definition. MSEPU is a unit within the Ministry of Finance, Planning and Economic Development (MFPED), created to coordinate activities related to MSME development in Uganda¹.

A micro enterprise is defined as having:

- Fewer than five employees, including family members;
- Working capital of less than Ushs 2.5 million;
- Turnover value of less than Ushs 10 million

A small-size enterprise is defined as having:

- Up to a maximum of 50 employees
- Working capital of less than Ushs 50 million
- Turnover value of Ushs 10–50 million throughout each year of operation

The definition for medium-size enterprises has not yet been derived, and there is still need to reach consensus on the definition of both micro and small-size enterprises within the private sector.

3.3 Methodology

As a result of UNIDO’s activities in a number of districts in Uganda, they have built an array of resources that were leveraged for this study. A number of districts that already possessed a

¹ Gerald Ssendaula, Minister of Finance, Planning and Economic Development at his keynote address to the UNCTD sponsored Symposium on modalities for financing SMEs in Uganda held in Kampala, Uganda, 2002.

District Business Information Center (DBIC) or were inline to receive one were selected to form the basis of the study. This was primarily meant to help build synergy and leverage off existing relationships that have already been nurtured by the DBICs. In addition, existing sites are widely distributed across the country, something that would help provide a good overview of demand across the country.

3.3.1 Work phases

The study proceeded in a number of phases highlighted below:

Preparatory phase

The preparatory phase was aimed at ascertaining the actual needs of the partners and helping to build the appropriate momentum to kick-start the assignment. Extensive interactions with the clients interleaved with brainstorming discussions amongst team members helped to create a good understanding of the client expectations. The team in agreement with the client agreed to adopt a quantitative approach as the best method to deliver on the assignment. Two separate instruments were identified for development: one targeting potential customers for the refurbished PCs and the other targeting potential channel partners.

Instrument design

The two instruments were developed through a participatory and consultative process, which went through two iterations:

- a) The first iteration involved internal evaluation and feedback from various team members. This feedback was used to improve the early drafts;
- b) The second iteration involved interacting with UNIDO counterparts who reviewed and provided feedback that was used to further improve the instruments

The instruments were designed with check-backs to help track for consistency of responses and ensure more data accuracy.

Training on Instrument and instrument pre-testing

At least two enumerators were selected from each location participating in the survey and trained on how to best administer the survey instruments. Besides having a good understanding of each locality, this would also help address language differences that might arise of deploying new people from a different locality. Training was conducted over a two-day period and involved teaching enumerators how to build up trust with their interviewees as well as understanding how MSMEs operate. Enumerators had an opportunity to pre-test the instruments and collect data in an actual setting. Working in groups, they were asked to collect data from at least two MSMEs (a potential customer and a potential channel partner). In subsequent de-briefing sessions, each enumerator gave their experience in administering the instrument in a real life environment. Specific questions that were found unclear or difficult to administer were revised as per the feedback from the pre-testing mission.

Data collection

Enumerators deployed the survey instruments using two approaches: in cases where the informant preferred to fill it personally, they did so with guidance from the enumerator, who had to wait for the completed questionnaire. The alternative approach was interview-

administered. The intent was to reach the right personnel with the questionnaires and at least ascertain some high degree of data validity.

Data capture

All questionnaires used to collect data in the various locations were delivered to a central location for data capture and entry. Information from the questionnaires was entered into a Microsoft Access database and after thorough validation exported into Microsoft Excel for analysis.

Data analysis and report generation

This phase involved processing, analysis and writing of the draft evaluation report. The first draft was peer reviewed through the team’s internal mechanism. The revised draft with its interim findings was discussed with UNIDO and input integrated to produce the final draft.

3.3.2 Formality Index

In order not to rely on varying definitions and also establish a basis for comparison across districts, the interviewed MSMEs were classified into formal, semi-formal and informal businesses. Although there are many approaches for classifying MSMEs, this study adopted a formality index² that relies on a number of criterion as described in Table 2.

Table 2: Computing the Formality Index.

Question	Value	Index Points
Form of ownership?	Sole proprietor, Partnership	0
	CC, Pty	0.5
Is your business Registered with the Receiver of Revenues? (pay tax?)	No	0
	Yes	0.5
Is your business Registered for VAT?	No	0
	Yes	1
How many of your employees have a WRITTEN EMPLOYMENT contract?	None	0
	One ore more	1
Does your business strictly separate business finances from personal finances?	No	0
	Yes	0.5
Does your business keep financial records?	None	0
	Simple bookkeeping	0.5
	Double entry bookkeeping	1

² Adapted from a study, “Towards an African e-Index: SME e-Access and Usage.” Performed under the auspices of ResearchICTAfrica, the study produced in 2006, reports on how small businesses leverage ICT 14 African Countries.

	Audit annual financial statements	1
Maximum Total		4.5

The premise around the method is that limited companies (PTYs) and Closed Corporations (CCs) usually require registration with various ministries such as finance and/or trade and an Industry, whereas sole proprietors and partnership do not necessarily need registration. MSME registered for VAT is also more likely to be formal than one that is only registered for income tax since VAT handling requires sophisticated record keeping. Having written employment contracts for employees also contributed toward the formality index. Having a written contract allows employees to enforce the rights and minimum wages as stipulated in labour laws while those without contracts can often be hired and fired at will. Whether a business is strictly separating personal from business finances and the sophistication of record keeping and accounting was also included in the formality index. The total points scored by each MSME determine its classification based on the weighting criteria described in Table 3 below.

Table 3: Formality Index Weighting Criteria

Formality Index	Index points
Informal	1.5 points or below
Semi-Formal	2 points or more and less than 3.5 points
Formal	3.5 or more points

4 Customer Survey

The sample consisted of 473 MSMEs from across eight districts. Of these, 418 MSMEs are customers—who could potentially purchase refurbished second hand PCs, while 55 MSMEs are channel partners—who could potentially be part of a franchise to sell refurbished PCs in the various districts. Table 4 shows the detailed breakdown of MSME type according to the districts that participated in the study.

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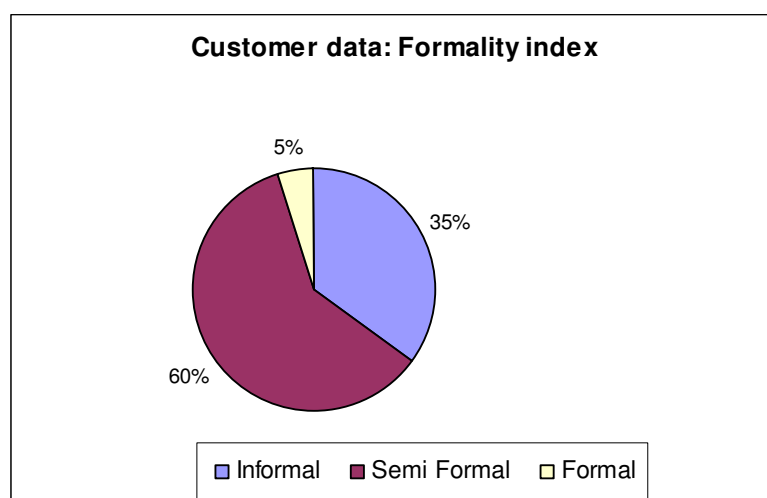


Figure 2: Customer distribution by formality (Qns. A.3 – A.13)

Organised according to formality, 60% of customer MSMEs that participated in the study operate in a semi-formal manner, followed by the informal at 35%. Only 5% of the MSMEs operate formally, probably an indication of the overheads challenges generally associated

with operating in a formal manner within the context of a developing economy. For example, for an MSME to file VAT returns, they need to keep better records of accounts. Amongst potential channel partners, semi-formal businesses still dominate with 68%, with the informal and formal partners almost equally accounting for rest.

4.1 Ownership of computers

More than half of the customer MSMEs interviewed already own at least one PC for their operations as indicated in Figure 3. When PC ownership is analysed across formality highlighted in Figure 4, formal (65%) and semi-formal (63%) businesses own more PCs than their informal counterparts (38%).

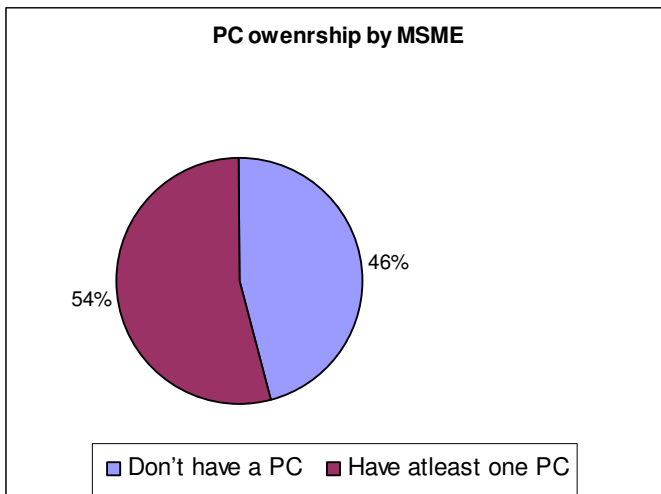


Figure 3: PC ownership amongst customer MSMEs (Qn C.3)

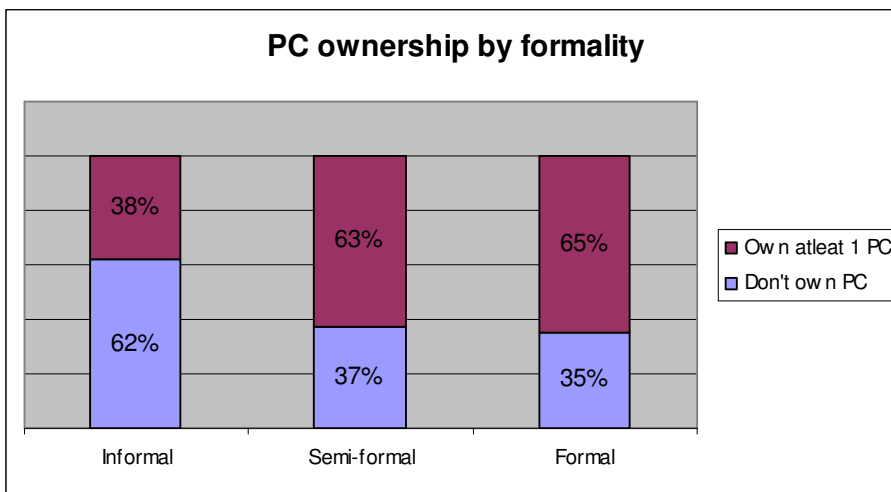


Figure 4: Variation of PC ownership by formality (Qn.C3 Vs. Qns. A3-A.13)

PC ownership varies greatly across districts with only 28% of MSMEs interviewed in Masaka owning at least one PC at the lower end and 79% of those interviewed in Kampala owning at least one PC at the upper end. While these numbers might not be representative, one would

expect that districts furthest from major urban areas like Arua have the least number of PCs. But this is not strictly the case. Figure 5 summarises the variation of PC ownership according to the districts that participated in the study.

