BSS310 Project GROUP 101

Authors: Jan-Hendrik Brink, u23694956 Derich Ben Havenga, (student num) Nollie, (student num)

April 10, 2025

PART A

1 Problem Identification

1.1 Key issues

There are many behavioural disorders that affect human comfort and living standards. One of the most common behavioural disorders is Attention Deficit Hyperactivity Disorder (ADHD). ADHD is characterised by the decline in focus over periods of time due to low brain activity prompting the brain to become hyperactive to reach healty activity levels (Zentall, 2006, p.50). Sufferers require external stimulation supplementary to the low stimulus activity to maintain focus (Ayres, 2005). Performing motor activity has been shown as a reliable way to reduce hyperactivity and distractibility in ADHD patients (Azrin, et. al 2007).

Current testemony indicate that the primary issue is that ADHD sufferers tend to loose attention when presented with information which can have negative affects on school performance as well as work-place relations as distractible workers are regarded as poor performers.

1.2 Affected population

ADHD has not shown any bearing on geographical location or ethnicity. ADHD is correlated with age showing that simptoms tend to decease with increasing age of patients (Josephine, et. al 2018). The simptoms are primarily present in groups that are required stay stationary and give attention to one activity for an extended period of time.

By this it is concluded that the affected population is children in school and young adults working white collar jobs.

1.3 Short commings of existing solutions

Existing solutions include fidget toys which altough effectivity is somewhat proven (Amanda .R 2011). These toys require the use of 1 or 2 hands, which can be a hinderince when concidering the use of a sufferer's hands in a class room or work setting, In the class room an fidget toy taking up a hand can make it difficult for the student to take notes, or a worker to use tools or type on a keyboard.

Another concern is that of noise, many existing fidget toys can produce noise especially when used veroucisously as is common with children. these toys also have a tendency to degrade over time causing the device to produce even more noise. The presence if noise makes these devices impractical for use in a classroom aswell as meetings or any other noise sensitive environments where sufferers will be required to focus.

1.4 Evidence to support the investment decision

According to a 2016 study on factors that promote resilience in youth with ADHD simptoms (Melissa R. Dvorsky). The single bigest factor is social acceptance. Thus the prority sould be to symptomatically treat ADHD symptoms with as little effect on the surrounding social environment.

1.5 Reframing the problem

1.6 Problem statement

2 Objectives and Operational requirements

2.1 business system's requirements

The business requires....

2.1.1 objectives

The business objects are

2.1.2 system's operational drivers

operations that drive business descisions ...

2.2 required capabilities

the business requires capabilities these required functions are are needed to achieve stated objectives

2.3 Physical embodiments for the functions

2.4 Needs of the business system

- 3 Market analysis
- 3.1 Target market
- 3.2 Market map to identify market gap
- 3.3 Porters's market forces
- 3.4 Competitive rivals
- 3.5 Supplier
- 3.6 Buyer
- 3.7 Threats
- 3.7.1 Threat of substitution
- 3.7.2 Threat of new entry
- 3.8 Value Proposition

4 Value chain design

4.1 Primary Activities

- 4.1.1 Inbound Logistics
- 4.1.2 Operations
- 4.1.3 Outbound Logistics
- 4.1.4 Marketing and sales
- 4.1.5 Service

4.2 Support Activities

- 4.2.1 Procurement
- 4.2.2 Technological development
- 4.2.3 Human resources management
- 4.2.4 Infrastructure

5 Overall project p	plan
---------------------	------

6	Overall project cash flow analysis

PART B

- 7 Production Systems
- 7.1 System Characteristics

8 Project scope and stakeholders

- 8.1 Project Scope
- 8.1.1 Deliverables
- 8.1.2 Constraints
- 8.1.3 Assumptions
- 8.2 Stakeholders
- 8.2.1 Internal Stakeholders
- 8.2.2 External Stakeholders

- 9 Project Plan
- 9.1 Project phases and deliverables
- 9.2 Work Beakdown
- 9.3 Structure
- 9.4 Network diagram

10 Budget

11 Project Budget

12 Logistics Systems

12.1 System Characteristics

13 Project scope and stakeholders

- 13.1 Project Scope
- 13.1.1 Deliverables
- 13.1.2 Constraints
- 13.1.3 Assumptions
- 13.2 Stakeholders
- 13.2.1 Internal Stakeholders
- 13.2.2 External Stakeholders

- 14 Project Plan
- 14.1 Project phases and deliverables
- 14.2 Work Beakdown
- 14.3 Structure
- 14.4 Network diagram

15 Budget

- 16 Project Budget
- 17 references