

How the Market Reacts to NCAP in Emerging Countries?

K. A. Abu Kassim^{*1}, A. Furas² and S. Mustafa¹

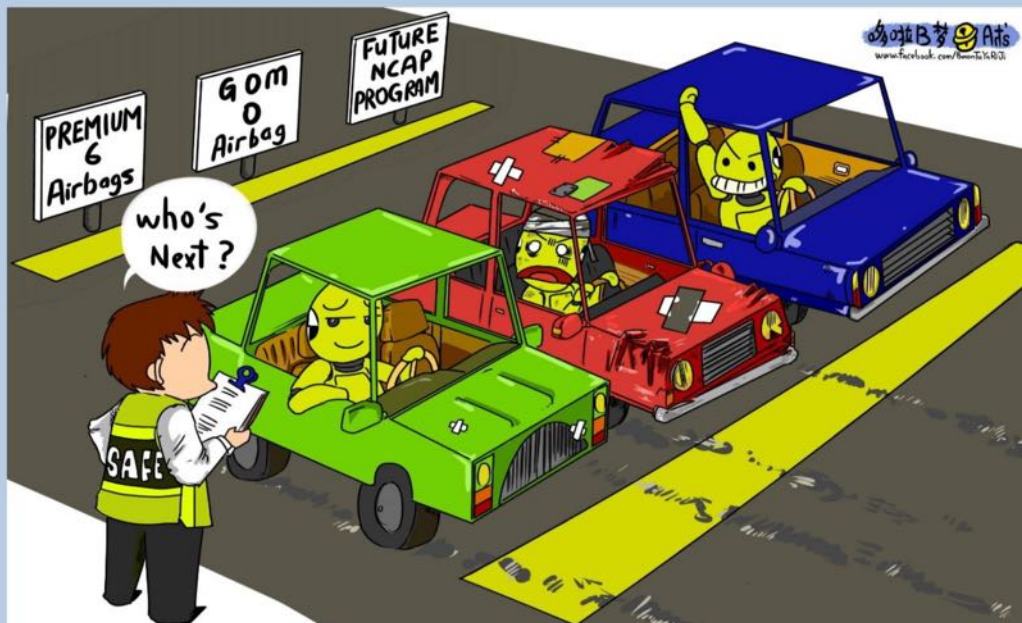
¹ASEAN NCAP Operationalization Unit, Malaysian Institute of Road Safety Research (MIROS), 43000 Kajang Selangor, Malaysia

²Latin NCAP, Joaquin Nunez 2719 Of. 210, CP 11300 Montevideo, Uruguay

^{*}Corresponding author: khairilanwar@miros.gov.my

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This paper shall discuss three New Car Assessment Programs (NCAPs) in different emerging markets. Each program faces its own challenges, with different issues to be addressed and strategy worked out for OEMs, in order to benefit vehicle consumers. Two key success factors to ensure an NCAP's effectiveness in keeping consumers well informed about vehicle safety levels in an emerging market include: (i) a capable strategic and technical team; and (ii) dynamic safety requirements in a voluntary or mandatory environment.

Bmon is a freelance cartoonist based in Petaling Jaya, Malaysia, who brands his art as "BmonTuYaRiJi", or "Bmon Sketch Diary" in English. His Facebook page is www.facebook.com/BmonTuYaRiJi.

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In the automotive industry, as in other industries, business optimization is translated as making the most profit while, at the same time, reducing the cost. As a result, car makers in the past often overlooked the safety aspects for each automobile market by only adhering to the minimum requirements allowed by law (Abu Kassim et al., 2017). Such a situation existed as OEMs were able to reduce cost and increase profit due to the fact that safety – especially passive safety – was not visible. Things, however, changed in the United States, Australia and Europe many years ago when the New Car Assessment Programs (NCAPs) started to carry out crash tests to ensure a new car safety standards reached a little beyond the minimum regulatory requirements (Hershman, 2001; van Ratingen, 2016). As an immediate response, consumers in the aforementioned countries started to push for beyond-governmental-minimum-requirements safety in their cars. However, in other markets where the safety regulations were weak and outdated, and where NCAP was non-existent, OEMs still resorted to the strategy of lowering the cost in order to increase profit. A notable evidence of such a claim can be seen in certain car model dubbed the “global car” or “global platform” but comes with different safety equipment and structural construction as opposed to its market origin. Such car models scored excellent rating in the developed country’s market but obtained poor result in another market. For example, several South American cars assessed by Latin NCAP obtained different results compared to the same models for the Indian market as tested by Global NCAP (Fox News Latino, 2013; Global NCAP, 2014).

