Abstract—This paper aims to provide an assessment of Information Technology and to identify its influences on microenterprises within UK. It develops an understanding towards providing an evaluative measure against strategic growth within microenterprises. The author’s draws upon research questions that derive towards identifying if Microenterprises should be regarded in their own right away from the commonly used term SME (Small-medium Enterprise), and to addressing the perceptions of IT on strategic growth within Microenterprises. The paper also aims to identify whether microenterprises can achieve greater time-efficiencies using IT to pursue strategic growth. To address the research areas the paper examines literature studies within the areas of microenterprises; the strategic growth and influence of information technology (IT) within microenterprises. The research carried out observational case study within a project management microenterprise addressing the general processes, perceptions and challenges addressed in the working environment highlighting particular attention towards administrative deficiencies with use of IT and reliability issues with their in-house server and attempting to overcome these solutions. The result from the literature and the observations of the case provides an opportunity to propose towards a development framework to assist microenterprises in achieving strategic growth with the use of IT and overcoming their addressed barriers and challenge.

Keywords—Information Technology, Microenterprises, Strategic Growth, SME.

I. INTRODUCTION

Information Technology Consultancy is a fascinating position to be in the world of Business and Technology; it can help other people and businesses on any scale to identify problems and hopefully provide a viable solution to their needs. It could make daily tasks more efficient, it could result in scrupulous tasks being automated to enable skills to be put to better use. It could save time, save money and generate more business. Large corporate companies have the ability to invest millions into finding ways to innovate, adapt and more so in today’s climate; reduce costs, speed up processes and/or make the company more profitable [1]. Teams of experienced professionals with predefined roles will take a problem and design, create and develop a solution and implement it, not to mention at sometimes astronomical costs. But for the 4.6million microenterprises trading in the UK as of 2012, the ability to develop better ways to conduct daily processes and with the prospect of wanting to grow, it can prove difficult with limited time and resources available [2].

Strikingly the number of microenterprises registered has risen by 183% within 5 years, largely down to the economic conditions currently persisting in the UK with people’s changing circumstances of increasing unemployment and the ability for Microenterprises to capitalize on their agility and service offering to compete with larger companies [3]. So with the ever evolving technology out there, how is technology helping to leverage microenterprises to better prosperity? How does IT play in the role of enabling a micro enterprise to achieve growth strategically? There is extensive literature around the corporate world of business and strategy and IT evolution, however from initial research it has become apparent very little research available on the influences of IT on SMEs and scarcer when narrowed to just microenterprises [1]. The research aims to address some of research questions as:

a) Should microenterprises have greater awareness in society from Small-Medium Enterprises (SMEs)

b) Are all microenterprises driven to succeed by becoming larger businesses or they look to succeed by remaining ‘Micro’

c) What are the current perceptions of IT and its impact on microenterprises aiming to pursue their current strategy

The authors aims to analyse current literature to identify the importance of classifying microenterprise to their larger counterparts and towards determining factors that influence microenterprise strategic growth with particular focus towards the application of information technology. An observational study was carried out to identify general influences and challenges of information technology within a Microenterprise with the use of semi structured questionnaires. The synthesis of literature studies and that of the observational results will further allow the research to propose a development framework of solutions that could enable strategic growth within microenterprises.
II. LITERATURE REVIEW

This aim of the paper is to provide an assessment of information technology and its influences on microenterprises. The literature review brings together the understanding of microenterprise through existing literature and how they are perceived in the UK economy. The survey also addresses some of the research questions highlighted within the introduction. Within such definition grounded, to then identify ways in which microenterprises establish themselves strategically and how they plan to grow is an important aspect of this research. Through the analysis of existing literature of ‘microenterprise and technology adoption’, the author would aim to draw upon how information technology affects the decisions and challenges microenterprises face when adopting IT and the capacity to help strategically grow.

