Managing Global Brands

*** *Prof. Nitin S. Dhopeshwar***

INTRODUCTION

The global market has opened-up innumerable opportunities to the passionate marketers to create global brands and nurture them to achieve significant sales and profitability performances across different markets. The world-renowned corporations are up in arms to take advantages of the booming market environment and create brand portfolios to establish their supremacy in relevant product categories. The rules of the game have undergone a drastic change and now, the customer is in a position to dictate what he/she wants and marketers are engrossed in their efforts to understand their customers' clearly and bring new, innovative products in the market place.

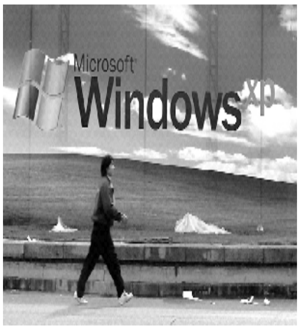
What is a brand? "A brand is a name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or a group of sellers and to differentiate them from those of competitors." – American Marketing Association. Extending the concept of branding to global branding, we can say, a global brand is one which has its presence in most of the global markets. They are termed as 'global' by virtue of their presence, recognition, and acceptance in the different geographies of the world.

As the brand gets customer awareness and acceptance in the market, its brand equity increases.The marketer strives to keep his brand in the top-of-mind awareness of the customer and uses a combination of marketing communications to maintain the visibility of the brand in the market.

"What is global for some in one part of the world is local for others living in those places. This is a challenge for marketers wanting to take brands across diverse cultures. The superficial aspects of culture travel faster than culture itself. It is fashionable to talk of a Coke or McDonald's culture going global, but these are symbols; not the real thing."

NEED FOR GLOBAL BRANDING

A need for branding products globally arises for various reasons like markets are proliferating, customer needs are getting heterogeneous, markets are opening up, customers are aspiring to improve their lifestyles by adopting new products, a slackness in one market can be compensated by growth in other markets, improving overall performance of firms in terms of sales, profitability, market share etc.



The global brand's challenge is to evolve innovative market approaches and connect with people across multiple cultures in different ways, without compromising a brand's identity. A global brand is one which shares strategic principles, positioning, and marketing in every market throughout the world; although the marketing mix can vary. It carries the same brand or logo. Its values are identical in all countries; it has a substantial market share in all countries and comparable brand loyalty. The distribution channels are similar.

Micheal Perry, a former Unilever chief, could not have been more precise in articulating this when he said: "The only way to build a global brand is to build a local brand many times over." He was essentially hinting at being driven by needs instead of the brand.

Global branding can also be considered from the point of view of strategic and tactical moves of the organizations. Initially, brands are created for specific local or regional markets, and subsequently they are pitched in other markets to gain wider awareness and acceptance. Finally, the marketer can also think in terms of brand extensions to add few more products or product variants in the market place. The entire process of branding globally depends on the corporate strategies, their commitments, and understanding market environment in which brands are going to perform across the markets.

With the advent of WTO and multi-lateral agreements happening, the marketing strategies pursued by corporations have shown different dimensions. Strategic

**Assistant Professor,* KLE Society's Institute of Management Studies & Research, Vidyanagar, Hubli-580031, Karnataka
Email : dhopeshwar_ns@yahoo.com

alliances in the form of mergers and acquisitions have become a norm of the day. Corporations with resources and risk-taking abilities are now considering the options of buying the brands to take advantages of the markets and build them further by following some innovative strategies. This can be seen happening recently with Tata group acquiring Daewoo's Korean heavy vehicles production units and further purchasing Jaguar and Land Rover brands.

The marketers, who firmly believe that the entire world is a single market i.e. global market, strive to take their brands global by following appropriate marketing strategies. Corporate players, who have global mindset, do strive to achieve global branding as a means for their survival and growth in future.

BUILDING GLOBAL BRANDS

There is an unprecedented complexity of managing brands in today's worlds. More and more brands are spreading across wider geographical areas even as local and foreign competition increases within their existing markets. The same brand extends across more products, more markets, and more segments than ever before. The challenge is to make sure that your brand offering is relevant, that it's something they want to buy. If you don't solve that problem, you're right, you could have the greatest brand in the world, but you won't sell anything.

