

Vietnam-Japan Monozukuri Partnership for Supporting Industries

For Leveling Up Vietnam's Competitiveness in the Age of Deepening Integration*

Kenichi Ohno
Vietnam Development Forum
Revised August 22, 2008

Part I. The vision and the purpose

As international integration deepens, Vietnam must greatly improve the capability of local enterprises in order to survive and effectively compete with imports and global competitors. Up to now, quantitative expansion has been achieved through economic liberalization, external opening and large inflows of foreign capital. In the years to come, however, the implementation of WTO obligations and the completion of AFTA liberalization process by 2018 will exert enormous pressure on local enterprises. If local capability in technology and management remains as weak as today, a large segment of indigenous industries is likely to shrink or even disappear under severe competitive pressure, and Vietnam will be locked into the position of a producer of low-value goods under the dominance of foreign firms.

The 2020 vision of industrialization and modernization must be achieved through domestic value creation and highly skilled manufacturing, not by a continued expansion of simple assembly or copy production with little domestic value. Vietnam needs to shift to a new manufacturing model to realize this goal.

In order to level up Vietnam's local manufacturing capability, a bilateral strategic partnership between Vietnam and Japan in *monozukuri* is proposed in sectors in which Japan has strong comparative advantage: transport equipment, electronics and electricals, and precision machinery¹. *Monozukuri* is a Japanese term that describes a special way of organizing and executing manufacturing. It features internal skill accumulation, pursuit of high performance, demand on QCD (quality, cost and delivery), long-term trust and cooperation among assemblers and suppliers, and strict compliance with safety, environmental and intellectual property standards.

By transferring the *monozukuri* spirit and method from Japan to Vietnam, Vietnam can bolster local manufacturing capability and differentiate its products from others, while Japan can have a reliable developing country partner that can perform *monozukuri* together. For this partnership to be successful, Japan should intensify its effort to transfer technology related to *monozukuri* to Vietnam, and Vietnam should vigorously learn and absorb this technology as top national priority.

* This paper was prepared by Kenichi Ohno (VDF) based on the proposal letter of VCCI dated 16 May 2008 and a series of discussion with Japanese officials and experts. Ohno bears the full responsibility for the content.

¹ This includes motorcycles and automobiles; consumer electronics; white goods (refrigerators, washing machines, air conditioners, etc); audio-visual equipment; computers, copiers and other office machines; mobile phones and other telecom equipment; digital cameras and camcorders; industrial machinery requiring precision; and so on.

1. Vietnam's challenges

Despite good performance in growth, institutional reforms and international integration in the last decade, Vietnam's domestic capability in manufacturing has not improved dramatically. The structure of manufactured exports has not changed very much since the mid 1990s. It still relies heavily on simple labor-intensive products with large import components. High quality products are dominated by foreign names while local industrial products serve second-tier domestic markets only. FDI firms continue to complain about the lack of quality, reliability and aspiration of local suppliers. Many weaknesses continue to be reported in management, quality control, marketing, finance, and labor quality.

Vietnam is in the final stage of global and regional integration. Commitments of AFTA, WTO and other FTAs must be implemented. In particular, protection against ASEAN products must be completely removed by 2018. This is a great concern for Vietnam since ASEAN is the strong production base of Japanese products such as automobiles and electronics. Without further cost reduction, Japanese FDI producers in Vietnam will be forced to switch to imports of their own products from neighboring countries rather than assembling them in Vietnam. If major products such as automobiles and electronics must be imported almost entirely, there will be a large negative pressure on the balance of payments.

In addition, wage pressure is already visible in the labor market. If the wage and other costs continue to rise, Vietnam will no longer be a low-cost host for foreign producers and will not be able to offer a "China-plus-one" option. As a result, FDI may shift to other countries with lower costs. One way out is to devalue the currency to retain the status of a cheap-labor country. But the better solution is to increase productivity to continue to attract investors even with higher production cost.

To avoid the middle income trap or regression to simple labor manufacturing, Vietnam must now adopt a new approach to manufacturing with sufficiently large impact. Partnership with Japan will provide a great opportunity to enhance local manufacturing capability to a higher level.