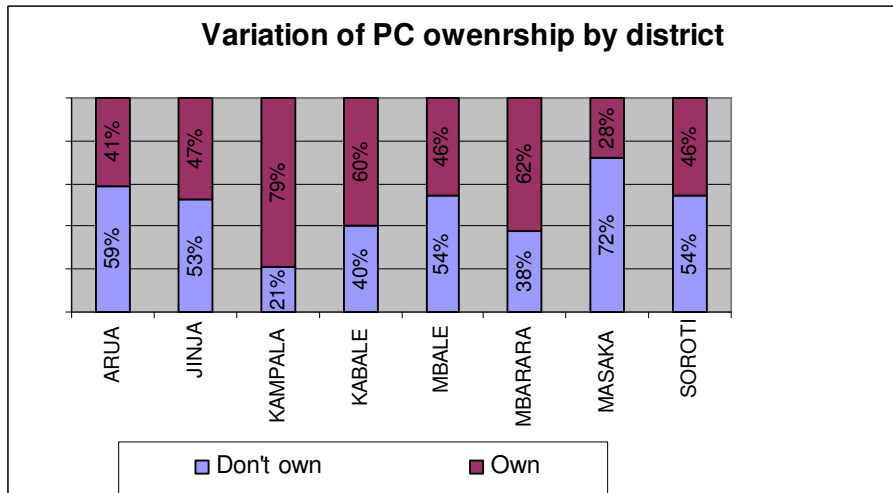


Figure 5: Variation of PC ownership across districts (Qn.C.3 Vs. Q.2)

4.1.1 Types of computers owned by MSMEs

There are different ways to look at the types of computers owned by MSMEs. One can compare branded computers (IBM, DELL, HP) versus other-name brands. On the other hand, we can consider whether computers are bought in new condition vis-à-vis those bought second-hand. Taking into account all computers bought new or used, Branded PCs (IBM, DELL, HP) account for the majority of computers owned by MSMEs with 61% of the whole total compared to other-name brands at 39%. In terms of condition at purchase, second-hand computers account for 51% compared to computers bought in new-condition, which account for 49%. The majority of branded computers are purchased second-hand (37%), compared to those purchased in new condition (24%). Conversely, for other-name brands, more computers are purchased in new condition (25%) than as second-hand computers (14%). This is perhaps the first indication that the cost of branded PCs is an influential factor when it comes to PC ownership by MSMEs. Taking into account the various categories, the majority of computers owned by businesses are second-hand, branded PCs (IBM, DELL, HP) accounting for 37% of all PCs. These are closely followed by brand-new, other-name PCs at 25% and brand-new, branded PCs (IBM, DELL, HP) at 24%. Second-hand, other-name PCs are the least owned at only 14%. All of this information is summarised in Figure 6.

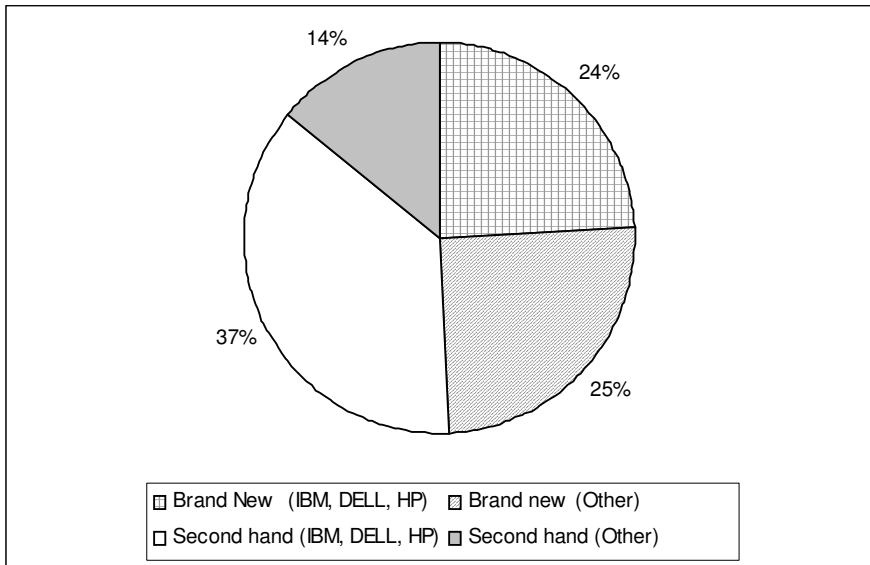


Figure 6: Types of PCs owned by MSMEs (Qn. C.4)

When asked to share the reasons that influence purchase decisions for computers, 56% of MSMEs surveyed indicated that affordability was the most important factor influencing their choice. This was followed by their expectations of the robustness of the computer at 20% and specifications at 9%. Other reasons are highlighted in Figure 7. Given the magnitude of how affordability influences purchase decisions, it is critical to ensure that refurbished computers are within the affordable range of more MSMEs or at the very least, perceived to be affordable.

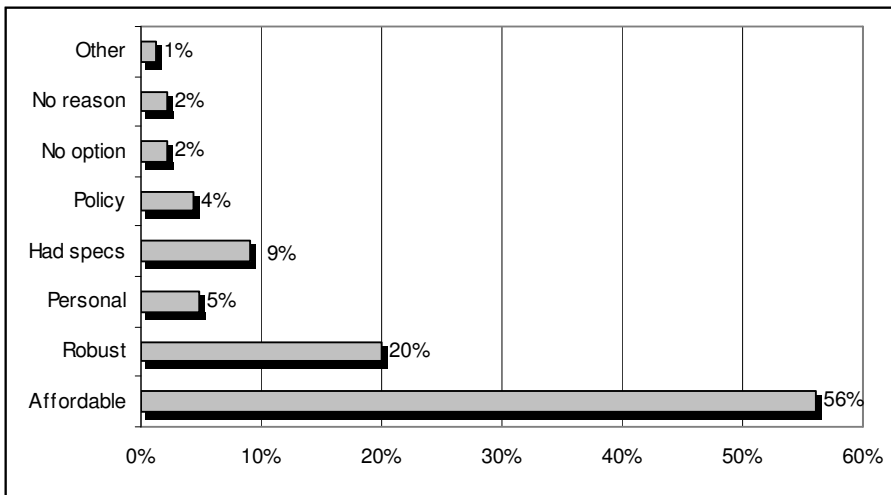


Figure 7: Reasons for type of PC owned by MSMEs (Qn. C.5)

When it comes to perception of the performance of their PCs, owners of brand-new, branded PCs (IBM, DELL, HP) are most satisfied with 85% of them ranking the computer performance as good. The perception is poorest for second-hand, PCs as indicated in Figure 8. This is a perception that UNIDO/Microsoft will need to reverse in order to run a successful franchise selling quality refurbished second-hand computers in Uganda.

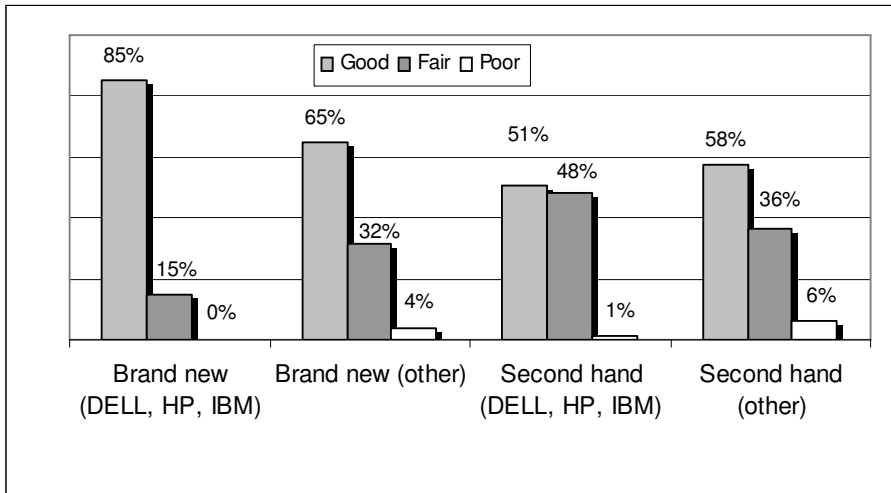


Figure 8: Perception of performance compared to type of PC owned by MSMEs (Qn. C.5 Vs. C.6)

Amongst MSMEs who do not currently own any PCs, the majority, 85% plan to buy a computer in future. 10% are uncertain; while only 5% are currently certain that they will not buy any computers in future.

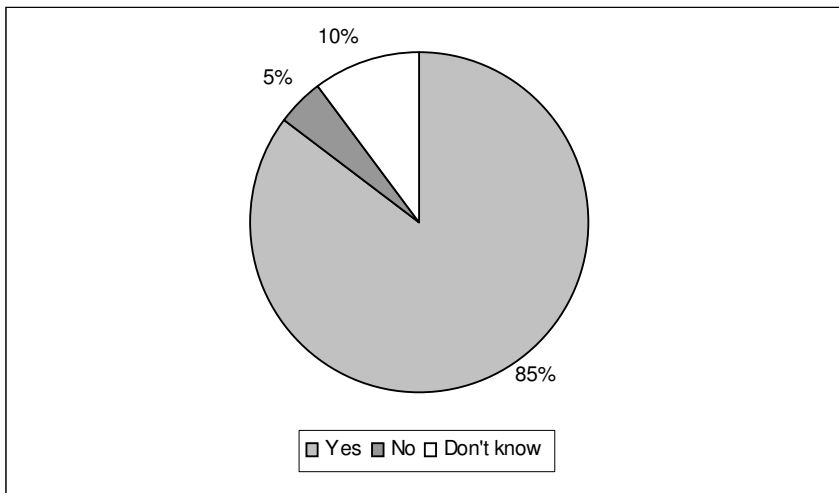


Figure 9: Plans to buy amongst MSMEs who do not own any computers (Qn. C.9)

4.2 Usage of computers

In terms of usage, more MSMEs report using computers for their business operations (60%) than those that own computers (54%). This indicates some degree of shared use and the presence of potential unfulfilled demand for computers. Usage increases across formality as shown in Figure 11, in corresponding fashion to ownership highlighted in Figure 4. Formal (85%) and semi-formal (67%) businesses leverage computers more for business operations compared to their informal counterparts (43%).