To find common ground, the term ‘enterprise’ is a synonym for ‘business’, but additionally, [4] states more importantly, the term ‘enterprise’ is also about the actions of an individual that shows initiative by making something happen and taking risk through chance and investment of establishing a business, with the responsible individual commonly known as an entrepreneur [4].

<table>
<thead>
<tr>
<th>Country/Area</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Source/Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1-9 employees ($2m turnover)</td>
<td>10-49 employees ($&lt;10m turnover)</td>
<td>50-249 employees ($&lt;50m turnover)</td>
<td>[5]; [6]</td>
</tr>
<tr>
<td>UK</td>
<td>1-9 employees</td>
<td>10-49 employees</td>
<td>50-249 employees</td>
<td>[5]; [7]; [8]; [9]; [10]; [11]; [12]; [13]</td>
</tr>
<tr>
<td>Canada</td>
<td>1-5 employees</td>
<td>6-99 employees</td>
<td>100-499 employees</td>
<td>[12]; [14]</td>
</tr>
<tr>
<td>US</td>
<td>1-19 or 0-5</td>
<td>20-99 or 6-99</td>
<td>100-500</td>
<td>Small Business Administration [5]; Association for Enterprise Opportunity [12]</td>
</tr>
<tr>
<td>New Zealand</td>
<td>&lt;= 5</td>
<td></td>
<td></td>
<td>[15]</td>
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Table 1.1 Variance of definitions of Small, Medium and Micro Enterprises

Definitions of microenterprise vary across the world, other constraints can apply but it predominately determined by size. Coincidently many authors of publications use the definition of their locality as shown in figure 1 but also some examples like that of [16] that identified the commonly used 20 but decided to use up to 5 as a matter of choice. Therefore, there are differing opinions across researchers and organizational bodies in defining a microenterprise. The initial reasoning for categorizing business by size is way largely down to government policy making. The EU for example define SMEs this way to identify business that are able to benefit from programmes or policies specifically tailored for SMEs while on the other hand, ensures those that “exceed defined boundaries do not benefit from the support mechanisms specifically intended for SMEs” [6]. Despite this however, it has become apparent, as identified by [7] and [5], Microenterprises are not always regarded in their own right and blended into the term “small enterprise”. Despite ‘The Department for Business, Innovation & Skills’ Sector (BIS) for the UK defines microenterprise in their 2009 report [13][31], interestingly, does not include the definition or refer to the term ‘micro’ at all in their latest report for “Business Population estimates for the UK and Regions 2012”; Instead the BIS refer to ‘small businesses’ as having between 0-49 employees [13].

Microenterprises and UK Government

Despite the existence of a well-defined term, The UK government have been highlighted by many researchers referencing them only distinguishing companies by SMEs against large companies [7], [2], [16]. By doing so, the term SME, employing fewer than 250 people refers to 99.9% of the 4.8million businesses in the UK, within that the term ‘small’ equating to 99.2% of all UK enterprises [17]. Therefore a mere 6,000 registered businesses are large with more than 250 employees accounting for only 0.1% of all UK enterprises [17]. The significant point that must be addressed, of the 4.8 million businesses registered in the UK, 4.6 million are microenterprises representing 96% of all the enterprises in the UK. Yet, so much research and emphasis is placed upon larger businesses leaving them largely ignored, blended in the shadows of the much larger definition of SMEs [5].

