

TRIPLE HELIX ASSOCIATION

TOMSK STATE UNIVERSITY
OF CONTROL SYSTEMS AND RADIOELECTRONICS

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**«THE TRIPLE HELIX
AND INNOVATION-BASED
ECONOMIC GROWTH:
NEW FRONTIERS
AND SOLUTIONS»**

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Henry Etzkowitz

President of the Triple Helix Association

- The future is everyone's to share. No single country or region holds the monopoly over innovation. Breakthrough innovations develop in many countries around the world, enhanced by interaction among government, industry and universities.

Today the university is the key factor giving momentum to development. A place with a great number of highly educated people is where the double helices of University–Industry and Government–University meet and create the Triple Helix of innovation-driven entrepreneurship.

For over 20 years the Triple Helix Association has been focusing the efforts of the academic community on study of the interaction between research institutions, industrial enterprises and government agencies. If built wisely, the resulting synergy drives technological innovation and economic growth of the region.

The main goal of the Triple Helix Association is to promote scientific knowledge and practical achievements associated with all aspects of interaction among academia, business and government to advance research, innovation and competitiveness.

The events organized and managed by the Triple Helix Association include scientific conferences, symposia, networking events for academic and research institutions and other participants in the Triple Helix process. Our goals are: to promote the Triple Helix model through publications, academic journals and mutually beneficial projects; support application of academic models in practice, foster international academic mobility and training of students, researchers and experts.

Before Tomsk, Amsterdam, New York, Rio de Janeiro, Copenhagen/Lund, Turin, Singapore, Glasgow, Madrid, Stanford, Bandung and London hosted the International Conference of the Triple Helix Association. I am happy to see Russia joining this global innovation club. I believe that the Triple Helix model will be key to recovering from the crisis, ensuring sustainable innovation-driven development. Home to several major Russian universities, Tomsk is the perfect place for universities developing their entrepreneurial profile, for new high-tech companies and for modern government to thrive.



Alexander Uvarov

Chairman of the Russian Chapter of the Triple Helix Association, Ambassador of the Association to Russia. Vice Rector of TUSUR University

– In 2014 Russia will for the first time host the International Triple Helix Conference. The conference is a unique venue where international policy makers, researchers and experts can discuss the future of the innovations sector in the post-crisis world.

Among the topics to be discussed are the new role of entrepreneurial universities in enabling sustainable economic growth, the behavior of business which is the fastest player to react to economic uncertainty, and the best practices of cooperation between government, universities and industry in formation of the innovation sector of economy.

TUSUR University joined the Triple Helix Association in 2010 when it presented the Russian edition of Henry Etzkowitz's book "The Triple Helix: University-Industry-Government Innovation in Action" in Moscow and Tomsk. In 2010 TUSUR University acted as a co-organizer of the Triple Helix Conference in Stanford.

TUSUR University is one of the leading and most dynamic engineering universities in Russia. We are working towards developing as an entrepreneurial university with training of new-generation of innovation-minded professionals and expert entrepreneurs as its main priority. We lay emphasis on focusing our research on addressing the future needs of the economy and society.

TUSUR University brings the ideas of the Triple Helix into practice through our Education, Research and Innovation Network of enterprises founded by our alumni, through the IT and Electronics Cluster of Tomsk Region created together with the regional government, through project-based learning in the heart of our academic process. We hope that our experience will become a valuable contribution to the research process of the Triple Helix model. We also expect our development as an entrepreneurial university to benefit from this unique global networking opportunity.

Bringing together over 300 researchers and experts from 50 countries every year, the conference will drive us forward in our main endeavor – transition to innovation-driven economy.



Eduard Gatzhinsky

Rector of National Research Tomsk State University

Founded in 1878, Tomsk State University is what helped Tomsk transform from a small merchant town into a major center of education, science and culture for the vast territory of the Northern Eurasia. Becoming home to the first university in Siberia has changed the profile of the whole region, created the unique environment, stimulating and favorable to scientific thinking. That is why today Tomsk is known around the globe not for its exhaustible gas and oil resources, but for its human resources which are potentially limitless.