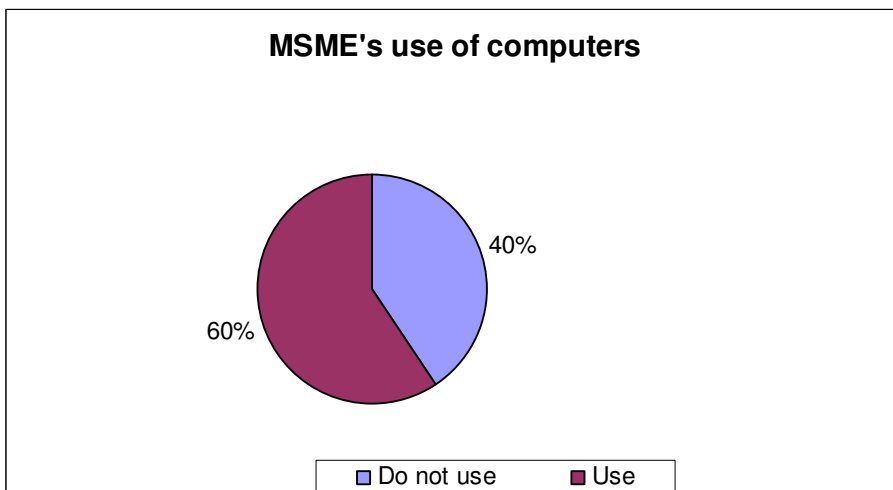


Figure 10: Use of computers by MSMEs (Qn.C.2)

While the gap in terms of computer ownership between semi-formal (63%) and formal (65%) MSMEs is not significant, the level of usage between the two is rather significant in favour of the formal MSMEs. Potential aspects that may explain this gap include user skill levels, types of applications used, etc.

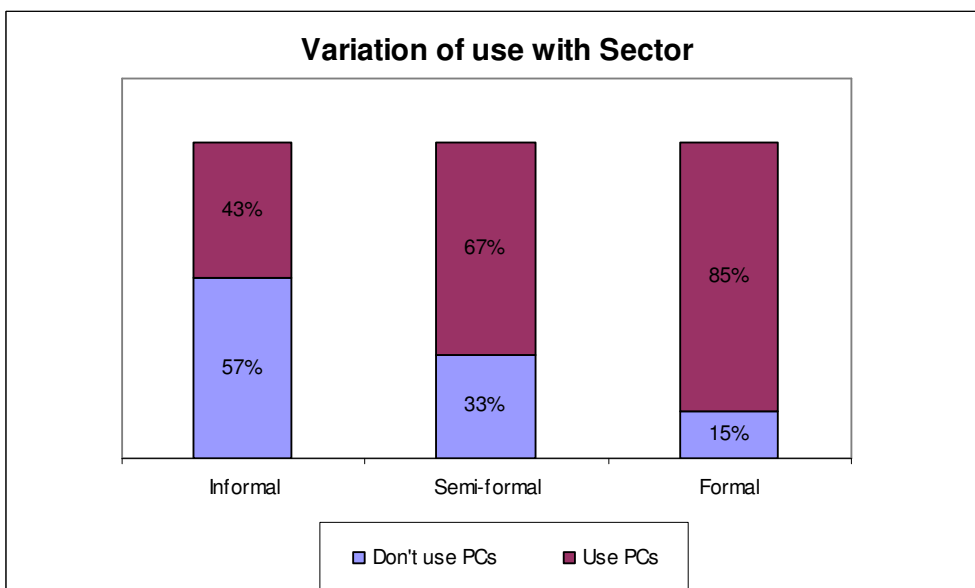


Figure 11: Variation of PC usage with business type (Qn. C.2 Vs. A.3-A.13)

Across districts, usage figures summarised in Figure 12 tend to follow the trends of computer ownership shown in Figure 5, although they are slightly higher indicating some degree of shared use. Kampala, Masaka and Mbarara districts indicate significantly more computer usage among businesses compared to ownership. In Masaka, only 28% of MSMEs own at least one computer compared to 46% who report using computers for business operations, while in Mbarara, 62% own at least one computer compared to 74% who report using a computer for business operations. This indicates a higher degree of shared use among business in these districts compared to the other districts, something that maybe exploited for potential business.

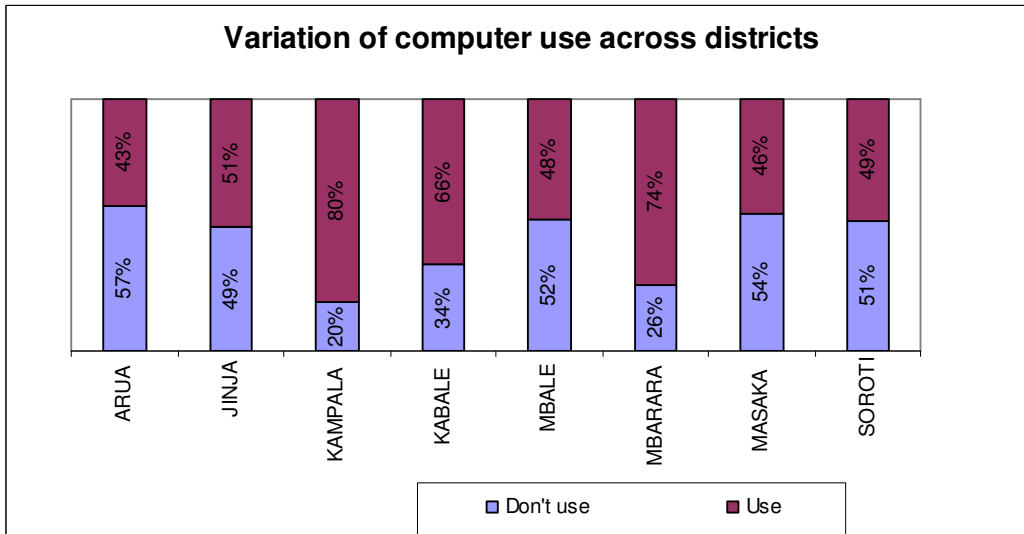


Figure 12: Variation of Computer use across districts (Qn. C.2 Vs. Qn.2)

Separating those that do not own computers from those that own at least one computer provides a clearer picture about computer usage. Amongst those that do not own computers, only 17% report using any computers at all for business operations compared to 96% of those that own computers. While it's logical for such a high number of computer owners to report usage, usage among none owners is still rather low, indicating a potential market for shared computer usage as well as individual purchase.

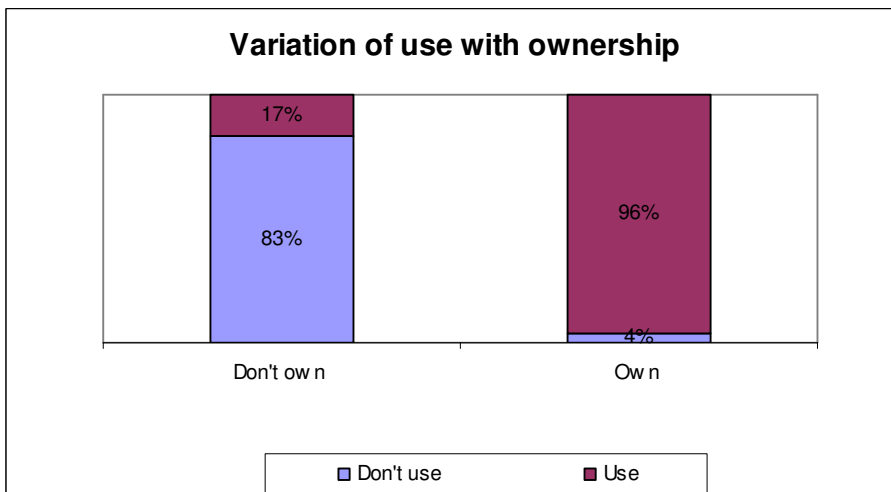


Figure 13: Variation of computer usage with ownership (Qn.C.2 Vs. Qn. C.3)

4.2.1 Functional usage

Computers are used for a variety of functions in business operations amongst MSMEs. These include office administration (38%), Internet access (10%), and communication via email (9%) etc. as indicated in Figure 14. When all MSMEs that use the Internet for business operations are taken into account, 73% of them access the Internet via Internet cafes, 18% access from their offices, 6% using their phones and 3% from home.

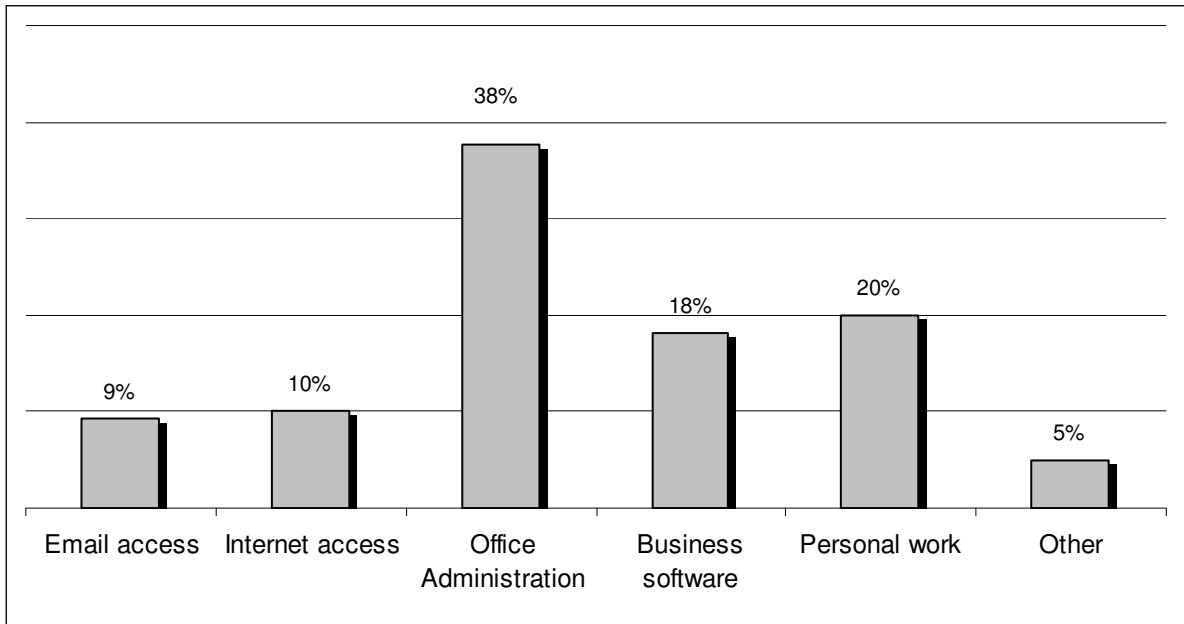


Figure 14: Functional uses of computers among MSMEs (Qn. C.2)

Amongst businesses with no computers, those that leverage computers for business operations have to rely on computers owned by others. They use computers belonging to other businesses (32%) like secretarial bureaus, print shops, etc. or go to Internet cafes (13%). Such usage is usually facilitated by an operator who helps bridge the skills gap necessary for computer use, for example to type and print a letter. In addition, this spares the MSME from owning their own complimentary equipment like printers, scanners, etc.

