DHARANA
International Journal of Business
DOI: 10.18311/DBIJB/v17_i1_2026_01
INFORMATICS JOURNALS
ISSN: 0974-0082 | Vol 17(1), 2026 | pp. 1–9

VISHWAROOP– Concerted Strategy for Export Marketing of Machine Tools

N Ramanuja

Chairman, M.P. Birla Institute of Management, Bengaluru – 560001, Karnataka, India
Former Chairman and Managing Director HMT Limited; deephari2003@yahoo.co.in

1. Introduction

Synergy is when two or more things—organizations, departments, or even teams—work together to produce something of value. A Rigveda mantra beautifully encapsulates this synchronization in the mantra:

'समानी व आकृतिः समाना हृदयानि वः ।

समानमस्तु वो मनो यथा वः सुसहासति"

"May your resolves be one; May your hearts feel alike in harmony; may your thinking be one; and thus, may all of you live happily with thorough Union".

-Rig Veda 10.191.4

- Let your aims be common and your hearts of one accord; and all of you be of one mind. So, you may live well together-

This mantra from the Rig Veda beautifully encapsulates the ancient Indian spirit of unity in action—the harmonization of thoughts, efforts, and aspirations. It reflects a profound vision of collective progress, where collaboration across individuals and communities became the bedrock of growth in Bharatavarsha, the Indian subcontinent. This ethos manifested across diverse fields—from spiritual philosophers and saintly scientists to technologists, educators, medical practitioners, and chroniclers—each contributing, innovating, and sharing for the greater good. It sowed the seeds of synergy, nurturing the ideal of a borderless global family— वसुधैव कुटुम्बकम् "Vasudhaiva Kutumbakam." This vision extended to knowledge sharing and wealth creation on a global scale -"Vishwa Mahajana." Global Citizen!

Interestingly, the modern term "synergy" echoes this ancient wisdom. Rooted in Ancient Greek philosophy, synergy embraces the idea that "the whole is greater than the sum of its parts." The word traces its lineage from Latin synergia, derived from the Greek synergos, meaning "to work together" or "to collaborate."

Over a period of time, territorial co-operative focus evolved continuously – shrinking in to countries, states, and companies (Rashtra, Rajya & Samstha). Concept of competitive approach to operate business in domestic and international arena emerged. Competitive co-operations through collaborative and consortium efforts provided the powerful connect. The concept of synergy in business achieved popularity in the 1990s, when corporate executives and

Article Received on: 24-02-2026 Revised on: 02-03-2026 Accepted on: 17-03-2026

investment bankers used corporate synergy to gain by mergers and acquisitions (M&As). Corporate synergy doesn't only mean the M&A process. It's also used when a company or group of companies come together for cross-business product development or marketing.

2. Evolving Cooperation: From Community to Competition

Over time, cooperative efforts evolved across different scales—territories, countries (Rashtra), states (Rajya), and organizations (Samstha). Eventually, a more competitive approach emerged, balancing cooperation with competition in domestic and international arenas.

This transition fostered competitive cooperation—where collaboration and consortium efforts coexisted with competition, creating powerful networks of mutual benefit. The concept of synergy in business gained prominence in the 1990s, particularly with the rise of mergers and acquisitions (M&As) as a means to create value through integration. However, synergy in business extends beyond M&As— it encompasses cross-functional collaborations, joint product development, and integrated marketing efforts across divisions or firms.

3. Synergy in the Manufacturing Domain

In the manufacturing sector, this spirit of synergy took concrete shape through the pivotal role of machine tools and allied systems, providing time-tested, timely, and appropriate support solutions. The diversity and complexity of manufacturing technologies initially necessitated global collaborations with leading machine tool manufacturers.

Gradually, through robust in-house R&D efforts, industries built self-reliant, indigenous alternatives. This journey of assimilation spanned design, manufacturing, assembly practices, applications engineering, and the training of engineers and technicians.