Tomsk State University has always been among the best universities of this country, and in 2013 it was included in the state-funded Global Competitiveness of Leading Russian Universities Program. Our goal is to transform the classical university where the academic process has always been based on results of fundamental and applied research, into a modern, world-class research university. It is impossible to create an efficient university management system, to bring in talented students and faculty, concentrate resources unless in some aspects we develop as an entrepreneurial university as described by the Triple Helix concept

Russia devotes significant financial resources to support of innovation-driven entrepreneurship: creates new business incubators, encourages entrepreneurial associations, commits to the cluster approach. Our goal is to make these investments as efficient as possible – and it would be extremely difficult to achieve without proper methodology, without systematic work, without cooperation among those who develop innovations and those who bring them into practice.

Our cooperation in the Triple Helix Association offers us an excellent opportunity to join the global effort to develop the methods and models which will become the foundation for universities of the future. This work will help create a training system for the innovation sector of the economy where apart from professional knowledge, graduates will have all the knowledge and skills necessary for entrepreneurship – the ability to take risks and act in situations of uncertainty, commitment and responsibility to themselves and their companies. The more there are people like that, the higher is the standard and quality of living in our society.

Establishment of Tomsk State University 136 years ago was what drove transformation of this region from a trade hub into a center of culture, science and education. Today Tomsk Region has impressive experience in interaction among government, universities and business.

Today our research and technology drive the emergence of new production methods and bring the region to the forefront of high-tech entrepreneurship. The conference of the Triple Helix Association in Tomsk is an important element of this process.

CONTENTS

| | |
|---|----|
| PREFACE BY PROF. HENRY ETZKOWITZ (ii) | |
| PREFACE BY PROF. ALEXANDER UYAROV | iv |
| PREFACE BY PROF. EDUARD GALAZHINSKY | v |
| <hr/> | |
| A LIMITLESS CONCEPT: EVOLUTION OF THE TRIPLE HELIX MODEL IN RUSSIA | 1 |
| A SIMULATION MODEL OF THE TRIPLE HELIX OF UNIVERSITY-INDUSTRY- GOVERNMENT RELATIONS AND THE DECOMPOSITION OF THE REDUNDANCY | 5 |
| MULTIPLE NETWORKS APPROACH TO UNIVERSITY-INDUSTRY RELATIONS IN REGIONAL CLUSTERS. THE CASE OF MARITIME CLUSTER OF ALGARVE, PORTUGAL | 9 |
| CONCEPTUAL FRAMEWORK OF THE NECESSARY FORMATION OF THE TRIPLE HELIX AS THE EFFICIENT NATIONAL ECONOMY'S INNOVATIVE SUMMIT | 13 |
| ECOSYSTEMIC RELATIONAL CAPITAL: FRAMEWORK AND MEASUREMENT PROCESS | 17 |
| STUDYING AND BUILDING INNOVATION CLUSTERS: AN ECONOMIC GROWTH DIMENSION | 21 |
| THE BRAZILIAN DIASPORA NETWORK: SCIENTIFIC COOPERATION AMONG UNIVERSITIES, FIRMS AND GOVERNMENTAL INSTITUTIONS | 27 |
| INDUSTRIAL FIRMS' R&D ACTIVITY AS A KEY TO THE GROWTH OF INNOVATIVENESS IN POLAND | 31 |
| SUGGESTIONS FOR THE CREATION OF SUSTAINABLE UNIVERSITY DEPARTMENTS AS PARTNERS IN THE TRIPLE HELIX BY CROSS POLLINATION OF BASIC AND APPLIED RESEARCH FIELDS - A CASE STUDY | 33 |
| BUSINESS INCUBATION IN RUSSIA: CHALLENGES AND KEY SUCCESS FACTORS | 37 |
| CHANGES TO IP LEGISLATION IN RUSSIA AND THE IMPACT ON COMMERCIALIZATION OF UNIVERSITY RESEARCH | 41 |
| REVIEWING THE THEORY OF KONDRATIEFF LONG WAVES IN CONTEXT OF TRIPLE HELIX CONCEPT WITH PRACTICAL CASE EXAMPLES OF FINLAND AND SIBERIA | 45 |
| ANALYSING EXISTENCE OF UNIVERSITY - INDUSTRY - GOVERNMENT LINKAGES IN SINDH, PAKISTAN | 49 |
| UNIVERSITY SPIN-OFFS. MOTIVATIONS AND GROWTH | 51 |