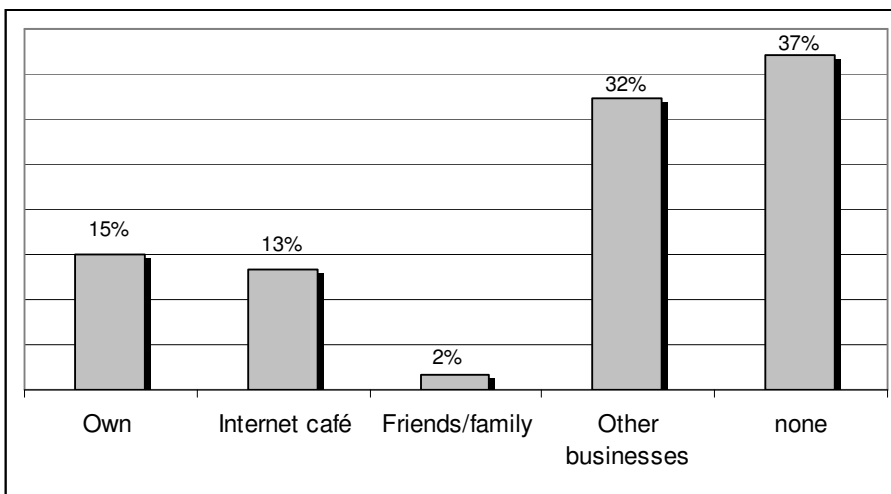


Figure 15: Access to computers amongst MSMEs that do not own any (Qn. C.8)

The high cost of computers is the biggest inhibitor for businesses that don't currently own any computers. 67% of MSMEs with no computers indicate that they are too expensive. Other reasons advanced include the lack of need (14%) and the lack of knowledge on where to procure computers (6%).

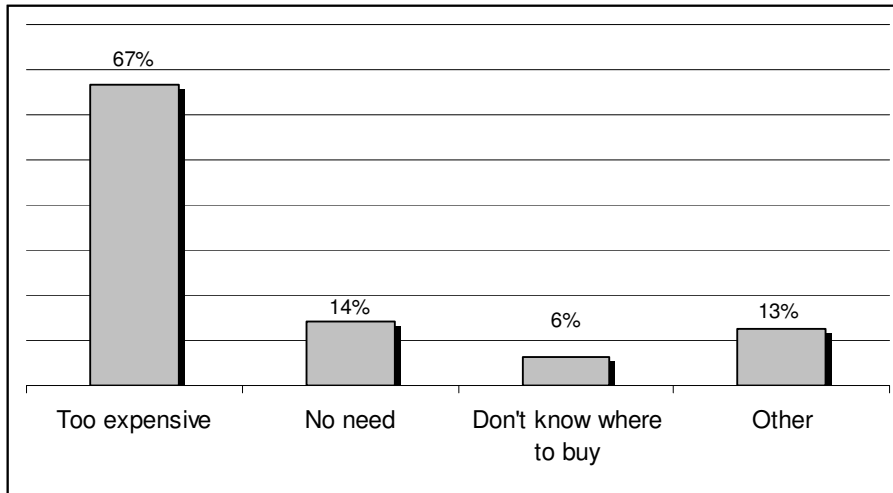


Figure 16: Reasons for not using computers (Qn. C.7)

4.3 Interest in refurbished computers

Having ascertained the different types of computers owned by MSMEs and how they leverage them for business operations, we sought to establish their interest in purchasing refurbished second-hand computers. On the whole, the majority of MSMEs (79%) expressed interest in purchasing refurbished second-hand PCs as indicated in Figure 17.

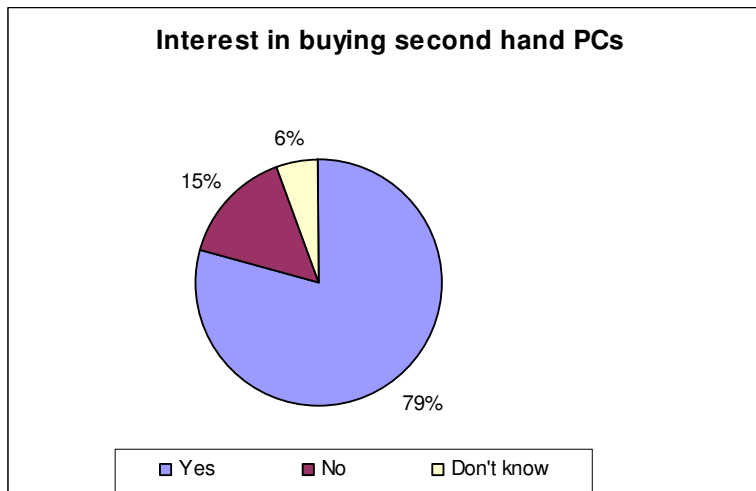


Figure 17: Interest in buying refurbished second-hand PCs (Qn.D.1)

Both current computers users and non-users exhibit considerable interest in investing in affordable refurbished second-hand computers. 83% of MSMEs that use computers for business operations indicate that they would be interested compared to 77% of MSMEs that do not yet use computers. This difference might be explained by the fact that those who use

computers have built up an appreciation of how computers can contribute to the better performance of their businesses.

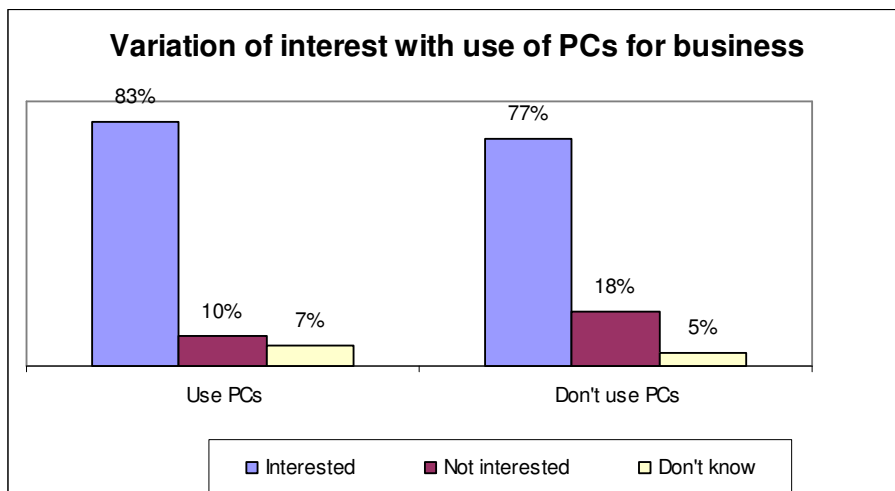


Figure 18: Interest in refurbished second-hand PCs verses current PC usage (Qn.D.1 Vs. C.2)

Even amongst MSMEs that own computers, interest in investing in affordable refurbished second-hand computers is still high. As highlighted in Figure 19, 78% of MSMEs that own at least one computer are still interested in investing in affordable second-hand computers. 81% of MSMEs that do not currently own a computer expressed interest. Amongst MSMEs that own computers, owners of second-hand computers were more enthusiastic about buying more second-hand computers. 85% of those that own second-hand branded (IBM, DELL, HP) computers and 84% of those that own second-hand, other-name computers expressed interest in affordable refurbished second-hand computers as shown in Figure 20.

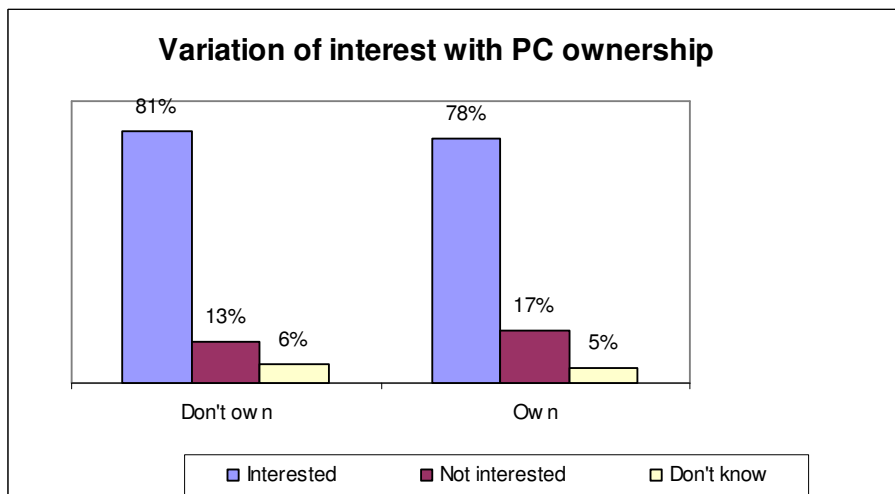


Figure 19: Interest in refurbished second-hand PCs verses current PC ownership (Qn.D.1 Vs. Qn.C.3)

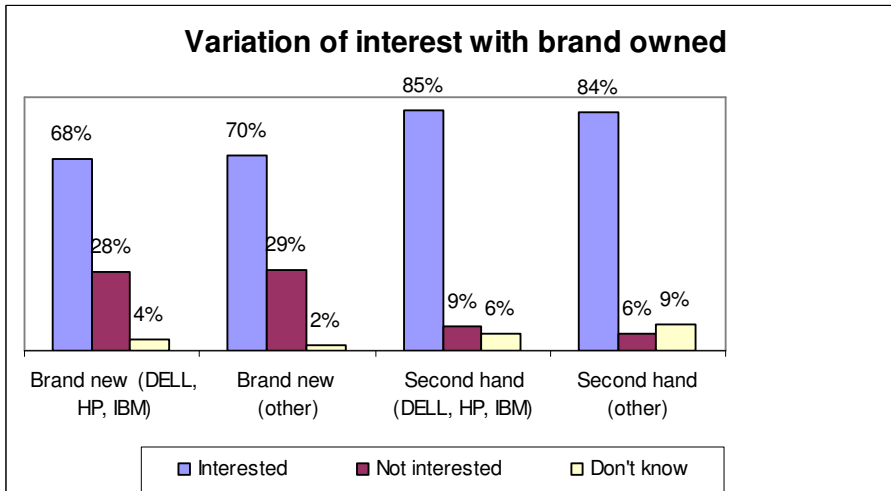


Figure 20: Interest in refurbished second-hand PCs verses current type of PC ownership (Qn.D.1 Vs. C.4)

Affordability influences the type of computer MSMEs invest in as shown in Figure 7, while cost is highlighted as the main inhibitor for computer usage among MSMEs that don't use computers in Figure 16. Given the above facts, the cost of refurbished second-hand computers becomes important if we want to be able to reach as many MSMEs as possible and encourage them to embrace the use of computers in their business operations.

