

## Abstract

Evaluate and recommend enhanced ServiceNow services to improve current state operations and expand capabilities to support future growth. In short, the project focus is ultimately finding ways to integrate AI capabilities such as Virtual Agents and Chat Bots into the service support framework that will drive efficiencies with first pass routing, addresses limited and revolving staffing and will create a sustainable solution to address the increasing volume of support needs.

## Introduction

With increased student enrollment year over year, Covid19 pandemic related concerns, limited resourcing/staffing, and increasing volume of complex support needs across students and faculty, the need for a systemic support service to meet and exceed current state demands and evolve with future state dynamics is the key to success. Our team project is focused on how to improve and enhance the current service support operations of KSU UIT's team. The objective is to review the current state operations, gaps, strengths, and weaknesses and recommend people, process and technology enhancements leveraging ServiceNow.

## Research Question(s)

How best to deploy Virtual Agents to address current service support demands?  
 What staffing recommendations and deployment methodologies should be used with Live Chats?

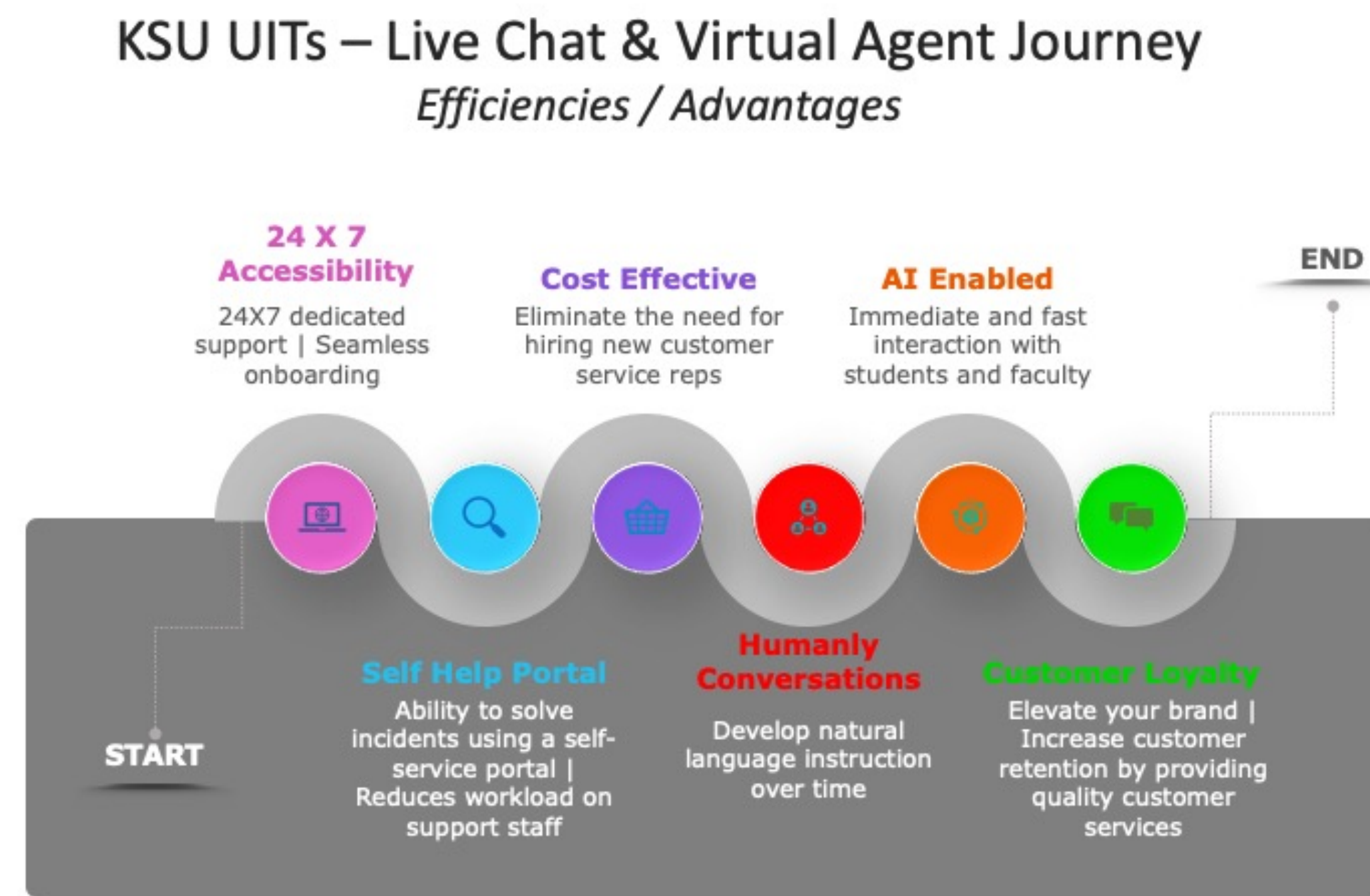
## Materials and Methods



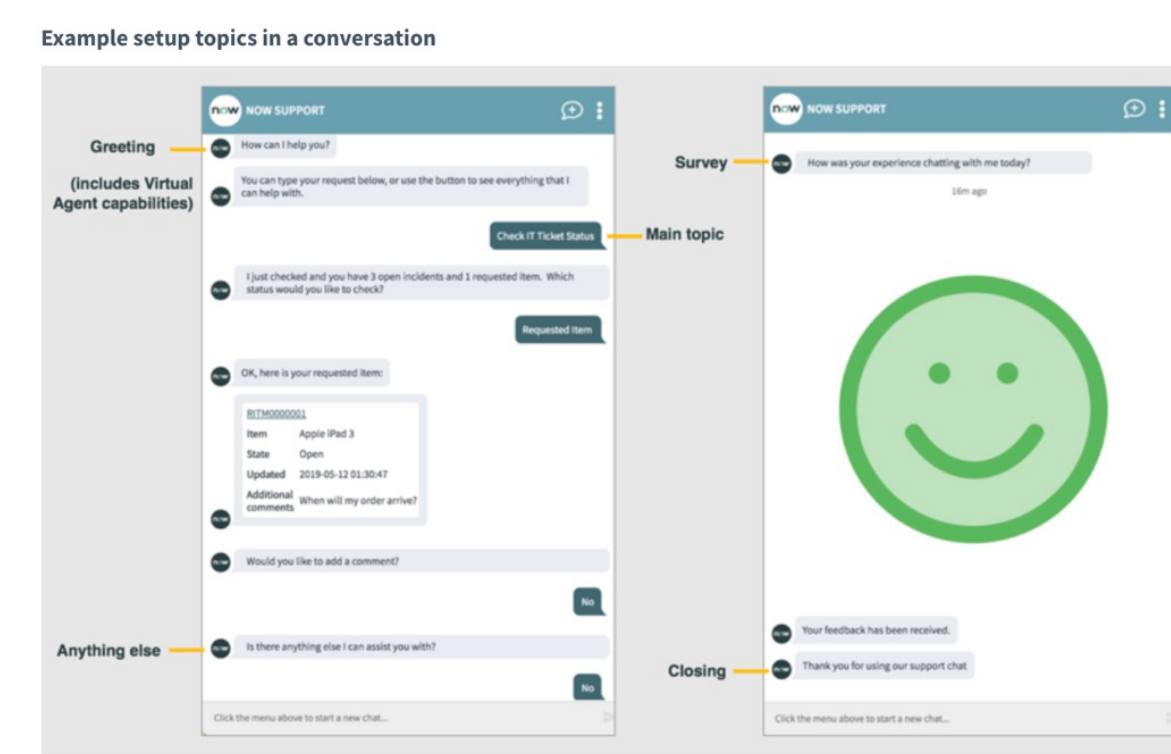
The main objective was to evaluate current KSU UIT's operating metrics/KPI's and support challenges, both from a technological and resources standpoint and provide recommendations on integrating Live Chats and Virtual Agents. We evaluated incident data from 2020 & 2021, categorized primary support channels, created a proposed staffing model and showcased Service Now virtual agent designer capabilities.

## Results

### Kennesaw State University UITs (University Information Technology Services)

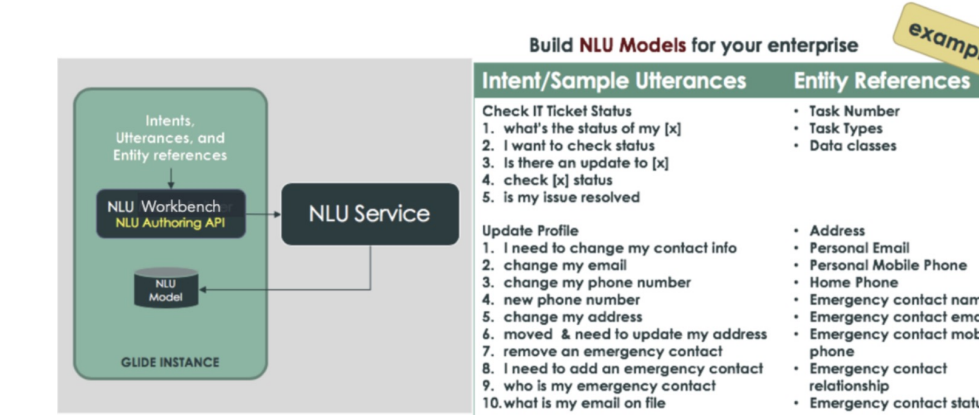


## Live Chats with ServiceNow



(ServiceNow, 2021)

