



Biomedical Engineering

Marketing
Course Code: UNR331
Level: 300
Allowed Time: 2 Hours
June. 16, 2016
Second 2015 /2016
Final Exam [50 Marks]



Faculty Of Engineering

All questions are in one page.

Answer ALL the questions.

Q.1) [4 Marks]

How to do customer needs assessment?

Q.2) [4 Marks]

Describe the consumer purchase decision five steps.

Q.3) [8 Marks]

How can marketing benefited from the following technological improvements:

- | | |
|--------------------------------------|--------------------------------|
| a) Global Positioning Systems (GPS). | b) Internet Enhanced Tracking. |
| c) Virtual Reality and Simulations. | d) Neuro-Research (MRI & EEG). |

Q.4) [8 Marks]

Fill in the Spaces:

- a) The four types of customers are.....,, and
- b) In family branding approach, new products are
- c) Public service advertising run advertisements through.....
- d) Skimming is a pricing strategy aims to.....

Q.5) [8 Marks]

What are the main advantages of brands for marketers?

Q.6) [8 Marks]

Create a SWOT analysis for biomedical company, selling X-ray equipment for MENA region.

Q.7) [10 Marks]

Marketing Plan covers the following sections: 1.Situation Analysis, 2.Target Audience, 3.Goals, 4. Strategies and Tactics, and 5.Budget Breakdown.

Describe these sections (in brief) of Marketing Plan for a "Rehabilitation Wheelchair".

All Best Wishes, Dr. Nabil Shalaby

(4)

Q1:-

How to do customer needs assessment:

- 1- listen to The Customer and ask him about his/her need, his demands, what he want, what benefit of him achieve, his requirements. The characteristics of The product/service he want. keep good relationship with customer.
- 2- Ask him/her some questions that help in define The product as, The range of price he could pay for it, what's The category. This questions also help in knowing if it for shopping or purchasing goods.
- 3- make The Customer choose/give him The choice of different products and explain The benefits of each one for him and what's distinguish them, make him take The choice.
- 4- Ask him for a feed back and eliminate the products that aren't face his needs.

and make a choice in The suitable product.

5. Repeat what the marketer understands and knows about the customer need and ask him if he'd to add any details or demands in the product. Then offer him an sales offer... ex; discount ten percent 10%. For a product. or, Keep you in touch with him and good relationship.
6. This also known by Technology tracking.

(4)

Q 2

Describe the consumer purchase decision five steps:-

[1] Recognize the need of a product (need)

اعتراف الحاجة / الحاجة
recognizing the need of product such
as a service of a good that face our
demands. ex: The food is the demand of
hunger or clothes for clothing, home, travel
...etc. الحاجة / الحاجة

[2] Search for the product.

البحث عن المنتج
search the product is an important step to
identify what I need. It could be by
asking friend, searching in social media,
search the internet, shopping, supermarket
--- etc. many methods for that.

[3] Evaluate the product that found in research

تقييم المنتج وجوده والقيمة
تقييم المنتج وجوده والقيمة
Evaluate the product from price

characteristics, brands, and choose the more suitable for my needs and cost.

[4] purchase the product.

شراء السلعة بعد اختيارها والتأكد من أن الأفضل بالنسبة له.

[5] After purchasing

بعد شراء السلعة ويتم من اقتناء العميل بالسلعة

خدمات ما بعد البيع

في مكان العميل كإعارة / الخدمه وجوره بالاختيار الموفق

خدمة المصارف

(3)

Q.3)

a) Global positioning system (Gps): Markets and marketers benefit from Gps as it help them to track and follow the customers. It help them to find the location of the ex shop, Market. Also help marketers to know if the customer is in their markets and knowing their desires and needs.

b) Internet Enhanced Tracking: Internet enhanced Tracking and make it effective to the marketers to track the customers. The marketer can know the websites that the customer visits, the age of visiting customer, if they males or female their categories and their employees. Also Internet tracking is a good method to recognize the customers need, demands and what way they see and what thing they search for/like..

c) virtual Reality and stimulation: It's another method to know what's customers need, demand and what's the opinion of customers toward to

products that's existed. It could be represented by Computer program that stimulate the virtual world and make it virtual asking Customers about what they need, opinion in products and it could be by asking Customers in virtual or reality and make it close with them.
 ايضاً هو العالم الافتراضي الذي يسأل العملاء عن احتياجاتهم وآرائهم في المنتجات ويمكن أن يكون ذلك عن طريق برنامج حاسوبي يحاكي العالم الافتراضي أو عن طريق سؤال العملاء في الواقع.

d) Neuro-Research (MRI, EEG) : MRI, EEG
It's a Technological Method to identify Customers need. Researcher marketers could use MRI and EEG sensors to measure/record the brain effected by stimulus such as (Imaging or sound stimulus) and record the result of brain stimulated. That's benefit for Market researchers.

هو تسجيل التأثيرات على الدماغ باستخدام أجهزة (MRI, EEG) وذلك عن طريق عرض صور/صوت (Imaging or sound stimulus) وتسجيل النتيجة من الدماغ المحفز. وهذا من المنافع للباحثين في السوق.

③

Q 4. Fill in the spaces.

a) The four types of customers are existing customers, former customer, potential customer and repentive customer.

b) In family branding approach, new products are introduced into the market under the existing brand before.

