IT APPLICATION MODULES LIKE "MUST HAVE" FOR BUSINESS START-UPS

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Abstract

In this paper there are presented the main modules of some applications that represent the future of IT for start-up businesses, depending on what is essential, compulsory and important for this type of businesses. IT applications modules, described in the following paper, definitely belong to the IT department of any new business. The basic applications that any company obligatory needs are: office software, financial-accounting applications, online banking and so on. Only in exceptional cases, the giving up of certain modules, which are specific to "must have" applications, should be taken into account, such as certain marketing activities on the internet. In this paper the word, "start-up" does not refer to "start-ups" in IT. This paper is about those people who want to start a business, those who are at the beginning and have nothing to do with the IT sphere.

Keywords

Start-up businesses, office software, web applications, databases, documents management

1. Introduction

In an increasingly globalised world, in which customers hold an ever-growing power and change their preferences more and more frequently, in which competition unfolds in progressively aggressive terms, in which legislation, culture, economic and social environment are getting more and more complex and dynamic, in which employees have emancipated and have acquired a great negotiation power on the labour market, any economic entity must comprehend these changes in order to survive and be successful. In a way or another, these tendencies influence the activity of any organization. Thus, the interdependence between organizations, seen as systems found in permanent change of resources and information with the environment, respectively the environment with whom these interact, is decisive for the success of the organizations.

Companies with tradition on the market can benefit from past experience. A young company is not yet established on the market, but it must make decisions which have a big influence on future years. A subcategory of young companies is represented by "start-ups", which are, par excellence, innovative and with a maximum of three years' existence, which many times implement the obtained results from the research activities.

2. IT for "START-UPS"

In this subchapter, the following problem should be clarified: Which are the domains in which IT can help a newly founded company? This general presentation is aimed to serve as basis for the identification of appropriate IT applications for the professional tasks and processes that are run within the company.

Of course, for entrepreneurs, the spotlight is represented mainly by the establishment stage. In the business process, the fundamental decisions are directed towards the product or service range, location, legal form, the way the services are provided, the use of methods, tools and equipment, the design of operational processes, task distribution and so on.

Entrepreneurs must own from the beginning the mode of organisation and the specifications linked to the "business plan", and in many cases, the business plan must persuade the investors and the business partners of the main idea, and how this one is going to be implemented. *By means of the business plan it must be shown that – for this idea – there is a market and also a growth potential for the business*" [1].

2.1. Office Software

Office packages belong to the category of office software and represent basic applications for any company. They are characterised by a consistent and constant design. More than that, these include many times standard interfaces for the integration among various programs. Another advantage of Office packages is the low price compared to the acquisition of each program individually. Essentially, all Office packages contain the following 5 components:

- Word processing;
- Spreadsheet;
- Presentation;
- Personal information management;
- Database.

Market analysis

Even though Microsoft Office is the benchmark when it comes to office software, there are a series of alternative products, which are briefly presented. Since the functions available, for different products, are extremely similar, they mainly differ in the availability at a certain price, or being free. A good overview can be consulted on Wikipedia [2] and in "Office packages".

Office packages

- Office packages in Open Source:
  - Apache Open [3]: Writer (word processing), Calc (spreadsheet), Impress (presentations), Base (data bases), as a complement: Thunderbird for e-mails;
  - LibreOffice [4]: (Writer, Calc, Impress, Base).
- Commercial "Office packages";
- Microsoft Office [5]: (Word, Excel, PowerPoint, Outlook, Access);
- WordPerfect Office [6]: (WordPerfect, Quattro Pro, Presentations, Paradox).

Alternatives without local installation

An important question that needs answering is whether the running of software at a local level or internet operation is preferred. If an Office package with an online solution is chosen, then there are three main platforms, which make this thing possible.

- Microsoft Office 365 [7];
- Google Docs [8];
- Google Apps for Work [9].

File formats and sharing

A file format describes the type and structure of a file and the way in which the pieces of information are linked among them and saved. There are formats pre-established by the producers, for example: .d*ocx*, .*xlsx*, .*mov* and standardized formats, independent from the supplier .jpg. Not all Office packages can save any type of file.

For an entrepreneur who wishes to maintain to a minimum the level of tools, it is important not to work with too many different file formats. As for the use of integrated office systems, the file formats within the Microsoft Office have become a

standard and can be read and processed in a normal manner by Office packages from other manufacturers, for example OpenOfficeOrg. The market share of the Microsoft Office package was in Romania, in 2014, of approximately 70 % because many users did not have licenses.