2. Japan's challenges

Japan has high manufacturing technology, but its population is aging. A large number of experienced managers and engineers, born in 1947-49, began to retire in 2007. Meanwhile, young workers who are willing to learn their skills and knowledge are in short supply. This situation is expected to intensify as time passes. If no action is taken, Japan's monozukuri tradition may be lost forever. To retain and further develop this tradition, the Japanese government targets both domestic and foreign human resources as receivers of such skill and knowledge.

Moreover, the wage level in Japan is very high while Japanese enterprises competing fiercely in global markets are under constant pressure to reduce cost. As a result, labor-intensive monozukuri processes are no longer competitive in Japan and need to be transferred to a developing country where the wage is lower. Only through a proper international division of labor, where capital-intensive processes are performed in Japan and labor-intensive processes are performed abroad, Japanese manufacturing can achieve both quality and cost. But Japan has not yet found a suitable monozukuri partner. While Thailand and Malaysia are improving

their manufacturing capabilities, they still fall short of the expectation of most Japanese enterprises.

With diligent labor and a central location in East Asia, Vietnam is *potentially* a very attractive manufacturing partner for Japan. This is a consensus evaluation by Japanese businesses and experts in Vietnam. At present, however, inadequacy of government policy and business management prevents Japan from choosing Vietnam as such a partner.

3. Monozukuri partnership

In order to solve the problems described above, in complementarity and mutual benefit, the governments of the two countries should forge a strategic partnership to elevate the bilateral relationship to a higher level. Japan should regard Vietnam as an emerging monozukuri partner and provide sufficient assistance to realize this goal. In turn, Vietnam should regard Japan as a source of new skill-based manufacturing and aggressively adopt monozukuri skill and knowledge (with local adaptation if necessary).

This strategic partnership should be strongly owned and supported by the highest level of political leadership in each country, and be concretized in proper documentation. Vietnam should recognize the significance of this partnership in the national development strategy. Japan should do the same in its economic cooperation strategy for Vietnam.

Vietnam-Japan monozukuri partnership should aim to achieve the following with active participation and contribution of both Japanese and Vietnamese sides, and both governments and enterprises:

(1) *Resetting the mindset*—at present, Vietnamese managers seem passive or hesitant in acquiring new technology or approaching foreign companies. Vietnamese workers do not seem very motivated or far-sighted in improving their skills and accumulating experience. These attitudes should be changed and manufacturing should be accorded with great importance and pride by a systematic national campaign.

(2) *Technology transfer and capacity building*—supporting industries and human resource are the core to local capability building (see below). Basic knowledge for high skill manufacturing, such as 5S, kaizen and production management, should be taught at schools and centers in large numbers, while factory-specific consultation and patented knowledge should be made available with reasonable payments. There should be mechanisms to accelerate technology transfers through policy, external assistance and business contribution.

(3) *Commitment to international standards*—from the very beginning, bilateral monozukuri partnership should strongly adhere to international standards in product quality, safety, environment and intellectual property so that the product will be competitive in any market in the world.

(4) *Positioning in the global value chain*—Japan and Vietnam should specialize in manufactured products and components that use high skill labor while outsourcing other inputs and services. Although business firms are the ultimate designer of product and investment strategies, the two governments in consultation with businesses should provide policy support for private dynamism.

(5) *Reforming policy methodology*—Vietnam’s industrial policy formulation should be renovated significantly to respond quickly to business needs and market shifts, and effectively carry out the proposed Vietnam-Japan monozukuri partnership.

(6) *Non-exclusivity*—although this is a bilateral partnership, any benefits it generates should be available to all firms of any nationality. By allowing such “free riders,” the partnership aims to achieve the “win-win-win” situation for all (for Vietnam, Japan and others). Vietnam is also free to choose other models of manufacturing from any country it desires. The Japanese model is not imposed exclusively or unconditionally.

4. The importance of supporting industries

The promotion of supporting industries is the necessary condition as well as the first important step toward realizing the vision of Vietnam-Japan monozukuri partnership. The term “supporting industries” (Japanese original: *susono sangyo*) refers to multiple layers of establishments located inside a country that supply parts and components to assembly-type manufacturing firms in that country. This term was first used officially by Japanese MITI’s *White Paper on Economic Cooperation* (1985) to point out the absence of such industrial activities in Southeast Asia when Japanese FDI inflows to that region greatly increased in the 1980s.