CONTENTS

| | |
|---|-----|
| THE PATH TO INNOVATION IN INNOVATION – THE EMPIRICAL EVIDENCE OF ENTREPRENEURIAL UNIVERSITIES IN EAST ASIAN ECONOMY | 55 |
| HOW A PROOF OF CONCEPT MODEL WORKS IN RUSSIA: EXPERIENCE FROM THE FIRST ROUND OF THE SKOLTECH INNOVATION PROGRAM | 59 |
| CONSTRAINTS EXPERIENCED MANAGING TRIPLE HELIX COLLABORATION IN SOUTH AFRICA | 63 |
| EVALUATION OF BUSINESS INCUBATORS EFFECTIVENESS AS THE ELEMENT OF RUSSIAN UNIVERSITIES' SPIN-OFF STRATEGIES | 67 |
| INNOVATION CHALLENGES FOR SOUTH AMERICAN UNIVERSITIES: AN ANALYSIS BASED ON SCIENTIFIC AND TECHNOLOGICAL INDICATORS | 71 |
| ANALYSES OF THE LEGAL LANDSCAPE AFFECTING THE GOVERNMENT SUPPORT OF THE INNOVATION COMPONENT IN MODERN RUSSIAN ECONOMY. | 75 |
| INTERSECTORAL MOBILITY OF RESEARCHERS IN RUSSIA: TRENDS AND POLICY MEASURES | 79 |
| THE SOCIAL –CULTURAL FUNCTIONS OF INTEGRATED EDUCATIONAL SYSTEM IN UP-TO DATE TRAINING OF FUTURE STUDENTS FOR INNOVATIVE ACTIVITY IN SCIENCE-BASED ECONOMY | 83 |
| BERLEMONT J.M. | 87 |
| INTERACTIVE RESEARCH IN A TRIPLE HELIX BASED ENVIRONMENTAL COLLABORATION | 89 |
| INTERNATIONALIZATION OF BRAZILIAN SOFTWARE COMPANIES, THE ROLE OF PUBLIC FINANCING AND PUBLIC AND PRIVATE VENTURE CAPITAL | 93 |
| BUILDING THE MULTI-CENTERED INDUSTRY-UNIVERSITY COLLABORATION IN THREE LAYERS FOR PROMOTING REGIONAL ECONOMY-A CASE STUDY OF TOP LAYER DESIGN OF TRIPLE HELIX IN SOUTHEAST UNIVERSITY | 97 |
| THE TRIPLE HELIX AS CORE FOR MODELLING AN ENTREPRENEURIAL UNIVERSITY IN MEXICO | 101 |
| UERJ'S TRANSFORMATION IN AN ENTREPRENEURIAL UNIVERSITY | 105 |
| GLOBALIZATION AND INTELLECTUAL DIVIDE | 109 |
| MODELING DIFFUSION OF INNOVATIONS: SECTORAL TYPOLOGY. THE CASE OF RUSSIAN FEDERATION | 111 |
| DOES INVENTOR ROYALTY SHARE MATTER IN COUNTRIES WITH LOW LICENSING INCOMES? | 115 |
| OPEN AND DISTANCE LEARNING SYSTEM AND ECONOMIC BREAKTHROUGH | |

