

Knowledge Transfer Unit



WP6: Exploitation and Sustainability plan

Leader - Khmelnytsky National University

Consortium Meeting, Budapest, 26.02.2015

Dr. Tetiana Hovorushchenko,

Dr. Vira Titova



Plan of Report

Dr. Tetiana Hovorushchenko (20-25 minutes):

1. Sustainability: concept & tasks
2. Activity for WP6: what we did & what we plan & tasks for partners

Dr. Vira Titova (5-7 minutes):

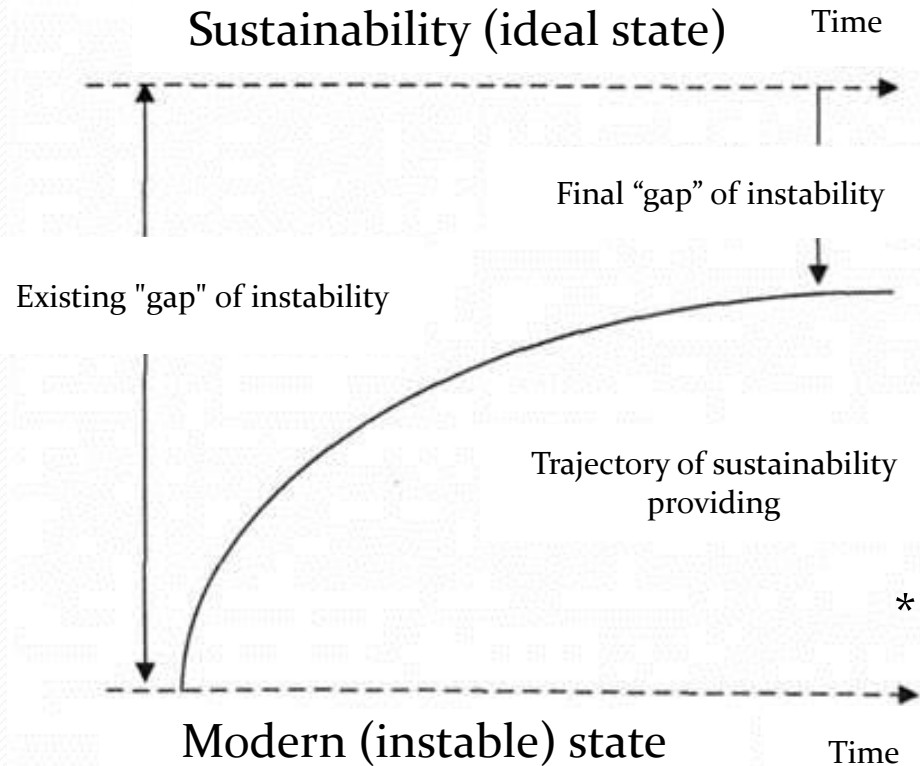
3. Service №1 of KTU in KhNU: support for preparation of application

Sustainability is a main challenge & task for KTUs

Sustainability!

Sustainability - the general concept of the need to establish a balance between the satisfaction of the modern needs of organization and the protection of its future interests.

The main indicators of sustainability are: the legislative framework (available and necessary laws are described in the Strategy!) and public participation in decision-making.



* Logistics: Logistics foundations of sustainability // http://pidruchniki.com/1281041941423/logistika/logistichni_os_novi_stalogo_rozvitku_turizmu#77



Tasks for achievement of sustainability*:

1) Identification of opportunities for sustainability based on analysis of the internal environment:

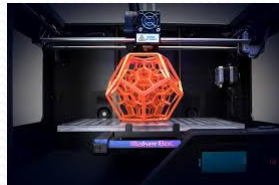
- staff & management;



- finances;



- industrial;



- innovations.



2) Identification of opportunities for sustainability based on analysis of the external environment:

- customers and society;



- investors;



- providers;



- competitors.



3) Development and implementation of the strategy of sustainability:

- relations management with stakeholders;



- systemic motivation towards sustainability;



- system of balanced indexes and goals.



