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by TAK Mathews

Colonel Hathi and Sher Khan, characters from Walt Disney's 1967 movie The Jungle Book are inhabitants of India. But that is where their similarity ends.

Colonel Hathi (hathi is "elephant" in Hindi) can stomp up to 15 mph, and even then there is a debate whether he ever runs, and he is definitely anything but graceful. Sher Khan (sher is "tiger" in Hindi), with his ability to guickly accelerate and reach top speeds of up to 45 mph, is faster and all grace and agility. On the other

hand, Colonel Hathi, with a mass of 10,000 pounds, can generate significant momentum in comparison to Sher Khan, weighing in at 500 pounds. With a lifespan of 70 years, Colonel Hathi would be around long after Sher Khan would have lived his life of 20 years.

The Indian Paradigm

For the best part of the last three decades, the world's largest democracy (and second most populous country) had failed to impress the elevator and escalator (E&E) industry (many other businesses too) with its very low market

growth. E&E suppliers and component manufacturers keep postponing their India plans. Key decision makers would walk away shaking their heads, quoting growth statistics and infrastructure reports from other less populous locations. The above comparison between Colonel Hathi and Sher Khan probably best explains this dichotomy. The business world expects velocity and agility in contrast to the momentum and long-term sustainability that India had the potential to achieve. They fail to recognize the potential associated with sustained momentum - a momentum that saw India barely flinch through the Asian economic crisis, natural calamities, the innumerable terror attacks and even a border conflict.

Many decision makers also fail to recognize the contradictions that formed India. Again, I will go back to Colonel Hathi to illustrate this. If a blind man were to feel Colonel Hathi's tail, he would describe it as wiry. Another, feeling the leg, would describe it as the trunk of a tree, and a third, feeling his trunk, would describe it as a flexible

TAK Mathews is an independent vertical-transportation consultant with TAK & Associates of Mumbai. He has about two decades of experience in the elevator/escalator industry - first with Otis and later with Schindler, where he was instrumental in establishing Schindler operations in India. Mathews is a chartered engineer, member of the National Association of Vertical Transportation Professionals, NAESA International, the International Association of Elevator Engineers and the Consulting Engineers Association of India, and was formerly a member of the Bureau of Indian Standards and the National Building Code panels for elevators and escalators.



Construction in Mumbai

pipe. All descriptions are right; yet in isolation, each does not describe Colonel Hathi.

India is not just about Mumbai or Delhi. The Indian language is not just Hindi, and for that matter, Indian food is not just tandoori and curry. It is normal that the roads in India are shared by the bullock cart (or even an elephant) and the latest BMW. India has the pavement dweller as well as those who stay in palatial apartments costing over US\$1000 a square foot. (The current Forbes listing features 36 Indian billionaires, with four of them finding place among the top 21 richest people in the world.) It might not be easy to do business in India, but numerous India-based companies have become global leaders in their respective fields. To complicate matters further, strategies for India were derived from a successful strategy from another location with the logic if it worked there it should work in India. With different strategies required between Indian cities, the consequences were obvious. These issues were not limited to global players trying to come into India, but even regional players within India trying to expand nationally.

The Indian E&E Industry Transition

In the three decades preceding 2004, Indian E&E growth for most years hardly exceeded 5% on a low base, with some years even witnessing negative growth. In fact, the escalator growth (total units installed in India as of 1998 was 125) was stagnant, with most units coming from one supplier. This supplier was forced to shut down its local plant as the market growth had made production economically unviable even with a 100% market share. Through the last decade, the Indian economy significantly opened up, causing major ripples globally, indicating that the elephant

had stirred. Throughout this period, the growth in the real-estate development sector was also evident.

In 1997, there was just one building in India above 40 floors. Currently, there are close to 100 projects that fit that description at different stages of concept, design, planning, construction or completion, with at least five projects slated to cross 75 floors. The vertical development that was earlier limited to the class-A cities has started spreading to class-B and -C cities.