Inversely, [8] highlights that 95% of government funding for business skills and support goes to the 5% of UK Businesses; consisting of the large, medium and small enterprises despite the clear need for microenterprises to have more support, guidance and funding [8]. Somehow the UK Government, fail to draw upon policies and statistics in England to incorporate microenterprises. There has been a recent e-petition (December 2012) to draw signatures asking the UK government to “tell us what you are doing for Micro Enterprises not for SMEs” [18]. Our findings also analyzed that to the extent of describing the public sector e-business advisory services in the UK as poor and even potentially dangerous [10]. Given that microenterprises make a significant contribution to the economy and communities and collectively can be regarded as the “powerhouse of the economy” [23]. Studies states that “the issue is not so much that large corporations are over appreciated but microenterprises are underestimated and underappreciated” [5]. It so happens that the UK unemployment of 3.3m in 2009 would actually be 2.2m if the UK government recognized self-employed, home-office entrepreneurs which fall under microbusiness [8]. So with lack of common use of definitions and ambiguity of a small enterprise, the situation is exacerbated as Enterprises without any employees are usually ignored completely [11]; [12]. Research identified this statement in the USA stating that as much as 75% of businesses completely ignored as single-person enterprises are not even included in statistical surveys [5]. This is because as the US census bureau identifies that “most have lower overheads with no one on payroll resulting in accounting for a mere 3% of tax receipts” [5] [19]. So despite their sheer
number, [5] states that simply because of statistical prominence, they are invisible to the government as the resulting lack of access to business-supporting policies and resources.

**Comparisons of Microenterprises and Small Enterprises**

Research suggests that “in every case” those microenterprises have limited capital, technological and human resources comparatively to their larger counterparts [11]; [12]. Smaller firms by definition have limited internal resources and capabilities [11]; [12] while there may be some exceptions to the case, particularly in the surge of app developers and dominant companies like Plentyoffish.com (which is still today run and sustained by one person and is one of the leading global dating websites) the majority do apply to these circumstances [5] [16]. The Federation of Small Business released a report in February 2012, The FSB ‘Voice of Small Business’ member survey that helps to identify what characteristics differentiate microenterprises from small enterprises [33]. This extensive report is led by the FSB, the UK’s leading business organization representing the 200,000 owners of small businesses. A useful analytical tool to help establish a true representation of the population from the sample is the use of confidence intervals, in this report a confidence of 95% is assumed and where statistically significant differences exists, details have been included.

The following table 1.2. Illustrates the comparisons as a useful tool to grasp some of the barriers identified by the FSB. However it is very limited as it does not suggest any other factors which differs from other sources and highlighted early in the FSB report [33]. Family factors for example that are a considerable thought documented in [16], for example. The factors given to give an indication that even with little difference in definition from 1-9 employees as a micro and 10-49 as a small firm there are considerable difference. To highlight of course is staff employed but more strikingly, the net change from the previous 12 months showing that microenterprises clearly want to remain small with a flexible work force with small comparatively engaging in growing their business by as many as 20 people in full or part time. The negative change in full time staff for microenterprises may be linked to the current economic climate feeling the pinch financially but showcasing the flexibility of the work force.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Micro</th>
<th>Small</th>
<th>Note to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premises Owned</td>
<td>27%</td>
<td>38%</td>
<td>Home working is prevalent in England</td>
</tr>
<tr>
<td>Source of Finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Savings/Inheritance, family and friends loans (£33,600)</td>
<td></td>
<td></td>
<td>Significant differences in borrowing and access to the bank</td>
</tr>
<tr>
<td>Sources of business support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek less generally (family/friends and Informal networks more than small)</td>
<td>Seek more generally (predominantly higher with banks, suppliers, Solicitor, Gov’t funded support and bigger</td>
<td>Micro source more informal channels comparatively to small firms seeking formal advice (usually at a price) – source as a customer source shows parity</td>
<td></td>
</tr>
</tbody>
</table>

| Past Innovation: New or improved products or services in the last 2 years | 66% | 78% | Small consider more likely to have innovated in the last 2 years |
| Future Innovation: New or improved products or services in the next 2 years | 60% | 72% | Small more likely to innovate in the future than micro |
| Business Objectives – Next 12 Month | Grow: 57% Remain about the same: 29% Downsize/Consolidate business: 4% | Grow: 64% Remain about the same: 23% Downsize/Consolidate business: 5% | Micro not as inclined to grow and more likely to remain the same |