1) Identification of opportunities for sustainability based on analysis of the internal environment

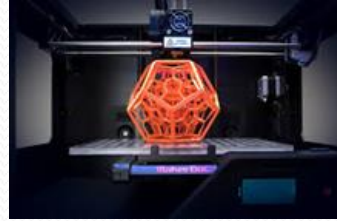
Staff & management:



- How can harmonize of labor resources with a focus on sustainable growth of efficiency?;
- What efficiency of optimal organizational structure and rational management?;
- How can coordinate the KTU staff and their competencies with the existing needs of the economy in the region and the presence at the university, on the basis of which KTU was created;
- How can we valorise the staff? For example, through study visit to EU universities, advanced training, etc.



Industrial:



(the main goal of this analysis - to maximize external funding)

- What needs are at the university community, organizations, businesses and entrepreneurs of the region?: Purpose - forming of required services in KTU!

For example, analysis of the needs of western region (which the KhNU represents) provided the forming following basic services for our KTU: 1) support for preparation of application; 2) support for public events, public awareness and student engagement; 3) 3D-modeling - technical consulting, analysis of engineering applications, implementation in the educational process.

Additional services (if demand will be!): 1) work with innovations; 2) development of advanced training programs for KhNU lecturers and for industry representatives .

- What types of activity are at the university, in which KTU is formed?: Purpose - further integration and expansion of services.

Innovations:



- What possibilities of special research and engineering development for the implementation of innovative products, services, processes, methods and technologies are at the University?
- What innovative management tools we will use?: methods of seek the views, analytical methods, assessment methods, methods for generation ideas, methods of prediction, decision-making methods, techniques of visual representation, reasoning methods;
- What research groups can work on external innovations from various disciplines? and How can evaluate their success? (strategy "top-down");
- What internal innovative ideas are able to receive support and funding from outside? (strategy "down-top");
- How can select the criteria and evaluation methods for external innovative ideas? - development of templates to describe ideas, novelty analysis

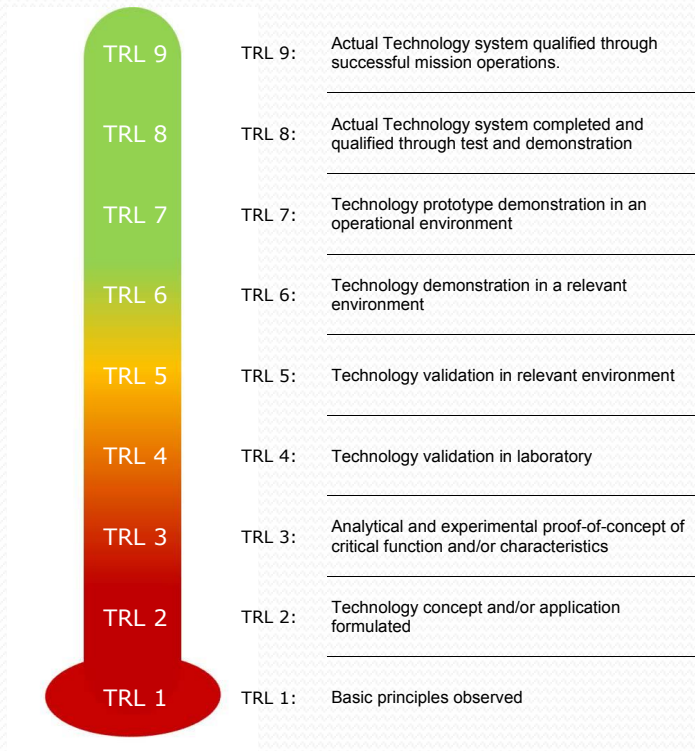
In the evaluation of innovations and research groups we will be using the experience of KTH Innovative (study visit to Stockholm & contacts with head of KTH Innovative).

