

Corrugated Trend



Indonesia, with a population of 240 million, is the world's fourth most population and the largest economy in Southeast Asia. And it was estimated 30 millions of its population have strong buying power. It has 56.5% middle class income in 2010 (World Bank report, 2011; Bank Indonesia)

Indonesia economy is quite independent to the world economy as 64% of GDP is contributed by domestic consumption which helps Indonesia to buffer external exposure. Average expenditure for food per capita 50.66%, in which 13 % is contributed by processed food (BPS, March 2013). The challenge is on the infrastructure (on of the most expensive one in the world, Logistic Index Indonesia 27%, while United States of America only 9,9%, Japan 10,6%, singapore event only 8%, Malaysia, 13% and Thailand 20%) and employees productivity also has serious problem (capability to do the job efficiently on economic scale). Demand for corrugated Packaging Material has reached US\$ 176 billion and by 2019 Asia Pacific will represent 70% of worldwide corrugated market. While emerging market growth forecast to reach 30.2 billion sqm.

In 2011 Indonesia has become no 10 Top Corrugated Output in the world, moreover Indonesia 5 years growth (2011-2015) in no 4 in the world just behind China, India and USA with 2,35 billionsqm. Indonesia has new baby 4,5 million yearly. New Baby mean new retail business. Therefore the baby diaper business in Indonesia in the last few years is booming. It is being predicted that the Indonesian market for disposable baby diapers alone will grow at a pace of 14% a year, increasing from approximately 1.9 billion in 2010 to 3.7 billion in 2015. and all the big players enter the market, such as :

P&G is investing more than \$100 million to build a plant for its baby care division and has started producing its "Pampers" brand diapers locally by this year. The plant located in Karawang, West Java. The plant will be ready to fulfill diaper demands for about **8 million babies** in Indonesia.

Unicharm, Indonesia's largest diaper producer, has two factories and expects to start operations at a third in eastern Java next year. Unicharm Corp. spent \$400 million for factories and sales offices in Indonesia, which had been relying on imports of Pampers.

Kao Corporation is building a second plant in Indonesia to help meet demand in the region. According to executives, the 140,000-square-foot plant will make laundry detergent and sanitary napkins initially and will ultimately make disposable baby diapers for the Indonesian region. It will be complete in 2014. The total investment for the project has been reported at ¥10 billion (\$128 million).

Retail Trends in Indonesia

- The market huge and changing
- The shoppers Socially Shopaholics
- The challenges - Raising competition and raising cost of doing Business

Corrugated has big market and though more than 70% is till basic corrugated box, but the other segment growth worldwide more than 6%, while the basic corrugated growth is decline by 3%. Corrugated has 4 main market segment

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|------------------------|------------------|
| 1. Basic Corrugated | growth ww – 3% |
| 2. High Quality Flexo | growth ww – 6.5% |
| 3. Litho Laminated | growth ww – 6.5% |
| 4. Merchandise Display | growth ww – 6.5% |

Corrugated Material Trends.

Lightweighting

Average substance weights continue to show reductions as producers look to improve yields as far as possible. This is driven by the need to reduce overall packaging weight and reduce transport costs. The majority of lightweight boards are being used in Western Europe, where finished board weights have been reduced by an average of 5gsm from 2009 to 2012, according to data from FEFCO. Paper weight is getting less and less. Fluting mostly now about 112 gsm down from 125 gsm. While Liner now mostly 150 gsm down from 200 gsm

Heavyweighting

On the other hand, the industry has seen the introduction of certain new heavyweight products, such as Billerud Flute semi-chemical fluting. Primarily targeted at replacing wooden packaging. The heavy duty sector is continuing to show growth, particularly in the chemical and automotive industries, as a result of growing demand as well as the 'greener' image of corrugated compared with



other materials.

New Packaging - Tea and Juice on the Cup

At the beginning the tea was sold in the street on the plastic and giving a straw to the mainly driver in the street. Now it has been substitute with a cheap Tea Cup. It sold tremendously a lot. I have seen a printing machine 24/7 running one of the brand of this ice tea cup.



New Packaging – Food Contact Packaging

With the changing of life – most of woman now is not just a housewife, the woman also has job and will be to busy to prepare all the food in the traditional way, but of course they still has same passion to serve the family well. That is the reason that DS Smithe has innovated the ready one time baking – which make it easier to cooke, serve the cake and just thru it away once finish. No need to wash the cooking utilities. Clean, fast



New Packaging – Beer in a Cooler Corrugated Box

New Innovation has been made last year in UK by Miller Beer. It six pack beer also can be used as a cooler. It sells so well, as the young people can do picnic with this pack without any necessary to bring a cooler anymore. Simple and convenience.



Brown Box to Marketing Tools

- Special Color to Color Separation (Opaque ink to transparant ink)
- Fast Moving in Retail (RRP and Display)

Printing

The life style has change. Competition is very taft in the retail market, therefore more and more corrugated market is changing from brown boxes to the colorfull boxes. Fom the simple box to RRP (retail ready packaging), point of sale displays and merchandising units. These items are under pressure to provide the shelf appeal and brand exposure that brand owners are looking for. Paper mill also start to provide liner that can enhanced graphic properties allowing the reproduction of photorealistic images on RRP and POS (point of sale) applications in particular. The graphic liner is suitable for both offset and flexography. Demand from the FMCG sector continues to benefit from the trend towards the use of shelf-ready packaging ("SRP"), which can be readily converted from its initial role as a protective transit pack into a box or tray that can be placed on display in the retail store. SRP benefits retailers by reducing the manual work involved in loading goods onto store shelves and reducing the amount of damage to goods in store, while enabling products to be presented more attractively. SRP requires more sophisticated packaging manufacturing capabilities for cutting, printing and gluing the corrugated board



to form the more complicated box structures. The increased proportion of these higher value-added boxes, often requiring multi-passes within the production process, has contributed to capacity utilisation across the corrugated industry remaining higher than levels that would be indicated by the overall level of demand.

Retail Ready Packaging

System of packaging and merchandising that allows goods to be moved direct to shelf with minimal handling, enabling products to be displayed effectively within then secondary packaging medium. Demand for higher quality, creative packaging.

For this reason, the printing process also changing,

- Special color change to color separation
- Ink change from opaque ink to transparant ink



Common Practise

- Ink is formulated generically
- Pressman change anilox roller until the color is as close as possible to the target
- May also add extenders and bases to the ink to correct color/strength. This can sometime backfire

Problems

- Uses significant press time
- Color may never be as close as it could be
- Changing anilox roller influences graphic quality

Better Practise

- Ink is formulated specifically for the anilox roll and substrate it will be printed on.
- The ink is proofed prior to going to press to verify accuracy
- Proofer must correlate with the press
- Measure the drawdown and compare to the reference
- Adjust the ink recording the adjustment until the ink within tolerance
- Mix a full batch using the new formula
- Ink is often within tolerance without any adjustment on the press

Then we must make standarization of all the materials and equipments we use to make sure that the desire colors by the customers can be achieved in an economic way and always the same quality all the time. We have to do optimization of the printing machine as well as making a Fingerprint for all the parameters used in the printing process as well as the ICC Profile to give guidance what colors can be achieve with your each printing machine.