## Natural Language Understanding



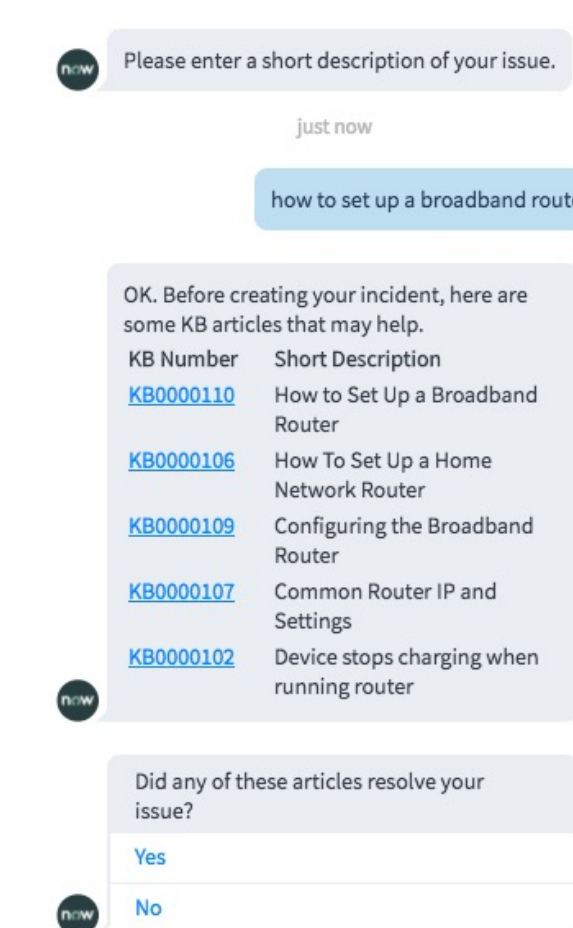
Number of email incidents in 2021: 29,356 YTD or 3,670 on average monthly  
 Chat type: Reactive  
 Chat Availability: 8 hours  
 Average Chat Duration: 12 minutes  
 Concurrent Chats per agent: 4

### Estimations:

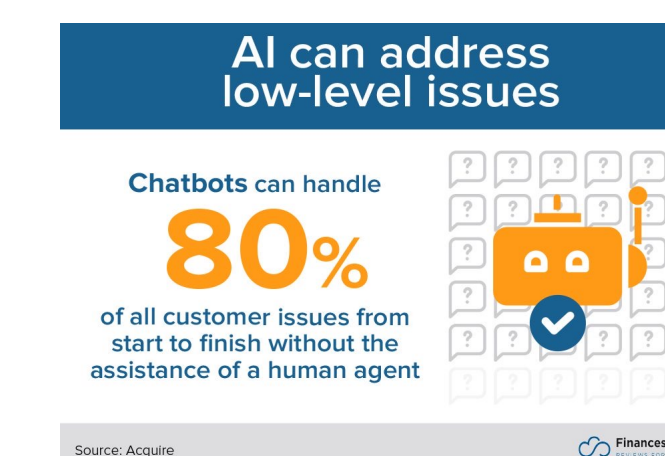
KSU has an estimated 367 chats per day as an initial target  
 KSU has an estimated 46 chats per hour (based on an 8-hour day)  
 KSU will need 2.3 agents per hour to accommodate Live Chat requests assuming each agent has 4 concurrent chat sessions active

## Virtual Agents with ServiceNow

### Knowledge-Based Support



- ✓ Automate Repetitive Tasks
- ✓ 24/7/365 Support
- ✓ Reduce manual intervention by 50%
- ✓ Easy to implement
- ✓ Adaptable for multiple departments
- ✓ Self-Service options



## Conclusions

In this research project, our team reviewed the current state of the KSU UITs support team by analyzing historical data, categorizing incident/support requests reviewing staffing model constraints and evaluating features of the ServiceNow platform. By leveraging the existing virtual agent and live chat capabilities of their ServiceNow application, KSU can greatly expand and improve upon their current service capabilities. Our research shows that implementing these AI functions can automate responses to consistent repetitive tasks and free up resources to work on value-add activities while at the same time create a sustainable support growth model.

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Christina Coronado – Executive Director Customer Support Services (KSU UITs)  
 Michael Lenna – Assistant Director Customer Support Services (KSU UITs)  
 Sammy Wong – Team Lead Service Desk Manager (KSU UITs)  
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Project Website: <https://sites.google.com/view/fall-2021-capstone-service-del/home>  
 Project Video: [https://youtu.be/Zx86tzb\\_dK8](https://youtu.be/Zx86tzb_dK8)

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