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Omnichannel Retail For A Seamless Grocery Shopping Experience

January 2020 Poster Session

BACK TO KIOSK MENU

Motivation / Background

1. **Transformation in competitive landscape**

amazon Walmart

2. **Change in shopping patterns**

~67% of all shopping events start online with customers exploring options on their personal devices

3. **Increase in customer expectations**

~71% of customers identified faster home delivery as their main expectation from retail stores

Key Question / Hypothesis

How should Retail Business Services help the brands it supports integrate online and offline channels to better serve its customers and provide a seamless grocery shopping experience?

Relevant Literature

Chopra, S. (2018). The evolution of omni-channel retailing and its impact on supply chains. Transportation Research Procedia, vol. 30, pp. 4-13

Chopra, S. (2016). How omni-channel can be the future of retailing. Decision (0304-0941), vol. 43(2), pp. 135-144

Hübner, A., Holzapfel, A., & Kuhn, H. (2016). Distribution systems in omni-channel retailing. Business Research, vol. 9(2), pp. 255-296

Bell, D., Gallino, S., & Moreno, A. (2014). How to Win in an Omnichannel World. MIT Sloan Management Review, vol. 56(1), pp. 45-54

Project's Scope

Retail Business Services — A Company of Ahold Delhaize USA

Peapod DIGITAL LABS

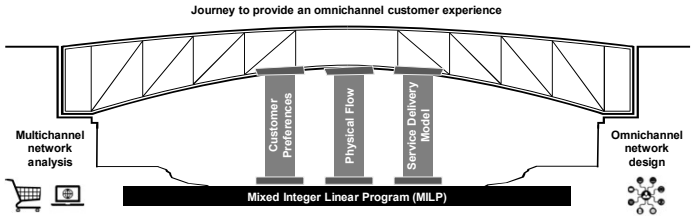
1. Zoom-in on the **Boston Metropolitan Area** (Greater Boston) — Boston
2. Focus on services to the **Stop & Shop Brand** — STOP&SHOP
3. Explore **physical flows to best integrate online and offline channels** — Multichannel ▶ Omnichannel

The Problem

How can Retail Business Services better support the retail brands it supports in meeting customers' increasing demand while remaining operationally efficient and cost-effective?

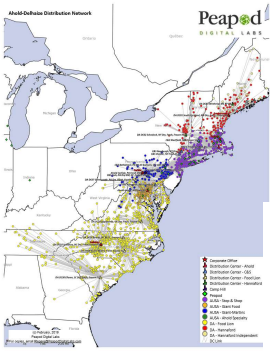
- Should the company use the current brick & mortar facilities to fulfill online orders?
- Should it solely use dedicated home delivery distribution centers?

Methodology

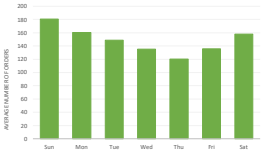


Initial Results

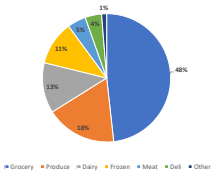
Ahold Delhaize USA's Local Brands' offline and online distribution network



Average number of online orders per day in 2019 (YTD)



Percentage of cases shipped by product type in 2019 (YTD)



Expected Contribution

- **An optimization model that helps Retail Business Services better services Ahold Delhaize USA's local brands to meet the customers' increasing demand while remaining operationally efficient and cost-effective**
- **Replicable insights about online and offline channel integration that can potentially be expanded into other areas such as the New York Metropolitan Area as well as other brands that are part of the Ahold Delhaize USA brand portfolio**

Nikhil Ganapathi



Wassim Aouad