A vibrant supply chain of components and subsystems emerged, comprising machine tool manufacturers and their supporting ancillary small and medium enterprises (SMEs). Leading machine tool manufacturers also established world- class training centers and structured educational programs, thereby fostering knowledge dissemination and skill development at par with global standards.

4. HMT and adaptation of synergy

I began my career at Hindustan Machine Tools which was established in 1953 with an intention to manufacture Machine Tools aimed at promoting indigenous manufacturing solutions and integrated systems in India. This initiative called for the absorption and indigenization of a wide range of technologies, initially through collaborations with Internationally acclaimed machine tool manufacturers, predominantly from Europe, particularly Germany, Switzerland, and France on the platform of आ नो भद्राः क्रतवो यन्तु ववश्वताः'Aa No Bhadrah

Kratavo Yantu Vishvatah' Let knowledge come to us from all sides. Thus, the Organization had to manage multi-product portfolio, multi-technologies, with manufacturing plants located at multiple locations and was subsequently aptly renamed HMT Ltd. This change was made to reflect company's multi-faceted, product-technology focus. A key driver of this transformation was the absorption of technologies through in- house capabilities to manufacture all components for final assembly. Over time, the organization established a wide ancillary network and supply chain to support the growing market demands and enhance cost control too. The concept of synergy thus took seed at HMT which exfoliated in the coming times as a large conglomerate. The supply chain also helped other large and medium Indian machine tool manufacturers.

Wide dispersion of manufacturing facilities of major machine tool user sectors like defence production, automobile, auto-ancillaries, power generation, industrial products etc. necessitated HMT Ltd to establish country wide manufacturing facilities and customer centric marketing network. I had the opportunity of operating in the vibrant marketing network to understand and needs and thus supporting major use sector.

My introduction to our scriptures which believed in united efforts in various facets of life have influenced me enormously in my thought process in my personal life and also my corporate career. This prompted me work for concerted efforts in both watches and machine tools, I had realised that harmony is the key to realize the objectives of Vision, and Mission for the journey and destination too as defined in the "Aikyatha Mantras" in the Rigveda, often translated as "mantra of unity," which emphasize the importance of harmony, cooperation, and shared purpose. These mantras highlight the need for collective effort and shared understanding in achieving common goals.

It has always been my mission to instil the teachings from the Rig Veda in all initiatives of mine. I took it upon myself to infuse this spirit among my colleagues in the organization, not just limiting myself to the company but also fellow manufacturers in the country for contemporary development of Machine Tools.

5. Indian Experience in collaboration

Country's consumption was supported by domestic production and sales, as well as imports. Exports were marginal-around 10% of country's production, with a focus on product exports was getting initiated which developed into project exports which included many other machine tools manufactured by Indian industries. On the export front, CNC machine tools, particularly from Taiwan, Korea, and the higher end technology machines from Germany, and Japan. There were two significant challenges. The first challenge is the competition among CNC machine tools to compete against cost-competitive models. The second challenge is to identify and offer a diverse range of product groups that can be tailored to meet specific market demands.

6. Background

Towards the end of 1990s decade, I had taken to international exhibition at MCMORMICK CONVENTION HALL CHICAGO a big team from HMT machine tools various divisions & from various disciplines like Design R&D, Proto type development, Refurbishment division, international division, planning& data Center, corporate group Product development corporate planning& project management, Metal forming division & General managers of various machine tools units. I had the pleasure of interacting with major machine tools manufacturers & CNC system manufacturers like Fanuc, Siemens.

I also had the privilege of meeting fellow INDIAN machine tools exhibitors like Batliboi, PMT, BFW, and ACE. Etc. All of us were putting lot of efforts time & money in exhibiting our products. It is at that time at that time I felt if we are able to pool up this great efforts & technical skills & jointly put up a show exhibiting a product consisting of the best skill of each in building up a cost effective CNC Machine Tools for the global market. Then it will be a great movement Compete internally but jointly together face outside international competition — then we can justify our ancient thought of the Rigveda's समरनी व आकूतत: समरनर ह्रदयरतन व:।

The idea of synergy was mooted at meeting we had at HMT board room with members of major machine tool makers of our country invited by HMT after my return from international exhibition at Chicago.