CONTENTS

| | |
|---|-----|
| IN DEVELOPING NATIONS: THE NIGERIAN EXPERIENCE | 119 |
| CHINA'S LOCAL COLLEGES' TRANSFORMATION INTO ENTREPRENEURIAL UNIVERSITIES—A MULTIPLE CASE STUDY | 123 |
| MITIGATING CLIMATE CHANGE VIA TECHNOLOGY TRANSFER ORGANIZATIONS IN CANADA: WHY SOME FIRMS ARE MORE COMMITTED TO CLIMATE CHANGE MITIGATION THAN OTHERS AND AT WHAT PRICE | 125 |
| SPIN-OFF AS INDICATOR OF UNIVERSITY-INDUSTRY COLLABORATION | 129 |
| TECHNOLOGICAL CATCH-UP AND THE ROLE OF UNIVERSITIES: SOUTH KOREA'S INNOVATION-BASED GROWTH EXPLAINED THROUGH THE CORPORATE HELIX MODEL | 133 |
| ACTIONS TO PROMOTE TECHNOLOGICAL ENTREPRENEURSHIP IN MINAS GERAIS STATE | 137 |
| INTERNATIONAL RESEARCH FUNDING: BOOSTING RESEARCH OUTCOMES (CASE STUDY OF TOMSK POLYTECHNIC UNIVERSITY, RUSSIA) | 141 |
| CLUSTER DEVELOPMENT PROCESS IN RUSSIA: EVIDENCE FROM THE TOMSK REGION | 145 |
| NEW COOPERATION MODEL IN BRAZIL, STRENGTHENING THE INVESTMENT AND THE LONG-TERM INNOVATION: A NEW TRIPLE HELIX FUNDING SCHEME | 149 |
| CHALLENGES AND OPPORTUNITIES OF ORGANIZATIONAL CHANGE IN RUSSIAN UNIVERSITIES | 153 |
| UPGRADING INDUSTRY IN REGIONAL LEVEL: DOES UNIVERSITY-INDUSTRY COLLABORATION MAKE A DIFFERENCE? | 157 |
| ASSESSING THE TRANSFER OF ENTREPRENEURIAL EDUCATION FROM MIT TO THE SKOLKOVO INSTITUTE OF SCIENCE AND TECHNOLOGY, | 161 |
| UNIVERSITY AS A PART OF TERRITORIAL INNOVATION ECOSYSTEM IN KALININGRAD REGION | 165 |
| CURTAIN OF TRIPLE HELIX AND COMMUNITY UNIVERSITY PARTNERSHIP: COMMUNITY-UNIVERSITY COLLABORATION ON TRANSFER OF TECHNOLOGY IN HIGHER EDUCATION TOWN KEYWORD: CAPACITY, COLLABORATIVE, COHESIVENESS, CUR, TRIPLE HELIX | 169 |
| THE ROLE OF INNOVATIVE WAYS AND TRIPLE HELIX MODEL IN THE DEVELOPMENT OF THE RUSSIAN ECONOMY | 173 |
| INTELLECTUAL PROPERTY MANAGEMENT, ENTREPRENEURSHIP AND INNOVATION: A POLICY FOR BRAZILIAN FEDERAL NETWORK OF VOCATIONAL EDUCATION, SCIENCE AND TECHNOLOGY TO SPUR ECONOMIC GROWTH | 177 |
| TOWARDS A FRAMEWORK FOR UNDERSTANDING CONTEXTUAL FACTORS SHAPING TRIPLE HELIX MODELS | 181 |

CONTENTS

| | |
|--|-----|
| GOVERNANCE IN NANOTECHNOLOGY INNOVATION NETWORKS A PROPOSAL OF AN ANALYTICAL FRAMEWORK AND TOOLKITS | 187 |
| THE CHICKEN AND EGG PARADIGM OF THE INNOVATION PARADOX – THE FUNDAMENTAL QUESTION TO THE DEVELOPMENT OF INNOVATION AND RTD ACTIVITIES IN EU REGIONS | 191 |
| ADVANCING FROM TRIPLE HELIX TO QUADRUPLE HELIX WITHIN THE EU SMART SPECIALISATION CONTEXT | 195 |
| THE TRIPLE HELIX AND CLUSTER APPROACH IN THE INNOVATIVE DEVELOPMENT OF KAZAKHSTAN | 197 |
| THE SPECIFICS OF TECHNOLOGY TRANSFER IN RUSSIA | 201 |
| EVALUATING THE EFFECTIVENESS OF COLLABORATION BETWEEN IRANIAN UNIVERSITIES WITH MUNICIPALITY BASED ON TRIPLE HELIX MODEL: CASE OF MASHHAD MUNICIPALITY | 205 |
| A BRIEF HISTORY OF COOPERATIVISM AND ITS IMPORTANCE FOR BRAZIL AND EUROPE TRIPLE HELIX | 207 |
| UNIVERSITY, INDUSTRY, GOVERNMENT MEASURING TRIPLE HELIX IN NETHERLANDS, RUSSIA, TURKEY, IRAN; USING WEBOMETRICS APPROACH | 209 |
| EDUCATION, WELL BEING AND THE EMERGENT ECONOMIES OF BRAZIL, RUSSIA AND SOUTH AFRICA | 213 |
| SYSTEM OF PROFESSIONAL ENGINEERS CERTIFICATION AS A CONTRIBUTOR FOR INNOVATIVE CLIMATE DEVELOPMENT | 215 |
| DISTANCE LEARNING AS PUBLIC POLICY TO DISSEMINATE HIGH LEVEL EDUCATION IN BRAZIL | 219 |
| CLUSTERS SMART SPECIALIZATION STRATEGIES, OPEN INNOVATION AND FORESIGHT NETWORKS – CONCEPTUAL THOUGHTS | 221 |
| RUSSIAN TECHNOLOGICAL PLATFORMS AS A KEY INSTRUMENT OF RUSSIAN INNOVATION POLICY: THE TRIPLE HELIX IN ACTION | 223 |
| CERTIFICATION CENTERS ESTABLISHMENT AS A NECESSARY ELEMENT FOR THE IMPLEMENTATION OF THE REGIONAL CLUSTER POLICY | 225 |
| ENTREPRENEURSHIP ECOSYSTEM IN TURKEY: A CASE STUDY OF ODTU TEKNOKENT, QUADRUPLE HELIX MODEL | 229 |
| SYNERGETICS OF INTEGRATION PROCESSES IN THE TRIPLE HELIX MODEL | 233 |
| SBUSINESS-ORIENTED RESEARCH PROFESSIONALS – EMPIRICAL RESULTS FOR ACADEMICS' COLLABORATION WITH ENTERPRISES | 237 |

