

Abstract. We study a two-dimensional information design problem in a duopoly with vertical differentiation. A third-party designer, literal or metaphorical, designs a public joint signal structure to reveal product quality before firms compete in prices. The industry-optimal policy only reveals the quality ranking, which amplifies perceived differentiation, mitigates price competition, and yields socially optimal allocation. The consumer-optimal policy, to the contrary, intensifies competition by fully concealing the ranking. We further derive welfare-maximizing signal structures for arbitrary Pareto weights. Depending on the weight and the market coverage assumption, the optimal policy takes one of the following forms: ranking, no-ranking, full revelation, or a combination of full revelation with either ranking or no-ranking policies.