If the data is sent to collaborators, problems may appear with those that need to be processed afterwards. For example, a certain font, which is used, and which is not installed on the PC of the client, appears with an incorrect display of the document. For the correct interpretation of Office files, there is the possibility of converting these files into an accepted output file format. The most well known format of this sort is without any doubt .pdf from Adobe [10], which also has available alternatives, like PDFCreator [11].

2.2. Communication and Collaboration

Is the e-mail program being used efficiently to store important files and information? Is the mailbox full and does it create problems when the tracking of important information is desired? These are just a few of the possible questions for most of the companies. For a new established company, in which everything needs to be done from scratch, as quickly and well as possible, chaos may rapidly set in. Therefore, the use of software needs to be thought from the very beginning, and this software must ease the communication and collaboration with clients and colleagues. Such software is "Enterprise 2.0". The term was presented by the Harvard professor, Andrew McAfee, in his article "Enterprise 2.0: The Dawn of Emergent Collaboration" [12], in 2006. In this article it is described the possibility of improving the internal and external communication of a company, for instance, in projects or knowledge management, by means of software based on Internet services.

Document management

In many companies, more people need to access, edit and comment on the documents. Even the access from the outside of the company may be necessary. Thus, especially the use of an online platform for document management is needed (see figure no. 1). Furthermore, more usres can simultaneously process a document and add comments to these. Most of the online tools for document management are free, but they have reduced storage capacity.
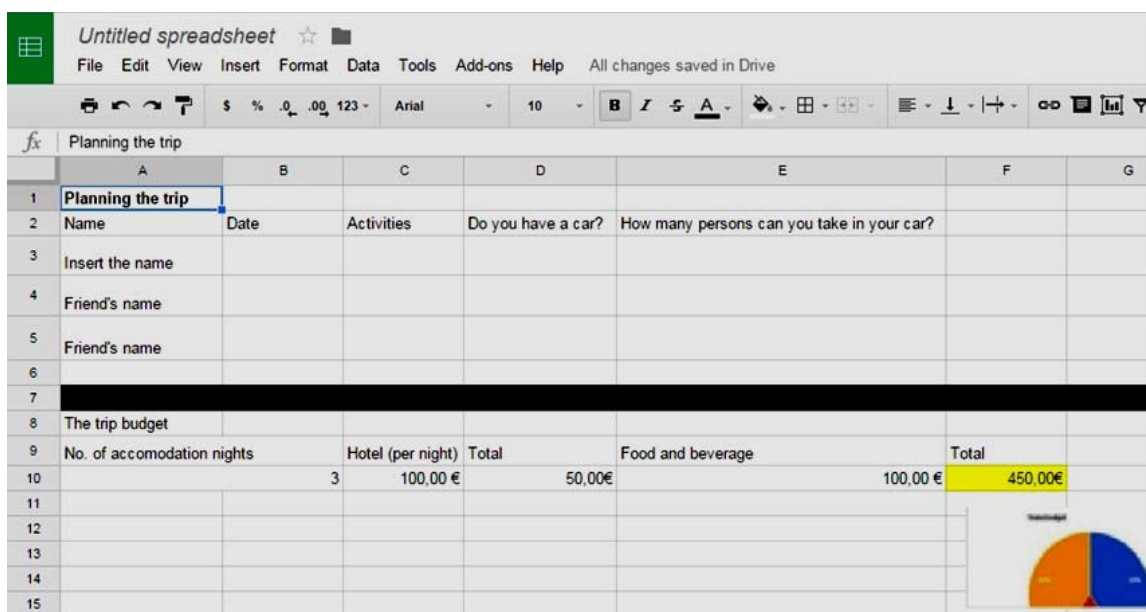

Figure no. 1 Processing documents using Google Docs application

Profile page

A profile page is a web page, which contains information about a person or a company. The biggest part of the career/ profile of the person/company is described and stored in contact. Profile pages can be found on the internet and are used by big companies to identify employees and to evaluate their experiences. For a newly established company, the creation of a profile page is important in order to advertise the company and to be easily found by customers.

Integrated solutions: Social business platforms

The presented tools can be used individually or through some platforms which combine more tools, the so-called social business platforms. It is a software package that can be installed in the network of the company and it offers the possibility of using: document management, blogs, wikis, project websites, profile pages, RSS feed and so on. Frequently computer software used is Microsoft SharePoint 2010 (see figure no. 2), and the following:

• http://sharepoint.microsoft.com/;
• http://basecamp.com/classic;
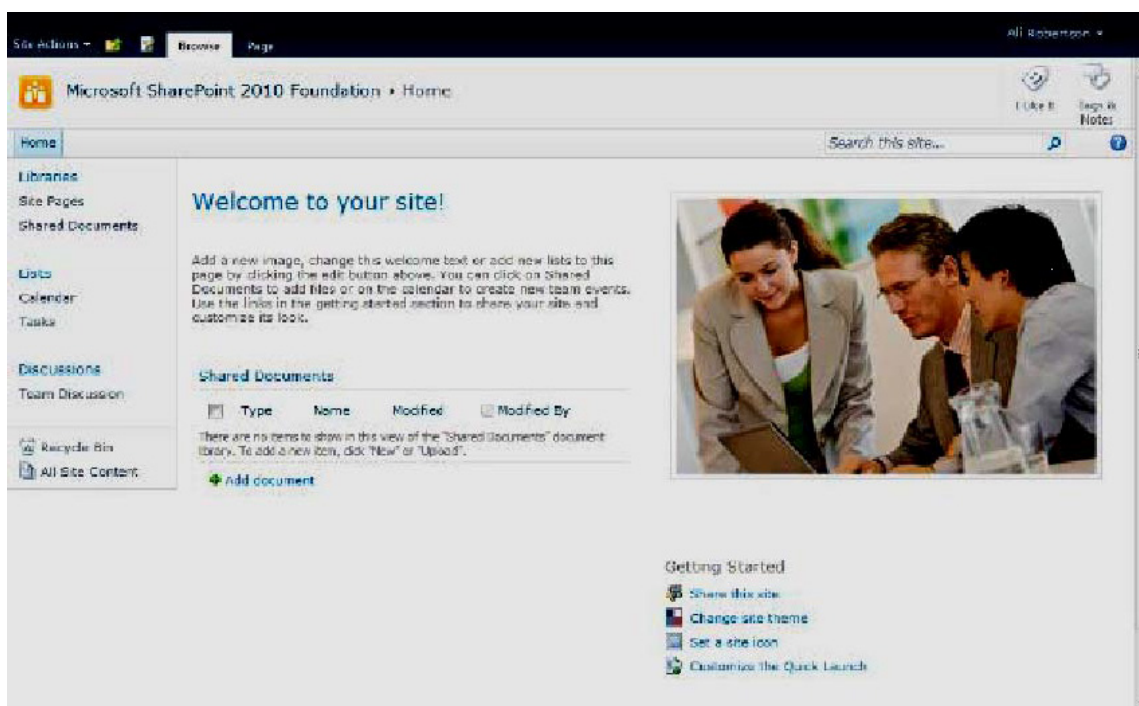• https://www.yammer.com

Figure no. 2: Microsoft SharePoint as an example of social business platform

3. Financial Accounting

Financial accounting records all the transactions, which involve the alteration of the liabilities and assets of a company. It forms, from the financial-accounting statements and activities, external accounting and it addresses, in addition, to both lenders and public institutions. Financial accounting determines the data for the balance sheet, the stocks of assets and liabilities, the yearly expenses and revenue presented as loss or profit, compared with each other.

3.1. The Development of a Software System for Financial Accounting

The main requirements presented for a financial-accounting software system, derive from the basic principles of accounting systems. Thus, "*a financial-accounting software system must make correct transactions as*

soon as possible" [13]. Each transaction must be able to be tracked down in the development and the execution of a document, journaling, and it must be placed in the activity of the corresponding accounts. A financial accounting software system must ensure the following functions:

Administration

Administration implies the transmission of all the necessary data for the access and management of the activities involved in the use of this software. These include, for instance, information regarding the classes of accounts, bank accounts, payment summons and so on.

Document Processing

In the document processing there are submitted all the relevant primary documents which are verified, corrected and accounted for. These include invoices of sales or acquisition, credit notes, receipts and so on.

Information

This area can be seen as an information platform. The information modules are to inform the user regarding the sums that have still not been paid by the customers, and, if necessary, which the remaining invoices are. In addition, the software products indicate the due-to-expire payments, so that the invoices received from the supplier can be solved properly.

Reports

The software systems for financial accounting offer more options of reporting. These can be divided in three categories: "financial statements", "current account" and "general information". In "general information", the following may appear address lists or SWOT analysis, regarding clients and suppliers, as well as account plans, posted lists and the sales lists that are generated.

The "current account" evaluates all the assets and the liabilities of a company, such as unpaid invoices and summons lists. More than that, it offers the user useful information for the financial-economic analysis, through assessments such as the trial balance and the balance sheet.

Database

Each financial accounting software package stores all the transactions in the database. The data will be stored, depending on the software product, in a file, in the case of smaller financial accounting software, as well as on a data base server, such as MySQL, SQL Server, NoSQL and so on.

3.2. Banking Operations

In the online banking applications, it is considered that transactions are being made using a PC when services like online payments or Internet Banking are performed. With Internet Banking fast, easy to make, non-stop banking transactions are made, regardless of clients' work program. Furthermore, banking transactions can be flexible, mobile and conducted from different locations.