CONTENTS

| | |
|--|-----|
| MODERN TENDENCIES IN EDUCATION DEVELOPMENT: EXPERIENCE OF NATIONAL RESEARCH TOMSK STATE UNIVERSITY IN MOOC CREATION | 241 |
| SOCIAL NETWORKS IN EDUCATION: THE ATTITUDE OF STUDENTS AND TEACHERS | 245 |
| CLUSTERS AND PROFESSIONAL COMMUNITIES: PEOPLE AS THE KEY FACTOR FOR INNOVATIONS (CASE-STUDIES FROM BRAZIL AND RUSSIA) | 249 |
| EXPLORING THE "CHINESE CHARACTERISTICS AND EVOLUTION PATH" OF ENTREPRENEURIAL UNIVERSITY: ON THE ACADEMIC ENTREPRENEURSHIP OF THREE RESEARCH UNIVERSITIES IN CHINA | 253 |
| IDENTIFYING HIGHER EDUCATION INSTITUTIONS AND INDUSTRY LINKAGES IN ANAMBRA STATE, NIGERIA | 257 |
| UNIVERSITY OF SOCIAL ROLE SYNTHESIS | 261 |
| UNDERSTANDING THE DEVELOPMENT OF GOVERNMENT-INDUSTRY-UNIVERSITY PARTNERSHIP WITHIN THE CONTEXT OF DEVELOPING COUNTRIES: THE CASE OF ALGERIA | 265 |
| HOW IS 'INNOVATION' UNDERSTOOD? COGNITIVE FRAMING AMONG ACTORS INVOLVED IN THE FUNDING OF FOOD AND HEALTH RESEARCH ACROSS EIGHT EUROPEAN COUNTRIES | 269 |
| COMPARATIVE ANALYSIS OF RUSSIAN PRACTICES AND POLICIES IN ASSESSMENT OF MEASURES FOR GOVERNMENT SUPPORT TOWARDS SMALL IT COMPANIES | 273 |
| DOCTORAL PROGRAMMES IN A KNOWLEDGE SOCIETY THE CHANGING LANDSCAPE | 277 |
| INNOVATION IN COOPERATION OF UNIVERSITY - INDUSTRY | 283 |
| INNOVATION AND INDUSTRIAL PROPERTY MANAGEMENT IN BRAZILIAN STEEL INDUSTRY: THE CASE OF COMPANHIA SIDERÚRGICA NACIONAL (CSN) | 285 |
| RESEARCH ON THE ROLE AND FUNCTION ACTED BY LOCAL GOVERNMENTS IN THE REGIONAL INNOVATION SYSTEMS UNDER THE BACKGROUND OF CHINA'S NEW ROUND OF REFORM | 289 |
| ORGANIZATIONAL ENTREPRENEURSHIP AND ITS IMPACT ON THE PERFORMANCE OF GOVERNMENTAL ORGANIZATIONS IN THE CITY OF MASHHAD | 291 |
| SPOTTING SYNERGIES AMONG STARTUPS IN SILICON VALLEY AND BEYOND | 295 |
| FUZZY FRONT END OF SYSTEMIC INNOVATIONS: STARTING CHANGES IN THE BUSINESS ECOSYSTEM | 297 |