*Table 1.2 Factor Comparisons of Micro and Small Enterprises [33]*

**Microenterprises Growth**

Studies highlight that despite many studies into what determines the survival and growth of microenterprises, there is no definite agreement in the literature about the key factors of success – suggesting that results vary across different studies [20]. Large corporations are driven to grow and exploit markets to the best of their abilities through profit maximization, but in contrast microenterprises are diverse in type of business and reason for existence, therefore not all microenterprises strive for growth [11]; [12]. Evidence suggests there are some ‘Growth-orientated’ microenterprises. The FSB report suggests 57% of UK microenterprise look to grow in the next 12 months. Similar studies also suggest the following characteristics towards having a positive relation to a microenterprise’s growth [33]. These characteristics are [21]:

- Educational level of an entrepreneur;
- Entrepreneurial intensity of the firm;
- Informal networking with customers and suppliers;
- Business partnering activities;
- Product innovation;
- Adoption of E-Business technologies;
- Managerial delegation;
- Focus for local markets;
- Age and size of the firm;

Authors argue and identify that growth in the traditional sense of wanting to increase the size of the firm is not the case for
the majority of microenterprise owners [22]. The common misconception and largely typically increasing the size of the company by increasing the number of employees’ results in a change of responsibility and tasks, detracting from the reason they started their business. Many researchers have suggested that microenterprises value the success of their business not by objective factors (profit, revenue etc.) but by subjective factors (customer satisfaction, personal motivation) [16] [24]. Researchers [15] and [20] makes an assumption and completely disregard motivation or entrepreneurial orientation to the growth of the business yet studies found and suggested it is precisely these subjective factors that drive the strategic direction and growth of a microenterprise [25] [26].

**Information Technology and Microenterprises**

The rapid development in Technology has fortunately resulted in a diverse range of IT to become a much more viable and cost effective solution to many business needs. With fast processing power, ability to store data easily in large quantities and have access to simple analysis tools [27]. Research studies suggest that there is little research even as wide as SMEs go in terms of understanding exactly what factors directors are influenced by in making decisions about the use of technology, let alone how it can aid the strategic direction and growth. From the unique characteristics of a microenterprise distinguishing itself from its larger counterparts, the assessment of technologies should focus on that of a microenterprise and not from a small business standpoint [15].

Microenterprises do not have the need or intensity to compete and adopt the latest technologies as many SMEs do as they are not affected as prolifically in competition [11]; [12]. Technology however has enabled reach to extend to a global scale which can and has allowed microenterprises to compete over larger corporations as IT has eliminated geographical barriers to an extent, competing on a personalized and customized level as microenterprises can still benefit from their adaptability and flexibility [29]. This research states it’s limitations as it needs to identify the relationships between as mentioned before; entrepreneurial motivation and capabilities and the technology use and learning with value creation and growth in microenterprises.

Research studies has suggested that finance is the one of the critical issues that micro enterprise face when trying to adopt new IT infrastructure and solutions – the lack of recognition, funding and support by the government exacerbates the situation. Invalid source specified. Research states that while there is greater emphasizes on the use of IT in the workplace, there are key differences in the use of IT comparatively between microenterprise and those that are predominantly larger [16]:

- Generally have few resources available to devote to IT
- Little control over forces that are external to the organization
- Generally do not have their own separate IT department
- Less formalized planning and control procedures for the adoption and use of IT.

Therefore it can be gathered from existing literature that small business entrepreneurs are often placed in a ‘catch22’ situation: knowing that IT can support their business in some way vs. lack of the expertise, resources and finance to know how it can be effectively applied. While research has shown that productivity improvements can be achieved through “learning-by-doing” in order to become more efficient and effective. In recent years the development literature suggests that when ICTs are applied in innovative ways the efficiency gains can be magnified. If applied correctly and appropriate to the social context of which such firm is within. Research identified the benefits as [30]:

- **New markets**
- **Administrative efficiencies**
- **Access to information and expertise**
- **Labor productivity can be achieved**