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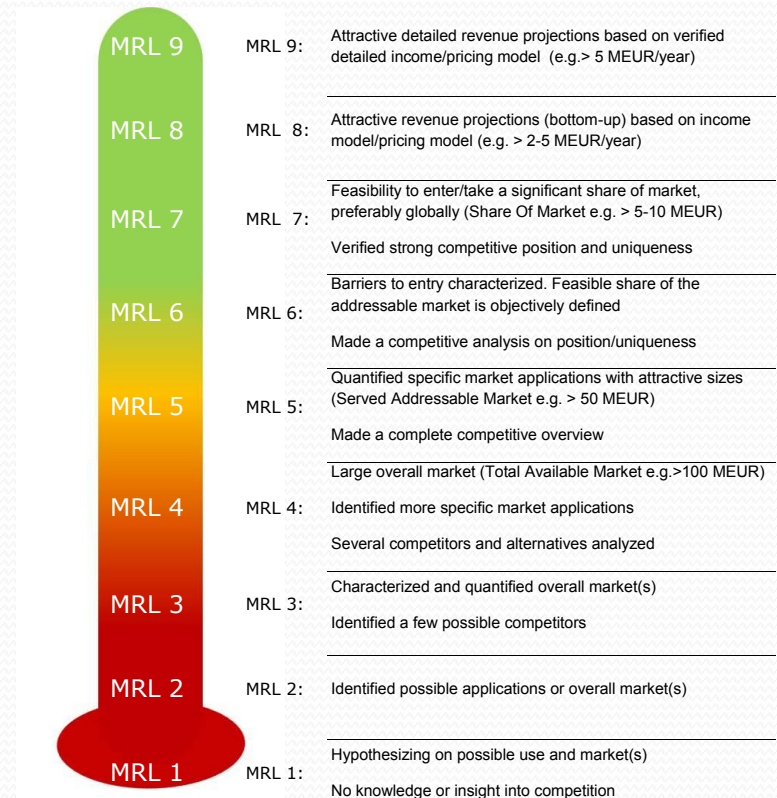


Describe and evaluate your idea – **NABC**:
Need? **A**pproach? **B**enefits? **C**ompetition?

Technology Readiness Level – TRL



Market Opportunity Readiness Level – MRL



Tempus

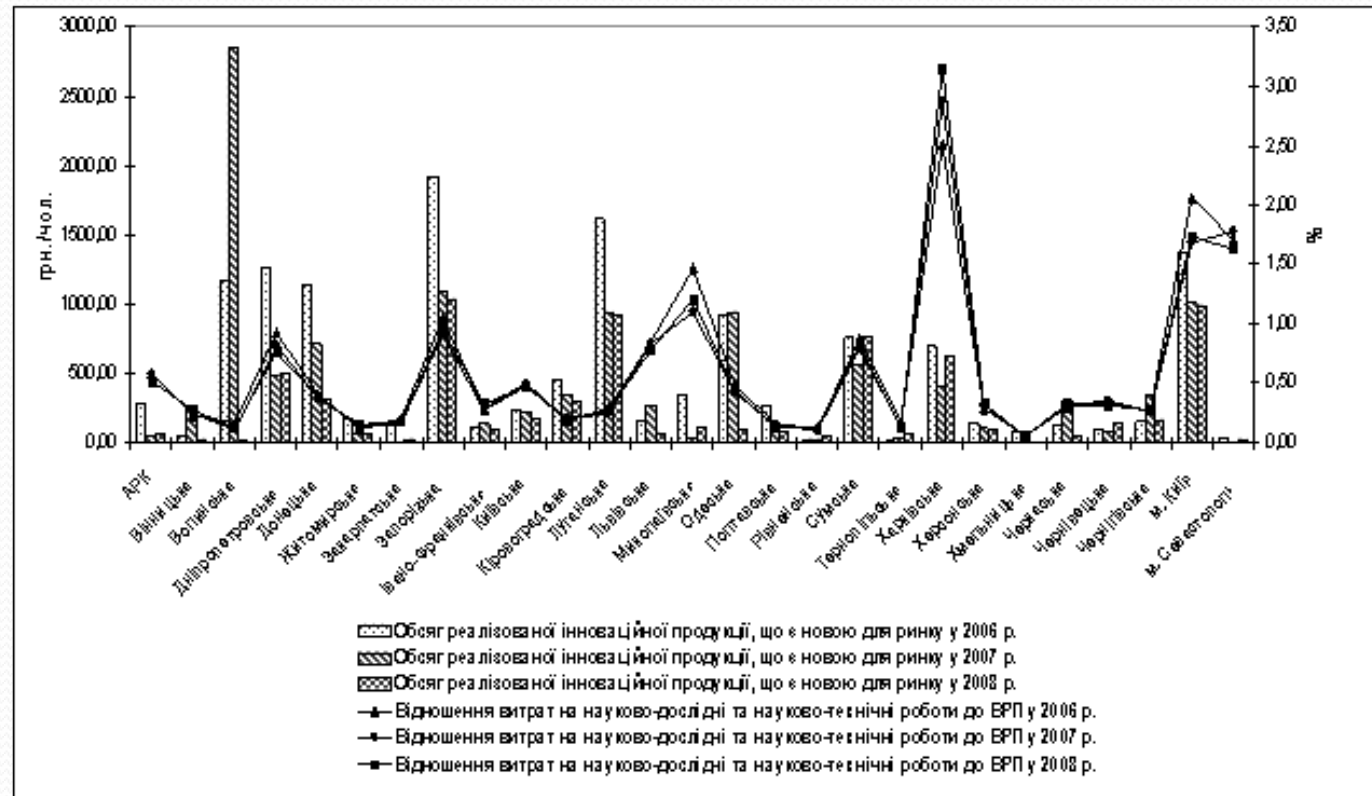
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The lowest cost of scientific research work and the least amount of innovations are in Khmelnytsky region (within 0.6%)*.