Since the largest value (typically 80-90%) of mechanical products comes from parts and components while labor-intensive assembly adds relatively little value (typically 5-10%), international competitiveness requires easy and reliable access to suppliers of parts and components that can offer QCD. Without strong supporting industries, assemblers must import a large amount of parts and components. This will add international transport cost and long lead time to production, reducing competitiveness vis-à-vis rival companies with quick access to suppliers in the same country.

When supporting industries are undeveloped, assemblers cannot expand since they have no cost advantage. But when assemblers remain small, no suppliers will invest or expand in that country since parts cost cannot be reduced with small orders. This is the vicious circle observed in the early stage of industrialization, which can be broken only by the strong policy initiative to invite both assemblers and suppliers in large numbers. This is the realization that ASEAN4 have come to after many decades of industrialization effort.

The scope of supporting industries can be decided strategically to suit the policy purpose at hand. For the purpose of improving Vietnam’s manufacturing capability through the proposed bilateral monozukuri partnership, targeted sectors can be defined as *metal parts and processing* and *plastic parts and processing* for the industries mentioned earlier². More specifically, this will cover:

- Parts—metal and plastic parts for mechanical products; electrical wiring; screws, nuts and bolts; springs;
- Processes—production and maintenance of die and mold; pressing, casting, forging, machining, plating, coating, heat treatment

² See footnote 1. If necessary, rubber, glass, ceramic, cloth and other parts of mechanical products may be added to the list.

Targeted enterprises include both FDI suppliers and Vietnamese suppliers. The relative importance of these suppliers will vary according to specific sector, parts and processes. For FDI suppliers, strategic FDI marketing should be conducted to entice them to invest in Vietnam in accordance with the clearly formulated industrial strategy. For local suppliers, producers with strong will and potential to learn should be supported strongly but selectively, based on proper screening and monitoring.

Industrial human resources are the most important cross-cutting factor in supporting industry promotion at both FDI and local firms. They are classified into (i) top managers, (ii) middle managers and engineers, and (iii) workers. All of these segments should be targeted, with particular emphasis on the first and the second. Besides this, support for capital and equipment is sometimes also needed.

Part II. A proposal for concrete action plan contents

This part contains preliminary ideas of some Japanese experts for concretizing the Supporting Industry Promotion Action Plan for Vietnam. They are presented as an initial input to this effort and are therefore subject to revision by subsequent discussion among Vietnamese and Japanese stakeholders.

The promotion of supporting industries overlaps but does not coincide with the promotion of SMEs. The proposed Action Plan aims to strengthen Vietnam's supporting industries for industrial competitiveness rather than assisting all SMEs to generate income and employment.

ASEAN4 countries have a long history of promoting supporting industries and SMEs, and Japan has assisted their efforts with a large number of technical and financial programs. The policy menu is similar across countries, but results seem to vary according to political will, economic environment, design details, and coordination and monitoring in implementation. The policy package that Vietnam should adopt will be overlapping with this common menu.

The table below shows policy areas and possible measures for Vietnam in light of ASEAN4 experiences as well as recent discussions in Vietnam. Since all measures cannot be adopted at once, selectivity, sequencing and adjustments will be necessary.

Policy area	Measures
1. Capacity building (for specific firms)	<ul style="list-style-type: none"> - Shindanshi (enterprise evaluation) system - TA for management and technology - Large-scale mobilization of retired Japanese engineers - Intensive support for limited sectors (e.g., die & mold) - Awards, PR and intense support for excellent suppliers
2. Human resource (general or institutional)	<ul style="list-style-type: none"> - Management/technical centers and programs - Large-scale mobilization of retired Japanese engineers - Alliance between FDI firms and local universities/centers - Monozukuri school (to be upgraded to university) - Meister certification system
3. Finance	<ul style="list-style-type: none"> - Credit guarantee