However, they have been recognized as difficult to achieve in microenterprises [22]. The reasons as microenterprises are already established and are high proportion in numbers suggests that there is less evidence about their growth patterns. However, what can be identified are the challenges that microenterprises face in being able to adopt and use information technology applications. Research studies describes as a “growing” business therefore SMEs looking to strategically grow. Authors are able to classify the diverse range of challenges faced by a microenterprise into the following categories of Capabilities, Resources, Access, Attitude, Context and Operations [22]. To overcome such challenges, Learning factors were the next step in research that has been undertaken as a response to this. In line with the informality of microenterprises, many studies on small businesses highlight the importance of informal learning. Hendry et al (1991) identifies 5 ways learning by: solving problems by oneself, together with colleagues, asking for help of a colleague, direct employee participation and learning new things under the responsibility of another experienced worker. It appears there is great focus of learning within the organization, this is largely due to the expense of external sources of help [11]; [12] [5]. 45% self –learn for example according to Duxbury et al. (2002) with employees with microbusiness less likely to have received employer-funded formal training; linking with the informality of the micro-workplace.

The literature review analyzed suggested that microenterprises dominate the nations’ economies by number, in the UK equating for 96% of the UK’s enterprises. Although some differences in defining businesses by size, microenterprises predominantly are regarded to have employees between one and nine and the fluctuations do not affect the overall consensus. Characteristically microenterprises differ greatly even from their larger counterparts of a small enterprise, particularly in how the business perceives growth. Unlike small, medium and large enterprises, the majority of microenterprises, particularly of those in the UK do not aim to grow by assessing objective factors like size and revenues but of subjective factors; to grow in terms of achieving personal value of achievement and motivation. Importantly, despite the clear differing characteristics of a microenterprise to their
larger counterparts, the government’s lack of recognition of microenterprises exacerbates the problem of lacking resources, capacity to achieve their perceived value of success as funds are not fairly distributed across all SMEs.

Current literature identified that not all microenterprises are driven to succeed by becoming larger but there is a balance between the two. This is largely dependent on the business’ owner’s values and preferences but there are valid contrasting views of microenterprise strategic growth. The review also suggests the need to know more about the perceptions of IT. Technology has enabled microenterprises to compete against larger businesses on a personalized and customized level as they can benefit from their adaptability and flexibility but there is little research even as wide as SMEs go in terms of understanding exactly what factors directors are influenced by in making decisions about the use of technology, let alone how it can aid the strategic direction and growth.

Growth and success can and should be to an extent defined qualitatively, based on, among other things, a small enterprise owner’s vision, values, lifestyle goals, and the quality of his or her relationships and contributions within and beyond the walls of business [5]. For now it is ideal to focus on what can be done without the dependency for such support and recognition form the government, particularly in these economic times as they are a big part of local communities and play a huge role in the economy regardless. Much research is focused on policy making for microenterprises and seems to not have an impact on microenterprises. So if this is the case, surely the influence of successful IT use here, reducing and perhaps automating administrative tasks for example, would enhance this success and growth of the company as it enable the owner to focus on the relationships and customer satisfaction instead of tedious administrative tasks and laborious amounts of time consumed in internal business tasks?

Where the gap in research is evident, if the microbusiness improve their internal processes and administrative tasks more efficiently through the careful use of IT, then perhaps there will be more time for the microenterprise to engage better with their customers, to identify new opportunities with products and their clients and to open new opportunities within and further away from their markets, and existing clientele. From a generic standpoint, there is empirical evidence suggesting that the best way to achieve profitability is not necessarily from cutting costs, but from improving revenues through achieving higher levels of service quality and customer satisfaction [27]. Firms that can successfully achieve both cost reduction and revenue expansion can have a positive impact on both customer satisfaction and long-term financial performance, research shows that attempting to focus on both at the same time usually fails. Therefore, the idea is to identify what can be done from an internal standpoint in terms of reducing time on process, hence also viewed as a cost reduction (in terms of wages), will then enable the microenterprise to focus on working closer with current customers and adding value to their services, and working with new clients generating new revenues instead of been held back by administrative tasks for example.