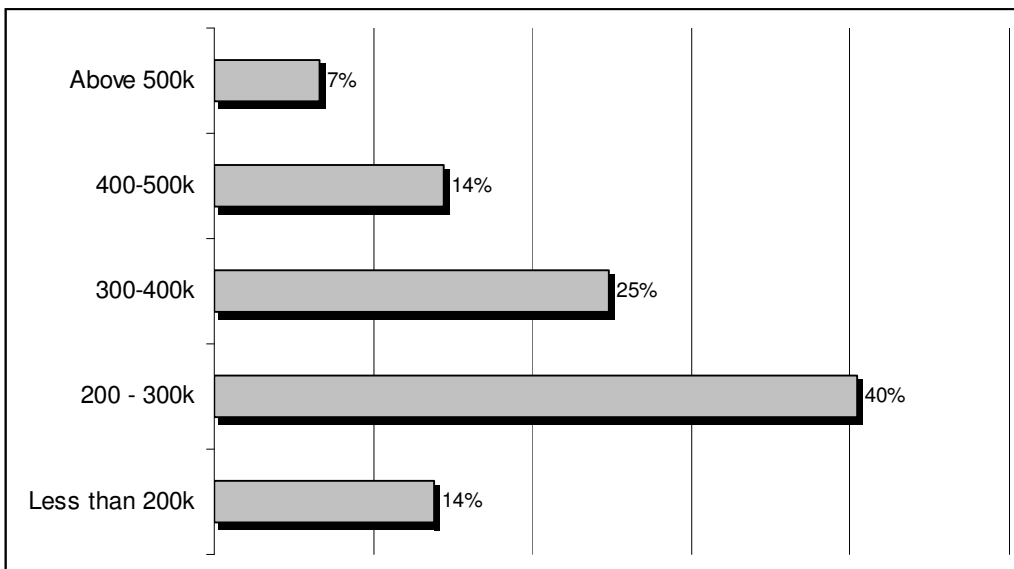


Figure 21: Comfortable price range for refurbished second-hand PCs (Qn. D.2)

Amongst MSMEs interested in refurbished computers, the biggest majority (40%) would comfortably pay between 200,000 to 300,000 Ushs for a refurbished branded computer. Above 500,000 Ushs, the proportion drops to only 7%, indicating that beyond that price, not many MSMEs would be interested. Options that reduce the cost of owning and maintaining computers will certainly help increase the number of computers amongst MSMEs.

Looking at the level of user skill, more users (76%) have the requisite skills to use computers in their day-to-day work compared to those with any knowledge about computer hardware (38%). This implies the need to create an after-sales relationship with businesses to help them address any hardware issues that may arise after their purchases

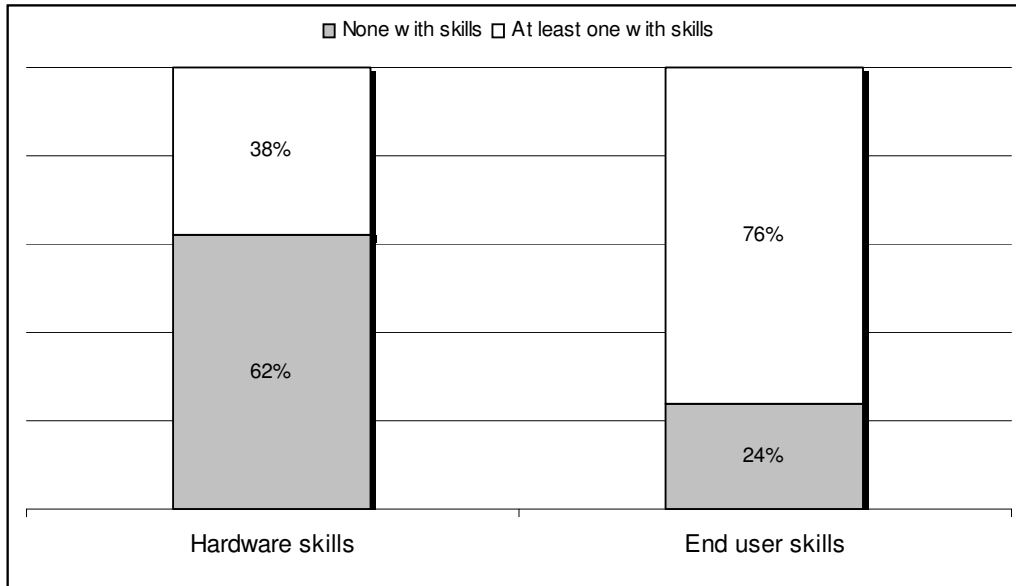


Figure 22: Staff skills in relation to computer usage (Qns. E.3 and E.5)

5 Channel Partner Survey

Table 5: Sample distribution of potential channel partners by District

District	Partner	%
Kampala	19	35
Mbarara	4	7.3
Masaka	5	9.1
Kabale	6	11
Arua	5	9.1
Mbale	5	9.1
Soroti	6	11
Jinja	5	9.1
Grand Total	55	100

Amongst potential channel partners that we interviewed in the various districts, 82% indicated interest in selling refurbished second-hand computers, 6% were not sure, while 12% indicated no interest. Of those interested in selling refurbished second-hand computers, 94% are willing to participate in a franchise model, although only 79% have prior experience with franchising.

Potential channel partners expect other MSMEs to be their biggest customers for refurbished computers. Other customers expected include schools, Non-governmental organisations operating in their areas as well as homes. Although other MSMEs are expected to be their biggest customers, there is a mismatch between the prices potential channel partners are willing to pay compared to what other MSMEs are comfortable paying for refurbished second-hand computers as highlighted in Figure . For example, a higher percentage of channel partners (56%) are willing to pay for a second-hand computer in the 200,000 to 300,000 Ushs range that is favoured by most MSMEs (40%). More customers are willing to pay above 500,000 Ushs and below 200,000 Ushs than partners. While this may indicate the partners' appreciation of the value of refurbished computers, it also underscores their limited knowledge about their potential market.

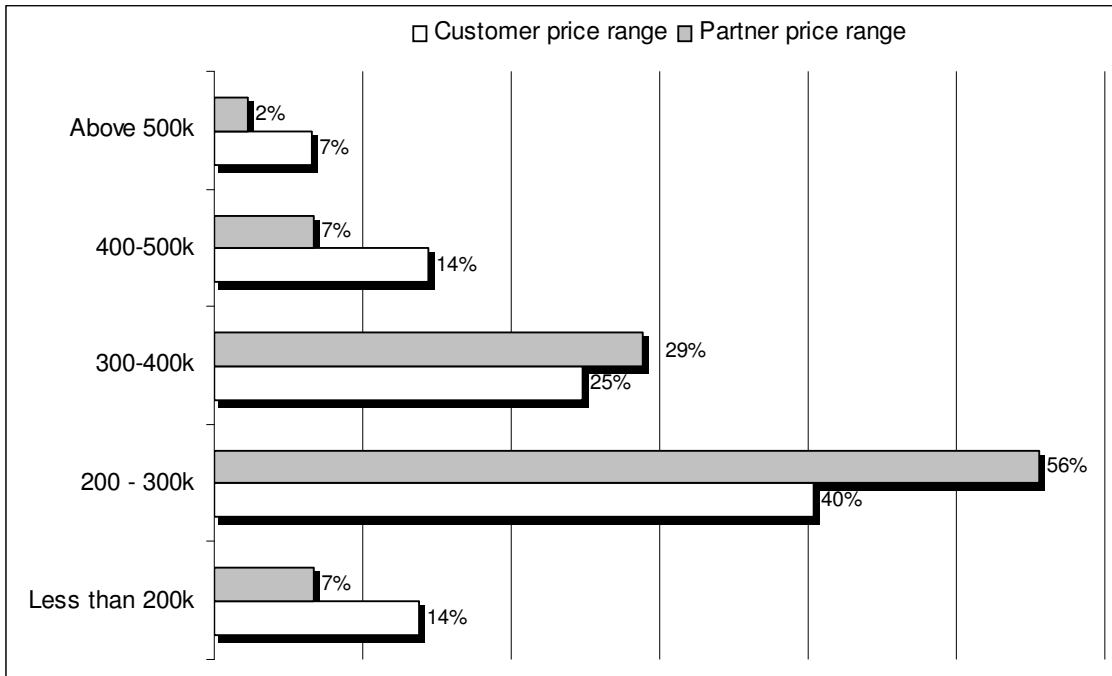


Figure 23: Comparison between price ranges selected by potential customers and channel partners

Partners interested in franchising identified a number of areas in which they would like support from the franchise. Support for marketing/selling training selected 23 times was the most requested form of support desired, followed by technical training requested 21 times and technical support help line backup requested 14 times. Details of other support desired are highlighted in Figure . Although credit for 30-60 days, selected 12 times and access to loans for purchase of a franchise, selected 10 times did not feature more prominently, there is a need to address access to financial credit for channel partners. The majority of partners interviewed, 72%, have never accessed a loan to develop their businesses.