But, for example, Volyn' region also have little expenses on scientific research, but it has become the leader in terms of sales of innovative products.

This fact demonstrates the latent innovative potential, which should be basis of sustainability.



* Statistical digest "Regions of Ukraine", 2009. – Part II. – Kyiv: State Statistics Committee, 2009. – 758 p.

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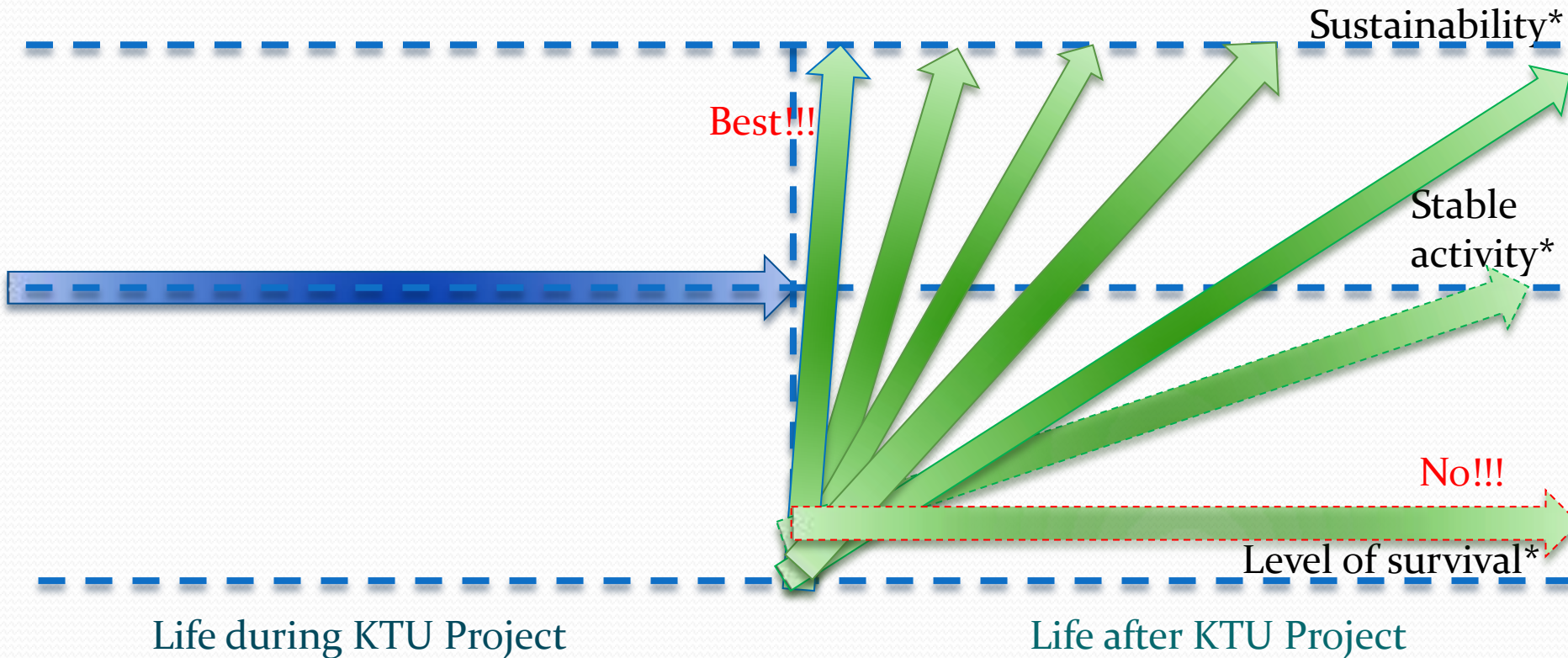


