**Strategic Alliances: industry-specific characteristics of the achievement of**

**a competitive advantage**

**Natalia Victorovna Kuznetsova***,*Doctor of Economic Science, *P*rofessor, Department of World Economy, School of Economics and Management, Far Eastern Federal University, Russia, 690950,

Vladivostok City, Suhanova Str. 8

e-mail: kuznetsova.nv@dvfu.ru

Table 1 – Examples of strategic alliances in the automobile industry

|  |  |  |
| --- | --- | --- |
| **Alliance members** | **Country** | **Purpose of cooperation** |
| Renault + Volvo | France, Sweden | Creation of a diesel engine and gearbox to complete the haul tractors |
| Ford + Volkswagen | USA, Germany | Collective R&D |
| General Motors + Fiat | USA, Italy | Minimization of costs in the production process |
| Ford + Mazda | USA, Japan | Exchange of technology, exchange of components, collective marketing of products |
| Renault + Nissan | France, Japan | Exchange of technology, exchange of components, collective marketing of products |
| Fuji Heavy Industries (Subaru) + General Motors | Japan, USA | Obtaining of GM access to the Japanese development in exchange for 20% shares of the company |
| Fiat + Chrysler LLC | Italy, USA | Collective production of engines, exchange of technologies |
| Toyota Motors + Fuji Heavy Industries | Japan | Collective creation and production of technologies |

Table 2 – Purpose of Alliances: the overview of the most attractive industries, 2007 (%)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Industry** | **Share of Strategic Alliancees** | **Scientific researches** | **Product development** | **Purchase** | **Production of service / good** | **Collective marketing** | **Purchase and commercial usage** |
| Pharmaceutics | 18 | 30% | 54% | 0% | 0% | 0% | 14% |
| «High-tech» | 16 | 0% | 61% | 6% | 0% | 3% | 27% |
| Automobile | 7 | 6% | 27% | 3% | 47% | 6% | 6% |
| Energy | 11 | 13% | 9% | 4% | 61% | 0% | 9% |
| Finance | 6 | 0% | 18% | 0% | 0% | 0% | 73% |
| Logistic | 6 | 0% | 9% | 0% | 9% | 0% | 82% |

Based on: The Art of the Alliance, 2008.

Table 3 – Strategic Alliances in the sphere of computer and information technologies

|  |  |  |
| --- | --- | --- |
| **Alliance members** | **Country** | **Purpose of cooperation** |
| Microsoft + Scala Business Solutions | USA, Netherland | Software and business consulting |
| IBM + Apple | USA, Netherland | Agreement on the development of operating systems |
| Xerox + Fujitsu | USA, Japan | Copying technology, technology for printers |
| Fujitsu + Amdahl | Japan, USA | Development of the technology of universal computers |
| IBM + Toshiba | USA, Japan | Research and development of flat screen |
| Sun Microsystems + Fujitsu | USA, Japan | Research and development of microprocessors; computer technologies (creation of SPARC) |
| Hewlett-Packard + Apple | USA | Research and development of microprocessors; technology transferring |
| IBM + Apple | USA | Computer technologies (PowerPC) |
| IBM + Motorola | USA | Computer technologies (PowerPC); research and development of microprocessors |
| LG Electronics + Zenith Electronics | Republic Korea, USA | Development and production of LCD monitors and TV sets for the reception of HD signals |
| IBM + Philips Electronics | USA, Netherland | Collective development and manufacturing of semiconductor technology |
| Toshiba + Ericsson | Japan, Sweden | Development of new communication equipment |
| IBM + Toshiba + Siemens | USA, Japan, Germany | Development and production of chip DRAM memory up to 16 GB for large computers |
| Toshiba + Time Warner | Japan, USA | Development of new interactive cable television technology |

Table 4 – The largest biotech and pharmaceutical strategic alliances (2010)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Company** | **Country** | **Partner** | **Country** | **Potential value, million USD** | **Single cost of operations,**  **million USD** |
| Boehringer Ingelheim | Germany | MacroGenics | USA | 2.16 | 60 |
| Cephalon | USA | Mesoblast | Australia | 2.05 | 350 |
| Bayer Schering Pharma | Germany | OncoMed Pharmaceuticals | USA | 1.94 | 40 |
| Boehringer Ingelheim | Germany | F-star | Austria | 1.70 | 0 |
| GlaxoSmithKline | Great Britain | ISIS Pharmaceuticals | USA | 1.50 | 35 |
| Eisai | Japan | Arena Pharmaceuticals | USA | 1.37 | 50 |
| Kyowa Hakko Kirin | Japan | Dicerna Pharmaceuticals | USA | 1.32 | 4 |
| AstraZeneca | Great Britain | Rigel Pharmaceuticals | USA | 1.25 | 100 |
| Roche | Switzerland | Aileron Therapeutics | USA | 1.13 | 25 |
| Forest Laboratories | USA | TransTech Pharma | USA | 1.11 | 50 |
| GSK | Great Britain | Proteologics | Israel | 1.07 | 3 |
| Takeda Pharmaceutical | Japan | Orexigen Therapeutics | USA | 1.05 | 50 |