BRAND-BUILDING LESSONS

- Brand-building is not just advertising.
- Brand-building involves innovation.
- Excellence in execution creates huge payoffs.
- Products are key to the brand.
- The brand is more than the products.
- Know the brand identity.
- The brand team should run the brand.
- Connect with customers at the emotional level.
- Use sub-brands to tell a story and manage perceptions.

(Source: *Brand Leadership, The Free Press*)

Building of brands in global markets calls for a well-planned approach. There have been two distinct approaches in building brands globally. One approach speaks for simultaneously establishing the brands across most of the markets; the other approach considers cautious launching of brands initially in few markets and then expanding into the other markets (Waterfall and Sprinkler models of product / brand launches).

The first approach of simultaneous launch of brand globally involves high risk of how brand performs in different markets and whether it will be accepted. Still, some companies think in terms of launching the brands in most of the markets at one go to take the advantages of being the initial mover and taking advantageous positions vis-à-vis that of other competitors.

The second approach of launching of a brand is to initially launch it in a few markets and then based on its performance; take the brand to other markets with suitable modifications to meet the market requirement. Many of the brands of international repute have followed this strategy believing that their initial learning experiences in some markets will help them in launching the brands in other markets.

To build a brand in a given geography calls for proper understanding of the market, market forces and requirements of the customers who are going to buy and adopt these brands. Each market is unique in nature and within each market; there are different market segments who have their own unique characteristics. The marketer, when he plans to take his brand global, has to make in-depth study of market and analysis of consumer behavior in each of these markets. Also, the issue of global brand building is also dependent on the type of product you are marketing - consumer, consumer durable, or industrial.

"When a brand is marketed around the world, that fact alone gives it an aura of excellence - and a set of obligations. To maximize the value of global reach, companies must manage both." More than two decades ago, Harvard Business Professor, Theodore Levitt provocatively declared in a 1983 HBR article, "The Globalization of Markets," that a global market for uniform products and services has emerged. Then, global branding was about saving costs and ensuring consistent customer communications.

Because of their pervasiveness, global brands are seen as powerful institutions capable of doing great good and causing considerable harm. A research study by Douglas B. Holt, *et.al* involving 3,300 consumers in 41 countries found that most people choose one global brand over another because of differences in the brand's global qualities. Rather than ignoring the characteristics of their brands, firms must learn to manage those characteristics. That's critical, because future growth for most companies will likely come from foreign markets.

"The Global Brand Study" covering 1,800 people in 12 nations revealed that consumers all over the world associate global brands with three characteristics - quality signal, global myth, social responsibility, and American values - and evaluate them on those dimensions while making purchase decisions.

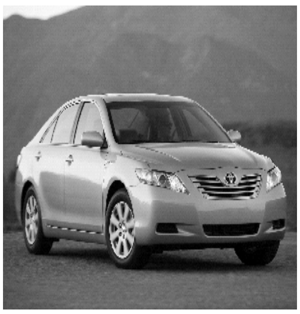
Quality signal: Consumers also believe that transnational companies compete by trying to develop new products and breakthrough technologies faster than rivals.

Global Myth: Consumers look to global brands as symbols of cultural ideals. They use brands to create an imagined global identity that they share with like-minded people. "Global brands make us feel like citizens of the world, and…. they somehow give us an identity," an Argentinean consumer observed. A Costa Rican best expressed the aspirations that consumers associate with global brands: "Local brands show what we are; global brand show what we want to be."

Social Responsibility: People expect firms to address social problems linked to what they sell and how they conduct business. People have become convinced that global brands have a special duty to tackle social issues.

When we grouped them together, consumers who evaluate global brands in the same way, regardless of home country, we found four major segments - global citizens, global dreamers, antiglobals, and global agnostics. Global citizens (55%) are concerned whether companies behave responsibly on issues like consumer health, the environment, and worker rights. Global dreamers (23%) see global brands as quality products and readily buy into the global myths they author. They aren't nearly as concerned with those companies' social responsibilities as are the global citizens. Antiglobals (13%) dislike brands that preach American values and don't trust global companies to behave responsibly. Their brand preferences indicate that they try to avoid doing business with transnational firms. Global agnostics (9%) don't base their purchase decisions on a brand's global attributes. Instead, they evaluate a global product by the same criteria they use to judge local brands and don't regard its global nature as meriting special consideration.