Finances:



Financing from EU

Self-financing



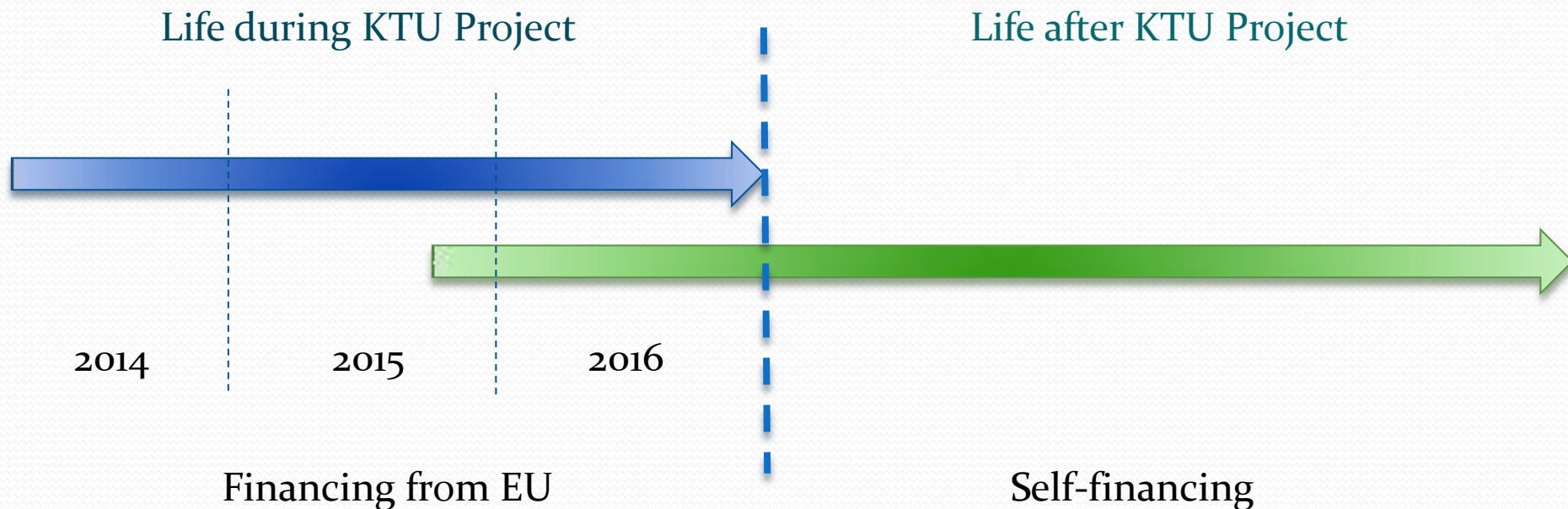
Tempus

* Economy of Trade: Methodological aspects of sustainability strategy //

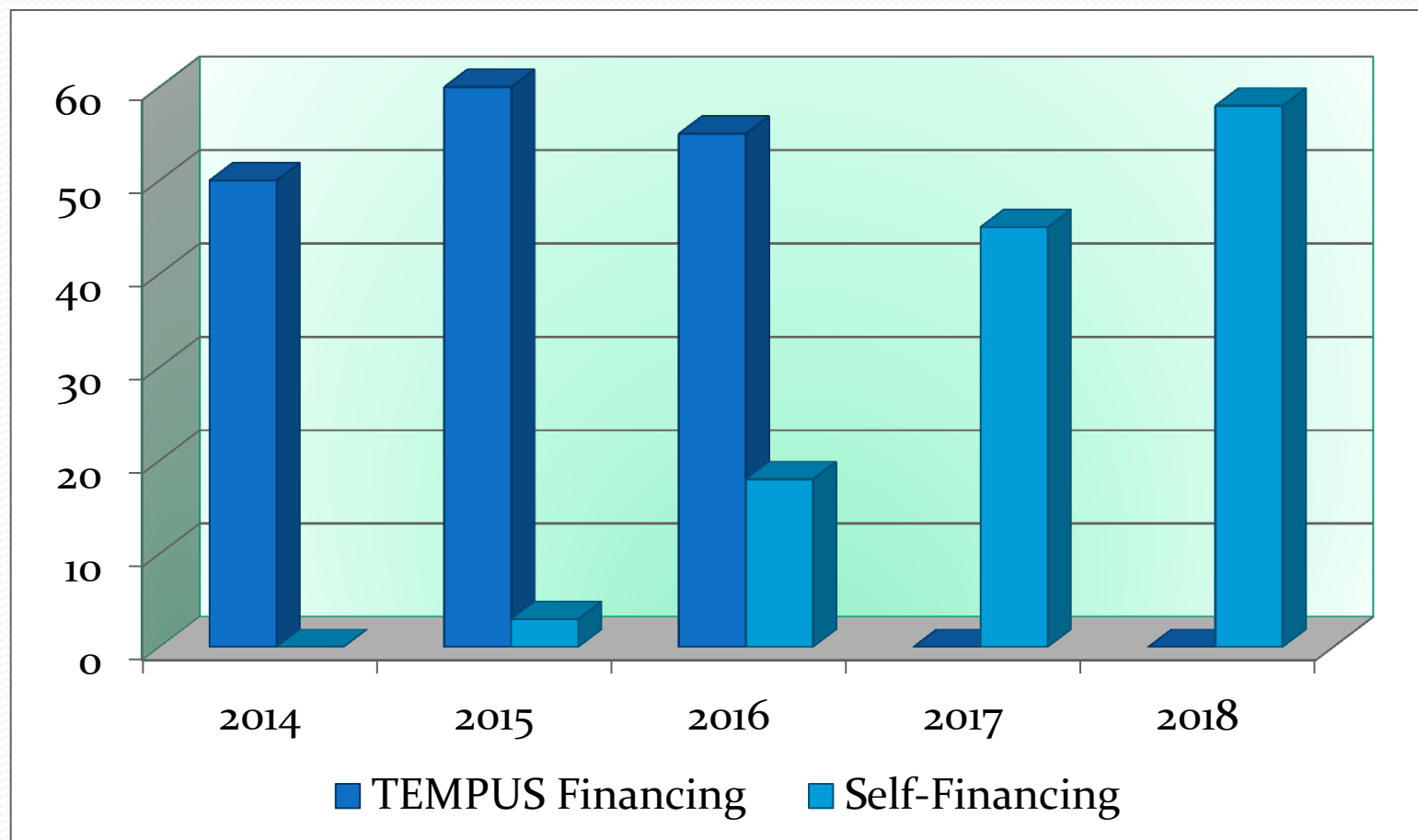
http://pidruchniki.com/15010922/ekonomika/metodologichni_aspekti_strategiyi_stalogo_rozvitku#37

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Toward the transition to the sustainability (or at least to the level of stable activity) will be fastest we must try to sell KTU services before the end of project and before the start of full self-financing (desirable at the end of the second year of the project!):