	<ul style="list-style-type: none"> - SME finance institutions - Two-step loans
4. Incentives	<ul style="list-style-type: none"> - Exemption or reduction of taxes and custom duties - Grants or loans for specified actions
5. Linkage	<ul style="list-style-type: none"> - Database and matching service - FDI-vendor linkage program - Parts Industry Association and Business Study Meetings - Trade fairs and reverse trade fairs - Linkage with Taiwanese suppliers (motorcycles, electronics) - Improving logistics between Hanoi and HCMC
6. FDI marketing	<ul style="list-style-type: none"> - Creation of strategic industrial clusters - Industrial parks and rental factories - Efficient logistics and infrastructure - FDI marketing targeted to specific sectors or companies
7. Policy framework	<ul style="list-style-type: none"> - Supporting industry master plan - SME law - SME ministry - Business associations and industry-specific institutes - Quality standards and testing centers

Below, short-term means by end 2009, medium-term means by 2013, and long-term means by 2020.

For an effective implementation of the Action Plan, it is essential for the Vietnamese people to recognize the importance of *monozukuri* and supporting industries for Vietnam's industrialization. It is hoped that the Vietnamese Government will take a strong leadership in launching a national campaign to direct people's attention to these topics.

1. Capacity building (for specific firms)

In order to transfer the know-how of *monozukuri* to Vietnam, Japanese should visit Vietnam, Vietnamese should visit Japan, and Vietnamese who have acquired relevant skills should teach other Vietnamese. Moreover, these must go on in sufficient scale and duration to make a great impact. For this purpose, it is proposed to establish the SME management *shindanshi* (enterprise evaluator) system in Vietnam as an institutional core, and produce technology promotion instructors and management improvement instructors. At the same time, there should be a mechanism to mobilize a large number of Japanese engineers, and the programs to send Vietnamese to Japan (or Japanese firms) for education and training must also be scaled up. It is needless to say that both the Vietnamese side and the Japanese side should make utmost effort and sufficient contribution to make this endeavor successful.

<Short-term>

- Survey of capabilities required of Vietnamese local supporting industries in the near future.
- Determination of program design, organization, and roadmap for establishing the *shindanshi* (enterprise evaluator) system which fits Vietnam's reality.
- Designing a mechanism for large-scale mobilization of Japanese engineers (current and retired).

- Designing ways to expand education and training of Vietnamese students and workers in Japan or at Japanese enterprises.

<Medium-term>

- Implementation of large-scale mobilization of Japanese engineers.
- Implementation of expanded education and training of Vietnamese in Japan or at Japanese enterprises.
- Training of SME instructors (technology promotion instructors and management improvement instructors).
- Establishment and implementation of the SME management *shindanshi* system.
- Establishment, expansion, and strengthening of quality standards and testing centers.
- Design and implementation of a program to gradually transfer high-level parts and processes from FDI firms to Vietnamese firms.
- Strengthening of mechanisms for accelerating technology transfer to Vietnamese enterprises such as FDI-supplier matching, subsidies, and investment finance support.

<Long-term>

- Scaling up of the entire capacity building system with the SME management *shindanshi* as the institutional core. Its links with financial support, technical assistance, FDI-supplier linkage, and database should be enhanced.

2. Human resource (general or institutional)

Leveling up of engineering students as well as current workers will equally benefit FDI firms and Vietnamese firms. To improve their education and training, it is essential to correctly identify the requirements of enterprises and supply students and workers who can satisfy them. Improvement and expansion of curriculums, teaching staff, and teaching equipment must be done primarily for this purpose. To facilitate this effort, a mechanism for close collaboration between hiring enterprises and teaching institutions must be created.

<Short-term> Student education

- Review of current status of education and training institutions (functions of various institutions at each level, capabilities of graduates, job market situation of graduates, etc.)
- Review and problem identification of curriculums of education institutions.
- Human resource needs survey for promoting supporting industries (identification of levels and areas to be prioritized).
- Collecting information on cross-country recognition of technical education certificates (Washington Accord).

<Short-term> Worker training

- Mapping of existing training institutions (MPI, MOIT, MOST, MOLISA, VJCC, provinces, VCCI, etc.)
- Review of training programs and training organizations of Vietnamese Government (including laws and regulations such as Decision 143).
- Identification of target training institutions for supporting industry promotion.

- Review and problem identification of existing training programs (for each area such as production technology, production and quality control, management, finance and accounting, etc.)