While malls and multiplexes were rarities in India 10 years ago, the situation has dramatically changed. Gibson Vedamani (CEO of the Retail Association of India) estimates that another 150 malls will be added to the Indian



Gateway to India



landscape over the next 20 months. Supriya Verma (a research analyst with The Economic Times) predicts over 600 additional malls in the next three years.

The growth in the real-estate sector development pushed the annual E&E growth in 2006 beyond 20%, with 2006 sales estimated to have inched close to 30,000 units. These units were sold by the seven international players - Fujitec, Hyundai (through KEEL), KONE, Mitsubishi (through ETA MELCO), Otis (the oldest and largest), Schindler and ThyssenKrupp, along with a host of domestic and regional players (estimated to be over 150) like Apex Elevators, City Lifts, Concord, Eros, Eskay, Johnson (one of the Indian market leaders), Omega, Supriya, etc. This growth also had an impact on manufacturing, with more OEMs shifting to outsourcing.

IEE EXPO 2007 - Go?/No Go?

It is with this backdrop that the International Elevator and Escalator Expo (IEE EXPO) 2007 was conceptualized and launched by Virgo Communications led by Anitha Raghunath and Raghu G., admittedly with some apprehension. This exhibition (a first for India) was held at the Nehru Centre, Mumbai (Maharashtra) on February 8-10. The exhibition, described as "A mega convention on elevator and escalator technologies," was to include OEMs as well as component manufacturers and suppliers.



Raghu G. and Anitha Raghunath, organizers of the event

Despite the obvious boom, many in the industry couldn't fathom why somebody would want to venture on such a risky and untested path. Negative experiences from similar exhibitions elsewhere appeared to justify this viewpoint. At times there was doubt whether the expo would even take off, let alone be of mega proportions. The organizers roped in ETA MELCO (Mitsubishi), Otis and TL Jones to take on the role of sponsors with ELEVATOR WORLD support and endorsement by the Maharashtra Chamber of Housing Industry (MCHI). Arvind Herwadkar and your author, both well experienced in the industry, volunteered as honorary advisors.





With over 60 OEMs and component suppliers committed to participate, of which 15 were foreign companies from countries like China, Germany, Italy, Spain and the U.S., the ball started rolling. It was now up to the visitors to decide the fate of the venture. Normally, the Mumbai weather in February is pleasant and comfortable. Blame it on global warming, but February 2007 witnessed early summer. Highs were 5°C above normal. The humidity levels were also abnormally high. Would this dissuade potential visitors?

IEE EXPO 2007 - The Event

On the morning of February 8, the expo was inaugurated by Sunil Mantri (vice president of MCHI and chairman of the Mantri Group) and H.B. Raskar (chief lift inspecting authority of Maharashtra). During his opening speech, Mantri pointed out that India's average economic growth of 10% made it the fourth-fastest-growing global economy. He also noted that the annual growth in Indian real-estate development was in excess of 25%. Mantri opined that growth could be sustained well beyond the immediate five years. He challenged the E&E industry to support this growth with the latest technology as well as shorter delivery times. (A press release from the Confederation of Real Estate Developers Associations of India stated that the annual real-estate business is growing at 30% annually. With this sector being opened up to foreign investments, the growth will be sustained well into the next decade.)

The traditional ceremonial lamp was lit jointly by Mantri, Raskar, S.M. Sontakhe (chief lift inspector, Maharashtra) and H.N. Sadaqatullah (general manager of ETA MELCO, India). The moment of truth had arrived. Despite



Lighting the ceremonial lamp



Registration counter

some apprehension, the exhibitors did not spare efforts to showcase their products and services. They had done their bit to satisfy potential visitors. As the day progressed, it appeared that this would turn out to be an event of amazing proportions. Most exhibitors had set targets of 200 to 300 visitors per day. Day one had already attracted more than 1,000 visitors. The excitement among the exhibitors built. The exhibition was already being termed a success. Such was the enthusiasm among the visitors that even at 7 p.m., the exhibition was in full steam. Finally, the lights had to be dimmed and then turned off to signal that the day had ended; a practice that continued through the last day.