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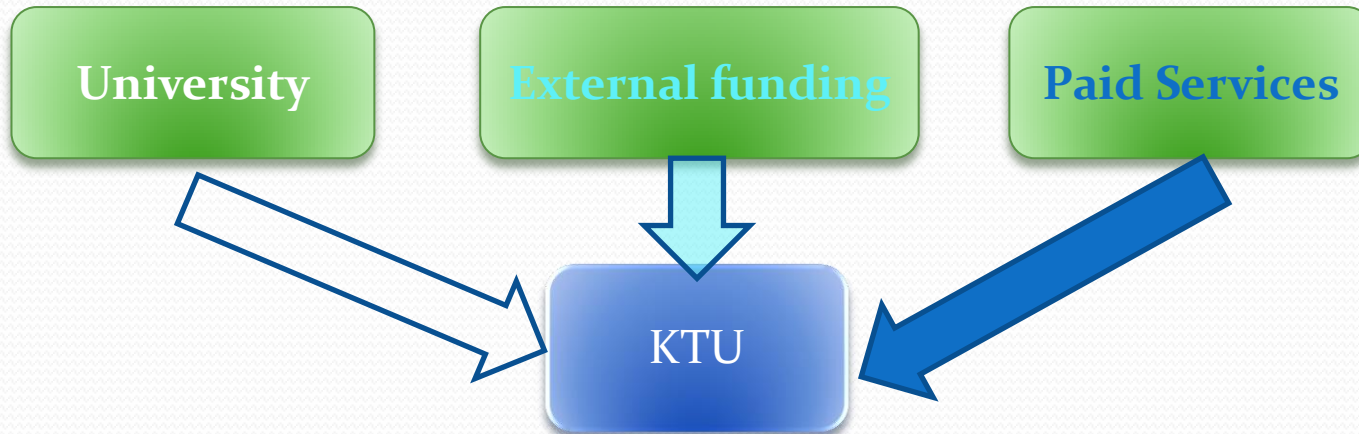
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Tasks (Finances):



- identifying of funding sources:



Therefore, the actuality and demand for KTU services in the region is an important aspect!

- continuous improvement, increase competitiveness, optimization and efficiency improvement of proposed paid services;
- activation of investment activity.

2) Identification of opportunities for sustainability based on analysis of the external environment



Customers and society:

- Does the public and customers informed about available KTU services?
- Are customers able and ready to pay for KTU services?
 - Does society require new, innovation products or improvement of consumer characteristics of existing products, creation of new processes and services that can improve the "quality of life"?
 - Does industry of the region require implementation of new methods and technologies?
 - Are customers able and ready to buy innovative products, processes, services, methods and technologies?

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Investors:



- informing the maximum quantity of region potential investors on KTU creating (as the module for establishing links between science and industry; for converting university resources into profitable business ideas);
- analysis of regional enterprises for the purpose of finding of organizations, which are able and ready to fund internal innovative ideas of university scientists (strategy “down-top”);
- analysis of regional enterprises for the purpose of finding of organizations, that have own innovative ideas and want to fund their research, evaluation and development (strategy “top-down”);
- comparative analysis of the University and potential investors interests with the purpose of establishing of "common ground" - common goals and priorities.



Providers:

- analysis of companies – providers of computer equipment (including consumables for 3D-printers);
- analysis of companies – providers of Internet;
- analysis of companies – providers of printing services (for print of KTU presentation materials, for publication of proceedings of conferences, workshops, trainings).



Competitors:

- analysis of regional enterprises with the purpose of finding of organizations that successfully provide the services, which KTU will provide;
- benchmarking, analysis of the activity and sales market of the above organizations (if they are);
- increase of competitiveness by mutually beneficial partnerships.



3) Development and implementation of the strategy of sustainability

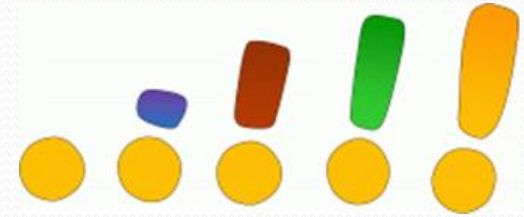
Relations management with stakeholders:



- research of environment to identify of stakeholders;
- the use of communication methods: meetings, events and conferences;
- the use of comparable methods;
- continuous communication with region industry representatives and potential customers of KTU services.