CONTENTS

| | |
|--|-----|
| DEVELOPING THE CORPORATE SYSTEM OF KNOWLEDGE MANAGEMENT BASED ON CLUSTER NETWORK PARADIGM | 301 |
| HOW CAN SMALL AND MEDIUM-SIZED ENTERPRISES PLAY A ROLE IN ENABLING INNOVATION IN THE WIND TURBINE INDUSTRY IN A TRIPLE HELIX CONTEXT? | 305 |
| TRIPLE HELIX INTERACTION; STRATEGIC ACTIONS FOR TO FOSTER INNOVATION IN BRAZIL, THE MINAS GERAIS CASE STUDY | 309 |
| THE "TRIPLE HELIX" MODEL APPLIED TO THE TERRITORY: PROBLEMS, LIMITS AND INTEGRATION OF NEW VARIABLES | 313 |
| TRIPLE HELIX LOCALLY – THE CASE OF BIALYSTOK | 315 |
| TECHNION AS ENTREPRENEURIAL UNIVERSITY. THE TECHNION INFLUENCE ON INNOVATIVE BUSINESS IN ISRAEL | 317 |
| PHENOMENON OF SOCIAL ENTREPRENEURSHIP AMONG UNIVERSITY STUDENTS | 319 |
| TRIPLE HELIX MODEL AS TOOL OF LINKING BETWEEN COMPANIES AND UNIVERSITIES IN GUAYAQUIL, ECUADOR | 323 |
| THE CONCEPT OF VIRTUAL EDUCATIONAL ENVIRONMENT BASED ON THE PRINCIPLES OF EDUCATION 2.0, WEB 2.0 AND PROJECT ACTIVITIES | 329 |
| NON-STANDARD EMPLOYMENT AND ITS ROLE IN MODERN CONDITIONS: EUROPEAN AND RUSSIAN APPROACHES | 335 |
| THE COLLECTIVE INTELLIGENCE OF INNOVATION PROCESSES THE TRIPLE HELIX MODEL FROM AN EVOLUTIONARY PERSPECTIVE | 337 |
| SHIFTING OF THE POINTS (TH IN SMALL POST-SOVIET) | 339 |
| ECONOMETRIC MODEL FOR ASSESSING AN INNOVATIVE ACTIVITY LEVEL OF TRIPLE HELIX PARTICIPANTS | 343 |
| ON MANAGING OF THE DIFFUSION OF INNOVATIONS | 349 |
| THE THREE DS DEVELOPING MODEL, R&D FOR DEVELOPING DEVELOPING COUNTRIES: LESSONS AND CHALLENGES FROM A BRIC COUNTRY TO ANOTHER DEVELOPING COUNTRY | 351 |
| GOVERNANCE IN THE RUSSIAN PILOT INNOVATIVE CLUSTERS FROM THE EUROPEAN PERSPECTIVE: PROBLEMS AND SOLUTIONS | 355 |
| MANAGEMENT OF INNOVATION FOR REGIONAL ECONOMIC DEVELOPMENT: LESSON LEARNED OF SUPPLY CHAIN MANAGEMENT STRATEGY FOR ENHANCING CORRIDOR ECONOMY IN EASTERN INDONESIA | 357 |

