A
SYNOPSIS
ON

"Opportunity Cost"

Presented by: - SY-IT

STUDENTS

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UNDER THE GUIDANCE OF

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DEPARTMENT OF INFORMATION

TECHNOLOGY. YEAR

2022-2023

DR. J. J. MAGDUM COLLEGE OF ENGINEERING, JAYSINGPUR. DEPARTMENT OF INFORMATION TECHNOLOGY.

CERTIFICATE

This is to certify that,

Mr. Hulwan Shantanu Jaydeep

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Students of Second Year Information Technology of Dr. J. J. Magdum College of Engineering,

Jaysingpur has submitted project Synopsis on the subject

"Opportunity Cost"

Under my supervision and guidance in a satisfactory manner in the academic year 2022 – 2023 Sem II.

Place:
Jaysingpur.

Date:

GUIDE	HOD	PRINCIPAL
Prof. R. A. Sanadi	Prof. R. A. Sanadi	Prof. S. B. Patil

Academic year

2022-2023

INDEX

ABSTRACT

Welcome to Opportunity Cost! It is an international collegiate programming (ACM-ICPC) Problem in which priority-based concept. There is x is price, y is performance and z are user- friendliness. In these problem statement you are forced to make some sacrifices the aspects you care about against each other and choosing the phone that achieves the best compromise. (where "best" of course depends on what your priorities happen to be).

One way of measuring this sacrifice is known as the opportunity cost, which (for the purposes of this problem) we define as follows. In this problem statement we assume that these values are measured on a comparable numeric scale higher is better. Example of these problem statement is n available phones, and the values (X_i, Y_i, Z_i) represent the (price, performance, user-friendliness) of the ith phone, then the opportunity cost is defined as n= number of available phones, x = price of the phone, y= performance of the phone, z= user-friendliness.

<u>INTRODUCTION</u>

Opportunity cost is the value of the next best thing you give up whenever you make a decision. It is "the loss of potential gain from other alternatives when one alternative is chosen". The idea of opportunity cost was first begun by Johan Stuart Mill. The utility has to be more than the opportunity cost for it to do be a good choice in economic.

Principle of opportunity cost is that the cost of one item is the lost opportunity to do or consume something else; in short opportunity cost is the value of the next best alternative. The concept of opportunity cost (for alternative cost) expresses the basic relationship between scarcity and choice. If no object or activity that is valued by anyone is scarce, all demand for all person and in all periodcan be satisfied.

Opportunity cost is the potential profit that an individual, investor, or business loses when choosing one alternative over another. Opportunity cost apply to many aspects of life decision. Often, money becomes the root causes decision-making. If you decide to spend money on a vacation and you delay your home's remodel, then your opportunity cost is the benefit living in a renovated home.

The concept of opportunity cost helps us to choose the best possible option among all the available option. It helps us use every possible resource tactfully and efficient and hence, maximum economic profits. Opportunity cost is the cost of taking one decision over another. This is not only financial, but also in time, efforts and utility. Opportunity cost can lead to optimal decision making when factor such as price, time, performance, user-friendliness is considered. It's considered three potential options and the benefits of each.

Most important consideration is: -

1) Price.

2) Performance.

3) User-friendliness.

Literature Review

RELEVANCE OF WORK

Opportunity cost is the value or benefit of an alternative choice compared to the value of what is chosen. The concept of opportunity cost is used in decision-making to help individuals and organizations make better choices, primarily by considering the alternatives.

Opportunity Cost helps a manufacturer to determine whether to produce or not. He can assess the economic benefit of going for a production activity by comparing it with the option of not producing at all. He may invest the same amount of money, time, and resources in another business or Opportunity.

Therefore, he will be able to decide which option gives him more returns and to opt for production or not.

This concept enables a manufacturer to decide what to produce. The opportunity cost of building a product is the loss of the opportunity to provide another product. A producer may choose to go for product A after evaluating the benefits he will derive if he produces product B.

ADVANTAGES:
1. Awareness of lost Opportunity.
2. Relative price.
3. Evaluation of various Alternative.
4. Identification of Relative Profitable Opportunity.
5. Draw attention to balancing automated and manual testing.
6. Benefits as well as cost.
7. Risk mitigation capability.
8. More realistic comparison between automated and manual testing.

Benefits of opportunity cost:
1) Brands Will Use VR to Improve Customer Loyalty.
2) There Will Be Changes in Teleconferencing.
3) Virtual Reality Will Improve E-Commerce for Products That Require Fit
4) There Will Be Changes in the Education Market.
5) There Will Be an Improved Design Process for Products.
6) VR Will Offer the Opportunity to Have an "Anywhere" Experience

PROPOSED WORK

We will be using unreal C++ to package our app. We will use C++ concept and this problem is solved. This problem is solved in future the people give the importance for then people choose the any option. We have seen complete video guide for how to problem is solved. We will discuss this problem for teacher.

Hardware Requirements:

In hardware requirements we require all those components which will provide us the platform for the development of the project. The minimum hardware required for the development of this project is as follows-

Laptop – Dell G15

Processor – i5

Software Requirements:

Software's can be defined as programs which run on our computer. It provides the relationship between the human and a computer. It is very important to run software to function the computer. Various software's are needed in this project for its development.

Which are as follows: -

Language: C++

PROPOSED METHODOLOGY

We aim to bring real time Opportunity cost is the profit lost when one alternative is selected over another. The concept is useful simply as a reminder to examine all reasonable alternatives beforemaking a decision.

USER INTERFACE:

1. ACQUISITION OF NEW CUSTOMERS:

A successful UI design contributes to a positive user experience, which is a competitive advantage. The effort to provide a consumer-tailored interface may be a brand factor differentiator. In this way, it attracts new customers and consequently increases sales. Thus, the bet on user interface design is able to enhance business, maximizing revenue opportunities.

2. INCREASED CUSTOMER ENGAGEMENT AND RETENTION:

The development of an interface to better navigate and simplify research attracts not only new users but also makes them want to continue their digital experience. In this way, there is a lower probability of bounce and a higher conversion rate. A well-designed user interface encourages customer engagement, which leads to becoming more loyal to the brand. This is very important, since in the current digital environment, with increasing competition and rapid technological advancements, it is essential that business invest in customer retention strategies.

3. LOWER DEVELOPMENT COSTS:

A well-planned design from the start avoids future problems. This includes any training needs and interface support, such as correcting navigation errors, eliminating non-relevant functions and features, or adjusting the design to be accessible and functional. All of this involves high costs. Thus, an intuitive and user-friendly interface benefits not only the users but also the business, as it causes fewer problems and frustrations to designers and avoids additional costs and features. The projection of the user interface design, when done well, reduces costs, time and effort throughout the later stages, which means that the strategic decisions taken at the start of the project determinethe cost and performance in the future.

4. LOWER CUSTOMER SUPPORT COSTS:

Usually, users express doubts or difficulties when navigating the interface. However, if the interface is intuitive, customer contact with the support service will be less frequent. This way, the company benefits by reducing costs in customer support. A simple and functional interface minimizes occurrences of errors, doubts and unwanted actions in the navigation process, avoidingcustomer support costs

FACILITY AVAILABLE:

Facilities Available:

- Microsoft visual studio code.
- Atom by GITHUB.
- Laptop.
- SDD 512 GB
- Window 11.
- ACM ICPC world Finals 2020-KTH.
- ACM ICPC – Top-coder.
- Visual studio 2022.
- Android phone.

Guide: **Student:**

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                                                     Jarag Dnyaneshwar Sampat.

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