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ANTIGUA & BARBUDA CUSTOMS & EXCISE DIVISION

EMBRACING THE FUTURE OF COMMUNICATION THROUGH ARTIFICIAL INTELLIGENCE

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•Customs Organization main interactions with stakeholders:

- Provision of information
- Assistance/troubleshooting activities for customs systems.

EMBRACING THE FUTURE OF COMMUNICATION THROUGH ARTIFICIAL INTELLIGENCE



Areas for integration of Al Technologies:
Automated Artificial Intelligence Help Desk
Al-Driven Website Content



AUTOMATED AI HELP DESK

Current Solution

- Dedicated Help-desk staff
- Atlassian Jira Package
- Issues recorded, ticketed and assigned to technical officers



<u>Challenges</u>

- Limited human resource for dedicated help desk
- Help desk staff overwhelmed
- Attention due customers can be compromised
- Repetitive issues



Proposed Solution

- Automated help desk agents, implemented as Alchatbots,
- Allows for human resources to be utilized to a greater level of efficiency and productivity, on the more technical issues
- Al assistant functions as first point of contact for the user for troubleshooting
- Guides user actions through direct conversation or typed chat.



Implementation

- Train Al-bot in Natural Language understanding and Enterprise Language understanding
- Jira Database may used as a dataset for train the Al Chat-bot
- FAQ Data may also be used for training.
- System should at least be able to proficiently address most frequently occurring issues.



Future Enhancements

- Evolution to Al-worker
- Handle issues on its own
- Perform actions
- Initiate process flow.

AI-DRIVEN WEBSITE CONTENT



Current Solution

- The Antigua and Barbuda Customs website: http://customs.gov.ag
- Information repository
- Customs procedures, Legislation, Trade information, ASYCUDA World documentation, relevant forms and contact information.

[©]AI-DRIVEN WEBSITE CONTENT (Cont'd)



<u>Challenges</u>

- Website usage statistics not captured and/or effectively utilized
- Lacking user engagement and interactivity
- Static content
- Does not provide content that fulfils needs of all possible stakeholders
- Currently no feedback mechanisms

PAI-DRIVEN WEBSITE CONTENT (Cont'd)



Proposed Solution

- Enhanced website content
- Machine learning applied to tailor website content
- Easier, quicker searches and streamlined user experience

^oAI-DRIVEN WEBSITE CONTENT (Cont'd)



Implementation

• User login credentials

 Data gathering: web traffic, types/categories of users accessing the site, tracking of user actions, most frequently accessed pages, length of time the average user remains on the site, the number of clicks to content

- Training on website usage statistics
- Data mining on trends in website usage

^oAI-DRIVEN WEBSITE CONTENT (Cont'd)



Future Enhancements

- Interactivity
- Feedback mechanisms
- Expand content

OTHER RECOMMENDATIONS



LIST OF RECOMMENDATIONS TO ENHANCE COMMUNICATIONS:

- Establish Kiosk in Public and Government areas
- Electronic billboards situated at all ports of entry.
- Electronic signage at the air and sea ports

 Creating apps and aid in procuring for android/apple devices; financial assistance required for development.

CONCLUSION



The Antigua and Barbuda Customs and Excise Division working together to contemporize our organization through

Sound leadership

• Vision

Hard work and dedication