CONTENTS

| | |
|--|-----|
| SYNERGETICS OF INTEGRATION PROCESSES IN THE TRIPLE HELIX MODEL | 361 |
| THE DEVELOPMENT OF R&D IN DIFFERENT SECTORS OF ACTIVITY IN KAZAKHSTAN | 365 |
| INTERESTS-BASED ECONOMY AS A WAY TO STABILIZING ECONOMY AND EXIT FROM A SOCIAL CRISIS | 371 |
| EVALUATING THE EFFECTIVENESS OF COLLABORATION BETWEEN IRANIAN UNIVERSITIES WITH MUNICIPALITY BASED ON TRIPLE HELIX MODEL: CASE OF MASHHAD MUNICIPALITY | 375 |
| THE DEVELOPMENT OF A TRIPLE HELIX NETWORK FOR HUMAN RESOURCES DEVELOPMENT: A CASE OF THE THAI RAILWAY TRANSPORTATION SECTOR | 377 |
| INTERACTION UNIVERSITY, BUSINESS AND GOVERNMENT: A CASE STUDY OF THE INNOVATION AGENCY OF THE FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANÁ'S TRAINING PROGRAM UFFINOVA PROJECT | 379 |
| EVOLUTION OF GOVERNMENT-ACADEMIA-INDUSTRY RELATIONSHIPS: TWO MODELS OF SPACE TECHNOLOGY DEVELOPMENT | 383 |
| PRICING THE NETWORK EFFECTS IN THE EDGE OF THE TRIPLE-HELIX PARADIGM: A HEDONIC PRICING APPROACH WITHIN THE CANADIAN CONTEXT OF TECHNOLOGY TRANSFER | 385 |
| TRIPLE HELIX IN FUNDAMENTAL PREPARATION OF SPACE INSTRUMENT ENGINEERING: IMPROVEMENTS IN SCIENCE, TECHNOLOGY AND EDUCATION | 389 |
| DEFINING A COMMON GOAL FOR TRIPLE HELIX PARTICIPANTS: CASE STUDY OF TOMSK REGION | 397 |
| SOCIETY AS A DIMENSION OF THE QUADRUPLE HELIX MODEL | 403 |
| WHAT FACTORS DETERMINE THE COMPETITIVENESS OF THE LEADING RUSSIAN UNIVERSITIES? | 407 |
| THE BALANCE SHEET OF THE EARTH AS A SOCIAL STRUCTURE CAPABLE OF RUNNING THE ECONOMIC GROWTH IN DEVELOPING COUNTRIES | 411 |
| DEVELOPING UNDERGRADUATE ENTREPRENEURSHIP THROUGH USAGE OF AN ECOSYSTEM THAT ENCOURAGES INNOVATION SUPPORTED BY A SOCIAL NETWORK OF AFFINITIVE AND INTEREST GROUPS: EXPERIENCES OF E-QUIPU IN PERU | 415 |
| DIFFERENT NETWORK TYPOLOGIES IN PATENTING ACTIVITY OF ACADEMIC INVENTORS: THE CASE OF ITALIAN CHEMISTS | 419 |
| ACCREDITATION OF ENGINEERING EDUCATIONAL PROGRAMS AS A MOTIVATION FOR THE DEVELOPMENT OF UNIVERSITY-INDUSTRY PARTNERSHIP | 423 |
| ECONOMIC AND SOCIAL IMPACT OF ADVANCED RESEARCH AT UNIVERSITIES | 427 |
| THE TRIPLE HELIX MODEL IN THE PROMOTION OF SMALL AND M-CRO COMMUNITY ENTERPRISES FOR RUBBER PRODUCTION IN THAILAND | 429 |

**MANAGEMENT OF INNOVATION FOR REGIONAL ECONOMIC DEVELOPMENT: LESSON
LEARNED OF SUPPLY CHAIN MANAGEMENT STRATEGY FOR ENHANCING CORRIDOR
ECONOMY IN EASTERN INDONESIA**

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Key words: *corridor, innovation, interaction, regional, supply-chain*

One form of innovation regional economic development is supply chain management (SCM) strategy in a region. The effectiveness implementation of this strategy link with interaction actors (academic, industry, and government), link to formulate communicative space, and determine for the level of attainment of regional economic growth. This article explains the strengthening of role of eastern part of the territory of Indonesia as a region producing seaweed products, while strengthening its position in the value chain from upstream to downstream industries. Industry cluster approach related to global market becomes an important and key indicator to economic growth in the region, particularly the economic corridors in eastern Indonesia. This article based on part of the action research that explains importance of the role of interaction in development of economic corridors area, that be designated on supply chain of raw material and value chain of seaweed industry in Eastern Indonesia.

