

The remarkable advances in coordination-enhancing communication and information technologies in recent years raise two key questions with respect to the economic organization of firms on the technological frontier. First, how do new coordination technologies affect the boundary of the firm? Second and perhaps even more fundamental, is the question of how the adoption of new technologies affects firm productivity. This paper examines these questions empirically from the perspective of organizational economics, which treats firms as bundles of contracts, using 1992 and 1997 Economic Census micro-data on taxicab companies. We find that adopters of computerized dispatching systems shift the boundary of the firm toward more centralized ownership of vehicles and increase their productivity relative to non-adopters by an economically and statistically significant margin. These findings are consistent with transaction cost economics (Williamson, 1991) suggest that there are complementarities between adoption of coordination technologies and asset ownership.