

# **Effective Consensus Decision Making-Utilising Practical Game Theory Techniques**

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## **Abstract**

This workshop will demonstrate a practical example of utilizing Game Theory for effective Consensus Decision Making. In today's ever increasingly multifaceted world, there is an essential need for complex decisions to be resolved in a responsible optimal manner. The solution process needs to be suitably applied, that appropriately resolves the issue. In most cases, utilizing Industrial Engineering (IE) Techniques will result in suitable outcomes. Consensus Decision Making-Utilizing Game Theory, is a participative, creative and dynamic way of reaching an optimum collective agreement between all or most members of a group. Instead of simply voting for an item and having the majority of the group getting their way, a group using consensus decision making, is committed to finding the best solution that everyone actively supports, or at least can live with leading to beneficial outcomes minimizing risks.

## **Keywords**

Effective Consensus, Decision Making-Utilizing, Practical Game Theory, Techniques.

## **Biography**

**David Karr** (FIIEA, Chris Heyde Awardee, CP Eng) Graduated as an Industrial Engineer BSc (Eng Mech in the Industrial Option) in 1976 at University of Witwatersrand (Wits), Johannesburg, South Africa in 1976. He received a Graduate Diploma in Engineering at Wits 1979. David has worked in various Production and Industrial Engineering roles in manufacturing, service industries and consultancy for over 45 years in South Africa, Canada and Australia. He also has training experience as a lecturer(casual) at TAFE (technical college) for 13 years delivering training in various aviation business units. He has worked for Siemens (Routing Eng) and Colgate Palmolive (IE) (South Africa), Pirelli Cables (IE) and Canada Post (IE) (Canada), BOC Gases (Australia) (Production & Project Manager) across production quality, project management, supply chain management, design and improvements of production line and layouts of work area and data optimization. Industry experience included batch and process type manufacturing as well as large and small sites mainly with large multinational or national companies. He has delivered Game Theory presentations to Curtin University, Perth, WA, University of Melbourne and Industrial Engineers Australia. Also, he has applied practical Game Theory industry circumstances. He has its own Business Consultancy undertaking passenger surveys, time and motion studies, setting up preventative maintenance systems for various clients and introduction of digitized autonomous processes. David has been very active in professional organizations in Canada (Canadian Society of Industrial Engineers (CSIE) and in Australia (Industrial Engineers Australia (IEA) and Engineers Australia (EA). He is a fellow, Chris Heyde Awardee and Federal Immediate Past President of Industrial Engineers Australia and a Chartered Professional Engineer of Engineers Australia.