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SOLEMN DECLARATION - GROUP ASSIGNMENT

Solemn declaration by students

Module: Technology Management
Module Code: MBAB 821
Assignment No: 06
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We hereby declare that the assignment which we herewith submit to the North-West University as partial completion of the requirements set for the MBA degree, is our own work.

GROUP NAME Cheetah's Vaal

GROUP LEADER: TIDIMALO MOREENG

Name	**Student Number**	**% Contributed**
Richard Molefe	1297173	100%
Tidimalo Moreeng	27620859	100%
Juniour Mthimkhulu	28262883	100%
Botle Bosiu	30980135	100%

Evaluation of a technological innovation opportunity for a new start-up company.

Company

The new-start-up company of which technological opportunities were evaluated is Optimisation. The company provides face-to-face training solutions for Universities, Schools, SETA's, TVET Colleges and QCTO.

Technological innovation opportunity evaluated was the introduction of e-learning system into the company's offerings. Development of e-learning system that will fit South African outcome-based teaching and learning, as well as they are aligned according to the requirements of Sector Education and Training (SETA's) and the QCTO (Quality Council for Trades and Occupations).

The Industry

Sector Education Training and Development Practices Education and Training Authority (ETDP SETA). Benefits the Employers and Employees by promoting and facilitating the development and improvement of skills profiles. Focus on: Raising skills levels of employees, maintaining a balance between supply and demand in the labour market, Diversity training, Flexibility in initial and in-service training and education (ETDP SETA, 2020)

Products

Optimisation's products includes a range of customized training programs as per client's needs. These programs include training on; Management and administration, Communication and time management, Project management, Diversity training, Leadership training and Recognition of Prior Learning. The products will also include category aimed at SME development programs namely: Business plan development, Generic management, new venture creation, Entrepreneurship

New additional technological offerings include; e-learning content development, learning technology and software, virtual library, video & animation and Teaching & learning aids.

Customers

Optimization's customers include;

- Public & Private Universities,
- Public and Private Schools,
- SETA's,
- Private & Public TVET Colleges,
- QCTO

The rationality behind the decision

On the 15th March 2020, the President of the country, President Ramaphosa announced the state of disaster in which all institutions of learning were directed to close due the (Corona Virus Disease) COVID-19, meaning no physical contact of learning was permitted at all. The private institutions and affluent schools had devised the means to keep their business running. The public institutions were found wanting as they were not ready to migrate to the new normal imposed by COVID-19. Microsoft teams and Zoom became the preferred to be used for virtual learning. The challenge was the accessibility of these platforms to the person in rural and remote areas. The Skills Development provider had to come up with the means to reach to their clients and continue to offer training to the employed persons (talent lms, 2020)

Electronic learning (e-learning) as it is commonly called, came into existence since 1999 when the word was first utilized at a Computer-Based Training systems seminar. To make it clearer to the audience on what e-learning is, the new terminologies were coined, which includes the word like virtual learning and online learning. In its infantry stage, the e-eLearning was just a way of delivering information to the students, but as times goes by, the pioneer of e-learning was then shift the gear to make it more interactive and this happened in the 70's (talent lms, 2020)

Most of the businesses around the year 2000, started to view e-learning as platform for training their employees. Covid-19 reminded Skills Development Providers about this platform and the company called Privi Technology is one such company we came across revive the idea for skills Development Providers during lockdown level 4. The good things about Privi Technology is that their model is customised to the Outcomes based leaning and it is aligned to the Sector Education and Training Authority (SETA) as well as Quality Council for Trades Organisation (QCTO) (talent lms, 2020).

The roadmaps for the company

Optimization will offer interactive e-learning which includes virtual library and YouTube videos. This will allow the user (the client who bought to use the system) to record the lesson that can be accessed anytime when the lesson has ended.

Security:

Optimization will use the cloud to secure their system and users can only utilize the cloud system only if they bought the system. This is a cost effective way as it cut out the administration costs, paper work and special hardware.

Compliance

The e-learning platform by selected by Optimization meets the standards set by Health and Welfare SETA and Quality Council for Trades Organisation as it ticks all the boxes to meet the requirements set out in their policies of e-learning.

Infrastructure

To use the Optimization e-learning system, the users can access it using their smart phones, desktop, laptop or tablets. It allows any operating system such as windows, android or IOS, the system works perfects on the gadgets.