Another significant issue the marketer has to deal with while deciding global branding is that of brand image i.e. the impression created by brand on the consumer. A marketer also considers creating brand equity for building the brand across different markets. "Brand equity is a set of assets and liabilities linked to a brand, its name, and symbol that add to or subtract from the benefits provided by a product or service to a firm / or to that firm's customers." - David Aaker. Brand equity is mainly based on five components of: brand loyalty, perceived quality, brand association, other proprietary assets, and name awareness.



Qulech has identified six traits of brands that can be proclaimed as 'global' brands:

- Dominates the domestic market, which generates cash flow to enter new markets.
- Meets a universal consumer need.
- Demonstrates balanced country market coverage.
- Reflects a consistent positioning worldwide.
- Benefits from positive country of origin effect.
- Focus is on the product category.

MANAGING GLOBAL BRANDS

To succeed, transnational companies must manage brands with both hands. They must strive for superiority on basics like the brand's price, performance, features, and imagery; at the same time, they must learn to manage a brand's global characteristics, which often separate winners from losers.

Brands need to be managed well especially when they are planned to have global forays. Managing of brand essentially involves managing brand equity and its performance at the market place.

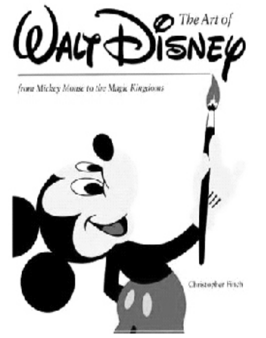
Marketers have to monitor the performance of brands in market and identify customer reactions to these brands over a period of time. There are instances where brands have been successfully launched, and after the initial hype, they have shown decline in the performance. Business organizations have been using different methods to keep tab on the performance of the brand and consumer attitude towards it. They have been conducting consumer behavior and competition research at regular intervals to keep them up-date on the developments at the market place.

Marketers predominantly consider brand positioning in the minds of customers and look for avenues to increase the consumption of brands by identifying new uses and new applications. Some marketers also consider revitalizing of the brands by introducing new features and benefits to ensure consumers do not switch to competing brands. You need to have a strong and valid reason as to why customers should stick to your brand overlooking the competing brands available in the market. When customers find the reasons you have propagated are true and believable, they form favorable attitude towards your brand and continue to buy/use it.

Marketers need to monitor brand performance at market and employ suitable combinations of marketing communications from time to time to ensure that a customer is given a reason to buy and to speak highly about your brand. Experiences of organizations like Unilever, Proctor and Gamble, Cadbury's, Toyota, etc. make amply clear this view-point.

An important consideration in managing brand equity is recognizing and accounting different types of consumers in developing brand marketing programs. A number of well-known brands have derived much of their sales and profits from non-domestic markets for years, for example, Coca-Cola, Shell, Bayer, Rolex, Marlboro, Pampers, and Mercedes-Benz to name a few. Brands such as Apple Computers, L'Oreal cosmetics, and Nescafe instant coffee have become fixtures on the global landscape. The successes of these brands have provided encouragement to many firms to market their products internationally. In more and more product categories, the ability to establish a global profile is becoming virtually a prerequisite for success. “You have to be local and as strong as the best locals but backed by an international image and strategy.” says Gilles Well, L'Oreal's head of luxury products.

WHY GLOBAL BRANDING?



Proponents of global branding have found many distinct benefits in taking their brands globally. They have found that there are different advantages in adopting global branding strategies.

The decision to take a brand global (or to several markets from its market of origin) is driven by fundamental strategic opportunities, such as:

1. Size and attractiveness of the market.
2. Commoditization in market of origin.
3. Displacement of competitors.
4. Achieve economies of scale.
5. Protect current margins.
6. Capture share of mind.
7. Enhance innovation.

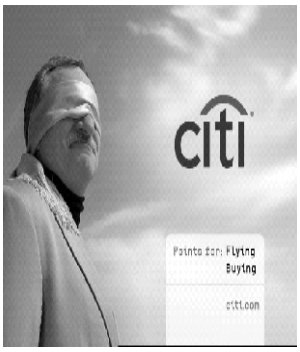
Size and attractiveness of market: A marketer who takes his brands to different global markets has the opportunity to widen his base and increase the top line and bottom line performance. The sheer size of the global market and the possibility of volumes that can be demanded attract marketers to plunge into global marketing. Also, the markets are also attractive in terms of scope for bringing in newer and newer products through brand extensions. You are not dependent on a single market and any changes in economic conditions of one market can be compensated by surge in other markets.