It is this definition that can be used to help develop further research to clarify the need to differentiate microenterprises from larger businesses albeit marginally larger. Therefore, in conclusion, it is evident that microenterprises need the support to achieve their personal unique goals as defined by their own combining factors to surmount to the conceptual definition of Strategic Growth highlighted in this review. It is apparent with the lack of Government support, limited resources and the many challenges and barriers it would become apparent that research supports that IT has the potential to assist microenterprises to enable to achieve their goals and their strategic growth to obtain them.

III. RESEARCH METHODOLOGY

The research intends to use both quantitative and qualitative research methods are adopted within the research. The first method identified within the research and discussed within this paper is that of an observational case study involving observing individual participants and processes within a real business environment on a typical day of a microenterprise. This technique identified real examples of influences and challenges of Information Technology within a Microenterprise and back existing findings in current literature. Company “PMM” was involved within the study, involving the authors to go into the business and witness the general running of the business, observe behaviors and how the people within the business interact with one another and the how they utilize current IT applications. The second method of Surveys including semi-structured questionnaire consisting of questions that the participant or respondent addresses is planned for future aspect of this research, and not discussed within this paper.

IV. CASE STUDY OVERVIEW

The case study conducted presents the findings of an observational study carried out within a microenterprise. The observations consisted of monitoring the general office presence, noting any discussions of importance. Particular attention was played on observing how each employee interacted with their Information Technologies present in the business and how they undertook their general business processes, especially their administrative tasks. Highlighting the issues and problems discovered from the observations and discussions, there may be some challenges that need to be addressed. PMM or Project Management Microenterprise (name changed for this study) is a Microenterprise based in South-East England offering project management services to publishers, universities and hospital trusts. From transcripts through to final publications, PMM manages all aspects of the publication of books, journals, reports from transcript to final product including the management of authors and virtual teams to bring the project to fruition. The team have no direct contact with clients as they are worldwide – everything is practically done via email.

AS-IS Study
PMM has organically grown on very informal processes but has been very successful, even some sixteen years later there is nothing wrong with the nature of the business from an external perspective and a lot of business is ready to be taken on. However, PMM has been faced with many challenges as a result of the economic downturn and additional challenges faced through 2012, therefore a strategic choice has led to considerations of a new strategy in order to harness the potential for the business to grow. With fixed pricing in publishing and a heavy reliance on technology, much has to be done to reduce costs. As a result, the opportunity to provide PMM with possible solutions through observations conducted under this thesis has been offered that could identify and overcome the problems that exist that currently prevent PMM from becoming more efficient or grow strategically. PMM currently engage in technology for external purposes such as virtual teams and e-book publications but much is to be altered internally in order to maintain competitive and costs low.

V. ANALYSIS - ISSUES AND PROBLEMS

A. Time constraints
An issue to be aware of is PMM are bound fixed costs within their contracts and therefore have a limited number of hours their Project Managers can turn a project around. As a result each employee has to manage their timesheets every quarter of an hour. If allocated hours are surpassed the project will be working at a loss. Therefore there more efficient PMM is, the more profitable they are.

\[ \text{Total Allocated hours for Project} = \frac{\text{Number of Pages in Project} \times \text{price per page}}{\text{Project Manager cost per hour}} \]

B. Informality, external commitments and company dynamics

The Director is now looking to grow again but the culture in the company has declined since reducing their time in the office. The Director took some time out a few years ago to train in consultancy and takes on a number of responsibilities such as teaching in further and higher education sectors. But having been out of the office for some time, the informality that once created a fantastic environment is beginning to take its toll as the team have become quite defensive with the director’s presence and susceptible to any change. The Director always ensure flexibility and enables as much develop as possible with her colleagues but there is a need for perhaps some more formal process and believes they cannot employee a larger team until the dynamics in the current business changes.

