

Algorithmic Contact Management in Sales & Service

Chandra Ganduri | Vaidy Raghavan

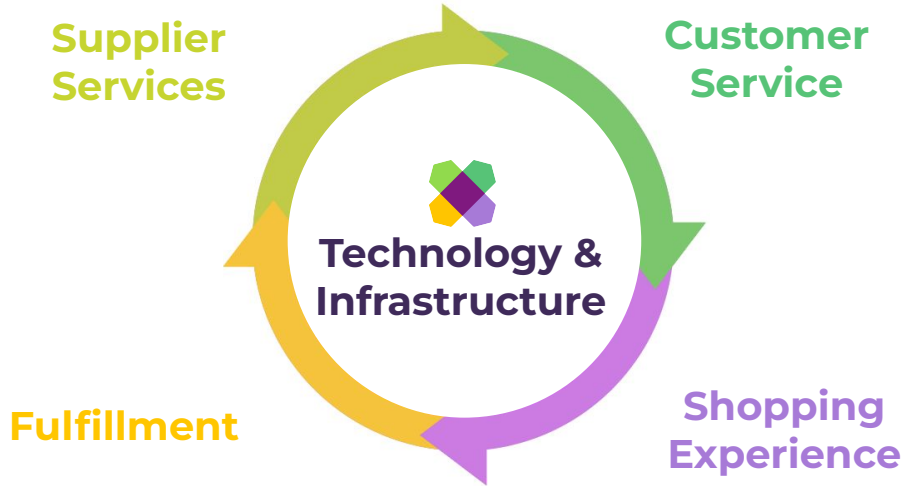


We are an E-Commerce Platform Exclusively Focused on the Home



Suppliers: >20 Thousand

Wayfair partners with our suppliers via a 3P model to drive marketplace success for each vendor



Customers: >22M Active

Wayfair offers its customers a 1P experience that enhances and unifies every step of shopping for the home

We bring together suppliers and customers. Our technology and services create market-leading experiences for both.

Contact Management 101

0-4 weeks
from contact



Forecasting

Planning & scheduling capacity for expected demand

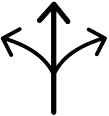
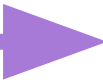
Day of
contact



Demand Shaping

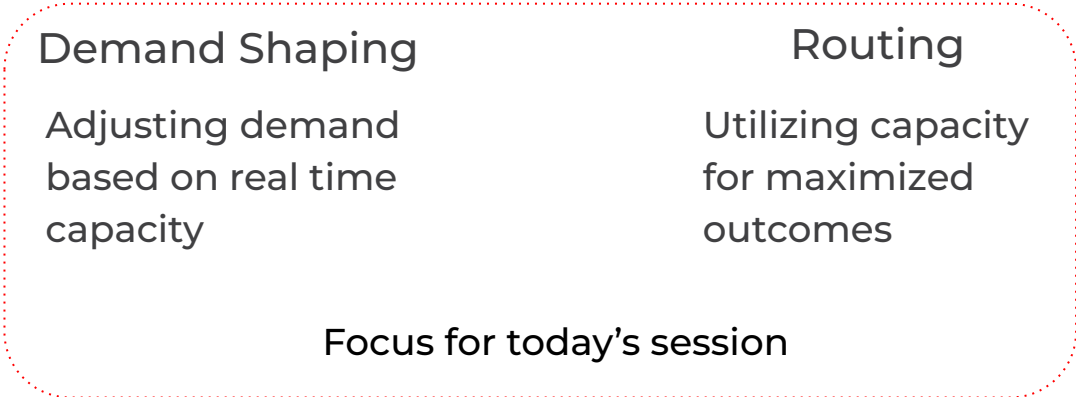
Adjusting demand based on real time capacity

