



The Operations Research Society of South Africa



Category II Recognition Award

(To a current member of ORSSA for a single, outstanding achievement with respect to the practice of OR on a national level)

David Lubinsky

Citation. *By Jan van Vuuren, on behalf of the Executive Committee of ORSSA.*

David Lubinsky holds a Masters Degree in Statistics from the University of the Witwatersrand and a PhD in Computer Science from Rutgers University in the United States of America. He worked at Bell Laboratories in its Intelligent Systems Research Group for four years upon completion of his doctoral studies before returning to South Africa in 1992. Pursuing a role in education at the Department of Computer Science at the University of the Witwatersrand, he was promoted to associate professor in 1995 before leaving academia in 1997 to form the consulting company OPSI Systems together with two of his graduate students.

OPSI Systems provides software solutions and consulting for transport planning and optimisation, encompassing a wide variety of applications, including vehicle fleet scheduling, routing and management, as well as auditing of vehicle fleets by means of GPS tracking. The products of OPSI Systems are integrated into the optimisation of all aspects of vehicle logistics for companies in the small, medium and enterprise space: from fast-moving consumer goods to courier services, from dedicated vehicle fleets to outsourced operations. The aim of these products is to help companies, such as SAB-Miller, Transnet, Clover, DHL, Imperial Logistics and St Gobain, as well as a large number of other clients, to reduce their costs, improve their efficiency and optimise their supply chains.

Dr Lubinsky is managing director of OPSI Systems, which has indeed become a premier developer and supplier of routing and scheduling systems to the South African road and rail communities. David has been involved in the algorithmic design of all the products of OPSI Systems. Three products deserve particular mention.

The first is FLO, a vehicle operations planning tool developed in 2005, which takes as input variables on-time depot departure statistics, levels of route schedule adherence, customer estimated times of arrivals and on-time delivery statistics in order to address and improve the efficiency, customer service and driver management of a delivery fleet. SAB-Miller is one of many OPSI Systems customers to experience significant improvements both in their key performance indicators as well as customer and distribution load planner satisfaction as a result of the implementation of FLO.

The second product is PLATO, a suite of enterprise-level software modules for dynamic, multi-day planning, scheduling and controlling across both the primary and secondary product distribution environments. It incorporates a large number of factors in the modelling of complex transport operations, including shift-changes, outsourcing to external contractors, loading bay configurations, and variable stop times based on loading and offloading profiles. Through the interaction with external systems and the integration with multiple tracking and GPS service providers, the distribution department of a company is able to improve the efficiency of its operations significantly using PLATO. Examples of companies benefiting from this tool include British American Tobacco, DHL and others.

The third product is ORBIT, an optimal route building and information tool designed to create and compare routes and nominated delivery days for delivery vehicles and sales representatives. It incorporates the demarcation of sales regions, visitation profiles and client clustering to facilitate an understanding of the subtle interactions between the various operational demands in a visual fashion. It provides several tools and functions for collecting, arranging and displaying client sales and routing information for the generation of optimal master routes, visitation profiles, nominated delivery days and multi-day sales representative routing.

The Executive Committee of ORSSA has decided to recognise the significant contribution David Lubinsky has made and the role he has played and is still playing in the local consulting landscape, where he has established a professional home for a large number of operations researchers working in the logistics and supply chain environment. As a current member of ORSSA, this award is conferred on him for his single, outstanding achievement of founding and leading OPSI Systems to become one of the most successful transport planning and optimisation consulting firms in South Africa. I call on the President to present the award to Dr David Lubinsky.