

# The Cold Start Problem in Algorithm-based CRM: Kickstarting Network Effects by Overcoming Replacement Threats

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## **Abstract**

Algorithm-based CRM (ACRM) technologies use advances in AI technology to enhance predictive functions for the sales force. Despite high hopes for increasing sales productivity, ACRM initiatives often fail. To understand their failure, we conceptualize the returns to ACRM from the perspective of network effects. Only after a running system is established the virtuous cycle of network effects unfolds; in short, managers first must solve the cold start problem. In a natural experiment, we show that ACRM technology can improve performance and that such effects unfold only over time. Here, replacement threats are a central cause of the cold-start problem and can even reverse the performance effects of ACRM. Salespeople game the ACRM system when they perceive high levels of replacement threats; they spend time with the system without taking advantage of its recommendations. As a management contribution, we show that the manager's leadership style can reduce such replacement threats.

**Subject Areas:** *Business-to-Business Marketing, Information Systems, Sales Force*

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