



Research School for Operations
Management and Logistics

Individual behaviour and decision making in distribution networks

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This PhD thesis studies individual behaviour and decision making in distribution networks from an individual (part 1, study 1/2/3) and network (part 2, study 4) perspective. Traditional Operations Management theories assume rational human decision making but actual behaviours of decision makers is different. Decision makers are influenced by behavioural factors such as cognitive biases, individual and social goals, and cultural norms. We take a behavioural perspective to investigate individual behaviour and decision making in operational settings and the influence it has on network goals.

In study 1 we focus on safety in warehousing. We address the measurability of safety aspects from multiple hierarchical perspectives. In study 2 we explore individual behaviour from a social perspective. We describe how individual and social goals influence transport planner behaviour and explain why planners deviate from expected/prescribed behaviour. In study 3 we explore individual behaviour from a cognitive perspective. We study how uncertainty in supplies affect inventory ordering decisions. In study 4, we investigate decision making from a network perspective and explore the assessment of strategic level decisions on cooperation between LSPs. Our optimization model incorporates realistic transportation costs to determine which partners to include in the collaborative cargo distribution network to maximize profits.