

### ПРОБЛЕМЫ ЭКОНОМИКИ РОССИИ И КИТАЯ В СРАВНИТЕЛЬНОМ АСПЕКТЕ

Ткаченко О.О., Воробец Л.В.

*Комсомольский-на-Амуре государственный технический  
университет, Комсомольск-на-Амуре,  
e-mail: liang2011@mail.ru*

Historically, relationships between Russia and China evolved in a complex way. At present, our relations are at a fairly favorable, friendly stage. China and Russia are cooperating in the geopolitical, economic, trade and social sectors, strengthening mutual leading positions in the international arena.

Due to aggravated economic problems of Russia, China and Russia are against of creating an anti-Western military alliance. Such close relationship of cooperation fully meet the interests of Russia and China.

Currently Russia is facing some serious long-lasting problems economic problems, such as high taxes, inflation, a significant reduction in savings, capital flight, poor investment climate, serious technological backwardness, weak institutions, courts, laws, property rights, low levels of public administration etc.

Chinese People's Republic has its own, global economic problems such as depletion of resources (资源枯竭), energy shortage (能源紧张), serious corruption (腐败严重), environmental degradation (环境恶化), the widening gap between rich and poor (贫富差距拉大), the stock market confusion (股票市场一片混乱), the problem of reunification of Taiwan with Continental China (台湾问题) and the problem of return to China the island, where there are large deposits of oil in the East China Sea from Japan (东海问题).

Russia and China support each other in solving the above problems, developing Russian-Chinese business cooperation in the Far East. Russian-Chinese trade and economic cooperation is developing rapidly. Although it is smaller than China's trade with a number of other partners, China has become the third trade partner of Russia, and the first supplier of goods to our country [1].

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### АНГЛИЙСКИЙ КАК ЯЗЫК ПРОФЕССИОНАЛОВ

Тусикова Е.А., Маркова Ю.В.

*Комсомольский-на-Амуре государственный технический  
университет, Комсомольск-на-Амуре,  
e-mail: ekateri-na\_alecsandrovna@inbox.ru*

What do you want to do when you grow up? We have heard this question many times during our school years. Perhaps, it was difficult for us to give a definite answer earlier. But now we understand that the time to choose our future profession has come. Today there are thousands of different kinds of jobs, and new ones are constantly appearing.

To my mind English is worth studying. There is a proverb: «A new language is a new world». «Knowledge is a power». Understanding and speaking a foreign language became necessary while applying for a good and well-paid job.

Learning a foreign language isn't an easy thing. Nowadays it's especially important to know foreign languages. Some people learn languages because they need them for their work, others travel abroad, for the third studying foreign languages is a hobby. Everyone,

who knows foreign languages can speak to people from other countries, read foreign authors in the original, what makes your outlook wider.

Now I know that for XXI century professional it is no matter what job to choose. The world is getting smaller and international connections tighter. A lot of foreign delegations keep coming to our country; hundreds of joint ventures have appeared in every city of our country recently. So without doubt you can't do without learning this beautiful language.

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### УПРАВЛЕНИЕ ЦИФРОВЫМИ ПРАВАМИ

Чусов В.А., Лопатина О.И.

*Комсомольский-на-Амуре государственный технический  
университет, Комсомольск-на-Амуре,  
e-mail: Olikšana@mail.ru*

When you need to protect your information, you can use organizational, legal, policy, software and hardware protection. Digital Rights Management is a class of technologies that are used by hardware manufacturers, publishers, copyright holders, and individuals with the intent to control the use of digital content and devices after sale. With first-generation DRM software, the intent is to control copying; with second-generation DRM, the intent is to control executing, viewing, copying, printing, and altering of works or devices.

The use of digital rights management is not universally accepted. Some content providers claim that DRM is necessary to fight copyright infringement and that it can help the copyright holder maintain artistic control or ensure continued revenue streams. Proponents argue that digital locks should be considered necessary to prevent «intellectual property» from being copied freely, just as physical locks are needed to prevent personal property from being stolen. Computer games sometimes use DRM technologies to limit the number of systems the game can be installed on by requiring authentication with an online server. Enterprise digital rights management is the application of DRM technology to the control of access to corporate documents rather than to the control of consumer media [1].

DRM opponents argue that the presence of DRM violates existing private property rights and restricts a range of heretofore normal and legal user activities. A DRM component would control a device a user owns by restricting how it may act with regards to certain content, overriding some of the user's wishes [2].

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### ЭНЕРГЕТИКА РОССИИ

Шпаченко К.Е., Кохан О.В.

*Комсомольский-на-Амуре государственный технический  
университет, Комсомольск-на-Амуре,  
e-mail: olga\_kokhan@mail.ru*

Currently, the share of renewable energy in total electricity generation in the country is very small (about

0.9%), despite the fact that Russia has huge resources of renewable energy. Only 179 TWh of Russia's energy production comes from renewable energy sources, out of a total economically feasible potential of 1823 TWh. Only 16% of Russia's electricity is generated from hydropower, and less than 1% is generated from all other renewable energy sources combined. The abundance of fossil fuels in the Soviet Union and the Russian Federation has resulted in little development of the renewable energy sector.