The technical seminar on day two, moderated by your author, focused on the E&E industry and was well attended. The first paper was by Neenu Kewlani (an employee of KPMG and group head of ADAPT) and was aptly titled "Towards Independent Living." Neenu, who herself is physically challenged, pointed out the general misconceptions associated with people with disabilities. She

> highlighted the inadequacy and ineffectiveness of the Indian legislation in supporting the cause of the disabled. She was appreciative of the organizations and individuals that went beyond legislation to make a difference. Neenu illustrated the specific areas where the E&E industry could support their







(l-r) Dinesh Musalekar and Jonathan Latham

cause. The industry committed their support to her plea to embrace the desire of the physically challenged to live independent lives.

Jonathan Latham (products specialist with Janus Elevator Products Inc.) and Dinesh Musalekar (general manager of TL Jones, India) presented a paper titled "Emergency Communication - Your Life May Depend on It." They introduced the advancements in emergency-communication methods and the changes in codes worldwide. It was pointed out that in Indian industry code, even a basic intercom is not mandatory. Considering the busy and changing social lifestyles, this is probably an area where the Indian code authorities need take priority.

Sachin Sapar (technical territory manager of Henkel Adhesive Technologies, India) presented a paper titled "Adhesive Application for Elevators." He illustrated the role of adhesives in the elevator industry and the various areas where adhesives could substitute for other fixing arrangements. A concern was raised on the impact high temperatures and flames would have on the adhesively bonded joints. This limitation was acknowledged, and there appeared to be potential to address the issue.

The post-lunch session had A. Basheer (general manager of ETA MELCO, U.A.E.) and Taki Yuki Yamada (Overseas Sales Engineering - Mitsubishi Electric Corp., Japan) presenting a "Case study on High Speed Elevators." The presenters detailed methods to improve ride quality, with



(1-r) A. Basheer and Taki Yuki Yamada

a focus on noise and impact on ear pressure. According to the presenters, the effect of ear pressure would not be directly due to elevator speeds, but to the change of the pressure within the building. They pointed out that a challenge to elevatoring tall buildings with high-speed units would involve the building designers' ability to maintain constant pressure throughout the building.

Abhijit Dandekar (general manager, Field Operations -Otis Elevator India) presented a paper titled "Towards Futuristic Trends - the Environment Friendly Permanent Magnet Machine." He took the audience through the evolution of traction machines to the latest permanentmagnet-synchronous-motor (PMSM) machines. Dandekar pointed out that PMSM machines combined the benefits of gearless machines and DC controls without any of the inherent disadvantages. Concerns regarding the proven life of the permanent magnets were raised by attendees. Dandekar assured that the average life of the magnets would be more than 15 years.

Peter Thomson (Group Engineering manager for TL Jones), in his paper entitled "Double the Solution," presented the advantages of the two-in-one door detector in meeting the fire requirements for many countries. Thomson detailed the working of the sensor under various conditions. The subsequent discussions threw up the gray areas related to fire-lift requirements in India. It was felt that this was another area that needed to be addressed by the industry.











The last paper of the seminar was by M. Balasubramanya (executive director, City Lifts India) titled "MRL [machineroom-less] Traction Elevators - An Overview." The paper covered an overview of the MRL traction elevator and its possible advancements. A discussion on the position of hydraulic vis-á-vis MRL solutions indicated that MRLs had taken a strong interest in India. A concern was raised on the current proprietary nature of most MRL solutions that prevents maintenance by third parties.

At the end of day two, many exhibitors had hardly found a moment to sit down - let alone eat - and had stiff backs and aching knees. (On-site physical-therapist facilities might be a prerequisite for the next event.) Yet nobody was complaining. The cumulative total of visitors crossed the 3,000 mark. (Incidentally, 3,000 was the success mark predicted for the entire event.)

