Higher education and marketing approaches in the sixth technological wave

Olena Bobalo

Social Communication and Information Science Department, Lviv Polytechnic National University, UKRAINE; Lviv; 12, Bandera str; e-mail: olena.bobalo@gmail.com

In the paper are reviewed the main points of technological waves and the future on higher education in sixth technological wave. The proposals of marketing approaches are given for higher education institutions during sixth technological wave.

Key words – Kondratiev waves, long economic cycle, higher education institutions, sixth technological wave.

Technological wave theory (also known as the theory of long economic cycles, Kondratiev cycle theory) was proposed in the early twentieth century by Russian scientist Nikolai Kondratiev. Analyzing large amounts of data, N. Kondratiev assumed that every 50-60 years exposed to the development of certain sectors of the economy, followed by a global economic crisis that leads to a new technological wave with the development of several industries. Such industries differs from the industries of previous cycle [1, 2]. According to the theory of long economic cycles, global society is now in the fifth technological wave, which is characterized by the development of industries such as computer, internet, media, communication, telecommunication and should be completed till 2015-2025 year [1, 3, 4]. The following (next) technological wave – sixth – is predicted by scientists as a development of such areas as nanotechnology, biotechnology, genetic engineering, robotics, high humanitarian technologies, assembly technology and the destruction of social subjects, design and management of the future, etc. [3, 4].

Professor G. Pocheptsov affirms that Ukrainian society is still in 4th technological wave (perspective areas: energy, electronics, chemicals, aerospace, heavy industry), given the number of companies that belong to the sectors of each technological wave. It should be noted that the end of the fourth technological wave coincided with a period of "perestroika" and the collapse of the Soviet Union, which stopped the scientific development of Ukraine as a separate independent state.

We should counting on the fact that busines enterprises and other organizations (which operate in the fields of the sixth wave within Ukrainian borders) are almost absent and that as there is no prospects of creation preferences for the following areas of business. So we can predict that the demand for relevant professionals in Ukraine is relatively low in the coming years and the potential could be occured just from the part of multinational companies. But it’s a high possibility of a need for an industry experts who are engaged in the implementation and results of their own activities distantly.

What does this mean for Science and Higher Education of Ukraine? The demand of national economy specialists will increase for the professions actual in sixth
technological wave and especially which could develop distantly. So, the need for the necessary specialties and specializations in higher educational institutions will increase also. It may becomes an additional asset during the work with potential students (for the universities that offer the appropriate areas of training). But it also indicates the need to open these specialties in those universities where they are currently not available. And occures the importance of staff training to be able to continue as an educational and scientific research process in these areas.

After analyzing the current list of projected areas the following conclusions and proposals can be reached for national higher education that universities should take soon: higher education institutions should pay particular attention to the creation, development and logistics of potentially important areas (creation and continuous updating of training programs, providing highly qualified teaching staff, the creation and development of training facilities in the form of equipment, auxiliary materials and procedures, cooperation with enterprises and organizations in these areas to create opportunities for student internships, etc.) focusing on current areas of academic staff towards research activities (involving skilled researchers of appropriate activities, their motivation, as demand for these scientists will soon exceed their actual existence, creation of favorable conditions for adopting the experience of scientists from other countries which are more prepared to enter the sixth wave).

Thus the use of marketing techniques in the field of promotion of higher education in the sixth wave technology should focus on such points:

1. Giving more attention to finding customers and promoting the scientific development of the areas whose development is most significant in the sixth technological wave, especially abroad. 2. Implement the announcement about the potential growing industries of the sixth wave among potential entrants to higher education institutions and among last years studying pupils in recent years – from 9th to 11th grades. Focus an attention on the availability of appropriate areas of study at the university in contacts with applicants (including “Days of open doors”), their parents and third parties (teachers, vocational institutions, interest groups, etc.) that influence at the choice of the future place of study. 3. Intesify search for potential partners from keys production of sixth technical wave areas to implement scholarship programs in the relevant areas of the teaching and employment of the best graduates.

References