Based on: Ernst & Young, Beyond Borders, 2011

Table 5 – Foreign experience of creation the strategic alliances

|  |  |  |  |
| --- | --- | --- | --- |
| **Alliance members** | **Year** | **Purpose of creation, results and characteristics** | **Results and characteristics** |
| Rover - Hondal | 1979-1988 | Creation of new technologies and products | For Rover company: the ability to reduce the cost of design and production of new vehicles;  For Honda company: gain experience in marketing and transnational production of cars |
| Toshiba – General Electric | 1982 | Collective development and manufacturing of filaments for light bulbs | Toshiba used the tools of strategic alliances to create a radically different innovative technologies, and created a lot of strategic alliances.  In 2012 the company won the competition with the supply of technology for the construction of a new thermal power plant in Japan |
| General Motors – Toyota (NUMMI) | 1984 | Achievement of saving from 'economies of scale' and acquisition of production competence | The program "Saturn" - a full-scale pilot production of small-displacement cars; creation a new type of manager - "Japanese manager with American face" according to the program NUMMI |
| Lockheed Martin – Mitsubishi Heavy Industries | 1985 | Development of a new model of experimental fighter FSX, designed to replace outdated models of fighter | From the US side: a tendency to control and direct the Japanese aerospace industry in the right direction; access to military technologies of Japan.  From the Japanese company's side: US companies gain experience, acquiring of new knowledge and skills |
| Toshiba – Motorola | 1987 | Production of memory cards and microprocessors | Successful implementation of the task;  access to the Japanese market for Motorola company |
| Xerox – Fuji Xerox  («Xerox international partners».) | 1991 | Struggle against the aggressive policy of Canon, access of Fuji to the US market of laser printers | Expanding of market share in laser printers of both companies;  Increasing the interest in the collective manufactured products;  Fuji company received strength position in the US market |
| Toshiba – Apple Computers | 1992 | Collective development of multimedia computer products | Apple: a competitive advantage in the field of software development;  Toshiba: skills in the manufacturing of electronic products |
| Philips - Nike | 2002 | Collective promotion of products for sports and recreation | First stage: sales of portable mp3 - players in a network of shops Nike;  Second stage: design and manufacture of sportswear and equipment supplier of Nike, which providing a special "pockets" for Philips Electronics |
| Philips – Dell | 2002 | Mutually profitable services | Philips has supplied components for the US computers: first of all the monitors and data storage devices.  Dell has received benefits on the supply of computer equipment for Philips. Transaction value: 5 billion USD. The company also expected to cooperate in the development of new technologies, marketing, and development of standards of data storage |
| Toshiba – Microsoft | 2003 | Design and manufacture of laptops and microprocessors | Microsoft brought the skills of software development, Toshiba shared with this company their skills in designing microprocessors |
| GSK – Roche | 2005 | Promotion of Xenical in the USA | Terms of the deal are confidential and concern of the American pharmaceutical market |
| AstraZeneca – Brystol-Myers Squibb | 2007 | Collective research and development of drugs aimed at treatment of cancer, cardiovascular diseases, respiratory diseases | Developed and implemented in the production of the drug «Baeta» for the treatment of diabetes of the second type |
| GSK - Genmab | 2007, 2010 | Research and development of method of treatment of rheumatoid arthritis, in future - collective production and commercialization of drugs for the treatment of cancer | Clinical experiments have shown positive results, which gave impulse to the development of further cooperation between two companies |
| Toshiba – IBM – Siemens | - | Research and development of creation of semiconductors | Alliance united some unique skills of the partners. Toshiba had the advanced technology of etching. IBM was strong in lithography, and Siemens - in engineering. Companies have limited their cooperation through collective research and production involved individually. |

