Editorial: New awarding schemes

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1 New records

2016 is a year of big success for the *International Journal of Inventory Research* (*IJIR*) because we have achieved a new record in the number of submissions and also published all four issues on time for volume 3. It is a result of the hard work of the editors, associate editors, assistant editor, guest editors, editorial board members and also reviewers. In terms of review efficiency, we are able to achieve a quick average review time (from time of submission to final decision) of 75 days. As a remark, most papers are either rejected or accepted after the first round review.

2 Special issues

IJIR has organised several special issues since its establishment. In 2016, we have published two special issues, namely the special issue on 'Inventory systems with consumer behaviour considerations' (by Chen et al.) and the special issue on 'Inventory management in the fashion industry' (by Shen et al.). We are now featuring a few new special issues. Contributions of both technical studies and review papers are welcome.

3 New awarding schemes

It has been under discussion for quite a long time that *IJIR* would like to give honours to authors, editors and reviewers for their good contribution to the success of the journal. Starting from volume 4, we will select one paper (among all papers published in the volume) to receive the best paper award, named as the 'Timothy Urban Best Paper Award' to honour *IJIR*'s founding chief editor Professor Timothy Urban. We will also select one editor among all the editors (editor, associate editors, assistant editor, and guest editors), excluding the chief editor, to receive the best editor award. A reviewer will be selected to receive the best reviewer award. The awards will be announced in the journal and a letter of certification will be issued to each winner.

4 About this issue – inventory insights

This regular issue of *IJIR* includes five research papers. The respective inventory insights of the papers are summarised as follows.

In 'Cooperative advertising in a closed-loop supply chain to encourage customers to return their used products', Farshbaf-Geranmayeh, Rabbani and Taleizadeh develop analytical gaming models to study cooperative advertising in a closed-loop supply chain system. The supply chain system has one manufacturer and one retailer. The authors consider the case when the retailer spends money on advertisement in order to increase the return rate of used products. They also consider the case when the manufacturer can make more profit from remanufacturing used products than manufacturing new ones. The authors uncover that both supply chain channel members would invest most and least heavily in the cooperative and Nash game, respectively.

In 'Impact of inventory sharing on service availability and transportation levels in time-differentiated distribution', Jat and Rafique explore a service system with two delivery time-window choices. The authors compare via a simulation study the inventory sharing and non-sharing scenarios for the service facilities. The authors examine the varying demand composition and find that there exist cases in which inventory sharing does not necessarily follow the classic 'inventory-transportation trade-off'.

In 'On the viability of partial inventory pooling', Gerchak investigates the partial risk pooling problem in inventory management. The author aims to explore an interesting case in which partial inventory pooling (i.e., pooling some inventories, but not all) in a central warehousing facility is optimal. The author reveals analytically that such a case does exist. The analytical conditions for this special case with respect to demand distribution and cost parameter are found. The author also examines both the symmetric discrete demand and the symmetric continuous demand cases.

In ‘Assessment of inventory class performance utilising inventory turn and days on hand’, Jatta and Krishnan study the ABC inventory classification scheme based on inventory turn. The authors make use of multiple multi-criteria inventory control models to classify 47 stock keeping units (SKUs) into categories A, B, and C. The authors examine the annual performance of these ABC classes for each model. They find that the A-class consistently has highest turns than the B and C classes. They identify some more comparison results and conclude that the inventory classification scheme should be limited to just A and B classes for real world applications.

In ‘A stochastic lot sizing model with partial backordering and imperfect production processes’, Taleizadeh and Zamani-Dehkordi analytically study an inventory control system with partial backordering. The authors consider an imperfect process with which a random number of defective products are present in each order. The authors derive the cost function and develop an algorithm to obtain the optimal solution. To generate additional insights, the authors conduct a few numerical analyses.