Time of
contact



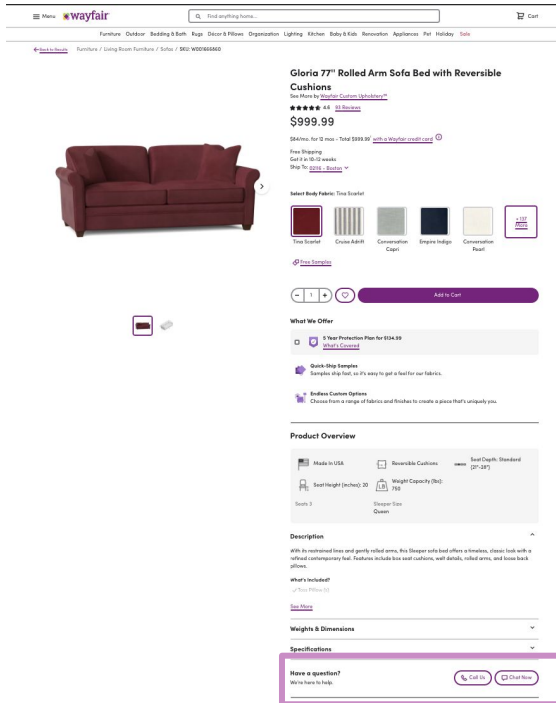
Routing

Utilizing capacity for maximized outcomes



Contact Management: Decision Points

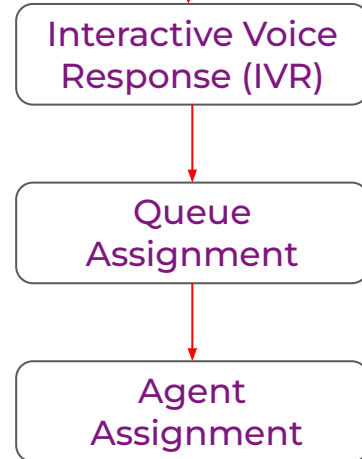
BAU capabilities at each of these decision points take a one-size-fits-all approach. There is value in tailoring these decisions based on customer needs, agent skills & availability to maximize outcomes



Have a question?
We're here to help.

[Call Us](#) [Chat Now](#)

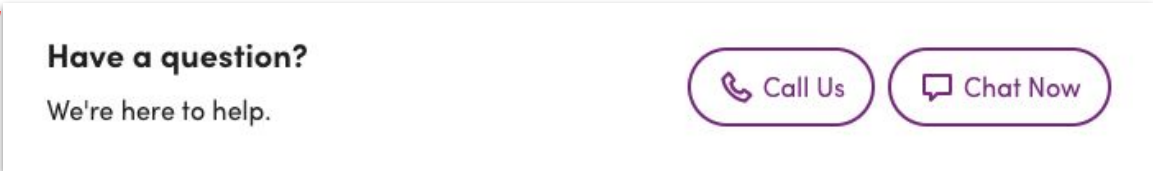
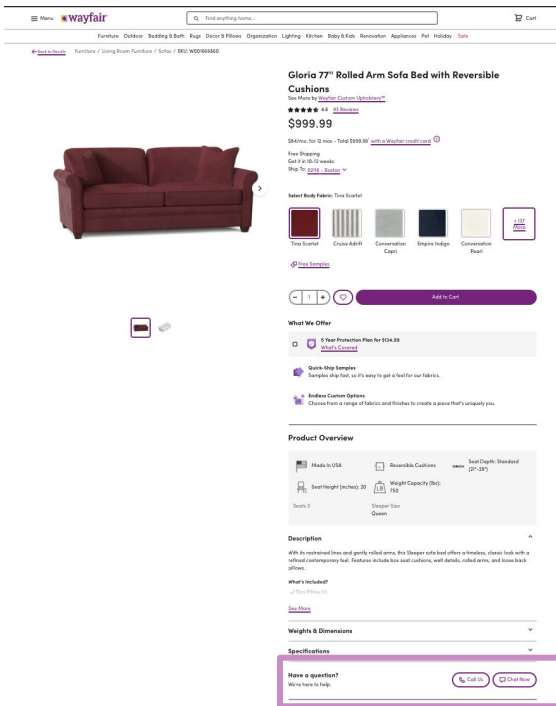
Customer initiates contact





Targeting and Load Balancing for Livehelp

Approach: Alter visibility of “Call Us” and “Chat Now” buttons on Storefront based on customer need