In tune with international CNC Machine Tools development and the eventual increase of domestic user demands, at that time, met largely by imports an idea germinated in our minds. The concept of VISHWAROOP as a strategy for marketing Indian Machine Tools jointly took shape here.

7. How the idea grew?

As a competitively positioned international brand, we needed to address the 4 P's of marketing - The four Ps are product, price, place, and promotion. Why not have all Indian leading machine tools manufacturers come together to address the exports collectively and still compete in domestically? During IMIEX 1998, the domestic manufacturers showcased a slew of CNC Machine tools with HMT leading the pride. Based on the encouragement of Indian manufacturing machine tool manufactures. As the chairman and Managing Director of HMT, I took a bold initiative of announcing this concept which would address international markets during the press conference, which was jointly supported by late Sri Shailesh Seth, one of the stalwart and think-tank of IMTAM. This was endorsed by other manufacturers at large. After the conclusion of IMTEX exhibition 1998, leading Indian machine tools manufacturers were invited by the HMT.

For the first time in the history of IMTMA, most of the machine tool manufacturers accepted the invitation and participated in this unique meeting. After brief introduction by the author concept of working together to address the export initiative was accepted in general.

8. Concept of VISHWAROOP

A Concept paper presented by HMT covered major aspects of cooperation and joint working:

- Product: product basket to meet the specific requirements of the select markets. It was generally agreed that the participating machine tool manufacturers Committee to evolve.
- Suitable product basket based on their experience in select market. The product basket to encompass general purpose Machine and CNC Machines. In case of offering cost effective technologies new CNC machine tools to be jointly developed.
- Price. In order to be price competitive ways and means have to be explored to contain the cost of manufactures Right from the materials management, manufacturing strategies and to reengineer a product for cost control.
- As deliberated above, jointly develops the competitively positioned CNC Machine tools the machine tool manufacturers to identify the major components and subsystems which can be vended out among themselves so that the installed capacity can be optimally used. Such pooling of resources enable cost reduction and reduce lead time for production Increase to be examined by committee.
- Place market to be identified based on past experienced of the participating company.
- Promotion: Essential to be present continuously in Select International Markets in addition to Display at Machine Tool Fairs and Shows.
- To participate jointly under one banner - to promote "Made in India" Brand with a cost effective solution.
- To Explore a Single Source Marketing Dealer/ Agency in select Markets to handle the total Business Development - from Prospecting to Commissioning dedicated with Customer Centric Approach.
- Preparation of a Composite Product with Literature under "VISHWAROOP" Brand, Pooling of Resources to evolve Cost-Effective Networking

It was my privilege to name this Unique Export Initiative proposed as - "PROJECT VISHWAROOP".

All the elite members of Indian Machine Tool Industry, IMTMA and Others, present in this Conclave, endorsed Concept as the Frame Work of and well as the project name proposed – VISHWAROOP

The author, concluded the Confluence of the Export Fora, thanking for their Flair and Fervour and their enthusiastic Zeal to forge ahead draw up Strategies to initiate activities in their Organisations.

To commemorate the Occasion HMT special edition watch 'Vasudhaiva Kutumbakam' dedicated to the nation in 1997 (50 years of independence) presented to all present.

On behalf of the Select Machine Tool Fraternity and IMTMA, Shri Shailesh. R. Sheth, admired the gesture of and steering the unique

comprehensive concept by the author. He endorsed and assured this movement would be imbibed in the plans of the manufacturers and Indian machine Tool Manufacturers Association in true spirits and all earnestness.

At this juncture, to-day, I am deeply distressed to say, Shri Shailesh Sheth, is not any more with us, as he joined the Lotus Feet of Almighty recently.

