Information design for colluding firms

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Firms often acquire information through common intermediaries, such as data analytics companies. We characterize the optimal design of information for colluding firms in a market where information is about the state of demand under secret price cuts. Information can be provided either before price setting --- i.e., ex ante information provision --- or after price setting --- i.e., ex post information provision. The two modes of information provision generate a trade-off between a price sophistication effect and a profit dissipation effect. Such trade-off hinges upon different factors, namely, the heterogeneity of demand, the efficiency of the information technology, and the number of firms.

Keywords: collusion, data analytics, ex ante information provision, ex post information provision, information design.

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