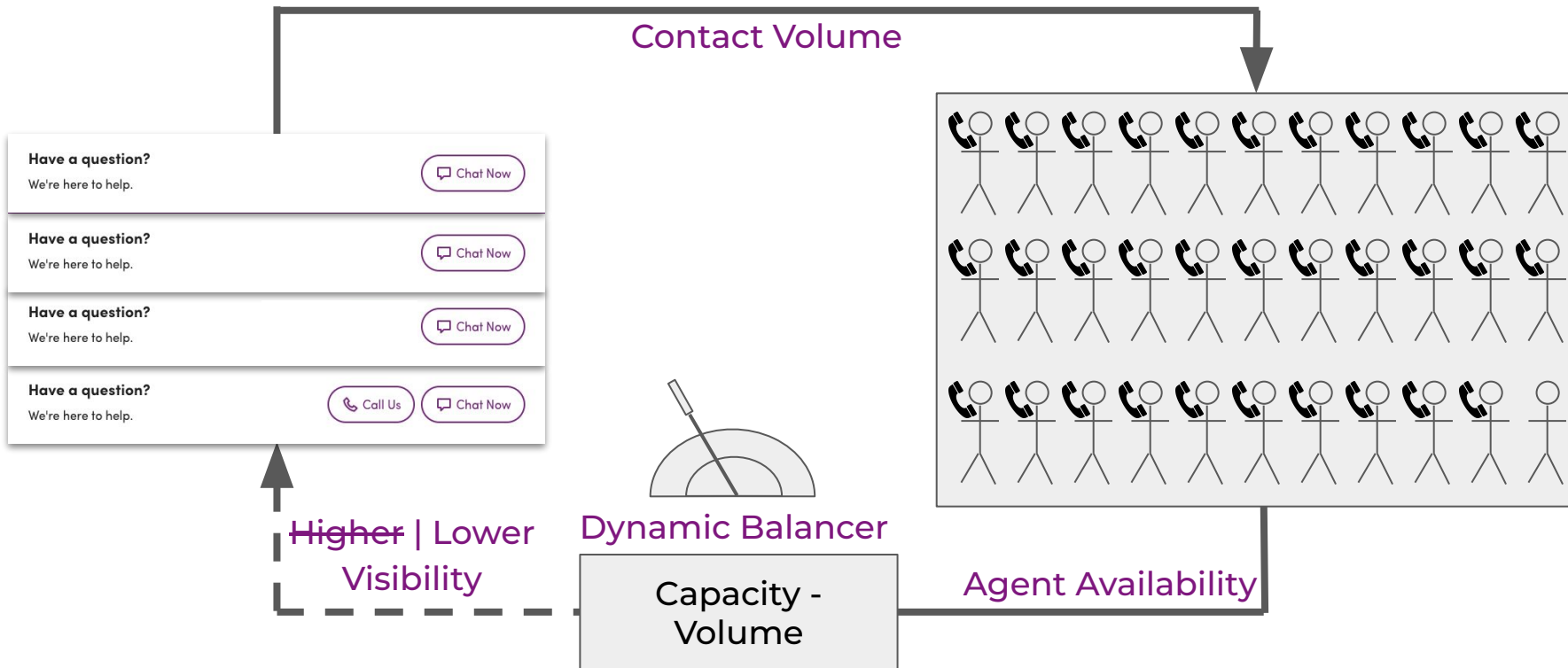


Altering visibility on product page changes volume to flatten out peaks and troughs of contact volume. Use Machine Learning models for understanding:

- Contact Intent
- Customer Value
- Channel Preference
- Expected volume in next interval