Operations

The system allows the live classes, which is what is required by the SETA and QCTP in their implementation policy. It also provides the virtual library, assist the student with administration, assessment.

What are the technology plans of the firm?

As the small entity Optimization, looking for expansion including the access to higher education and also ensuring that the technology is zero rated for students. They are also looking for the market to reach the bigger audience as they also plan to reach the rural schools well.

Technology innovation

Carayannis et al. cited in Diaconu (2015, p.8) defines technological innovation as "a new technology that creates new products, hence new opportunities for the industry".Taking technological innovation from the economic sector context, Scherer (2001) assert that technological innovation is the economic function by which emerging innovations are introduced in the production and consumption phase, through the use of a new material, ingredient or implementation of a new part of the product or service. This suggests that innovation is the development and adoption of new practices, taking place through the creation of a new product or an improved good or service. European commission, (2005) is of the view that technological innovation involves the assessment of scientific and technological activities. It is important to note that, in light of the above definitions, technological innovation is a gradual continuation towards the introduction of new knowledge or unconventional ways of doing things, therefore technological innovation involves continual development that is new to the organization.

Technology acceptance Model as the theory on technological innovation

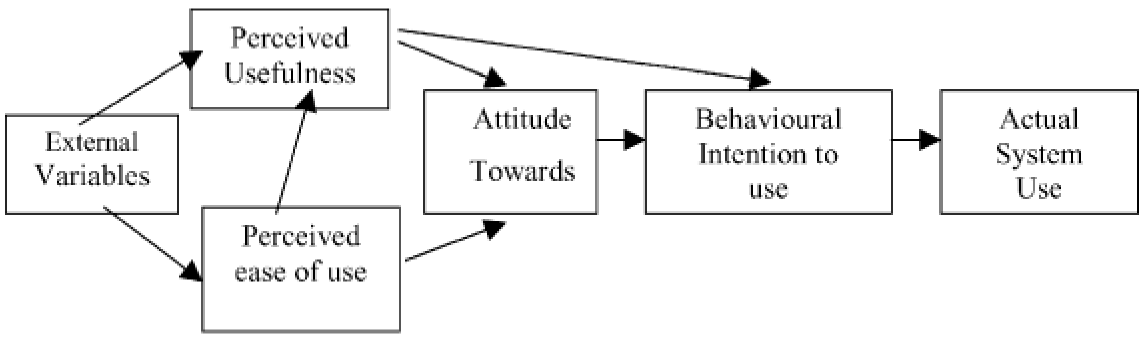

Figure 1: The original TAM (Legris et al. 2003)

Although TAM has some weaknesses, the Model has been extensively utilized in the measurement of emerging technologies and it will be used to determine the attitude towards adopting new technology and evaluating the new technological innovation. A short explanation of the Tam model follows.

The technology acceptance model.

The Technology Acceptance model originates from Fred Davis, it is an information systems theory. It is believed that it demonstrates how a technology is accepted and used by users. It is determined by two variables that will decide whether a consumer will consider and utilize a technological invention again after it has been introduced to them. Those considerations include:

i. Perceived usefulness (PU) – the degree to which the user feels that using a system/device improves their efficiency and satisfies his/ her needs to determine if they will accept and use it again.
ii. Perceived ease of use (PEOU) – this is the extent to which the user believes that using a certain system would be less taxing/ free of effort.

The key critique of the theory is that there is no strong correlation between intention-to- and the actual usage. It is also debated that the desire to utilize a system does not necessarily imply that a person will actually use it as time gap may bring new possibilities and feelings.

Technological Strategies

Below is a list of just some "new technologies" and practices. Some, have been around for quite a while. Management can invest in some of these technologies: Outsourcing, Viral and Blog Marketing, Crow Sourcing, Open source, Enterprise 2, Search engine marketing, Social Media, Business 2

Research and Development

Research and Development is what organisations undergo for innovation and the introduction of future new products and services adding to the existing offering so as to be ahead of competitors. It is separated from the operational activities and therefore does not give immediate profit or revenue (Kenton: 2020). Technology R&D on the other hand has to do with future inventions, designs, improvements as well as the construction of new equipment, machinery and products. R&D can be outsourced for reasons of size and cost however the capital risk-adjusted must be estimated against the R&D expenditures as payoffs will only happen in the future (Jeffress: 2020)

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