<Medium-term> Student education

- Improvement of policy mechanism for human resource development (coordination among MOET, MOIT, MOLISA, etc.)
- Improvement of education curriculums (with the participation of Japanese firms).
- Teacher training, enhancement of education facilities, and coordination among education institutions.
- Factory visits and internship at Japanese firms, skill competition and Olympics, and job placement service for graduating students.
- Establishment of collaborative schemes between FDI firms and universities.
- Large-scale mobilization of Japanese engineers (same as 1. above).

<Medium-term> Worker training

- Improvement of training curriculums (with the participation of Japanese firms).
- Education and training of teachers.
- Implementation and scaling up of worker training (including training in factory)
- Links with FDI-local linkage programs (inviting workers of potentially good firms to attend training and receive factory training, etc.)
- Establishment of collaborative schemes between FDI firms and training centers.
- Large-scale mobilization of Japanese engineers (same as 1. above).

<Long-term>

- Introduction of skill certification system and industrial Meister award system.
- Participation in cross-country recognition of technical education certificates (Washington Accord).
- Possible establishment of SME University or *Monozukuri* University.

3. Finance

Vietnam intends to use private commercial financial institutions as main providers of SME loans, with the backing of subsidies, credit guarantee, and two-step loans. However, this effort has just begun recently. Generally speaking, SME finance is saddled with a number of difficulties related to the lack of management and technical capabilities, insufficient corporate financial information and banks' evaluation capacity, and collateral requirement. Continuous institutional invention and adjustment is needed to overcome these problems. It is proposed that preferential measures for supporting industries be added to the process of improving SME finance in general.

<Short-term>

- Strengthening of financial services for supporting industries (establishment of supporting industry promotion department in each bank, assisting the analysis and evaluation of supporting industries and individual suppliers, introduction of asset based lending).
- Encouraging banks to take a leading role in supporting industry cluster promotion, and show initiative and commitment to the formulation of financial infrastructure policy.

- Japanese-local enterprise matching through SMEFP3 (JBIC two-step loan program), creation of model reporting format for business relations with FDI firms, and preferential loans for firms with such relations.
- Strengthening the credit guarantee fund (CGF), including review of advanced cases abroad, creation of the credit insurance system and its operational guidelines.

<Medium-term and long-term>

- Expanded use of the credit guarantee fund (institutionalization of subsidized low-interest policy loans).
- Promotion of using non-property collaterals (loans backed by accounts receivable, speedy execution of collateral rights, and utilization of nonbanks and leasing).
- Upgrading of the standard of bank loans (roadmap for Basel II compliance, building a common database to share among banks information on corporate finance, bankruptcy, asset evaluation etc.)
- Development of preferential financial services for companies with technical training certificates or corporate financial statements properly checked by certified accountants or *shindanshi*.

4. Incentives

Preferential measures for production, investment, education, and training related to supporting industries should be introduced as soon as possible and at levels sufficiently competitive and reasonable (neither too much nor too little) in comparison with other East Asian countries. For this purpose, eligible firms and activities must be clearly specified.

<Short-term>

- Agreement on the definition of “supporting industries” eligible for preferential measures.
- Determination of concrete preferences in taxes, import duties, and subsidies. For example, tax holiday (reduced corporate tax of 10% during six years following the first profitable year, etc.), exemption of import duties on equipment, subsidies on education and training, and working permit waiver and subsidies for Japanese engineers traveling to Vietnam, etc.

<Medium-term>

- Early implementation of agreed preferential measures (by 2010, for example).
- Active PR of preferential measures and FDI marketing for eligible firms and activities at investment seminars and other occasions.

<Long-term>

- Continued implementation of preferential measures. If necessary, adjust preferential measures in light of actual results and situations in rival countries.

5. Linkage

After studying the strengths and weaknesses of BUILD and NSDP in Thailand, VDP and ILP in Malaysia³, and so on, design a new scheme for promoting FDI-local production linkage in

³ Respectively, the Board of Investment (BOI) Unit for Industrial Linkage Development, the National Supplier Development Program, the Vendor Development Program, and the Industrial Linkage Program.