Table 6 – The experience of some Russian strategic alliances (from 1990 to 2012)

|  |  |  |  |
| --- | --- | --- | --- |
| **Alliance members** | **Year** | **Purpose** | **Result** |
| JSC "MGTS" - "Comincom" - "Alcatel" - "Belgacom" | 1991 | The alliance called "Combellga"; aim is to provide Russian companies some technologies and investments in exchange for the access to the Russian telecommunications market | Clients of collective cooperation are the dozens of the largest hotels and organizations, the Central Bank, the US Embassy, "Lukoil", etc. |
| JSC "MGTS" - JSC "Rostelecom" - "AT&T Communications Services International Inc." | 1991 | Alliance "Telmos", specializing in digital communications, data transmission, videoconferencing and other communication technologies | Successful cooperation in the field of telecommunications, a huge client database |
| JSC "Uralsvyazinform" - "Alcatel" | 1993 | The purpose of Russian company: improving communication networks in the Urals; the aim of French companies is the access to the growing market of telecommunication | * Joint Intelligent Network platform installation in Perm; * More than 40 contracts for a total amount, 100 million euro; * Future cooperation (since 2003). |
| «Boeing Commercial Space Company» - RCC "Energy" - CB "Yuznoe" (Ukraine) - PO "Yuzmash"(Ukraine) - "Aker Kvaerner" | 1995 | Alliance "Sea Launch Company" or "Sea Launch" was aimed at the creation and operation of the rocket-space complex of sea-based | * Creation of international company "Sea Launch"; * Implementation of high-tech experimental work; * 31 successful launch. |
| JSC "Permskie motori" - JSC "Aviadvigatel" - JSC "Interros" -"United Technologies" (Pratt&Whitney) | 1998 | Alliance "International commercial engines" was created with the purpose of:  - The implementation of a joint program of improvement of the PS-90A and its industrial modifications;  - Purchase of equipment and technical re-equipment of individual parts of production and marketing of improved engine. | Successful implementation of the project objectives, the organization of the sales of the engine and after-sales service |
| Gorkovskii motor plant - Fiat | 1997 | "Nizhegorodmotors" had aim to organize the manufacturing of Fiat cars and the creation of production capacity of 150 thousand cars per year. | Because of financial crisis, the project has been repeatedly postponed, with production scheduled for 2002. The Italian company began to control 73% of the company. |
| "Autodor" - "Vital" - "BMW" | 1999 | Assembling of some car models of BMW in Russia | Implementation of the objectives, implementation and marketing of assembled cars |
| JSC "RZD" - Siemens AG;  JSC "RZD" - Geismar, Alstom, GEFCO | since 2000 | * Development of high-speed network at railway; * Production of trains and accessories; * Skills and experience; * Supply of machinery and equipment for maintenance of railways. | * Production and commissioning of high-speed trains, called "Sapsan"; * Production of trains "Swallow"; * Training programs for Russian experts at high-tech French train stations. |
| "Gasprom" - TNC-ВР – "British Petroleum" | 2007 | Implementation of long-term investment in joint energy projects, as well as asset swaps both in Russia and abroad. | Creation of a working group to identify strategic opportunities for investment and collaboration of the companies. |
| GlaxoSmithKline Plc. - JSC "Binnofarm" | 2010 | Technology transfer for the localization of innovative vaccines in the Russian Federation | GlaxoSmithKline provides technology transfer, training and auditing of production processes, as well as long-term supply of antigens for the needs of Russian production, and JSC "Binnofarm" provide territory and organize production. |
| "ExxonMobil" – "Rosneft" | 2012 | * Creation of a joint Arctic Research Centre; * Exploration and development of three new areas of the Arctic. | Cooperation continues nowadays |

**5. Acknowledgement**

The authors acknowledge receiving support from state-funded research program of Russian Ministry of Education and Science. The results of this research were achieved within the frameworks of the governmental assignment of Russian Ministry of Education and Science in the sphere of scientific research during the researching assignment # 26.1478.2014/K “The structural transformation of Russian Economy through the integration installation in the industrial markets of Asia-Pacific Region”.

**6. References**

Auster, E. (1992). The relationship of industry evolution to patterns of technological linkages, joint ventures, and direct investment between U.S. and Japan. Management Science, 17(3): 1-25.

1. Baraevik, P. & Kanter, R. (1994). Global strategies: insights from the world's leading thinkers. Harvard Business School Press. Р. 129.

Buckley, P. & Casson, M. (1988). A theory of cooperation in international business. Cooperative strategies in international business. Lexington, MA: Lexington Books.

Baughn, C.C. & Osborn, R. (1990). Forms of inter-organizational governance for multinational alliances. Academy of Management Journal, 33: 503-519.

1. Bobina, M.A.(2006). International business: strategic alliances. Moscow: Delo. P. 40-43.
2. Child, J. (2005). Organization, Contemporary Principles and Practice. Malden: Blackwell. P. 224.

Contractor, F. J. (2002). Cooperative Strategies in International Business: joint ventures and technology partnerships between firms Bingley: Emerald Group Publishing. Р. 40-53.