9. Efforts of IMTMA in the synergy

Indian machine tool manufacturers association (IMTMA) was conceived 75+ years ago, to extend support the manufacturers of machine tools in India to increase competitiveness, enhance efficiency, improve productivity, and ensure growth. The aim of IMTMA is to assist the members to become cost-effective, technology-driven, and ever responsive to customers' changing needs. In addition, IMTMA has supported the user industries facilitating for getting better and more modern technology of machine tools to provide them with competitive manufacturing solutions.

IMTMA spearheads the advancements in industry addressing various facets of interphases – with government, academicians, and industry associations – domestic as well as international etc. Besides, IMTMA organises its annual flag ship event, Indian Machine Tools Exhibition IMTEX – A kaleidoscopic promotional scape that showcases dynamic unlimited views, opportunities and release of hidden creativity through display of shape of solutions on the horizon – vision/mission BRAIN STORMS – to foresee and formulate the short-term and long-term growth strategies.

IMTMA also provides 'Technology Centre' to impart continuously comprehensive and intensive training to develop technicians and engineers – on current state-of- the-art technologies.

10. Some milestones of VISHWAROOP Synergy

- HMT and Ace Designers mentored and initiated the process of formation of Core Member Companies - five companies from Bangalore, Hyderabad and Coimbatore.
- In 1998, monthly meetings were initiated at venues, at different locations near the core member companies, in order to facilitate visit to manufacturing plants of participating companies.
- Issues deliberated during the period 1998 to 2002:

1. Identification of Product Basket non-Competing models types of Machines and including Cost Competitiveness.
2. Identification of Select Markets to enter; with appropriate Product Baskets. First Step Identification of Marketing Agency
3. Promotional Steps to showcase the "VISHWAROOP" product Baskets.
4. Participation in International Machine Tool Shows in Germany, as a First Step, to evolve brand development and dealer networking strategies.

Inward mission of prospective marketing agencies to visit India to explore the modalities for market development.

Explore the establishment of Permanent Display cum Demo Centre with Customer Centric Support initially in Germany.

11. VISHWAROOP at IMTEX 2001

VISHWAROOP companies participated in IMTEX 2001 with Display focus on Showcasing competitive home-grown technological capabilities, Projection of R&D Efforts and achievements through Strategic Restructuring.

During inaugural Speech at the exhibnition, Union Minister of State for Commerce and Industry, Mr. Omar Abdullah emphasised focus on Globalisation and an export target of 25% of total Turnover was proposed. Emphasis on Training and Retraining of work force was emphasized, which was the very objective of Project VISHWAROOP.

In his valedictory address later, Mr. George Fernandes Union Minister of Defence praised the industry's display of Quality Technology Machine Tools. He re-emphasised focus on Export Markets. He also suggested a consortium approach to tap export markets.

It is worth noting that following Project VISHWAROOP companies displayed their own in-house developmental efforts and were awarded with CMTI- PMY and FIE Foundation:

1. HMT Ltd.,
2. Ace Micromatic Group
3. Galaxy machinery Pvt. Ltd.
4. Uday Computer Aided Mfg. Pvt. Ltd. Machinist Award to Bharat Fritz Werner Ltd.

Project VISHWAROOP Companies displayed State-of-the-art CNC Machine Tools, developed through own in-house capabilities. Thus, to facilitate preparing a suitable Product Basket to be offered as per deliberations during strategy meetings.

12. Evolution of VISHWAROOP

As I approached the end of my tenure as Chairman and Managing Director of HMT Ltd. in April 2002, a landmark development emerged through the progress of the Project VISHWAROOP initiative. It was deeply heartening to witness the formation of a Product Basket that included CNC Machine Tools and complementary General- Purpose Machines specifically targeted for the German and broader European markets.

The Indian Machine Tool Manufacturers' Association (IMTMA) played a pivotal role in this effort by supporting and facilitating participation in EMO 2001 and subsequent initiatives. Under the VISHWAROOP banner, participating companies began to share resources strategically, particularly in the manufacture of critical components and subsystems.