Commoditization of market of origin: There are possibilities that, when number of players manufacturing and marketing similar products galore in the country of origin, the products become mere commodities with little scope for differentiation. Any amount of efforts a marketer puts and funds on vitalizing the brand may not bring the proportionate increase in sales volume or market share. In such a situation, the marketer feels it is a best bet to go global and seek better performance for the brands in newer markets rather than restricting merely to local markets.

Displacement of competitors: When you go global, your standing vis-à-vis that of your competitors will change. Your positioning of the brand in the minds of customer as against that of competing brands will change. You stand a better chance to dislodge your close competitors on the claim of being global in nature. The competitors who cannot match your efforts in terms of product quality, technology, service-back up, advertising and promotions tend to soften their competitive strategies, if not totally withdraw from the market.

Achieve economies of scale: Marketers who go global look at possibility of increased demand from different markets rather than from a single market. Thus, with increased demand, there is enough scope for achieving larger economies of scale and bringing down costs per unit. The advantages gained from achieving economies of scale can help the organization to improve profitability as well as ability to offer competitive prices to the customers, without compromising the quality.

Protect current margins: Global branding helps marketers to maintain the current margin levels. With suitable changes in supplies to different country markets, one can ensure that overall profitability is maintained. With option to sell to different markets your dependence on specific market gets reduced. Also, with market-oriented pricing, a marketer can think in terms of using skimming pricing strategy in new-growing markets and penetrating pricing strategy in old-declining markets. Different organizations have their own experiences in terms of taking advantage of market-situation. For example, there may be a market where demand is low but customers are prepared to pay higher price as against other set of markets where demand is more and so the competition. In such a situation, a marketer might consider charging skimming price in the new but small market and competitive price in the old but highly price-sensitive large market.



Capture share of mind: Customer psyche plays a significant role in his behavior at the market place. Your brands are exposed to larger base of customers, your marketing communications are exposed to more people and you stand to get advantage of customer having your brand in his top-of-mind awareness.

Enhance innovation: Marketers who go global have ample of opportunities to enhance the innovativeness. In each of the market, the level and type of competition will be different. To meet this, you will have to continuously innovate and bring new and advanced products. Also, in certain markets, customers are anticipating. They always expect some organizations to bring more innovative models at regular intervals. The experiences of Sony and Nokia speak about the enhanced innovation they have achieved by bringing to market more and more new, innovative products which customers anticipate from them.

Thus, marketers who contemplate global forays for their brands envision all the possible opportunities that are available for grabbing. They know, the sooner you move in, the greater the advantages.

RISKS OF GLOBAL BRANDING

Global branding is not entirely risk-free. While you have many benefits of taking your brands in global brands, there are also risks involved in opting for global branding strategy.

Risk is a level of uncertainty. Each action or decision has its own level of risk. How the decision is made or action is initiated decides whether you have taken appropriate risk in the matter. Global branding involves taking risk as how the brand will perform in the global market. The efforts of the marketer and the financial commitment to the cause of creating and managing global brands has its own risk. Typically, global branding involves the following possible risks:

1. The danger of brand communication resulting in market confusion.
2. The danger of over-standardizing or over-simplifying the brand.
3. The danger of inappropriate spending on and ineffective impact of wrong communication channels used.
4. The danger of not correctly understanding market and underestimating of the investment and efforts in creating brand awareness.
5. The danger of not investing in internal branding to ensure regional employees understand the brand values and benefits that are to be communicated and delivered consistently.
6. The risk of failing to modulate performance metrics based on local variables.

Marketers at times assume that the brand communicates the same meaning across markets but ultimately realize that in fact, there is a confusion in the market about its benefits, positioning, etc. Such situations are dangerous and may not give the desired result in terms of sales and profits. Marketers have to take into account the cultural factors and consumption habits of customers across different markets while sending out the marketing communications. Here, the role of agency selected to design and create the brand communication and its knowledge of local customs and practices is of great significance.

