

## UNIMAS Research Update, December 2015

### **A COGNITIVE APPROACH TO DESIGNING EFFECTIVE IMPLEMENTATION OF INDUSTRIAL POLICIES : C-Solutions for Vehicle Maintenance Regulations (VMR) Implementation in Sarawak**

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#### **Abstract**

Policy implementation science has moved from its traditional top-down “how-to” approach that focuses primarily on the policy implementers while neglecting those affected by the implementation, to the hybrid “what-and-how-to” approach, where the policy implementation mechanics incorporate the understanding of the “meaning” and “benefits” of the policy from the perspective of all the stakeholders - those who will be doing the enforcement, and those who will be impacted upon by the policy. Theories from the science of the mind, or cognitive science, such as the theories of social cognition and distributed cognition, have gained popularity in policy implementation science in the developed countries since a decade ago. This new approach however, is still at inception stage in many developing countries.

This research explored the utility of cognitive science approach in designing the implementation of industrial policies, in the case of implementing the Vehicle Maintenance Regulations (VMR) regulations, a set of mandatory regulations passed to regulate safe and healthy vehicle maintenance industry in Malaysia. The benefits of the cognitive approach, over the “implementer-oriented” rational choice theory approach conventionally adopted in policy implementation were explored. The cognitive science approach is expected to increase the effectiveness of the VMR policy implementation by integrating the ‘sense-making’ and ‘meaning-making’ of all stakeholders whose cooperation and cooperativeness are highly essential in ensuring successful implementation. This research yielded both, an industrial working model, and an academic model. The C-Solutions Model suggests a win-win implementation plan that could garner support from all VMR stakeholders – the car workshop operators, the car owners, and the government implementer agents. The “Cognitive Model of VMR Implementation” was produced to describe how understanding the cognitive functions of the stakeholders could be utilised to collect their best support for the VMR regulations implementation.

*This research was supported by the Ministry of Domestic Trade and Consumer Affairs Malaysia, through Grant no KPDN(PK)(S)26/430/27*