

Problem Solving (A3) Report

Topic: Online Lottery

Date: January 22, 2021

Name: Hermes Colon

1. Identify a Problem	PLAN
<ul style="list-style-type: none"><li><b>Background Context</b><ul style="list-style-type: none"><li>The lottery is an old and very popular market in the world. The pioneers in regulating this game were the Italians back in 1448 with the introduction of the Lotto. Since that time there have not been many changes in the way tickets are purchased</li></ul></li><li><b>Current State</b><ul style="list-style-type: none"><li>The people don't have neither interest or time to go buy a lottery ticket. Also, they do not know places nearby to go buy it and most importantly they take care of their own personal safety due to the pandemic. In 2020 the Puerto Rico lottery lost \$ 120 million in the two and a half months that they were not active due to the pandemic.</li></ul></li></ul>	

2. Set the Target	PLAN
<ul style="list-style-type: none"><li>This website (Online Lottery) will allow more users to play lottery in a way that will increase its profits and the chance for players to win prizes.</li><li>It will also help people not have to risk their health and they can buy their ticket from their own home.</li></ul>	

3. Analyze the Causes	PLAN
<p><b>Root cause:</b> People do not have the accessibility and time to buy tickets. There must be extreme security with user data.</p> <div><div>People often do not have the time to buy tickets.</div><div>Why?</div><div>They do not have an accessible place or time.</div><div>Why?</div><div>They do not have a secure website to buy their tickets.</div></div> <p>Possible causes:</p> <ul style="list-style-type: none"><li>Employees are not aware of the new technology.</li><li>Older people don't know how to use the internet.</li><li>Managers are not aware of the positive impact of these technologies; thus, they stick with what they have.</li></ul>	

4. Propose & Implement Countermeasures

**Proposal:** Develop a web application and cloud infrastructure with updated technology. This will allow users of any age (18+) to buy their lottery ticket without any problem and completely secure from their cell phone or computer. Making this web application would be more accessible to people and generate more income for the government.

Cause	Countermeasure	Who?
The lottery is not accessible to everyone.	Create a user-friendly web application for all ages (18+).	Users
	Design a new cloud infrastructure using new technology and cloud computing resources that would be secure all the information of the user.	IT department & Company

5. Check/Evaluate	CHECK
<p><b>Questions to address:</b></p> <ul style="list-style-type: none"><li>Do we have many participants?<ul style="list-style-type: none"><li>If not, why?</li></ul></li><li>Are older persons having trouble understanding the user interface?<ul style="list-style-type: none"><li>If not, how can be improved?</li></ul></li><li>Has the network experience any security breaches?<ul style="list-style-type: none"><li>If yes, then review every security measure applied into the network.</li></ul></li><li>The system still can't handle heavy workloads?<ul style="list-style-type: none"><li>If not, why?</li></ul></li></ul>	

6. Act and/or Standardize	ACT
<p><b>Questions to address:</b></p> <ul style="list-style-type: none"><li>How we can make the process of buying tickets easier and safer</li><li>How can we ensure that people continue to use the website?<ul style="list-style-type: none"><li>Marketing of the website</li><li>Provide rewards for website use (example: gain one free ticket every 25 tickets buy)</li><li>Keep the IT personal up to date with the latest technologies.</li></ul></li><li>How can we keep improving the user experience?<ul style="list-style-type: none"><li>Ask users for feedback.</li></ul></li></ul>	