During the National Machine Tool Show (NMTS) held in September 2002, selected dealers from Germany and Italy—fully supported by IMTMA—were engaged in an inward mission. This engagement led to meaningful interactions with machine tool marketing experts from

these countries. Notably, Mr. Walter Germann, a seasoned machine tool expert from Germany, took a keen interest and helped initiate plans for VISHWAROOP partners to formally enter the German market.

Subsequently, five leading Indian machine tool manufacturers collaborated to establish a permanent "India Machine Tool Show Centre" (IMTSC) in Friesenheim, near Lahr in South Western Germany. These founding participants included:

1. Ace Micromatic
2. HMT Ltd.
3. Lakshmi Machinery Works – Machine Tools
4. Uday Computer Aided Manufacturing
5. Fenwick and Ravi

These companies collectively contributed financially and logistically, exporting select machines for permanent display and demonstration to prospective customers in the European market. This joint initiative marked the realization of Project VISHWAROOP's vision: establishing a sustainable platform for pre-marketing, after-sales service, and brand building in international markets, all under the unified identity of "India Team."

By 2003, the IMTSC had become a testament to co-operative collaboration of Indian Machine Tool sector - to usher in Technologically Competitive Machine Tools in Germany. It is interesting to note that there was an experimental effort by a few manufacturers to set the VISHWAROOP Concept to roll on.

13. Conclusion

Looking back, it gives me an immense satisfaction of ushering in an era of cooperation of Indian Machine Tool Manufacturers under the VISHWAROOP initiative piloted by me. The credit for the success of the idea must go to all the participating companies and IMTMA for making this possible. In a nutshell, I firmly believe that the VISHWAROOP must be the prime strategy for successful marketing of Indian machine tools in target countries.

I must acknowledge help of Sri T K Ramesh Managing Director of Ace Micromatic Group in finalising this article, by way of inputs which have elevating the impact of this article. I must also acknowledge his shared vision of VISHWAROOP, which he continues till date. I am thankful to Sri. P.J. Mohanram, former Managing Director of HMT (International) Ltd., for valuable inputs on project VISHWAROOP. I appreciate the contribution of Sri V K Subramanya, who was with me at HMT, an associate of IMTMA and UNIDO – ICAMT (International Centre for Advancement of Manufacturing Technology) for a long time. He was instrumental in taking much needed steps in giving shape to VISHWAROOP at HMT and helping me presently in encapsulating various aspects of this vision in this article. I must also acknowledge contribution of Sri Sudhindra Gargesa, who was with me at HMT (International) and former Director, MPBIM, in putting together the compiled information as an article.

In conclusion. I would like to remember the Aikyatamantras of Rigveda

संगच्छध्वं संवदध्वं सं वो मनरंसस जरनतरम्

देवर भरगं यथर पूवे सञ्जरनरनर उपरसते ||

saṃgacchadhwaṃ saṃvadadhwaṃ saṃ vo manāṃsi jānatām

devā bhāgaṃ yathā pūrve sañjānānā upāsate ||

May you move in harmony, speak in one voice; let your minds be in agreement; just as the ancient gods shared their portion of sacrifice.

समरनो मन्रस्ससमततस्समरनी समरनं मनाः सहचत्तिमेषरं ।।

समरनं मन्रमसभमन्रये वाः समरनेन वो हववषर जुहोसम ।।

The place is common, common the assembly,

common the mind, so be their thought united.

A common purpose do I lay before you,

and worship with your general oblation

समरनी व आकूतत: समरनर हृदयरतन व: | समरनमस्तु वो मनो यथर व: सुसहरसतत ||

samanī va ākūtiḥ samānā hrdayāni vaḥ |

samānamastu vo mano yathā vaḥ susahāsati ||

May our intentions and aspirations be alike, so that a common objective unifies us all.