

# Where Are the **Hottest** Shelves?

**MSIM601: Introduction to Modeling and Simulation**  
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# Importance of Product Placement

A diagram consisting of three circles connected by a vertical line, with a diagonal line extending from the top and bottom circles. The top circle is teal, the middle is yellow, and the bottom is orange. Each circle is connected to a horizontal bar of the same color containing text.

Critical to the successful of retail industry

Influence the buying choices

The difference between 5 units and 1000 units



# Placement Strategies

## Block Placement

- related items

## Vertical Placement

- more than one shelf level

## Commercial Placement

- higher perceived value

## Margin Product Placement

- more profit

## Market Share Placement

- highest revenue generators



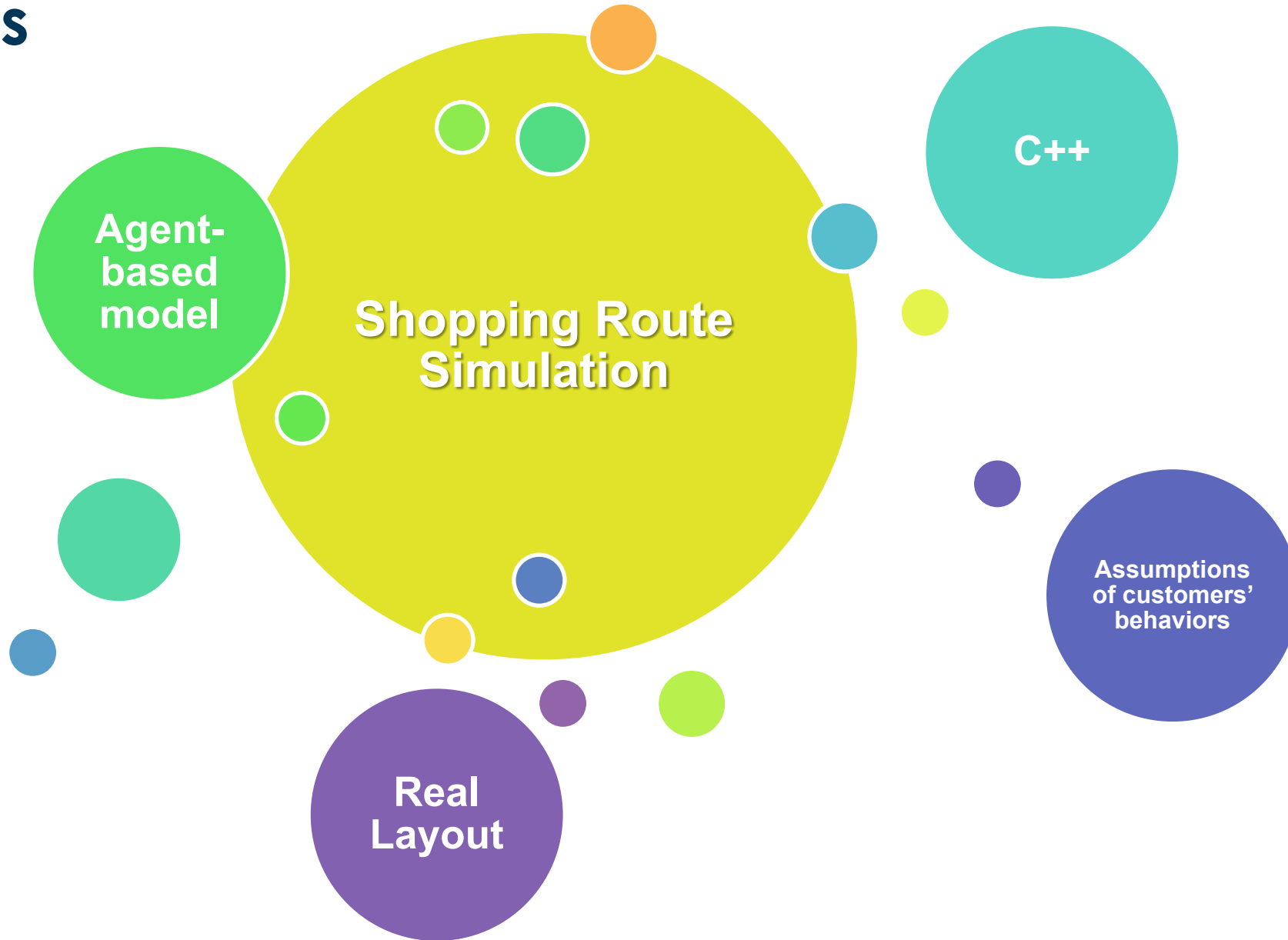
# Common Prerequisite



**Project Purpose:** find those **hottest shelves** by simulating customers' shopping route



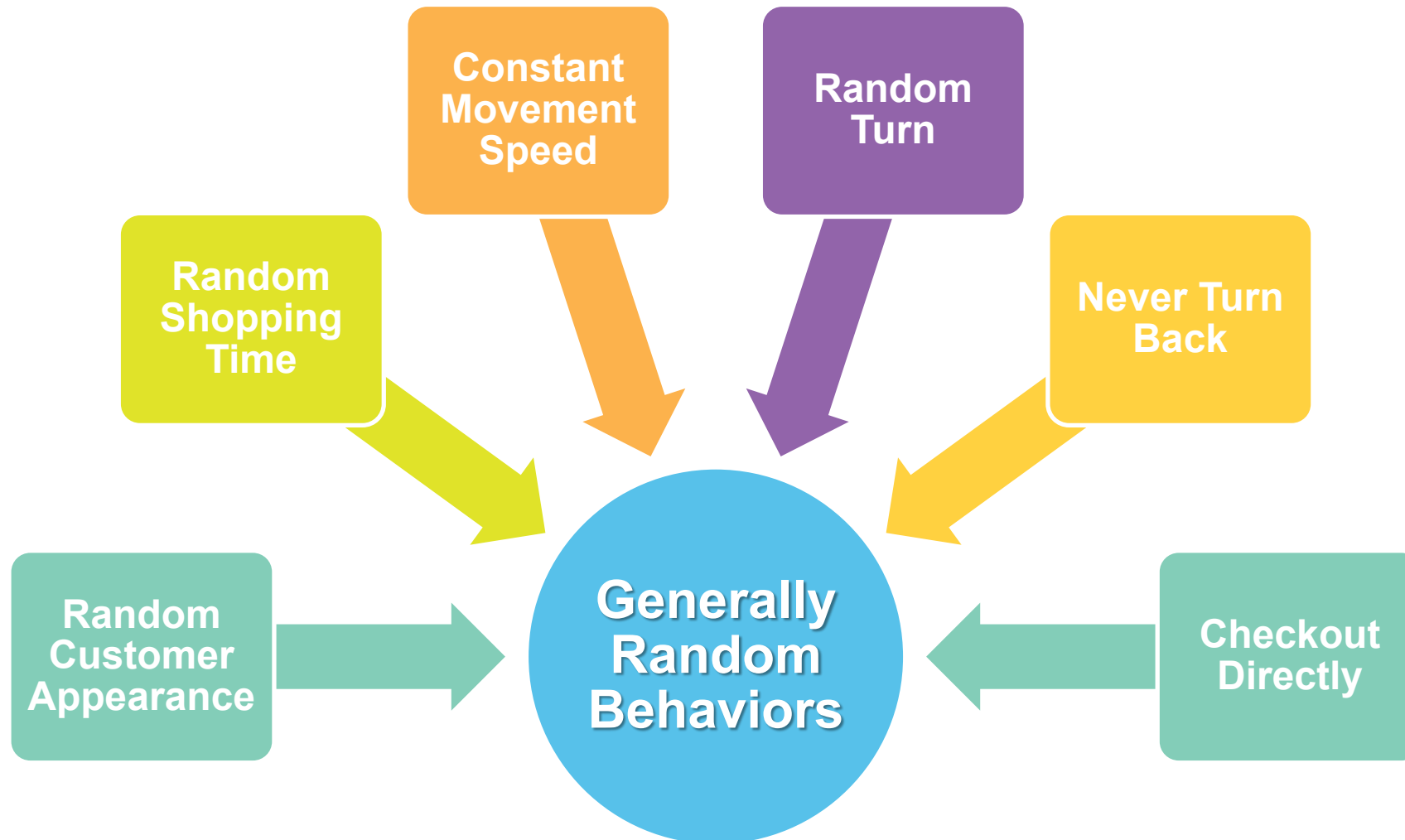
# Methods





# Assumptions

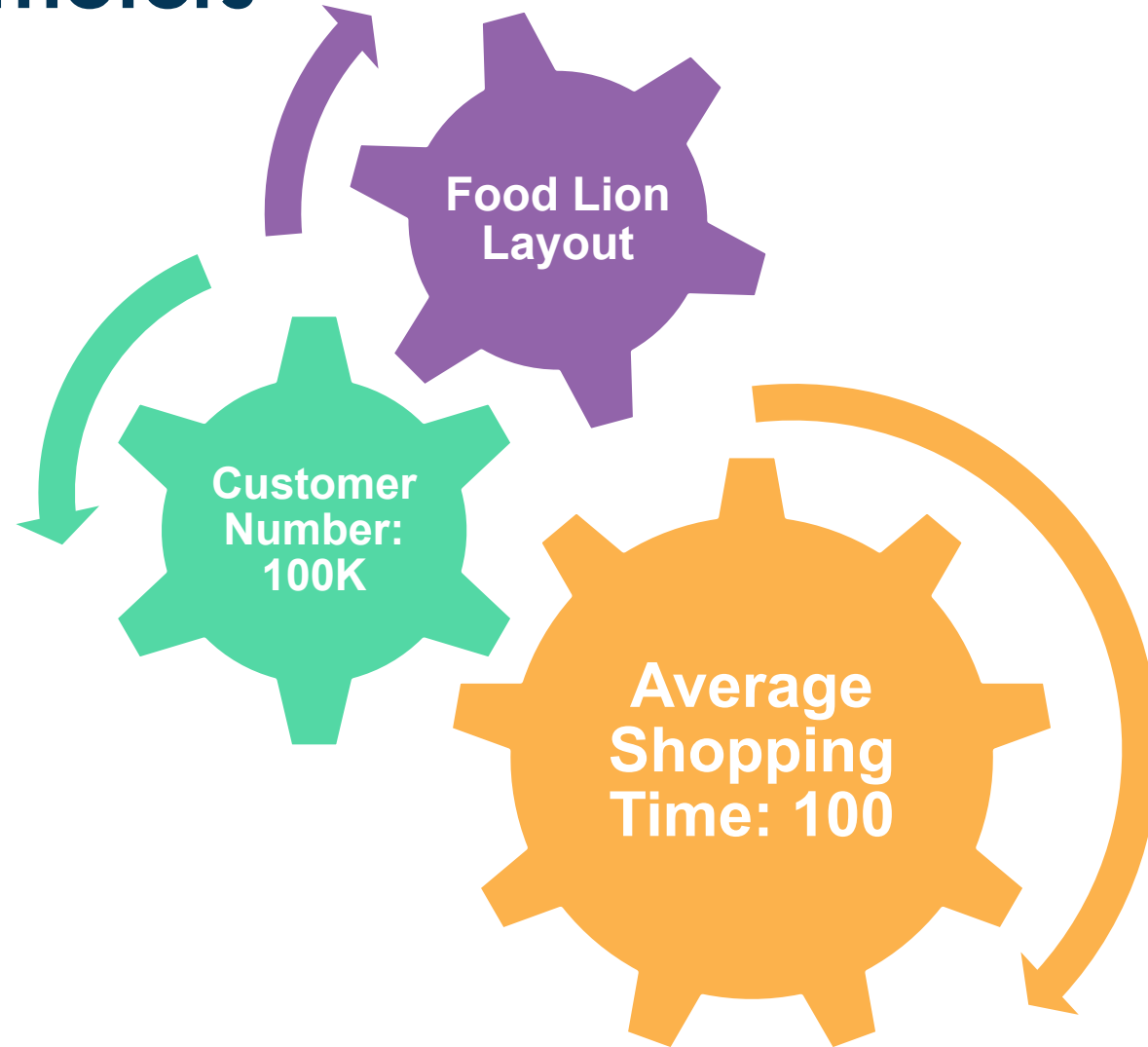
Only aimless (no specific products want to buy) customers should be considered