New Economic Corridor Papua – Maluku, as eastern of Indonesia potential to thrive in value chain of manufacturing-based economy. One of main economic activities in Papua - Maluku Economic Corridor is seaweed, an industry that accounts for significant economies of both gross domestic product and labor supply. Therefore, two aspects of supply chain performance must be achieved, namely the market needs and the efficiency of logistics. Logistics activities that are part of the supply chain to attention of the international trade. The competitive price of seaweed products can not be separated from the logistics costs incurred and impact on competitiveness. The low competitiveness of products one of which is due to high logistics costs. In addition to cost of logistics, emerging issues related to logistics is length of time post. This is partly because there are still logistical infrastructure conventional and not building connectivity between one location to another location that connects the centers of production with market or consumption centers.

Logistics consists of five activities that mutually affect customer response, inventory planning and management, supply, transportation and warehousing. Supply chain logistics is flow of material, information and money between firms. Supply chain is a network

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of facilities that starts from supplier to customer as for logistics is what happens on supply chain. Fluctuations in global economy and sustainable local industry has increased pressure on. Supply chain operations are challenged to provide best, lean or efficient, cost effective and timely delivery. Product life cycles are becoming increasingly shorter; market , supply and operations become increasingly progressive. Seaweed processing industry become one of national priority industries are still prospective for development. From aspect of market shows that the development of seaweed market in global trade shows fairly high upside, along with increasing need for industrial raw materials both for food grade, industrial grade and pharmaceutical. The question is how to develop economy of region based on of innovation supply chain to manage innovation effectively in order to achieve needs of market and logistical efficiency. Regional economic development be determined by capability and inclusiveness of actors (AIG) in order to accelerate innovation SCM and to increases productivity and economic growth in region, so that it is strategic management of innovation SCM and key success factor for economic development corridor in eastern Indonesia.

This study is a descriptive analysis to provide a complete picture of the performance of supply chain and logistics costs to be incurred by seaweed industry, both upstream or downstream. This studied used a quantitative that is further supported by a qualitative approach. Research done by conducting a survey on farmers, wholesalers , exporters and seaweed industry. The technique of collecting data using surveys, interviews and focus group discussions (FGD), using research instruments, using Porter's Generic strategies analysis and cluster analysis.

Finding

The results found that innovation of SCM must consider factors inhibiting the supply chain , logistics cost structure , an analysis of the efficiency of the supply chain , and design optimal connectivity. Supply chain is one part of requirements of innovation management in corridor area, so that the proper handling of SCM will be able to move the economy can grow and develop and expanding rapidly economic corridors. The results of study became basis to formulate strategies for improving performance of the supply chain, in order to gain control of the domestic market as well as the strengthening of the position of the industry in the value chain upstream and downstream which is a dominant issue in the framework of region-based economic development corridor. The study also found that the interaction between regions of space for regional economic development is strongly correlated with the performance of supply chain management innovation. The interaction between AIG for SCM innovation role as a key performance regional economic development.

Conclusion

Formulation of supply chain development strategy includes the performance of product and aquaculture production, marketing situation , finance , partnerships , strengthen

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**MANAGEMENT OF INNOVATION FOR REGIONAL ECONOMIC DEVELOPMENT:
LESSON LEARNED OF SUPPLY CHAIN MANAGEMENT STRATEGY FOR ENHANCING
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research pasokan. The study found that type of chain role as a regional producer of seaweed products in the Maluku province of eastern Indonesia economic corridor, while strengthening the position its location in the value chain for development seaweed industry, so that the network infrastructure to support the production and transportation accessibility for the supply becomes a key factor in the development of supply chain strategies. Governments have a major role and importance of adequate infrastructure realizing for the smooth supply chain. Supply chain management innovation involving academia, industry and government become a key instrument for economic development based on corridor economic.

Provision of adequate infrastructure for the development of a corridor leading commodity in the economy is a fundamental requirement for economic growth in the region. Plan for long-term infrastructure investments and medium-term master plan for the acceleration and expansion of economic corridors shall be realized, especially in the area supply chains of commodity with global market potential industrial scale. Smart interaction between AIG should be a basic needs and essential requirement for development of economic corridors in developing a regional commodity.

Further research aimed to identify methods of production that faced the seaweed industry, identify the value-added of the provision of services, and identify the need for infrastructure and connectivity are directly related to the leverage of supply chain development strategy for the economic development of the region.