It was fitting that the organizers chose day two to put together a "Fusion Night" showcasing a few traditional Indian dances from the state of Maharashtra. The dances were typical forms of worship to Lord Ganesha (the Elephant God), which is also the deity god of Maharashtra. Considering the visitor turnout, Lord Ganesha surely must have been smiling.

The delegates had a chance to show off their dance skills to typical Bollywood music. The large Hindi film industry based in Mumbai - valued at US\$1.5 billion - is referred to as "Bollywood" (a name invented by the BBC in an obvious take from "Hollywood"). It was clear that some of the foreign delegates had done significant home-

work on India and were familiar with Bollywood dance steps.

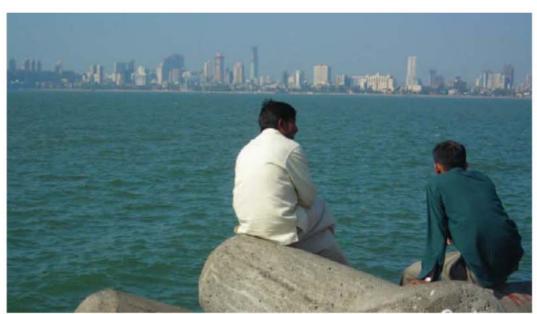
The evening also gave industry members an opportunity to interact and exchange thoughts on a neutral platform. For the Indian E&E industry, this neutral interaction was the first of its kind. Continuity in the same spirit should augur well for the industry. A concern that came up at one of the informal discussions was the paucity of adequately trained manpower. Suggestions included setting up independent institutes to



Seminar participants

impart certifiable technical training in the elevator and escalator field. With the large-scale growth that is taking place, it would be good if the industry takes up the matter and implements possible approaches.

Having run out of brochures and multiple print runs of visiting cards, most exhibitors wondered what day three would bring. With Saturday being an off day for most offices, day three was expected to have a high turnout, and it indeed ended up with the highest number of participants. In fact, late-afternoon visitors to the exhibition returned disappointed, as some exhibitors had closed their stalls because they had run out of material and energy. All the exhibitors to whom I spoke expressed overall satisfaction with the expo organization and turnout. An observation shared by the exhibitors was the high level of interest and awareness among the visitors. Most of the exhibitor/visitor interactions were at a high knowledge level. The visitors I spoke to also indicated that the stalls and exhibits exceeded their expectations. They found the



The Mumbai skyline against the Arabian Sea



"Fusion Night" Indian dance showcase

exhibition informative and were glad that they had taken the time out to visit the exhibition.

The organizers confirmed that the total visitor count exceeded 5,000. OEMs accounted for 45%; developers, architects and project consultants 35%; government and the private sector 10%; and students 5%. A sizeable number of the visitors had come from outside Mumbai, while there were some from the international community. The organizers also reported that the feedback from the exhibitors rated the event as excellent with a keenness to participate in future events. The organizers have already started working on the feedback with measures to smoothen out the overall experience. One of the first steps has been to identify a significantly larger venue for the next event, planned for the end of February 2008. (Details available at website: www.ieeexpo.com.)

India's Potential

The continued growth in the real-estate development sector and the numerous infrastructure projects (i.e., airports, metros, etc.) will continue to push the Indian E&E business growth well into the next decade. The elevator market for 2007 is expected to move to the 35,000 mark, with the escalator market likely to touch the 2,000 mark. This growth should encourage existing OEMs and component suppliers to consider expanding capacities, while the added attraction of reduced import tariffs should

encourage other foreign suppliers to hasten their plans to enter the Indian market.

India is on the move and developing momentum, which despite all contradictions and issues will be unstoppable for the better part of this century. Incredible India has arrived!



The Taj Mahal Hotel