Being aware of such a problem, Global New Car Assessment Programme (Global NCAP) was founded in 2011 to support newly established NCAPs in developing countries and regions, from the technical, strategic, logistics and financial aspects (Seeck et al., 2003; Mohd Jawi et al., 2016). To date, two new NCAPs have been launched (Latin NCAP in 2010 and ASEAN NCAP in 2012) in addition to two pilot programmes in India (Safer Cars for India) and the African region (Safer Cars for Africa). This paper will discuss the market reaction to the New Car Safety Programs in Southeast Asia (ASEAN), Latin America and India.

Most NCAPs operate in a voluntary environment although few are mandatory. While they are not embedded in a legal framework, NCAPs, to a certain extent, tend to be tough on OEMs. Results of crash tests and other specific assessments will be announced to the public through various media channels (Abu Kassim et al., 2017). Therefore, car makers offering poor safety package will normally be apprehensive, as negative publicity might deter potential buyers. Nevertheless, auto manufacturers with positive results might advertise their achievement as a marketing tool. It should also be noted that NCAP requirements are regularly revised to ensure the minimum bar is in line with the latest development in vehicle safety technologies (Abu Kassim et al., 2017). OEMs, in addition, are informed of the roadmap of each NCAP to create a win-win situation for those who desire to “stay in the game” (Mohd Jawi et al. 2013).

ASEAN NCAP

In early 2000, car production in the “general overseas market” (GOM) such as the Southeast Asia (ASEAN) region including Malaysia still adopted the “de-spec” strategy to meet the cost-reduction target. The cars were produced without certain functions and speculatively weaker structure compared to their original design for developed markets. Japanese OEMs, with approximately 80 percent share in the ASEAN market, also seemed unwilling to offer cars of the same specifications as in the Japanese Domestic Market (JDM). Although omission of certain parts, systems or sub-systems can be tolerated if done for convenience, it must never undermine the safety aspects. Besides airbags and crash avoidance

systems including the Antilock Braking System (ABS) and Electronic Stability Control (ESC), the overall car structure is a priority to ensure passive safety.

Immediately after the first crash test performed in May 2012, Toyota as the market leader announced it will equip all its cars manufactured and assembled for ASEAN market with dual frontal airbags, starting from September 2012. This was the first “quick win” for the ASEAN NCAP team. In 2017, the larger market segment followed suit by introducing more safety equipment in passenger cars; with ESC fitment becoming a standard and advance technology such as Autonomous Emergency Braking (AEB) introduced in non-luxury cars. This proves that safety indeed sells. Based on ASEAN NCAP analysis, almost 90 percent of cars sold in the market had been rated by ASEAN NCAP, with 96 percent achieving 4-star rating at minimum (Abu Kassim et al., 2017). Today, it is rather difficult to find low-safety standard cars in the region as most OEMs have reacted positively towards car safety movement in Southeast Asia.

Latin NCAP

Over in Latin America, lucrative free trade agreements and better government incentives have ensured the automotive industry’s steady growth in both manufacturing and sales. Similar to other regions, increased purchasing power by virtue of growing population is among the reasons why the region has witnessed an increase of in-house automotive production. In addition, the automotive ecosystem has also reacted to consumer demand for comfort, reasonable price, fuel economy and safety features. However, in terms of safety specifications, Latin America’s best-selling models are 20 years behind those of developed countries (Furas & Sandner, 2013). This is one of the challenges Latin NCAP faces toward increasing safer vehicles in the region. Non-existing crashworthiness regulation in each Latin American country has posed a challenge to uplift safety standards. At the same time, Latin NCAP will not be able to emulate its European counterpart’s achievements during its formative years as regulations were already in place in Europe at the beginning of Euro NCAP’s establishment (van Ratingen, 2016). Furthermore, authorities and even the users expect the same models rated in other markets to carry over the same safety level in their region.