C. Multiple Emails
Email is the main communication tool for engaging with clients and members of the team if out of the office. The time consuming aspect however is there may be scores of authors on one project and every single author has to be emailed individually with unique attachments. This can take a considerable about of hours to complete and a very repetitive process with relatively high margin of error.

D. Paper based projects and Administrative Burdens

Although a member of the team is devising a spread sheet to work with individual projects, all documentation, milestones, timetables and schedules are printed on paper and stored in files. As a result essential information has the potential to go missing and is not an efficient way of storing information, particularly with limited office space. This way is not particularly useful if the employees are working away from the office, posing a security risk with confidential information and is an unnecessary expense on ink and paper effecting the profitability of PMM. The information required may not be where it is thought to be (on another desk for example) and is a laborious task to trawl through paperwork to find what the individual is looking for. This method does not bear well with the potential to increase business as the office will become hard to manage with an increase of projects.

E. Internal Communications

All communication within the team is largely verbal with no means of tracking or monitoring progress or issues, it is up to the director or employees to make note of anything to do, relying on the organization and memory of each individual.

F. Performance recognition

With no formal processes in place it was observed and recorded by employees there is a feeling there is little direction thus evoking a lack of motivation with issues going unsolved such as alleviating tensions between employees. As a result potential is not met and efficiencies dwindle. There are no targets or deliverables set with no method of recording performance. In addition there is no Structured Appraisal and no rewards for project completion or achievement related targets. Employees spoke needing “guidelines, objectives and targets”.

G. Data entry

Each member of staff have their own Spread-sheet to record their projects based on a master copy. However there are a number of issues identified. There is no consistency amongst staff, each with their own style and data entry is not consistent across projects. There is therefore no means of keeping track of all projects relying on the user to keep track of deadlines, this issue is exacerbated as it common to maintain 10-12 projects at any one time.

H. Internal Server

PMM have an internal server they rely heavily as this stores all of their files and data required for projects. This allows for file sharing between colleagues on their computer as well as offering an FTP facility to upload files from their virtual teams. However, the reliability is not excellent and while they have a backup it only updates once a day, so any work undertaken during a day’s work and a power cut occurs, it is likely much of the data is lost. Security is also an issues especially with so many external members involved with projects from publishers, typesetters and authors.
VI. Key Strategic Challenges

As a microbusiness the problems and issues PMM face are difficult to overcome. The challenges identified are the following:

A. Resources

- Lack of Money - PMM lack finance to invest their own resources into the business and currently only generates enough to cover costs;
- Lack of Time - Projects consume a full working day; Family is priority so takes precedence alongside work; External commitments consumes work hours and therefore is made up another time; The Director nor employees have minimal time during office hours and outside the office environment available to seek ways to enhance their business
- Lack of Support - Support usually only comes at a price exceeding the added value of return
- Lack of Information - Not easier to find simple solutions to a unique company without investment

B. Capabilities

- Lack of IT knowledge - The director and employees are proficient users of IT and benefit from the latest desktop PCs however they lack know-how of how to optimize existing processes with the use of Information technology
- Inadequate IT user skills - although one member of staff is attempting to enhance their current spreadsheet, the user is only going by basic experience of spreadsheet software and with the hours put in, overall improvements will not greatly enhance the business.
- Inability to resolve technical issues - the current in-house server requires a third-party call-out team if problems exist due to lack of technical know-how;
- Understanding the benefits of IT - use of IT is critical in the business yet paper based process still consume much the time, space and expense without seeking the potential of the IT that is available;
- Limited Planning Ability - PMM have limited time to plan a strategy as they are constantly responding to the demands of their clients and have limited time to do so
- Not knowing what your IT actually does - this challenge is not so much an issue as they do use all technology available to them
- Not knowing what their current IT potential is - with the latest Desktop PCs, fast internet and use of desktop publishing software, there is potential to exploit if it is known;