Renewable energy in Russia mainly consists of hydroelectric energy. But at the hydro power plant the water coming out of the power station still has some potential energy. This energy cannot be used within the given surroundings of the plant (no adequate slope available). Rather, the remaining potential energy is dissipated to the environment with the water leaving the station. In other words, the potential energy of the water can be used only down to the level where it is in equilibrium with the environment, in this case expressed as altitude.

At the moment, renewable energy development is slowed by low investment, economic instability, low public demand and low tariffs on heat and electricity.

There are currently plans to expand the share of renewable energy in Russia's energy output. Russian leadership has taken steps to promote the development of renewable energy.

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**ИНТЕРАКТИВНЫЕ ФОРМЫ РАЗВЛЕЧЕНИЯ**

Шпунтенок А.С., Воробец Л.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,  
e-mail: larisa-13@inbox.ru*

Interactive entertainments have entered our life. Almost everyone nowadays has a small pocket computer – a smart phone, personal computer or video game console at home. All this platforms offer you to visit fictional universes, take part in rescuing the whole world or visit the places where a man has never been. Every year games become more complicated, sceneries much deeper and they get closer to the status of art. So, how actually games are developed, how universes are created and filled with life?

Every game is a programme that works with the data given to it where everything depends on this data: what the characters look like, what the world sounds like and what physical rules are correct. The central core of everything is a game engine. In this way, the game without data is the game engine, a programme which has an amount of tools for displaying graphics on the screen, playing sounds, music and reading required data. There are a lot of specialists involved in the development of games: 2D/3D-artists, programmers, musicians and sound engineers, animators and writers. The artists create a visual representation of the world. The main task is to create such an image, that players should believe in. The programmers work about the engine, create its architecture and develop how to pack the data in different file formats. For example, it has to be the format for 3d model, 2d image (called texture), sound file etc. Also they develop the game logic, they make the world behave in the right way. The musicians and sound engineers make the world sound as it should do because the sound is one of the ways to believe in the reality of the virtual world. The writers create a story which is full of events linked with each other making a logical chain in the

story. The animators make the entertainment world alive. Otherwise it will be the sequence of a static image and it will be dead.

Thus the more popular the games are, the more responsible the game developers should be for their ideas, which they fill the games with.

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**ЛЕДОКОЛОСТРОЕНИЕ**

Шталь Я., Першина Е.Ю.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,  
e-mail: yasha\_shtal\_91@mail.ru*

An icebreaker is a special-purpose ship or boat designed to move and navigate through ice-covered waters, and provides safe waterways for other boats and ships. Although the term usually refers to ice-breaking ships, it may also refer to smaller vessels, such as the icebreaking boats that were once used on the canals of the United Kingdom [1, 59].

For a ship to be considered an icebreaker, it requires three traits most normal ships lack: a strengthened hull, an ice-clearing shape, and the power to push through sea ice.

Icebreakers clear paths by pushing straight into ice pockets. The bending strength of sea ice is so low that usually the ice breaks without noticeable change in the vessel's trim. In cases of very thick ice, an icebreaker can drive its bow onto the ice to break it under the weight of the ship. Because a buildup of broken ice in front of a ship can slow it down much more than the breaking of the ice itself, icebreakers have a specially designed hull to direct the broken ice around or under the vessel. The external components of the ship's propulsion system (propellers, propeller shafts, etc.) are at even greater risk of damage than the vessel's hull, so the ability of an icebreaker to propel itself onto the ice, break it, and clear the debris from its path successfully is essential for its safety [2, 22].

Even in the earliest days of polar exploration, ice-strengthened ships were used. These were originally wooden and based on existing designs, but reinforced, particularly around the waterline with double planking to the hull and strengthening cross members inside the ship. Bands of iron were wrapped around the outside. Sometimes metal sheeting was placed at the bows, stern and along the keel. Such strengthening was designed to help the ship push through ice and also to protect the ship in case it was "nipped" by the ice. Nipping occurs when ice floes around a ship are pushed against the ship, trapping it as if in a vice and causing damage. This vice-like action is caused by the force of winds and tides on ice formations. Although such wind and tidal forces may be exerted many miles away, the ice transmits the force [3, 139].

The first boats to be used in the polar waters were those of the indigenous Arctic people. Their kayaks are small human-powered boats with a covered deck, and one or more cockpits, each seating one paddler who strokes a single or double-bladed paddle. Such boats, of course, have no icebreaking capabilities, but they are light and well fit to carry over the ice.

In the 9<sup>th</sup> and 10<sup>th</sup> centuries, the Viking expansion reached the North Atlantic, and eventually Greenland and Svalbard in the Arctic. Vikings, however, operated their ships in the waters that were ice-free for most of the year, in the conditions of the Medieval Warm Period.

In the 11<sup>th</sup> century, Russians started settling the coasts of the White Sea, named so for being ice-covered for