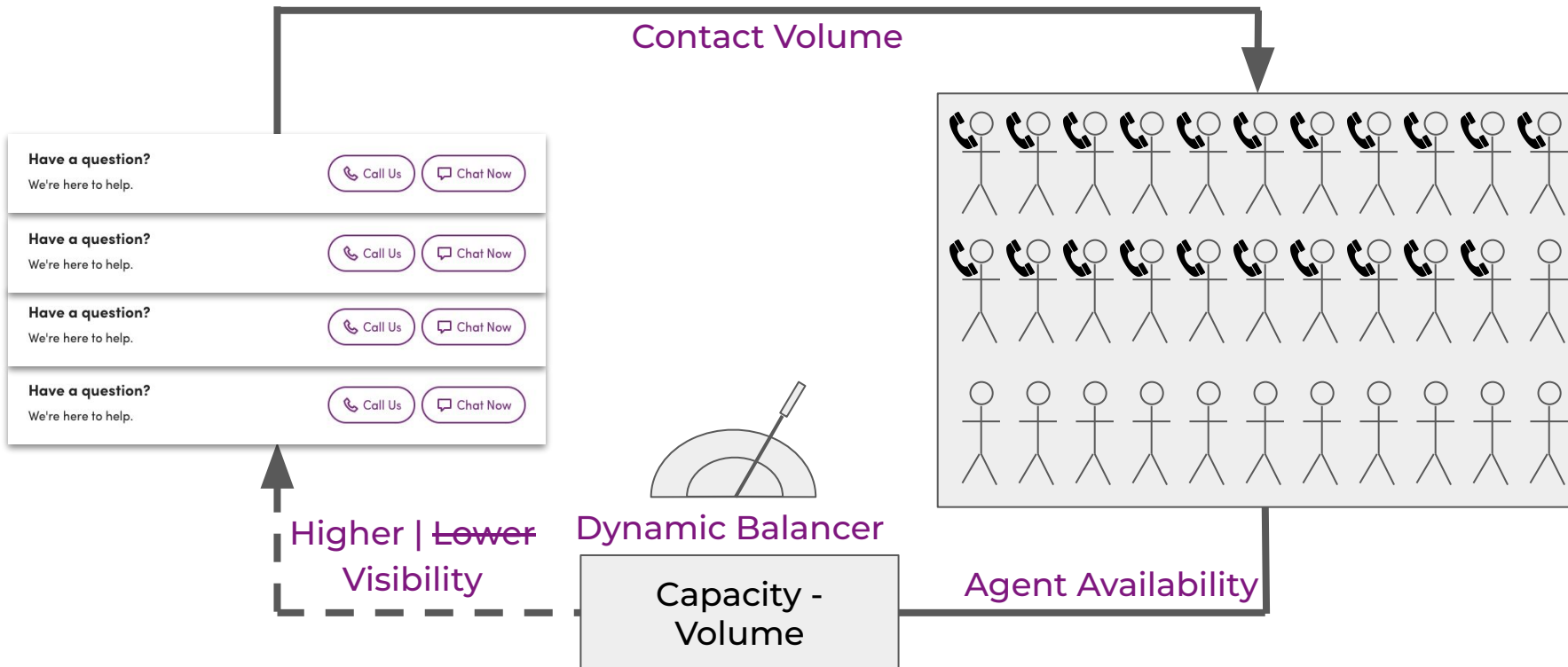


Targeting and Load Balancing for Livehelp





Targeting and Load Balancing for Livehelp



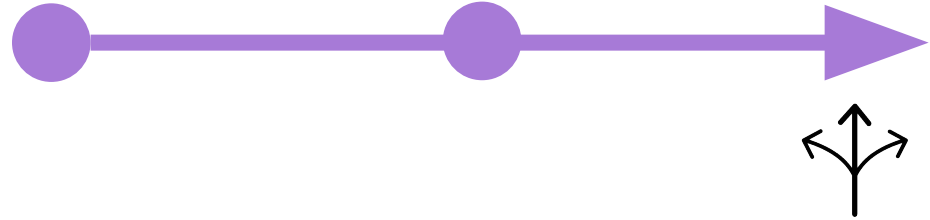
Algorithmic Routing

Algorithmic routing combines real-time contact profiling and agent skill assessment with on-the-fly optimization

0-4 weeks
from contact

Day of
contact

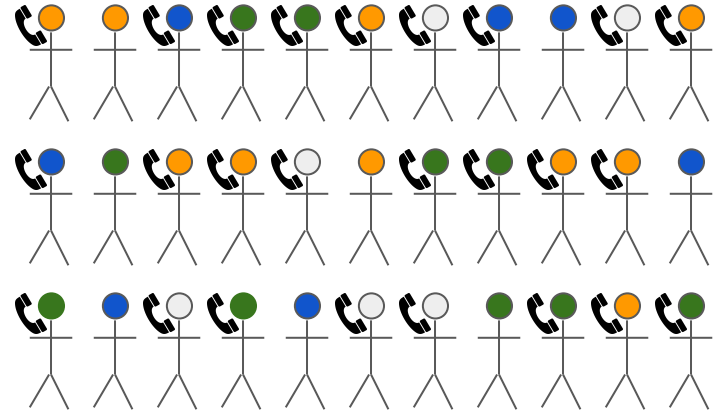
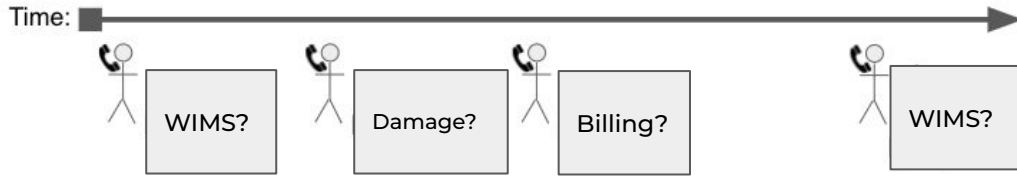
Time of
contact





Intent Based Routing (IBR)

Approach: Predict customer intent for contact and assign to best available agent



- Orange circle: Better at WIMS intent
- Blue circle: Better at Billing intent
- Green circle: Better at WIMS intent
- White circle: New agents

Understand Customer Intent Predictive ML models help with identifying customer *intent* for contact

Understand agent performance We rank available agents based on historical performance on the predicted customer intent & select best agent



Intent Based Routing (IBR)

Intent Modeling

- Leverage customer, order and product history including recent browse data to predict customer reason for contact
- System is architected with real-time feature engineering and inference capabilities

Agent Performance Modeling

- Historical performance by intent type
- ML procedures for outlier detection, tenure-based adjustments
- Performance scoring updated each day

Outcomes

Dimension	Metric	Lift vs. BAU	Leverage
Customer Effort	Customer Satisfaction (CSAT)	1%-2%	↑
	First Contact Resolution	1%-2%	↑
Productivity & Efficiency	Low Cost Resolution Rate	9%-11%	↑↑↑
	Average Handling Time	10%-14%	↑↑↑
Policy Compliance	Lost In Transit	1%-2%	↑
	Return Ship Fee Compliance	2%-3%	↑

Intent Based Routing is helping us lower customer effort, improve our productivity, efficiency and agent upskilling resulting in multi-million dollar savings



Intent Based Routing (IBR): Future Evolution