← في إطار العائلة التجارية (ماركة) موجودة مسبقاً
← أو علامة تجارية دخلت السوق تحت اسم ماركة موجودة مسبقاً أو (المنتجات) ماركة موجودة مسبقاً.

c) public service advertising run advertisement through (article in magazine, public relationships, Advertising) Not paid.

or: Public Service advertising run advertisement through (TV, Radio, magazines, Journals) and advertisement and traditional marketing (non-paid) promotion (ترويج غير مدفوع).

d) Skimming is a pricing strategy aims to positioning the new product of ex. company by putting a high price for it at the initial of production and marketing in the market to attract special customers to buy it. Ex: Apple (iPhone) Company and it's the Reverse of penetrating pricing.

مفروضه طرح بالا به اول ما بتزله و
دولت كران و كرفه و كرفه و كرفه

(8)

@.5)

The main advantages of brands for marketers:

- 1- Easy product recognition: as the brand and many people know it, so it's easy for people to recognize the product of this brand and may buy it and it gain the profit for this owner company.
- 2- Loyalty to the brand: The companies of brands can get a loyalty of specific customers and gain their confidence so some customers buy the brand's product without searching other competitive products.
- 3- The facility to new product in market and recognize it, as the brand has a loyalty and reputation, so when the brand company (2k) new product in market it faces a good welcome from customers.
- 4- the equity (The value of the brand) brand when it's a successful and famous It has a high value (high financial value)

So many companies would by the brand with a lot of money to gain it's profits when product goods under it's name.

بہت سے کمپنیاں برانڈ کے نام پر اپنے منافع حاصل کرنے کے لیے بہت سے پیسے خرچ کرتی ہیں۔

5- Brand gives a value and pricing for it's product and level of value of quality, that distinguish it from other products and competitors.

3

Q.6) Create Swot Analysis

⇒ Biomedical Company sells X-ray For MENA

Swot S → strength O → opportunities
W → weakness T → Threats

Strength (Internal)

- 1- The greatest company in MENA
- 2- High qualified employees.
- 3- شركة ذات رأس مال كبير
- 4- Good maintenance service
- 5- Owning many (فرع) MENA
- 6- has a good staff of biomedical engineers.
- 7- good reputation.

Weakness (Internal)

- 1- Lack of labours (قوى عاملة)
- 2- Lack of experience in the company's marketers.
- 3- Some problems in internal management.
- 4- lack of devices in some branches (نقص الأجهزة في بعض الفروع)
- 5- Lack of experience in the company's marketers (نقص الخبرة في فروع الشركة)

Opportunities (external)

- 1- New project in Egypt needs X-ray devices.
- 2- The country (الدولة) exposes (تعرض) empty land for buying (شراء) new technology in X-ray devices will be in hand and application (تقنية جديدة في مجال التطبيق).
- 3- new technology in X-ray devices will be in hand and application (تقنية جديدة في مجال التطبيق).

Threats (external)

- 1- Many Competitors arise in MENA have a good reputation and good service.
- 2- Some laws in south africa prevent to open a (فرع) brand for the company (منع الشركة من فتح فرع آخر في جنوب إفريقيا).
- 3- Weakness of sponsor company may affect our products.

(10)

Q.7):-

to make a marketing plan for
"Rehabilitation wheelchair"

1- Situation Analysis: تحليل الموقف الحالي
Analyze the current situation of the market by:

- 1- define the number of hospitals the need the Rehabilitation wheel chair in the city
- 2- define the number of patients that suffer from (polio) شلل الأطفال or need that chair
- 3- define the other competitive companies that produce this product and evaluate them

We could make it by SWOT Analysis to assist and evaluate our position

4- define the no. of products that should be produced to cover this region and give profit.

2- Target Audience:

defining Target audience is a very important to marketing plans. Target audience are people that need this product. In our situation:

- 1- Target audiences are people who suffer from diseases like (polio) disability.
- 2- Knowing in any region they are exist and spread. (patient, people).
- 3- define the no. of patient that is in hospital and suffer from this disease.

3- Goals:

We identify the goals (increasing the sales) and arrange it then make a strategy plane and tactics to achieve it. It could be:

4- ^{strategy plane} made by (SMART) analysis for goals.

① S → specific: ex. "Rehabilitation chairs" and make it cover all hospital.

② M → Measurable: ex. To make the goal or increasing the sales increased by 10% in first quarter

of a year, 15% in second quarter, 10% in fourth and third quarter or
→ Buying 200 product within a year.

A → achievable ^{يُمكن تحقيقه}
as it could be achieved (10% First quarter
15% 2nd quarter ---)
and make efforts to achieve it.

R → Realistic → ^{واقعي}
It means it's realistic to buy 200
"Rehabilitation wheelchair" in a year.

T → Timed → specific time (limited)
^{زمن محدد}

Also strategy involve advertising and promotions
strategy plane (time, percentage) so we should
increase products & It also involve (promotion)

5 Budget Breakdown: ^{تفصيل الميزانية}

We Count and assist the budget we
need for produce many products.

1 - Budget for advertising and promotion.

2 - Budget for produce The "Rehabilitation Chair".

3 - Budget for distribution of it.

at the end we compute / control the budget and control it as we could pay for.