Believing in Analytics: Managers' Adherence to Price Recommendations from a DSS joint work with Anna Sáez de Tejada Cuenca (IESE Business School)

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Abstract

Problem definition: We study the adherence to the recommendations of a decision support system (DSS) for clearance markdowns at Zara, the Spanish fast fashion retailer. Our focus is on behavioral drivers of (i) the decision to deviate from the recommendation, and (ii) the magnitude of the deviation when it occurs. We also study the effect of two related interventions: 1. providing feedback using a revenue metric; and 2. Showing a reference point for that metric. Academic/practical relevance: A major obstacle in the implementation of prescriptive analytics is users' lack of trust in the tool. Understanding the behavioral aspects of managers' usage of these tools is paramount for a successful rollout and deployment. Methodology: We use data collected by Zara during seven clearance sales campaigns to analyze the operational and behavioral drivers of managers' adherence decisions. Results: Adherence to the DSS's recommendations was higher when such recommendations were aligned with managers' previous coarse heuristic, consistent with algorithm aversion and status quo bias. Adherence was also higher when managers had fewer prices to set, consistent with rational inattention. The magnitude of managers' deviations was larger when inventory levels were higher and sales were slower, and when salvage prices were lower, consistent with the idea that inventory was more salient than revenue, and with loss aversion. Of the two interventions, only the second one was effective in increasing targeted managers' adherence and decreasing their probability of marking down when the DSS recommended leaving a price unchanged. Managerial implications: Our findings provide insights on how to increase voluntary adherence that can be used in any context in which a company wants an analytical tool to be adopted organically by its users.