Nevertheless, after seven years of Latin NCAP’s existence, the market has shown a steady improvement. For example, the locally-produced Toyota Etios proved that a car from the most competitive ‘small car segment’ was able to achieve 4-star rating in 2013. Latin NCAP had also underlined its significance when both the Volkswagen (VW) Bora and Ford Fiesta came with frontal dual airbags as standard fit before being selected for testing in 2012. In 2013, the VW up! (Brazilian production) achieved 5-star in Adult Occupant Protection (AOP), thus becoming the cheapest locally-produced city car to obtain such a remarkable milestone. Finally, in 2016, the Mexican-produced Nissan Tsuru, dubbed “the ultimate zero-star car”, stopped production after obtaining very poor results in two crash tests by Latin NCAP and Global NCAP (Latin NCAP, 2016).

Through market pressure, Latin NCAP team has tried its level best to popularize 5-star cars, inspire car makers and at the same time cease the sale of cars which performed poorly. Although safety improvements in the Latin American market is not as impressive as in the Southeast Asia region largely due to the slow reaction of a relatively larger market (more than 5 million cars sold annually) and 22 different governments and unique regulations, Latin NCAP managed to record all these successes by having a highly capable technical and strategic team. The only thing lacking is a better and up-to-date governmental regulation (not 20 years behind

Europe), and for all the models to be tested by Latin NCAP. If this can be achieved, OEMs will surely react quicker.

Safer Cars for India

NCAP is sorely needed in India as one of the vaccines to the road safety pandemic since passenger car fatalities in India is indeed alarming (Rajamaran et al., 2017). Compared to ASEAN NCAP and Latin NCAP, Safer Cars for India is still at its pilot stage. Although the Ministry of Road Transport and Highways of India promised the launch of 'Bharat NCAP' by October 2017, it has yet to materialize. Unlike Latin NCAP that has no independent lab in its region, India has several labs. Despite this, the Bharat NCAP is still to be launched. Perhaps pressure from car manufacturers have led to such a delay.

Based on results of Indian made cars since 2013, most had non-stable body shell (unstable occupant compartment) and lack of airbags, which resulted in poor protection and low star rating. In May 2016, Renault Kwid tested by Global NCAP obtained zero-star rating as its occupant compartment collapsed upon the 64km/h frontal offset impact. Renault reacted by improving the model, which underwent another assessment. The improved version with a single driver airbag achieved one-star in AOP (Beckwith, 2016). On another note, one of the 'safety performers' in ASEAN NCAP, Honda, disappointingly did not display the same safety principle in India. The basic version of Honda Mobilio with no airbag scored zero-star while the dual airbags variant achieved only 3-star in AOP. Thus, implementation of Bharat NCAP is crucial. As frontal impact constitutes 65 percent of the total passenger car crashes, the frontal offset test at 64km/h is the answer for such a situation. In a 'do-nothing scenario' while waiting for Bharat NCAP to materialize, it is predicted that the market will be slow to react.

Key Success Factors

To date, it is evident that ASEAN NCAP has the most improved market with regard to vehicle safety. It is only a matter of time before Latin NCAP reaches the same level, i.e. when all major OEMs change their attitude toward safety. It is also important to note the different approaches taken by both NCAPs in terms of their strategy toward OEMs. Prior to a test, ASEAN NCAP will notify an OEM on the model to be assessed. Usually the quick reaction by OEM is to make certain safety equipment as standard fit so that even the lowest version will get an acceptable score. Latin NCAP, on the other hand, selects and tests what is available in the market (most basic safety specifications) and then announces the result to the respective OEMs to be made public. The OEMs are given another chance to revise the safety features and making them standard, and Latin NCAP will carry out a new test for the updated version. This can also be a catalyst to introducing the globally accepted UN safety regulations in the region. On the other hand, India has the most challenging task; to upgrade the 'Safer Cars for India' pilot program to Bharat NCAP. Local industry players needed to be convinced as regards the benefits of having a domestic NCAP; and at the same time, an independent and capable local team must display the same fighting spirit as ASEAN NCAP and Latin NCAP.

As a conclusion, two key success factors are required for an NCAP to be effective in mobilizing safety in the automotive industry, namely (i) a capable strategic and technical team; and (ii) dynamic safety requirements in a voluntary or mandatory environment. Such an action is imperative so that consumers are well informed of vehicle safety levels. A capable technical team is significant in steering a viable and timely vehicle safety road map with regard to the prevailing condition of a specific region or country. In addition, having a domestic crash

laboratory is a bonus as it may speed up the process in getting technical knowledge of crash test, as well as shortening the development and testing time for car manufacturers.

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