1. Ernst & Young, Beyond Borders. (2011).The Global Biotechnology Report 2011. EYGM Limited. 2011. http://www.ey.com/Publication/vwLUAssets/Beyond\_borders\_global\_biotechnology\_report\_2011/$FILE/Beyond\_borders\_global\_biotechnology\_report\_2011.pdf
2. Garrette, B. (2002). Strategic alliances: translated from English. M. : INFRA-M.Р. 331.
3. Coase, R. (2007). Фирма, рынок и право. М.: Новое издательство. С.63.

Geringer, J. M. & Hebert, L. (1989). Control and performance of performance of international joint ventures. Journal of International Business studies, 20:235-254.

Gullander, S. (1976). Joint Ventures in Europe: determinants of entry. International Studies of Management and organizations, 6: 85-111.

Gomes-Casseres, B. (2000). Alliances and risk. Securing a place in the victory parade. Financial Times. May 9:6-7.

Gomes-Casseres, B. (1996). The Alliance Revolution: The New Shape of Business Rivalry. Cambridge, MA: Harvard University Press. P. 54.

1. Hamel, G. (1991) "Competition for competence and inter-partner learning within international strategic alliances", Strategic Management Journal, 14: 83-103.

Harrigan, K. (1985). Strategies for joint ventures. Lexington, MA: Lexington Press.

1. Harvard Business Review on Strategic Alliances. (2002). Boston: Harvard Business School Press. 224 p.
2. Hagedoorn, J. (1996). Trends and patterns n strategic technology partnering since the early seventies. Review of Industrial Organization, 11:601-616.
3. Hagerdoorn, J. (1994). Strategic groups and networks of strategic partnering in international high-tech industries. Paper presented at annual meeting of the Academy of International Business. November 3-6.
4. Inside the Mind of the CEO. (1998). Worid Economic Forum Annual Meeting, WEF-Price Waterhouse, Davos. P.5.
5. Karasuk, E. (2004). Velvet competition [Electronic resource]. Secret of a firm. 2004. №4(43). URL: http://kommersant.ru/doc/859460.

Kogut, B. (1988). Joint ventures: theoretical and empirical perspectives. Strategic Management Journal, 9: 319-322.

1. Koroleva, E. (2009). Strategic alliances: foreign experience and Russian distinctions. Russian foreign economic bulletin. # 5. С. 3-13.
2. New Patterns of Industrial Globalisation. (2001). Cross-border Mergers and Ac­quisitions and Strategic Alliances. OECD-Organisation for Economic Cooperation and Development. P. 27-28, 30-31.
3. Osborn, R. & Hunt, J.G. (1974).The environment and organizational effectiveness. Administrative Science quarterly, 6: 26-44.
4. Parise, S. & Casher, A. (2003). Designing and Managing Your Network of Business-Partner Relationships. The Academy of Management Executive, vol. 17, #4: 29.
5. Priemaiyer, B. (2005). Strategische Allianzen im europäischen Wettbewerbsrecht. Unter besonderer Berücksichtigung der europäischen Luftfahrt Industrie nach „Open Skyes“- Berlin: BWV. р. 11.

Pfeffer, J. (1977). The Ambiguity of Leadership // The Academy of Management Review. Vol. 2.# 1. P. 104–112

1. Pfeffer, J. & G. R. Salancik (1978). The External Control of Organizations: A Resource Dependence Perspective. New York, NY, Harper and Row.

Pfeffer, J. (2003), “Introduction to the classic edition,” in Pfeffer, J. and Salancik, G. R., The External Control of organizations: A Resource Dependence Perspective (classic edition), Stanford University Press, Stanford, CA.

Rolander, D. (1983). Horizontal cooperative ventures in the world car industry - driving forces and effects. Stockholm School of Economics, Institute of International Business.

Salancik, G. R. (1986). An Index of Subgroup Influence in Dependency Networks. Administrative Science Quarterly. Vol. 31. # 2:194–211.

1. Schumpeter, J. (1982). Theory of economic development. Moscow: Progress. P.159.
2. The Art of the Alliance.(2008). AT Kearny . AT Kearny management consultants. URL: http://www.atkearney.com/index.php/Publications/the-art-of-the-alliance.html
3. Vladimirova, I.G. (2001). International strategic alliance firms // Problems of theory and practice of management. # 6:18-25.

Williamson, O.E. (1991). Comparative economic organization: the analysis of discrete structural alternatives. Administrative Science quarterly, 36: 269-296.

1. Williamson, O. (1996). Economical institutes of capitalism: firms, market, "behavioral" contraction. SPt.: Lenizdat. 1996. P.48.
2. World investment report 1995. (1995). New York, Geneva: United Nations. P. 38-156.

Yoshino, M. Y. & Rangan, U. S. (1995). Strategic Alliances. An Entrepreneurial Approach to Globalization. - Boston, Massachusetts: Harvard Business School Press. P. 195.