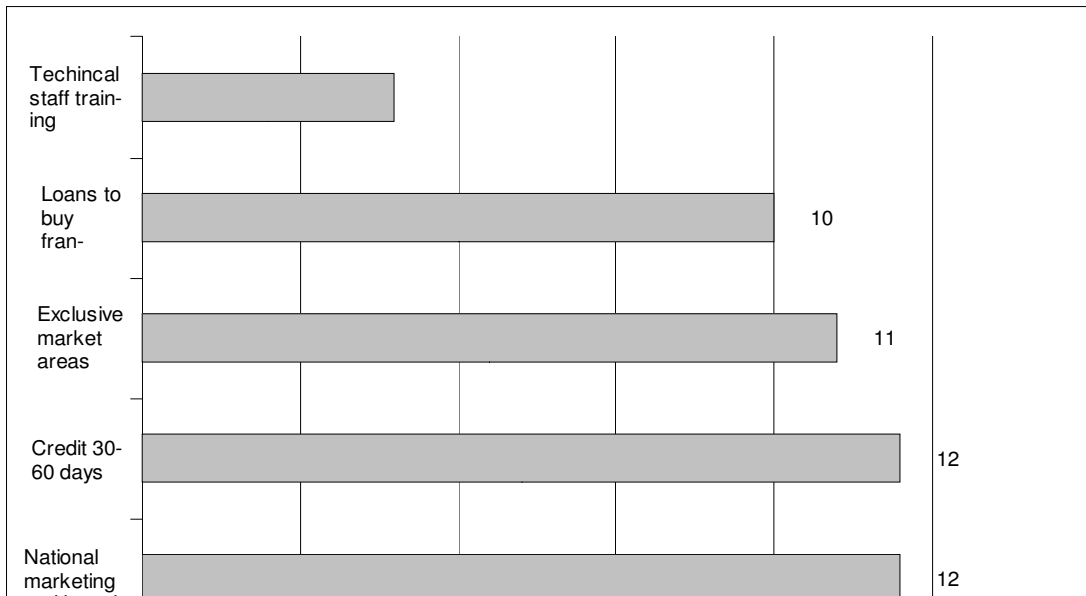


Figure 24: Franchise support areas selected by different potential channel partners

6 Conclusions & Recommendations

From the analysis of the results of this study, it is clear that there is a demand for quality refurbished second hand computers across Uganda. It is also apparent that to successfully run a business around quality refurbished second-hand computers a number of issues will need to be taken into consideration. In the following sections, we highlight some of the key findings and make some actionable recommendations that may guide the UNIDO/Microsoft partnership on how to start and manage a successful franchise selling refurbished computers in Uganda.

First, there is a need for sensitisation and skills development on different levels. Many MSMEs have no appreciation of why they need to use computers in their business operations or how they can effectively incorporate computers in their operations. A successful campaign will not only improve the performance of MSMEs, but also create a bigger market for refurbished computers. Currently, many MSMEs who do not own but use computers tend to rely on other businesses like secretarial bureaus, print shops, Internet cafes, etc. In most cases, a skilled attendant performs tasks for MSMEs, helping to compensate for the skills that MSME owners may lack. Avenues that help MSMEs to improve their computer skills will certainly help increase demand for refurbished computers.

Second, many MSMEs that do not own or use computers perceive them to be very expensive. In addition, affordability of computers is the most influential factor, when it comes to choosing the type of computer to purchase (new PC, second-hand PC, brand-name PC, other-name PC). All of this highlights the need to carefully address the issue of affordability and cost. There is an apparent need for credit arrangements to facilitate more MSMEs to own and use computers in their operations, which could be organised in conjunction with micro-finance institutions. The perception of affordability and better return on investment could be addressed via segmented bundling of services. On the partner side, many potential channel partners do not have experience with financial loans as a means of financing their businesses. Credit or loan facilities for partners, some of which may be passed onto customers will go a long way in building the viability of the franchise.

Third, most MSMEs that own computers have employees with the necessary user skills to leverage computers in their operations, but when it comes to hardware and trouble-shooting, such skills are in short supply. This presents both a challenge and an opportunity. A challenge in the sense that MSMEs need to be equipped with some basic skills that enable them to understand when their computers have actual problems that need to be addressed and an opportunity for channel partners to develop a relationship beyond just selling computers. To create a successful business model selling refurbished computers, UNIDO/Microsoft will have to develop a relationship that extends beyond the initial sell to help address subsequent issues that might arise. Such an ongoing relationship will help address the poor perception that MSMEs currently have with the performance of second-hand computers.

While it is apparent that computers can improve business operations and MSMEs do indicate plenty of interest in acquiring quality refurbished second-hand computers, the current power situation in the country leaves a lot to be desired. Electricity power supply is unreliable, punctuated by load shedding in most major urban areas. Given that many of our target areas are rural and that individually MSMEs will not be able to afford generators, due thought needs to be given to alternative ways in which MSMEs might be able to provide the required energy to run their computers.

7 Appendix I: Customer Questionnaire

UNIDO and Microsoft have partnered to build access to more affordable quality PC hardware and solutions in Uganda based on import and refurbishment of second hand PCs. The PCs would then be sold through a reseller partner channel that reaches across the country.

In order to build a business plan for the idea, UNIDO/Microsoft have requested the Directorate of ICT Support (DICTS), Makerere University to spearhead the collection and analysis of data from the two primary targets:

- MSMEs Operating in the DBIC districts (Jinja, Mbale, Soroti, Arua, Masaka, Kabale AND also Mbarara & Kampala. These are the target customers for the refurbished PC.
- ICT-based Business operating in the DBIC districts. These are the targets for channel partners.

PURPOSE: The aim of this research is to determine the market for branded second hand computers (which are bundled with value-added solutions) among Micro-Small-Medium Enterprises (SMEs) operating in the eight districts of Arua, Soroti, Mbale, Jinja, Masaka, Mbarara, Kabale and Kampala.

INSTRUCTION: This questionnaire is intended to be interview administered. The primary targets to interview are owners and/or key decision makers of Small-2-Medium-Enterprises with 1-50 staff, and conducting business from a fixed location that has electrical power.

MODULE 1: QUESTIONNAIRE IDENTIFICATION AND INTERVIEWER VISITS						
Q.1 QUESTIONNAIRE NUMBER				Q.2 INTERVIEWER ID:		
Q.3 BUSINESS NAME, CONTACT DETAILS (INCLUDE PHYSICAL ADDRESS)						
Q.4 NAME OF PERSON INTERVIEWED AND POSITION:					SIGNATURE AND STAMP	
INTERVIEWER TO COMPLETE THE FOLLOWING FOR EACH VISIT AND THE SUPERVISOR TO COMPLETE THE CHECK BACK						
VISIT 1		VISIT 2		FINAL VISIT		CHECK BACK
DAY		DAY		DAY		DAY
MONTH		MONTH		MONTH		MONTH
*RESULT Q.5.1		*RESULT Q.5.2		*RESULT Q.5.3		FINDING Q.5.7
1 = completed, 2 = unavailable, 3 = postponed, 4 = refused, 5 = partly completed					1 = interview acceptable in-field 2 = interview acceptable in-office 3 = interview need further visit 4 = interview to be rejected	
OFFICE ADMINISTRATION						
INTERVIEWER	FIELD SUPERVISOR	PROJECT COORDINATOR	CODERS	DATA CAPTURER		
Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy		

MODULE 1: QUESTIONNAIRE IDENTIFICATION AND INTERVIEWER VISITS				
Q.1 QUESTIONNAIRE NUMBER		Q.2 INTERVIEWER ID:		
Signature	Signature	Signature	Signature	Signature

MODULE 2: BUSINESS INFORMATION				
A.1 FORM OF OWNERSHIP?	1 = Sole proprietor, 2 = Partnership 3 = Close corporation, 4 = Business (Pty limited), 5 = Other (Specify):			
A.2 PLEASE INDICATE UNDER WHAT SECTOR YOUR BUSINESS FALLS	<ul style="list-style-type: none"> • Manufacturing • Construction • Personal preference • Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods Company policy • Hotels and restaurants • Financial intermediation, real estate, renting and business activities • Transport, storage and communications • Other (Specify.....) 			
A.3 DOES YOUR BUSINESS HAVE A TRADING LICENSE?	0 = No 1 = Yes			
A.4 IS YOUR BUSINESS REGISTERED FOR VAT?	0 = No 1 = Yes			
A.5 IN WHAT YEAR WAS THIS BUSINESS ESTABLISHED?				
A.6 DO YOU HAVE BRANCHES IN OTHER REGIONS OF UGANDA? IF SO WHICH REGIONS?	A. Central	B. West	C. North	D. East E. No other branches
A.7 HOW MANY EMPLOYEES DOES YOUR BUSINESS HAVE (EXCL. OWNERS)?	A: Full-time:		B: Part-time:	C: On Commission:
A.8 HOW MANY OWNERS DOES YOUR BUSINESS HAVE?	A: Men:		B: Women	
A.9 IS THIS BUSINESS OWNED BY FAMILY?	0 = No 1 = Yes			
A.10 WHO MANAGES THE BUSINESS?	1 = owner 2 = full time manager 3 = family member .4 = other (specify):			
A.11 HIGHEST FORMAL EDUCATIONAL LEVEL OF THE BUSINESS OWNERS? (IF MORE THAN 1 OWNER, CHOOSE THE OWNER WITH THE HIGHEST EDUCATION LEVEL)	1 = Primary, 2 = Secondary, 3 = Tertiary, 4 = Vocational, 5 = Self educated			
A.12 HOW MANY OF YOUR EMPLOYEES HAVE A WRITTEN EMPLOYMENT CONTRACT?				
A.13 DOES YOUR BUSINESS STRICTLY SEPARATE BUSINESS FINANCES FROM PERSONAL FINANCES?	0 = No 1 = Yes			
A.14 WHAT WERE THE MAIN REASONS FOR STARTING A BUSINESS?	1 = My own business pays more than being employed 2 = To make money additional to my salary 3 = Otherwise I would have been unemployed 4 = Other (please specify):			
A.15 DOES YOUR BUSINESS KEEP FINANCIAL RECORDS?	1 = Simple bookkeeping (Cash book, receipts, expenditures) 2 = Double entry bookkeeping (balance sheets, ledgers, etc) 3 = audited annual financial statements 4 = None 5 = Other, specify:			