Marketers in their anxiety to make brands readily acceptable and recognizable, try to over-standardize or over-simplify them. But, this tendency suffers from the danger of discouraged innovation at the local level. The marketer has to be clear upto what level he has to standardize or simply sell the brand across different markets. Some markets are technology-savvy and they accept products with improved technology, in fact, their expectations are guided accordingly. While in other markets, customers may look for gradual up-gradation of technology in new brands so that they can understand how to use them and adapt to them.

Global branding also demands that a marketer should select appropriate communication channels and communication strategies. Any error in selecting communication channels and strategies will result in unnecessary overspending and ineffective impact of such communications on target segment. Media availability across all markets in the world are not same, so also are the media habits of consumers. With a large mix of different media available and different media vehicles, the marketers contemplating taking their brands global must select the appropriate media vehicle to ensure that the reach is optimal. Also, the type of message strategy followed and theme selected is guided by socio-cultural factors prevailing in the markets.

It is essential that the marketers have correct understanding of the investment they will have to make to take their brands global, create their awareness in the minds of customers and make customers to try and adopt them. Marketing budgets of many MNCs and within that advertising and promotion budgets speak of heavy investment commitments. The efforts on marketing communications till the brands establish firm foothold in different markets demands proper estimation of marketing expenses till the logical ends are reached. You need proper financial back-up to take your brands globally.

Branding globally includes involving locals in selling your products. Marketers cannot assume that regional employees understand the brand values and benefits correctly. Marketers should spend sufficiently on ensuring these employees have proper understanding of brand values and benefits to ensure they are communicated and delivered consistently across market.

Finally, branding globally also has a risk of failing to modulate performance metrics based on local variables. Marketers have to know clearly how localites measure the product / brand performance in their market. There are different variables on which the brand performance can be measured, like awareness, interest, comprehension, likeability, adoption, repeat purchases, sales volume, profit margins etc. These variables are viewed differently in different markets to assess the brand performance.

CUSTOMER APPROACHES TOWARDS GLOBAL BRANDS

Customers are always passionate about brands. They look for new brands with added value. Marketers, while bringing global brands in the market should be guided by consumer approaches towards different brands. A teenager may be looking for a mobile handset with innovative features and best value proposition for the price he or she pays. Similarly, a housewife looking for home appliances might measure the value of a new brand launched in market in terms of comfort, easy to handle, safety, time saving, pride of ownership and the price tag. Each customer has his or her own method of evaluating brand choices available at the market place. It is for the marketer to identify these evaluation methods and design their marketing communication strategy to convince customers that their products meet customers' expectations on each parameter under consideration. As a marketer, you will have to give a valid reason as to why a customer should choose your brand as against that of competing brands available in market.

INTERMEDIARIES' APPROACHES TOWARDS GLOBAL BRANDS

The trading community will have its own way of accepting new brands for marketing. The channel members evaluate new brands from the point of view of their contribution to the top line and bottom line performances, aligning with the product range they offer, impact on the image of the intermediary, ability to arouse interest in the minds of customers and their acceptance etc. Channel members are also having their own image in the market and hence, they look for only those brands which will enhance their image and not hamper it. It is said an image of a retail outlet depends mainly on the type and variety of merchandise it offers for sale. Also, marketers have to support channel members in their efforts to build brand equity at market place. This could be accomplished through the right set of trade promotions and cooperative advertising.

EXPERIENCES OF GLOBAL BRANDS

Global brands evolve over a period of time and not overnight. Each brand has its own product life cycle (PLC) and how a marketer nourishes and manages the brand during the different stages of its product life cycle decides the performance of the brand in market. Different brands have shown varying performance over a period of time. An in-depth study of performances of different global brands during their life time suggests that brands can remain and perform provided they keep customers' interest in them intact for a fairly long time. There are instances where brands have shown decline in performance and marketers have taken timely action to revitalize them. Much of the brand performance at the market place depends upon marketers' actions commensurate with consumer expectations. The positioning strategy adopted by marketers and the use experiences of the customers determine the experience brands have at the market place.