Vietnam. For this to succeed, it is necessary to closely coordinate multiple measures such as narrowing the perception and information gaps between the two sides, database and directory construction, selection of potential local suppliers, focused assistance on selected suppliers, and enhancement of industry associations and trade fairs.

<Short-term>

- Creating the initial list of potential local suppliers based on existing sources (first step toward database construction).
- Award-giving, book publication, and PR of excellent local suppliers.
- Design of a new linkage program (target firms, content of assistance, and roadmap).
- Design of a new database based on the review of existing databases and international experience.

<Medium-term>

- Further collection of supplier information, and addition of new potential local firms.
- Construction and uploading of the database (at the earliest possible date).
- Institutionalization of award-giving and PR of excellent local suppliers.
- Scaling up of technical assistance to potential local suppliers.
- Assistance in establishing industrial associations, and assistance to parts manufacturers association, enterprise study meetings, and industry-specific research institutes.
- Inclusion of third-country assemblers and suppliers into the supporting industry promotion system (for example, Taiwanese companies in electronics and motorcycle).

<All periods>

- Facilitation of enterprise matching (introduction to Japanese business practices, product marketing, changing the mindset, follow-up after initial contact, successful cases, etc.)
- Providing opportunities for enterprise matching (reverse trade fairs, exhibitions, meetings organized by individual buyers, visits to Japanese firms, inviting Japanese business missions to Vietnam, individual matching by TAC, etc.)

6. FDI marketing

For the rapid and healthy development of supporting industries, Vietnamese local suppliers and FDI suppliers investing in Vietnam both must play important roles. The exact roles and weights of these two types of suppliers should depend on the product, the required level of technical competence, and the time scope. It is necessary to come to the clear and common understanding of the role of each, and effectively implement FDI supplier attraction measures and local supplier promotion measures, respectively.

<Short-term>

- Broad-based campaign to nationally recognize the importance of supporting industries.
- Review of the current situation of Vietnam's supporting industries.
- Identification of the appropriate roles of FDI suppliers and local suppliers, and design of FDI supplier attraction measures and local supplier promotion measures based on their respective roles.
- Conducting active PR on policy measures. Use investment seminars to explain preferred parts investment to FDI suppliers, and use various seminars, brochures, and media ads to explain to local suppliers.

- Study and design the industrial cluster strategy.
- Prepare a plan for supporting industry industrial parks. They should provide small rental lots (5,000m² for example), standardized rental factories, support center on the premise (administration, accounting and personnel services for companies in the industrial park), etc.

<Medium-term and long-term>

- Construction and marketing of supporting industry industrial parks.
- Strategic enhancement of infrastructure and logistics for the promotion of supporting industries and supporting industry industrial parks.
- Implementation of the industrial cluster strategy.

7. Policy framework

Although ASMED/MPI is designing and implementing SME promotion policies, assistance to SMEs remains inadequate in both quality and quantity. These policies must be strengthened. At the same time, supporting industry SMEs (which are a subset of SMEs) should be properly recognized for their importance, and a legal framework and policies to specifically assist them should be installed. Policy authority is decentralized at present, which prevents strong and consistent SME policy formulation. In the future, after a sufficient review of international experiences, reorganization of the SME promotion system as well as the possibility of a new unified organization may be considered.

<Short-term>

- Completion of revision of Decree 90, currently under way at MPI/ASMED (key points include sector-specific definitions of SMEs, prioritization of policy support, assistance of policy formulation at the local level, credit guarantee fund, SME promotion fund, etc.)
- Missions to Japan and neighboring countries for the study of SME policy formulation and implementation.
- Determining the scope of “supporting industries” for policy purposes.
- Selection of prioritized assistance areas (for example, die-and-mold, pressing, casting, welding, etc.)
- Government-led popular campaign for better understanding and higher interest in *monozukuri* and supporting industries.

<Medium-term>

- Drafting and passing of the Basic Law of SMEs and the Law on the Promotion of SMEs.
- Design and implementation of action plans for activating inter-ministerial collaboration, private-public partnership, and industry-university partnership.

<Long-term>

- Establishment of a new government body specializing in SME promotion (reorganized ASMED or a new organization).
- Revision of the Supporting Industry Development Master Plan in order to greatly level up supporting industries, including material industries, so that Vietnam will become a truly industrialized country.