The online banking system can also be run through the website of the credit institution, but also by means of a banking system. The major difference between Online Banking, through the website of a financial institution, through PIN, TAN system and Online Banking, through a banking software is that, in the second case, the financial operations can be integrated in the business processes.

Consequently, many financial accounting systems and ERP systems bring Online Banking features, allowing the transfer of data from the supplier and of the accounts directly into the payments system. This means that the remaining invoices are already transferred in the ERP system, and the transfer can be made directly in the software.

In addition, payments can be automatically processed, in accounting terms, and balances of the clients' accounts are reconciled with the financial accounting of the company that makes the payment. If an ERP system or an integrated financial accounting and pay system is used, the wage

costs and the non-wage labour costs can be registered in a direct manner (see figure no. 3).
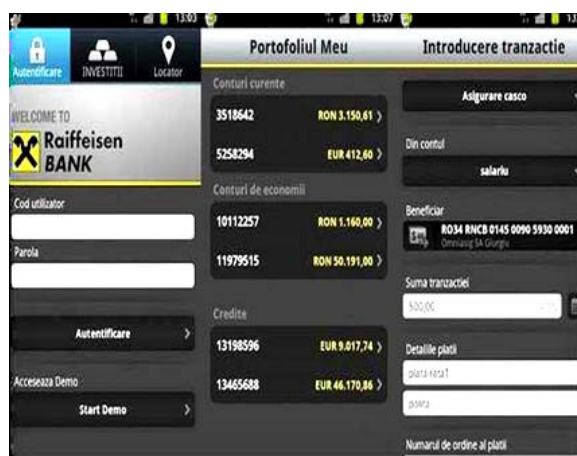

Figure no. 3 Example – Online banking for Smartphone

4. Internet Presence

Currently, regardless of industry and business model, it is essential for a company to create a website from the beginning of the business. The clients and those who may be interested can find out more about the product offer and/or services using either a PC or a mobile device.

"*When people talk about a company, they frequently refer to its website. The presentation standard on the Internet is extremely high, and, thus, the pages are expected to be informative and of good quality*" [14].

4.1. Domain

A domain name represents a unique sequence of characters, assigned to an IP address of a server permanently connected to the internet. More than one domain name may be assigned to an IP address. The domain name is unique. There cannot be more names such as "ulbsibiu.ro" [15]. Users of the Internet can access a website only by typing the name of the domain into the address bar of the browser that they are using, the process being similar to the download of the Output files of the source code, of the site, on their PC. Any domain name obligatorily needs an extension. This is usually given by the specific of the website that runs on the server behind the domain name. Thus, a Romanian website should have the ".ro" extension, exactly the way a website from U.S. should have the ".us" extension. The use of the extension assigned to the country of allegiance of the owner of the domain name is not compulsory. Thereby, if the launch of a site that sells mobile phones is desired, the ".*mobi*" extension can be chosen, and in the case in which a website with commercial emphasis is owned, a real advantage would be the use of the ".com" extension.

4.2. Implementation Options

There are two ways to create websites. At the beginning of the business, a 6-10 pages implementation and the use of a modular system of online suppliers are recommended. Depending on the knowledge stage, these can be created effortlessly through own contribution. To a great extend planned, the right solution for starters is a content management system, CMS for short. Afterwards, because shortly the content of the website will amplify, through the appearance of new functions, the aid of a specialised company that offers professional services will be required. The maintenance of the content, by the beneficiary, is possible for both of the options, for example for those who are familiar with the basic functions of Microsoft Word where the content is separated from the Internet programming.

4.3. Internet Marketing

If a website is developed, a few functionalities associated with Internet marketing must be carried out. In the end, a website that is visited and that helps the increase of sales is desired. The marketing activities on the Internet are considered online marketing. Their purpose is to direct the visitor on the website, so that the direct or indirect "initiation" of business relations can be accomplished. Figure no. 4 offers an overview of the most important marketing tools on the internet.

Figure no. 4 The main tools of Internet Marketing

5. Conclusions

To design an IT strategy it is necessary to answer some key, fundamental questions, which each entrepreneur should address:

• What do I really want to achieve with my company?

• How can I achieve that?

• What do I need?

• How can IT support help me in this situation?

• Which IT aspects have an influence on the clients' perception?

It is important for young and small businesses to think about future targets and the choice of the necessary equipment. This thing should happen before the first IT investment. Such an IT investment consists in the acquisition of a Notebook or of a "cheap" software product; because the financial resources are limited in the start-up phase and wrong acquisitions or changes are not permitted. Thus, an IT strategy must be prepared as soon as possible. Otherwise, it is supposed that the major decisions and/or investments can have negative consequences on future results.

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