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A. 16 HOW MANY FIXED PHONE LINES DOES YOUR BUSINESS HAVE?			
A. 17 HOW MANY MOBILE PHONE LINES DOES YOUR BUSINESS HAVE?			
MODULE 3: FINANCIALS			
		Month	Year
B.1 WHAT IS THE AVERAGE TURNOVER OF YOUR BUSINESS ?			
B.2 WHAT ARE YOUR AVERAGE WATER, ELECTRICITY, COST?			
B.3 WHAT IS THE AVERAGE COST FOR YOUR PREMISES IN TERMS OF RENT?			
B.4 WHAT DOES YOUR BUSINESS SPEND ON TELEPHONE CALLS, FAX, POSTAGE, INTERNET ON AVERAGE?			
B.5 WHAT IS YOUR AVERAGE EXPENDITURE ON SALARIES			
B.6 WHAT ARE YOUR ANNUAL AVERAGE DIRECT COST (RAW MATERIALS AND OTHER INTERMEDIARY INPUTS OR GOODS BOUGHT FOR RESALE)?			
B.7 WHAT IS THE AVERAGE ANNUAL AFTER TAX PROFIT OF YOUR BUSINESS?			
B.8. DO YOU HAVE A BUSINESS PLAN, AND IF SO, WHAT IS THE PLANNING PERIOD?		1. 6 months 2. 1 year 3. 2 years 4. 3 years 5. Other (Specify)..... 6. I don't have a business plan	
MODULE 4: ICT INVENTORY			
C.1 DOES YOUR BUSINESS USE THE INTERNET, AND IF SO, WHERE DO YOU OR YOUR STAFF ACCESS IT FROM WHEN THE BUSINESS REQUIRES IT? (SELECT ALL THAT ARE APPLICABLE)		1=Office 2= Internet Cafe 3= Home 4= Phone 5= do not use Internet for business	
C.2 DOES YOUR BUSINESS USE COMPUTERS, AND IF SO, FOR WHAT PURPOSE? (SELECT ALL THAT ARE APPLICABLE)		1=Email access 2= Internet access 3= Office administration /secretarial services 4= Business software (e.g. Finance and accounting, etc) 5= Personal work 6. Other (Specify)..... 7= do not use computers	
C.3 HOW MANY COMPUTERS DOES YOUR BUSINESS HAVE?			
C.4. WHAT IS THE COMMON TYPE OF COMPUTERS YOU HAVE BOUGHT?		1. Type A - Brand new –(Branded - IBM, DELL, HP) 2. Type B - Brand new – (Other brand) 3. Type C – Second-hand quality brands (IBM, DELL, HP) 4. Type D – Second-hand –Other-brand	
C.5. WHAT WAS YOUR REASON FOR SELECTING THE TYPE SPECIFIED ABOVE		1. Affordable 2. Robust(long lasting, reliable, etc) 3. Personal preference 4. Had the specification I wanted	

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	5. <i>Company policy</i> 6. <i>Had no choice</i> 7. <i>No reason</i> 8. <i>Other (Specify.....)</i>	
C.6 HOW WOULD YOU RATE THE PERFORMANCE OF THE SPECIFIED COMPUTER TYPE ABOVE?	1. <i>Good</i> 2. <i>Fair</i> 3. <i>Poor</i>	
C.7 IF YOUR BUSINESS DOES NOT HAVE COMPUTERS, WHY NOT?	1 = <i>Too expensive,</i> 2 = <i>No need,</i> 3 = <i>Don't know where to buy</i> 4 = <i>other: write in box</i>	
C.8 IF YOUR BUSINESS DOES NOT HAVE COMPUTERS, IS YOUR BUSINESS USING SOMEONE ELSE'S....	1= <i>own private facilities,</i> 2= <i>Internet cafes,</i> 3= <i>friends or family,</i> 4= <i>other businesses,</i> 5= <i>none</i>	
C.9 IF YOU HAVEN'T GOT ANY COMPUTER, DO YOU PLAN TO USE IT IN THE FUTURE?	1= <i>Yes</i> 2= <i>No</i> 3= <i>Don't know/ maybe</i>	

MODULE 5: USER PERSPECTIVES REGARDING REFURBISHED COMPUTERS

D.1 WOULD YOU BE INTERESTED IN INVESTING IN AFFORDABLE SECOND-HAND QUALITY BRANDED COMPUTERS?	1= <i>Yes</i> 2= <i>No</i> 3= <i>Don't know/ maybe</i>	If No, Go to D.4
D.2 IF YES, HOW MUCH WOULD YOU COMFORTABLY PAY FOR A SECOND HAND QUALITY BRANDED COMPUTER?	10. <i>Less than Ushs. 200,000</i> 11. <i>Between Ushs. 200,000 – Ushs 300,000</i> 12. <i>Between Ushs. 300,000 – Ushs 400,000</i> 13. <i>Between Ushs. 400,000 – Ushs 500,000</i> 14. <i>Above Ushs. 500,000</i>	

D.3 IF YES, WHAT PRIORITY DO YOU GIVE TO THE FOLLOWING ADDITIONAL FEATURES? (TICK WHERE APPROPRIATE)	Feature	Priority		
		Low	Medium	High
	6 months warranty			
	12-Months Warranty			
	Software for automating business processes.			
	Internet access			
	A UPS			
	Multimedia/Extra software for family (music, videos, games, education, etc)			
	After sales service			
	Trade-in after a year			
	Loan to help fund the purchase			
	Brand A type PCs (HP, DELL, COMPAQ, IBM)			
	Genuine Microsoft Windows software			
Staff training in IT skills				

D.4 IF NOT, WHY WOULDN'T YOU INVEST IN AFFORDABLE SECOND-HAND QUALITY-BRANDED COMPUTERS?	<ul style="list-style-type: none"> • <i>I fear second-hand equipment</i> • <i>They cannot meet my requirements</i> • <i>I don't buy second-hand equipment</i> • <i>It has to do with company policy</i> • <i>Other (Specify.....)</i> 	
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MODULE 6: COMPUTER USAGE

E.1 HOW IMPORTANT IS THE USAGE OF COMPUTERS FOR YOUR BUSINESS ACTIVITIES?	1= <i>Very important,</i> 2= <i>Important,</i> 3= <i>Neither/ nor,</i>	
--	--	--

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	4= <i>not important</i> , 5= <i>not important at all</i>	
E.2 HOW MANY OF YOUR STAFF REQUIRE THE USE OF COMPUTERS FOR THEIR DAY-TO-DAY WORK?		
E.3 HOW MANY OF THESE STAFF HAVE THE SKILLS TO USE COMPUTERS TO IMPLEMENT THEIR WORK?		
E.4 HOW MANY OF THESE STAFF USE COMPUTERS FOR THEIR DAY-TO-DAY WORK?		
E.5 HOW MANY OF YOUR STAFF ARE KNOWLEDGEABLE ABOUT COMPUTER HARDWARE SYSTEMS?		

8 Appendix II: Channel Partner Questionnaire

UNIDO and Microsoft have partnered to build access to more affordable quality PC hardware and solutions in Uganda based on import and refurbishment of second hand PCs. The PCs would then be sold through a reseller partner channel that reaches across the country.

In order to build a business plan for the idea, UNIDO/Microsoft have requested the Directorate of ICT Support (DICTS), Makerere University to spearhead the collection and analysis of data from the two primary targets:

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Q.4 NAME OF PERSON INTERVIEWED AND POSITION:					SIGNATURE AND STAMP:	
INTERVIEWER TO COMPLETE THE FOLLOWING FOR EACH VISIT AND THE SUPERVISOR TO COMPLETE THE CHECK BACK						
VISIT 1		VISIT 2		FINAL VISIT		CHECK BACK
DAY		DAY		DAY		DAY
MONTH		MONTH		MONTH		MONTH
*RESULT Q.5.1		*RESULT Q.5.2		*RESULT Q.5.3		FINDING Q.5.4
1 = completed, 2 = unavailable, 3 = postponed, 4 = refused, 5 = partly completed					1 = interview acceptable in-field 2 = interview acceptable in-office 3 = interview need further visit 4 = interview to be rejected	
OFFICE ADMINISTRATION						
INTERVIEWER	FIELD SUPERVISOR	PROJECT COORDINATOR	CODERS		DATA CAPTURER	
Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy	Date of completion ___/___/2007 dd mm yy

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Q.1 QUESTIONNAIRE NUMBER				Q.2 INTERVIEWER ID:	
Signature	Signature	Signature	Signature	Signature	

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MODULE 2: BUSINESS INFORMATION				
A.1 FORM OF OWNERSHIP?	1 = Sole proprietor, 2 = Partnership 3 = Close corporation, 4 = Business (Pty limited), 5 = Other (Specify):			
A.2 PLEASE INDICATE THE RELATED COMPUTER SERVICE THAT YOU OFFER	<ul style="list-style-type: none"> • Computer Sales • Computer repairs • Internet Cafe • PC based secretarial services • IT training • Other (Specify.....) 			
A.3 DOES YOUR BUSINESS HAVE A TRADING LICENSE?	0 = No 1 = Yes			
A.4 IS YOUR BUSINESS REGISTERED FOR VAT?	0 = No 1 = Yes			
A.5 IN WHAT YEAR WAS THIS BUSINESS ESTABLISHED?				
A.6 DO YOU HAVE BRANCHES IN OTHER REGIONS OF UGANDA? IF SO WHICH REGIONS?	A. Central	B. West	C. North	D. East E. No other branches
A.7 HOW MANY EMPLOYEES DOES YOUR BUSINESS HAVE (EXCL. OWNERS)?	A: Full-time:		B: Part-time:	C: On Commission:
A.8 HOW MANY OWNERS DOES YOUR BUSINESS HAVE?	A: Men:		B: Women	
A.9 IS THIS BUSINESS OWNED BY FAMILY?	0 = No 1 = Yes			
A.10 WHO MANAGES THE BUSINESS?	1 = owner 2 = full time manager 3 = family member .4 = other (specify):			
A.11 HIGHEST FORMAL EDUCATIONAL LEVEL OF THE BUSINESS OWNERS? (IF MORE THAN 1 OWNER, CHOOSE THE OWNER WITH THE HIGHEST EDUCATION LEVEL)	1 = Primary, 2 = Secondary, 3 = Tertiary, 4 = Vocational, 5 = Self educated			
A.12 HOW MANY OF YOUR EMPLOYEES HAVE A WRITTEN EMPLOYMENT CONTRACT?				
A.13 DOES YOUR BUSINESS STRICTLY SEPARATE BUSINESS FINANCES FROM PERSONAL FINANCES?	0 = No 1 = Yes			
A.14 WHAT WERE THE MAIN REASONS FOR STARTING A BUSINESS?	1 = My own business pays more than being employed 2 = To make money additional to my salary 3 = Otherwise I would have been unemployed 4 = Other (please specify):			
A.15 DOES YOUR BUSINESS KEEP FINANCIAL RECORDS?	1 = Simple bookkeeping 2 = Double entry bookkeeping 3 = audit annual financial statements 4 = None 5 = Other, specify:			
A. 16 HOW MANY FIXED PHONE LINES DOES YOUR BUSINESS HAVE?				
A. 17 HOW MANY MOBILE PHONE LINES DOES YOUR BUSINESS HAVE?				
MODULE 3: FINANCIALS				
		Month	Year	
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B.3 WHAT IS THE AVERAGE COST FOR YOUR PREMISES IN TERMS OF RENT?			
B.4 WHAT DOES YOUR BUSIENSS SPEND ON TELEPHONE CALLS, FAX, POSTAGE, INTERNET ON AVERAGE?			
B.5 WHAT IS YOUR AVERAGE ANNUAL EXPENDITURE ON SALARIES			
B.6 WHAT ARE YOUR ANNUAL AVERAGE DIRECT COST (RAW MATERIALS AND OTHER INTERMEDIARY INPUTS OR GOODS BOUGHT FOR RESALE)?			
B.7 WHAT IS THE AVERAGE ANNUAL AFTER TAX PROFIT OF YOUR BUSINESS?			