# Simulation Parameters



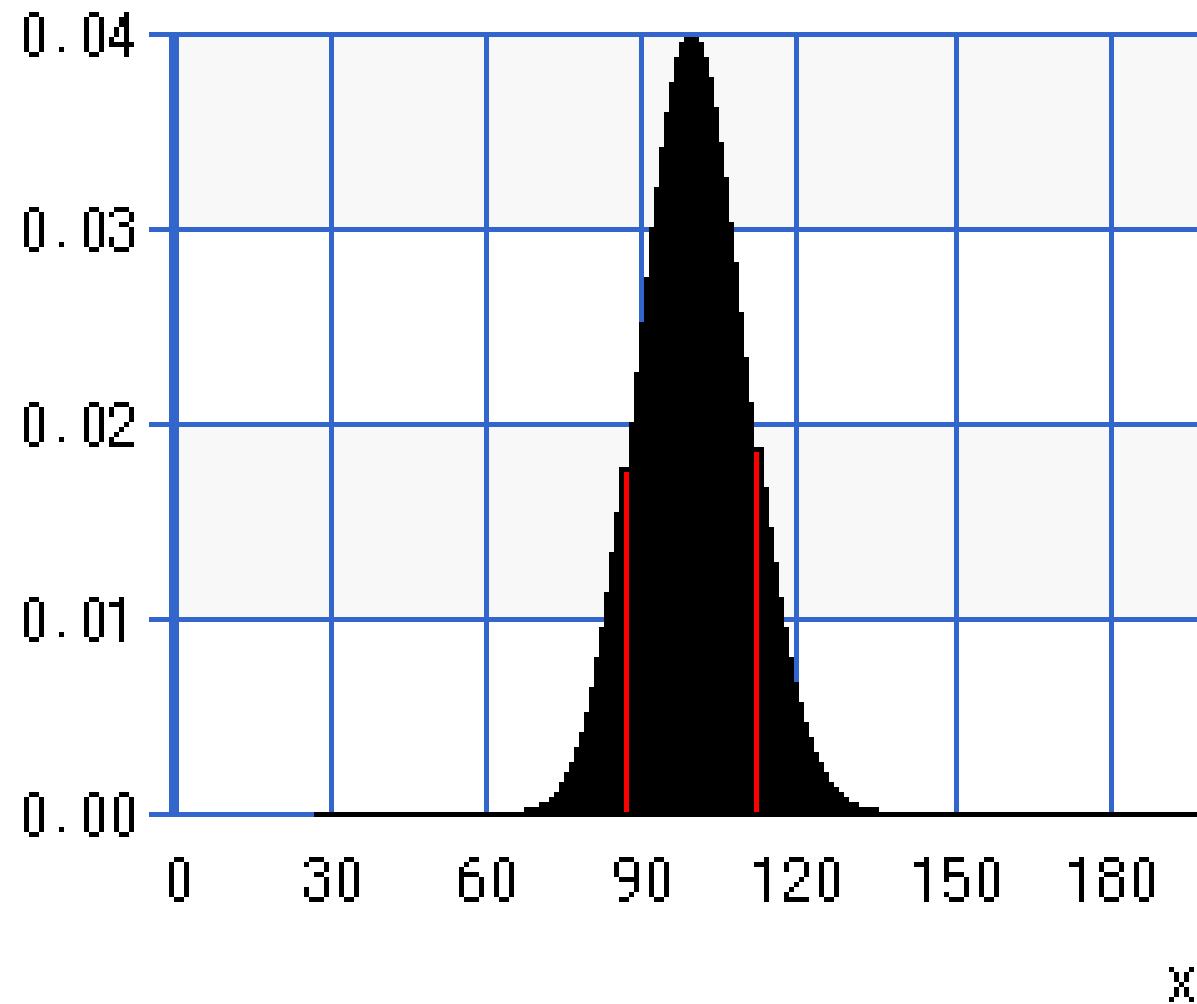


# Layout





# Shopping Time Distribution



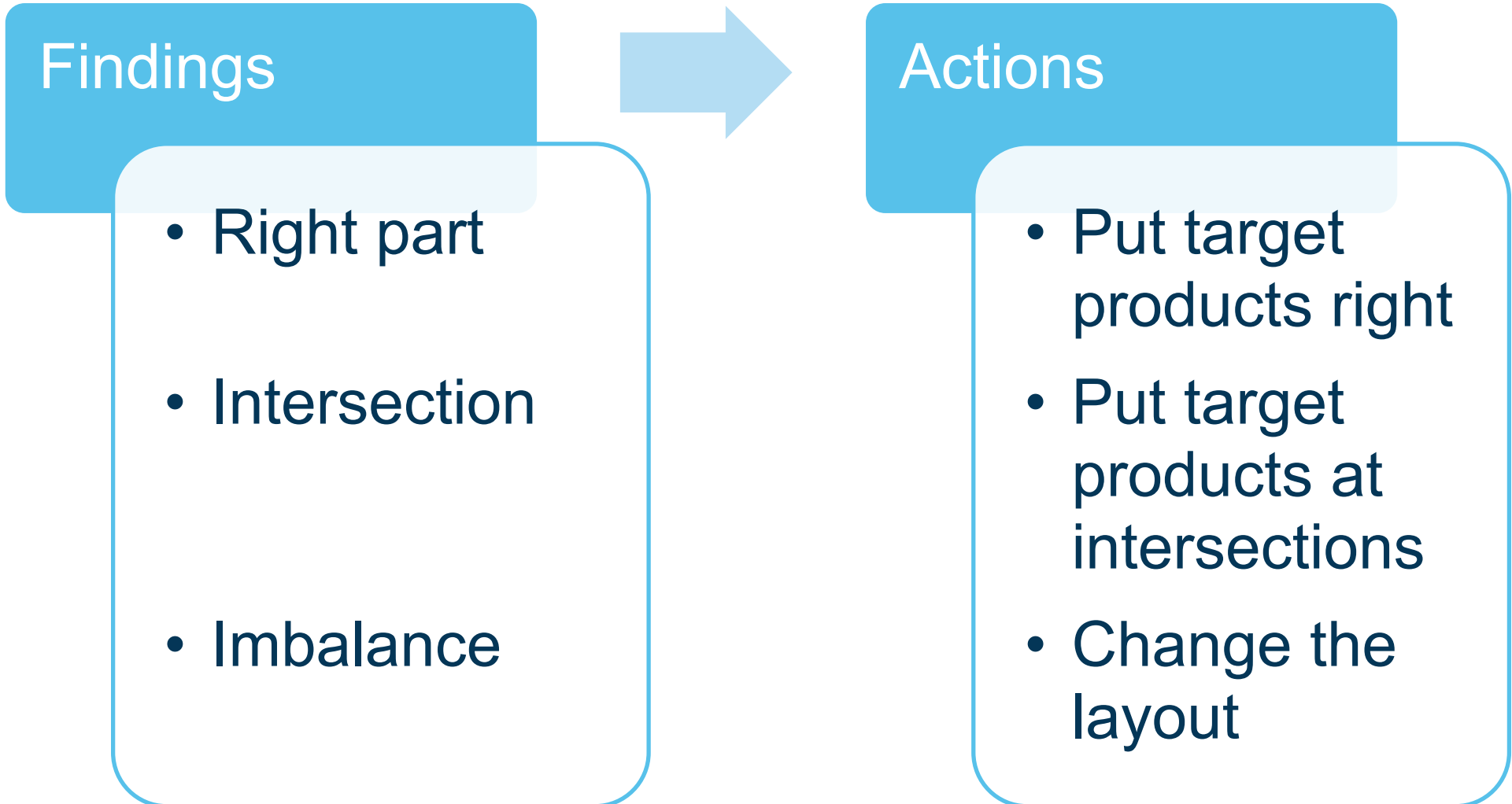


# Result

15	16	24	18	28	21	34	25	40	28	44	31	49	35	57	42	68	51	83	61	99	71	111	79	121	84	83
15		16		18		22		27		29		32		37		44		54		65		73		80		82
15		16		18		22		27		29		32		37		44		54		65		73		80		82
15		16		18		22		27		29		32		37		44		54		65		73		80		82
15		16		18		22		27		29		32		37		44		54		65		73		80		82
15		16		18		22		27		29		31		37		44		54		65		73		80		82
15		16		18		22		27		29		31		37		44		54		65		73		80		82
14		16		18		22		27		29		31		37		44		54		65		73		80		82
14		16		18		22		27		29		31		37		44		54		65		73		80		82
14		15		18		22		27		29		31		37		44		54		65		73		80		82
14		15		18		22		27		29		31		36		44		54		65		73		80		82
14		15		18		22		26		29		31		36		44		54		65		73		80		82
15	15	24	17	28	21	34	26	51	30	45	31	49	35	56	42	68	51	84	64	111	74	124	81	133	84	93
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# Findings v.s Actions



# References

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T. Elbers, “The effects of in-store layout- and shelf designs on consumer behaviour”, B.S. thesis, Wageningen University, 2016.

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Checkstand Program, “How Important Is Product Placement in C Stores?” Checkstand Program, 15-Jan-2018. [Online]. Available: <https://www.checkstandprogram.com/news/important-product-placement-c-stores/>. [Accessed: 03-Nov-2018].

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M. Krishna, “Eye level is buy level: The importance of in-store product placement”, Trax, 22-Nov-2017. [Online]. Available: <https://traxretail.com/2017/11/22/eye-level-buy-level-importance-store-product-placement/>. [Accessed: 03-Nov-2018].



**Thank you**