# Accepted Manuscript

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Please cite this article as: Moutaz Khouja, Jing Zhou, Channel and Pricing Decisions in a Supply Chain with Advance Selling of Gift Cards, *European Journal of Operational Research* (2015), doi: 10.1016/j.ejor.2015.01.045

# Channel and Pricing Decisions in a Supply Chain with Advance Selling of Gift Cards

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**Highlights**

- We analyze a service provider selling gift cards through a retailer.

- Consumers may buy gift cards from the service provider or the retailer.

- We identify the redemption rate at which it is optimal to sell gift cards.

- Under certain conditions, the service provider's profit increases with the redemption rate.

**Abstract:** Many service providers, such as restaurants, are selling their gift cards through independent retailers. We analyze a supply chain of a service provider who sells products and gift cards at face value at its locations. The service provider also sells its gift cards through a retailer. Consumers may buy gift cards from the service provider or the retailer for their own use and/or to use as gifts. Consumers may be customers of both the service provider and retailer (Dual), only the service provide (SP-only), or only the retailer (retailer-only). We find that under a large enough gift cards' redemption rate and no gift-givers, it is sub-optimal for a service provider to sell gift cards through a retailer. When there are some Retailer-only gift-givers, it is optimal for the service provider to sell gift cards through a retailer. We identify threshold redemption rates at which it is optimal for a service provider to sell gift cards through an independent retailer to different consumer segments. We also find that the SP may not always prefer a low redemption rate and for some service providers with large additional spending rates above redeemed gift cards' value, profit may increase with the redemption rate. Also, centralization in the SP-retailer supply chain in this paper may lead to only a small increase in profits. Numerical analysis indicate that the redemption rate needed to make it optimal for the service provider to sell gift cards to all consumers through a retailer is unlikely to occur in practice.
**Key words: pricing, analytical modeling, channel management**

# 1 Introduction and Literature Review

Service providers (SP) and retailers use various promotions to increase sales and profits; these include discounts, coupons, and rebates (Anderson and Song 2004). Another strategy becoming popular is selling gift cards. Gift card sales grew to $91 billion in 2010 (Mui 2010) and are expected to reach $138 billion in 2015 (CEB TowerGroup 2012). SPs, and in particular restaurants, have been selling gift cards through their brick-and-mortar locations, websites, and, more recently, through independent retailers. The National Retail Federation reports that restaurant gift cards are one of the most popular items for gift-givers with 34.2% of shoppers surveyed indicating that they would buy at least one gift card of a restaurant (National Retail Federation 2013). This makes restaurants second only to department stores in gift cards' popularity. Many

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