MODULE 4: COMPUTER INVENTORY		
C.1 DOES YOUR BUSINESS USE THE INTERNET, AND IF SO, WHERE DO YOU OR YOUR STAFF ACCESS IT FROM WHEN THE BUSINESS REQUIRES IT?	1=Office 2= Internet Cafe 3= Home 4= Phone 5= do not use Internet for business	
C.2 WHAT DOES YOUR BUSINESS USE COMPUTERS FOR? (SELECT ALL THAT ARE APPLICABLE)	1=Email access 2= Internet access 3= Office administration /secretarial services 4= Business software (e.g. Finance and accounting, etc) 5= Personal work 6. Other (Specify).....	
C.3 HOW MANY COMPUTERS DOES YOUR BUSINESS HAVE?		
C.4. WHAT IS THE COMMON TYPE OF COMPUTERS YOU HAVE BOUGHT?	5. Type A - Brand new –(Branded - IBM, DELL, HP) 6. Type B - Brand new – (Other brand) 7. Type C – Second-hand quality brands (IBM, DELL, HP) 8. Type D – Second-hand –Other-brand	
C.5. WHAT WAS YOUR REASON FOR SELECTING THE TYPE SPECIFIED ABOVE	1. Affordable 2. Robust(long lasting, reliable, etc) 3. Personal preference 4. Had the specification I wanted 5. Company policy 6. Had no choice 7. No reason 8. Other (Specify.....)	
C.6 HOW WOULD YOU RATE THE PERFORMANCE OF THE SPECIFIED COMPUTER TYPE ABOVE?	4. Good 5. Fair 6. Poor	
MODULE 5: USER PERSPECTIVES REGARDING FRANCHISING FOR SECOND-HAND COMPUTERS		
D.1 WOULD YOU BE INTERESTED IN RE-SELLING SECOND-HAND QUALITY BRANDED COMPUTERS?	1= Yes 2=No 3= Don't know/ maybe	
D.2 IF YES, WHAT PRICE WOULD YOU COMFORTABLY PAY FOR A SECOND HAND QUALITY	15. Less than Ushs. 200,000	

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<p>BRANDED COMPUTER?</p>	<p>16. <i>Between Ushs. 200,000– Ushs 300,000</i></p> <p>17. <i>Between Ushs. 300,000 – Ushs 400,000</i></p> <p>18. <i>Between Ushs. 400,000 – Ushs 500,000</i></p> <p>19. <i>Above Ushs. 500,000</i></p>	
<p>D.3 WOULD YOU BE WILLING TO WORK WITHIN A FRANCHISE MODEL? (REQUIRES ONE TO MEET SPECIFIED STANDARDS, SERVICES AND BRANDING)</p>	<p>0 = No 1 = Yes</p>	
<p>D.4 DO YOU HAVE ANY EXPERIENCE OF WORKING WITHIN A FRANCHISE MODEL?</p>	<p>0 = No 1 = Yes</p>	
<p>D.5 HAVE YOU EVER TAKEN OUT A FINANCE LOAN TO DEVELOP YOUR BUSINESS, AND IF SO WHAT SIZE WAS THE BIGGEST?</p>	<p>0 = No 1 = Yes</p>	
<p>D.6. IF YES, HOW MUCH WAS THE BIGGEST LOAN YOU HAVE EVER TAKEN?</p>		
<p>D.7. IF YOU WERE TO PAY FOR A FRANCHISE TO RESELL SECOND-HAND COMPUTERS, WHICH OF THE FOLLOWING SUPPORT FROM THE FRANCHISE WOULD YOU VALUE MOST? (CIRCLE MOST APPROPRIATE)</p>	<p>1. <i>Technical training</i></p> <p>2. <i>Marketing/selling training</i></p> <p>3. <i>Help with access to loans to buy the franchise</i></p> <p>4. <i>National marketing and branding to build demand</i></p> <p>5. <i>Exclusive market areas</i></p> <p>6. <i>Credit – 30 days, 60 days</i></p> <p>7. <i>Technical support help line backup</i></p> <p>8. <i>Technical Staff training</i></p> <p>9. <i>Other (Specify).....</i></p>	
<p>D.8. WHO DO YOU THINK WOULD BUY THE COMPUTERS YOU WOULD BE RESELLING?</p>	<p>1. <i>Other MSMEs</i></p> <p>2. <i>LORGs (Large Organizations)</i></p> <p>3. <i>School</i></p> <p>4. <i>Home Consumers</i></p> <p>5. <i>Schools</i></p> <p>6. <i>NGOs</i></p> <p>7. <i>Other (Specify....)</i></p>	
<p>MODULE 6: STAFF ICT COMPETENCE</p>		
<p>E..1 HOW MANY OF YOUR STAFF ARE KNOWLEDGEABLE ABOUT COMPUTER HARDWARE SYSTEMS?</p>		
<p>E..2 HOW MANY OF YOUR STAFF CAN TROUBLESHOOT AND REPAIR A COMPUTER?</p>		
<p>E..3 HOW MANY OF YOUR STAFF HAVE AN IT QUALIFICATION?</p>		
<p>E..4 HOW MANY OF YOUR STAFF HAVE A QUALIFICATION IN COMPUTER HARDWARE/REPAIR?</p>		

9 Appendix III: ICT in Schools

The Ministry Education and Sports produces an annual sector performance review as an avenue to better evaluate their performance. The latest edition was produced for the last financial year 2006/2007. It does provide some data about enrolment in primary and secondary schools that is summarised in the section that follow.

9.1 Primary school education

Enrollment in primary schools have increased thanks to universal primary education. Enrollment is highest in Eastern region with a total of 2,049,830 children; followed by the north with an enrolment of 1,723,512; followed by central with 1,597,456; western has 1,178,167; south western with 747,477 and north eastern with 118,438 children. When enrollment is looked at from rural vs. urban perspective, more primary school enrollment occurs predominantly in the rural area as highlighted in table 9.1 below.

Table 9.1: Primary enrolment by Geographical Location

	Primary school Enrollment			No of Schools	% of Schools
	M	F	T		
Rural	3,017,352	2,966,342	5,983,694	11,582	80.65
Peri-Urban	431,396	446,259	877,655	1,672	11.64
Urban	232,520	245,917	478,437	868	6.04
Unknown	36,849	38,245	75,094	238	1.76
Grand Total	3,718,117	3,696,763	7,414,880	14,360	100%

Source: EMI Source EMIS, 2007

Government is still the predominant source of funding for primary schools, with government aided schools constituting 77.6% of the total number of primary schools. 91% of primary schools are day schools, followed by partial boarding schools at 8% and full boarding primary schools accounting for only 1%.

9.2 Secondary school education

At the secondary education level, the central region accounted for the highest number of students with 288,984. Details of enrollment by region and class are summarised in table 9.2 below. Rural-based schools do account for the biggest fraction of secondary schools with 56%, followed by peri-urban areas with 28% and urban-based schools accounting for the least with 14%.

Table 9.2: Secondary School enrolment by class and region

District	Gender	S1	S2	S3	S4	S5	S6	Total
	Male	31739	29186	27304	23254	16913	14429	142825
Central	Female	34106	31069	29083	23886	15173	12842	146159
	Total	65845	60255	56387	47140	32086	27271	288984
	Male	29612	24769	24094	20536	7929	7155	114095
East	Female	24867	20590	19065	15136	4610	3662	87930
	Total	54479	45359	43159	35672	12539	10817	202025
	Male	1506	1237	1185	1254	220	191	5593
N. East	Female	1473	1175	1048	967	108	88	4859
	Total	2979	2412	2233	2221	328	279	10452
	Male	18647	16616	15419	13994	3954	3316	71946
North	Female	10823	9076	8540	6710	1383	1060	37592
	Total	29470	25692	23959	20704	5337	4376	109538
	Male	10449	8507	7870	6138	2058	1522	36544
S. West	Female	9405	7592	6258	4562	1096	795	29708
	Total	19854	16099	14128	10700	3154	2317	66252
	Male	18516	15853	14701	13840	5392	4411	72713
West	Female	17718	14800	13675	12095	3230	2605	64123
	Total	36234	30653	28376	25935	8622	7016	136836
G. Total	Male	110469	96168	90573	79016	36466	31024	443716
	Female	98392	84302	77669	63356	25600	21052	370371
	Total	208861	180470	168242	142372	62066	52076	814087

Source: MoES, (EMIS, 2006)

53% of all secondary schools are day schools, 36% are partly boarding schools and only a mere 10% are fully boarding secondary schools

Secondary schools are mainly owned by the private sector, which accounts for 47% of all secondary schools followed by government with 35% and the community accounting for the remaining 18%. As a result, secondary schools are not as dependent on government funding compared to primary schools. In terms of funding, only 24% of secondary schools are fully dependent of government funding, 11% are partly funded by government, while the majority, 65% rely on funding from other non governmental sources.

9.3 Information and Communications Technologies in Education

The Ministry of Education and Sports has developed a specific policy on ICT inline with the national ICT policy, which is geared towards creating an ICT literate population that can adequately compete in this increasingly knowledge-based driven world. To operationalise the policy, the Ministry is engaging partners from different sectors at different levels to help support a variety of ICT projects in education. Some of these initiatives and partners include:

- Nepad e-schools initiative
- SchoolNet Uganda
- Cyber School Technology Ltd
- Institutions of higher learning

Among the many challenges identified is the lack of computers in many schools. There is potential for this UNIDO-Microsoft initiative to engage the Ministry to explore avenues for supporting ICT in schools as a mutually beneficial project. Other challenges include equipping schools, primarily the rural-based ones with the energy necessary to power computers as well as teachers with the necessary ICT skills.