C. Attitude

- Lack of engagement with colleagues - despite less than 5 people work in the company office there is lack of engagement of some colleagues as they merely do the job in hand and do not seek to improve the company;
- Resistance to technology - use of paper may suggest there may be slight resistance to utilising their technology - evident in data input styles in spreadsheets;
- Lack of value and personal incentives - no performance recognition or appraisal
- Lack of awareness - staff are not aware of some cost effective solutions to enhance the business (cloud-based data storage)
- Lack of trust - it would appear with the reduction of hours the director is in the office there is an increase in self-management and less engagement and tensions between colleagues - resulting in lack of trust
- Lack of confidence - initial reactions were apprehensive of finding ways to improve the business before solutions were identified
- Cultural Factors - as a globally communicating microenterprise, language over email may be misinterpreted, national holidays may not be accounted for;

D. Access

- Inadequate hardware and software - In-house server may not be adequate in data size, speed and reliability - especially if looking to grow the business; new desktop publishing software is no inadequacy to PMM
- Poor IT infrastructure - network is sound but the in-house server is a reliability and security issue that should be addressed as it is proving an expensive maintenance issue;

From the case study findings it was identified that PMM currently to not optimize the business to the best of their ability and will not be able to expand successfully until current processes and visions are standardized and the use of Information Technology is utilized effectively

VII. Proposed Solution

With PMMs current choice of strategy of retrenchment in the short-term leading to growth in the medium-long term, arisen from the challenges faced through 2012. Suggestions addressed is with the inclusion of some solutions addressed as a result of the observations/ consultation the aim short-term is to reduce costs by utilizing IT more effectively. In the short term, this will increase productive capacity. An added value to PMM of using a more consolidated approach to IT will be the provision of a training and induction programme containing standard and accepted practice which will be explicit, allowing specific SMART objectives. Therefore a conceptual model has been constructed that could address the outcome of the consultancy report. As the time spent on processes reduces as a result of IT solution development, it is hoped that it will have an exponential opportunity to increase business. The next stage of the research is to further investigate and propose a conceptual model which will aim to address the challenges identified within the research and that
of the use of Information Technology within Microenterprises allowing them to attain strategic growth.

VIII. CONCLUSION

The following study aimed at the identification and analysis of few important research questions. The key research question addressed within this study was to identify the need of Microenterprises having greater awareness in society differentiating from Small-Medium Enterprises (SMEs). Despite little recognition to differentiate microenterprises generally in society, with an established definition and considerable differing characteristics of their slightly larger counterparts ‘Small enterprises’, more should be done to promote microenterprises as an individual entity, albeit within an SME but for the sake of the Government identifying microenterprises that suffer greatly from financial challenges. Microenterprises want to added value and increase business if there was a greater influence of IT on their strategic growth which would in turn boost the economy. The research also aims to address to evaluate if all microenterprises are driven to become bigger businesses or they prefer to remain ‘Micro’ for financial and strategic reasons. Our literature findings and that of case study analysis suggests that diverse ranges in microenterprise objectives and therefore a near fifty-fifty split would become bigger businesses or they prefer to remain ‘Micro’ for financial and strategic reasons. Our literature findings and that of case study analysis suggests that diverse ranges in microenterprise objectives and therefore a near fifty-fifty split look to become bigger whereas the remaining prefer to stay as microenterprise. A greater majority of microenterprises however look to remain micro overall disputing the generalization ‘all businesses grow big’.

Our study also looked on evaluating the current perceptions of IT and its impact on microenterprises aiming to pursue their current and future growth strategy within the context. Results suggested that there is a positive perception of Information technology holding a critical success factor of their strategies with 78% of surveyed participants, without it many businesses would cease to exist and many identify a realm of benefits Information Technology has to offer. From literature the list of barriers, number of barriers had been identified that hold greater importance, largely the management of number of factors including: financial, time, data and people management [22]. Our findings also suggested that there is great potential with the right balance of suitable solutions, time and skills adopted; the solutions in the next chapter will provide more evidence of this.

REFERENCES