BRAND VALUES FOR SELECT BRANDS: (in $ million)						
	Nokia	Walt Disney	Cisco Systems	Xerox	Philips	Motorola
2006	30,131	27,848	17,532	5,918	6,730	4,569
2005	26,452	26,441	16,592	5,705	5,901	3,877
2004	24,041	27,113	15,948	5,696	4,378	3,483
2003	29,440	28,036	15,789	5,578	4,464	3,103
2002	29,970	29,256	16,222	5,308	4,561	3,416
2001	35,035	32,591	17,209	6,019	4,900	3,761
2000	38,528	33,553	20,068	9,700	5,482	4,446

Source: Interbrand's Best Global Brands 2006

The above table shows the variation in brand values of identified brands over a period of seven years. The companies owning these brands must be having their own experiences in managing and building these brands in the global market.

Brand Values as per brand ranks in 2006:										
Brand Ranks	**1-10**	**11-20**	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**	**71-80**	**81-90**	**91-100**
Brand Value in $ billions	396	190	120	99	75	60	48	41	31	29

Source: Interbrand's Best Global Brands 2006

The above table shows how the brand values vary by their ranks as per the figures for the year 2006. It also explains that top 10 brands have value more than ten times that of brands ranked 91-100.

Finally, the brand values in 2006 as compared to that of 2005 have also shown major variation due to brand owners' efforts in building and managing these brands while facing the competition with other brands and meeting the customer expectations.

Change in 2006 Brand Value over 2005 Brand Value:			
Increase in Brand Value	**No. of top 100 brands**	**Decrease in Brand Value**	**No. of top 100 brands**
Up to 5%	22	Up to 5%	11
6% to 10%	32	6% to 10%	4
11% to 15%	19	11% to 15%	1
16% to 20%	4	16% to 20%	1
21% and above	1	21% and above	1
New Brand or zero change	04		

Source: Interbrand's Best Global Brands 2006

The above table shows that out of the top 100 brands, values of 78 brands have increased, values of 18 brands have decreased and 4 brands show no change in their values. The point to be noted is value of Google brand has increased by 46%, while that of Gap has declined by 22%. These variations in brand values of 2006 over 2005 speaks of efforts of brand owners in managing and building brands in global market.

CONCLUSION

Managing global brands calls for dedicated efforts right from the conceptualization stage till the realization stage. Marketers have to be on their toes to ensure that the investments made in global brands bring desired results for the corporations as well as the consuming fraternity. With globalization, effect has been seen in different markets (established as well as emerging). Marketers who want to grab the opportunities for going global with brands need to act fast and also with caution in dealing with different decisions pertaining to creating and managing global brands. The one who makes waves with brands in the minds of consumers will be a successful brander and he will have to keep consistency in his efforts to manage these global brands, which is not all that simple.

BIBLIOGRAPHY

1. DOUGLAS B. HOLT, JOHN A. QUELCH, AND EARL L. TAYLOR, 2004, *How Global Brands Compete?,* Harvard Business Review, Pp 68-75.
2. SAURABH SHARMA, 2004, *Global for whom, local for whom?,* Indian Management, Pp 18-24.
3. MANJARI RAMAN, 2002, *Where Brands Fit Into Business Strategy?,* Indian Management, Pp 20-24.
4. EVIN LANE KELLER, Strategic Brand Management Building, Measuring, and Managing Brand Equity, Pearson Education, 2nd Edition, Pp680-688.
5. R.M. JOSHI, International Marketing, Oxford University Press, 2005 Edition, Pp350 355.
6. www.interbrand.com Best Global Brands 2006 A ranking by brand value.
7. http://bwnt.businessweek.com/brand/2005/ Top 100 Global Brands Scoreboard.

(Cont. from page 20)

being encountered in decentralized logistics. Learned feed-forward mechanism and ANN-Genetic Algorithmic integration are two great ways to reduce dynamic tracking error of a feedback based decentralized logistics control system as well as to optimize the logistical processes and decision variables. Hence, the above-deliberated possible interface offers a tremendous opportunity of developing an Experiential Expert System for logistics control, policy formulation and decision-making.

BIBLIOGRAPHY

1. Chang, Yoon and Makatsoris, Harris., Institute for manufacturing, University of Cambridge, Cambridge, CB2 1RX, UK, International Journal of Simulation, Vol.2, No.1. ISSN 1473-804x on-line, pp.24-30, 2003.
2. Chen, F., Z.Drezner, J.K. Ryan, D. Simchi-Levi,"Quantifying the Bullwhip Effect in a Simple Supply Chain:The Impact of Forecasting, Lead Times and Information".*Management Science* v.46 n.3, 2000, pp.436-443.
3. Forrester, J. W. 1958. Industrial Dynamics: A Major Breakthrough for Decision Makers. *Harvard Business Review* 36 (4):37-66. .... 1961. *Industrial Dynamics*. Portland (OR): Productivity Press.
4. Forrester, J W., 'Industrial Dynamics', republished by Pegasus Communications, 1961, p.365
5. H. H. West and M. L. McGuire, Chemical Engineering and Material Science, University of Oklahoma, Norman, Oklahoma, USA
6. Irwin W. Sandberg, James T. Lo, Craig L. Fancourt, José C. Principe, Shigeru Katagiri, Simon Haykin Nonlinear Dynamical Systems: Feedforward Neural Network Perspectives, ISBN: 978-0-471-34911-2 , February 2001
7. Kelly, K. New Rules for the New Economy, 10 Ways the Network Economy is Changing Everything. Fourth Estate, London UK, 1998.
8. Luis Rabelo, Magdy Helal & Chalermmon Lertpattarapong, Analysis of supply chain using artificial neural net and eigen value, Winter simulation conference, USA 2004:
9. Moon, Young B., Phatak, Dinar., Enhancing ERP system's functionality with discrete event simulation, Industrial Management & Data Systems ISSN: 0263-5577, 2005, Vol.105 , , Emerald Group Publishing Limited, pp. 1206 1224
10. Richardson, G. P., and A. L. Pugh, III. 1981. Introduction to System Dynamics Modeling. Portland (OR): Productivity Press.
11. Satsangi,.P.S. "Integrated Urban Energy-Economy Environment-Transportation System Modelling And Simulation With Particular Reference to Soft-computing", Transportation Systems - Status & Directions, Phoenix Publications, IIT New Delhi Conference, 2002, pp. 369-384.
12. Sarmiento, A.M., R. Nagi. "A Review of integratedanalysis of production-distribution systems". IIETransactions 31, 1999, pp.1061-1074.
13. Sterman, J.D. Modeling managerial behavior:"Misperceptions of feedback in a dynamic decision makingexperiment". *Management Science* 35(3) 1989, pp. 321-339.
14. Thomas, D.J., P.M. Griffin. "Coordinated supply chainmanagement". European Journal of Operational Research,94, 1996, pp.1-15.
15. Towill, D. R. 1996a. Industrial dynamics modeling of supply chains. *Logistics Information Management* 9 (4): 43-56.
16. Vennix, J. A. M. 1996. Group Model Building: Facilitating Team Learning Using System Dynamics. Chichester: John Wiley & Sons.
17. Xiaoqiu Li and Stephen Yurkovich, Dynamic programming approach to optimal feedback-feed-forward controller design, Journal of Dynamic Systems, Measurement, and Control -- June 2000 -- Volume 122, Issue 2, pp. 269-275

(Cont. from page 23)

BIBLIOGRAPHY

1. Berkowitz, E.N, Kerin, R.A, Hartley. S.W, & Rudelious, W. (2000). *Marketing.* (6th ed.). New York: Irwin McGraw-hill, p.325.
2. Partridge, M.V.B. (2003). *Guiding Rights: Trademarks, Copyright, and The Internet.* Retrieved from http://www.GuidingRights.com/resources/html.
3. The amazing Infosys Story. (2006). Retrieved October 30, 2006, from http://specials.rediff.com/money.
4. Sukumar, R. (2001, January 21). India's Best Employers: The Top 5. *Business Today*. Retrieved from http://www.india-today.com
5. Infosys recognized as a Globally 'Most Admired Knowledge Enterprise for 2004'. (2004, December 1). *A Teleos study*. Retrieved from http://www.infosys.com.
6. Building The Infosys Brand. (2008, February 7). *Hindustan Times,* p.5.
7. Starbucks. (2006). *Starbucks Foundation Grants.* Retrieved May 26, 2008, from http://www.starbucks.com/aboutus/grantinfo.asp
8. Intel News Release. (2006). *Intel Commits $1 Billion To Further Emerging Markets Strategy.* Retrieved May 26, 2008, from http://www.intel.com/pressroom