Systemic motivation towards sustainability:

- support of KTU information field in the active state;
- support of long-term relationships with customers;
- material and non-material incentives of staff;
- training and advanced training.



System of balanced indexes and goals:

- mathematical modeling;
- graphical methods;
- expert methods;
- review and evaluation of plans.



KTU

Knowledge Transfer Unit - From Applied Research and
Technology/Entrepreneurial Know-How Exchange to
Development of Interdisciplinary Curricula Modules

Programme: Tempus | Joint Projects | Higher Education and
Society

Reference Number:

544031-TEMPUS-1-2013-1-AT-TEMPUS-IPHE5
Grant agreement number: 2013 - 5054 / 001 - 001
Project Duration: 36 months, 12/2013 - 11/2016

PROJECT HANDBOOK

by christian.kiss@fh-joaanneum.at

As of 17 October 2014

(to be updated on a regular basis)

Stored in the KTU Consortium online folder on Box.com:
<https://app.box.com/folder/1674279362>

WP6 Activity (according to KTU Project Handbook)

- 6.1 Financial plan for sustainability devel. & adopted
(Report, by 31/08/2016):
 - development of the plan for financial sustainability of the project and its adoption by the KTUs (which will focus on the internal revenue model);
 - specifically tailored model of financial sustainability plan for each KTU

- 6.2 Other local partners involved in the project
(Report, 30/11/2016)

- 6.3 Tools & processes dev. for curriculum mod
(Methodology, 29/07/2016)



6.1 Financial Plan

Template for financial plan is developed by Oksana Pomorova (in the form of the roadmap), taking into account the above tasks for achievement of sustainability.

Therefore, we propose and recommend to all partners to perform all the above tasks for achievement of sustainability (before the fulfill of template for financial plan!).

Tasks of stage 6.1	Who	When
1. Presentation of Template for Financial plan	KhNU	Graz meeting
2. Discussion of Template for Financial plan	Consortium	Graz meeting
3. Finalization of Template for Financial plan	KhNU	By results of discussion



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Tasks of stage 6.1	Who	When
4. Mailing the Template for Financial plan to all partners	KhNU	Immediately after finalization
5. Fulfill of Template for Financial plan	PCUs	2 months(???) after mailing
6. Feedback from EU partners	EU Partners	2 months (???) after fulfill of Template
7. Finally version of Financial plan	PCUs	2 months (???) after feedback from EU partners
8. Report on the 6.1	KhNU	3 months (???) after receiving of Finally version (by 31.08.2016)



6.2 Local partners involved in the project

To effectively involving of potential customers of services and potential investors to KTU we should:

- 1) effectively inform the potential customers and investors;
Nowadays task!
- 2) quality and in terms provide the required services to customers; **Further task!**
- 3) quality and in terms perform the study ordered by investors.
Further task!



Informing of the potential customers and investors – on the example of KTU in KhNU (in second KhNU KTU service – public events, public awareness, student engagement)

We developed:

- program for highlighting of the results of TEMPUS KTU project;
- program for informing about services of KTU in KhNU;
- concept of involving of various stakeholders in the activities of our KTU.

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National event
+
University event



System programming department of KhNU every year organizes **All-Ukrainian scientific conference of young scientists and students «Intelligent Technologies in System Programming»** (on 22-24 of April in 2015).

This year we decided to create a new session **«Transfer of information technologies. International experience»** to highlighting of the results of the TEMPUS KTU project and to drawing the attention of community to the presence and functioning of Knowledge Transfer Unit at the university.



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WHO? We are planning to involve to the partnership through session «Transfer of information technologies. International experience» of conference «ITSP-2015»:

- Students; 
- Masters; 
- PhD students; 
- University graduates; 
- Lecturers of KhNU; 
- Lecturers of IT- specialties of other Ukrainian Universities; 
- Lecturers, students and PhD students of Ukrainian Universities, which are partners by KTU project; 
- **IT-companies, software & telecommunication companies of Khmelnytsky and Khmelnytsky region.**



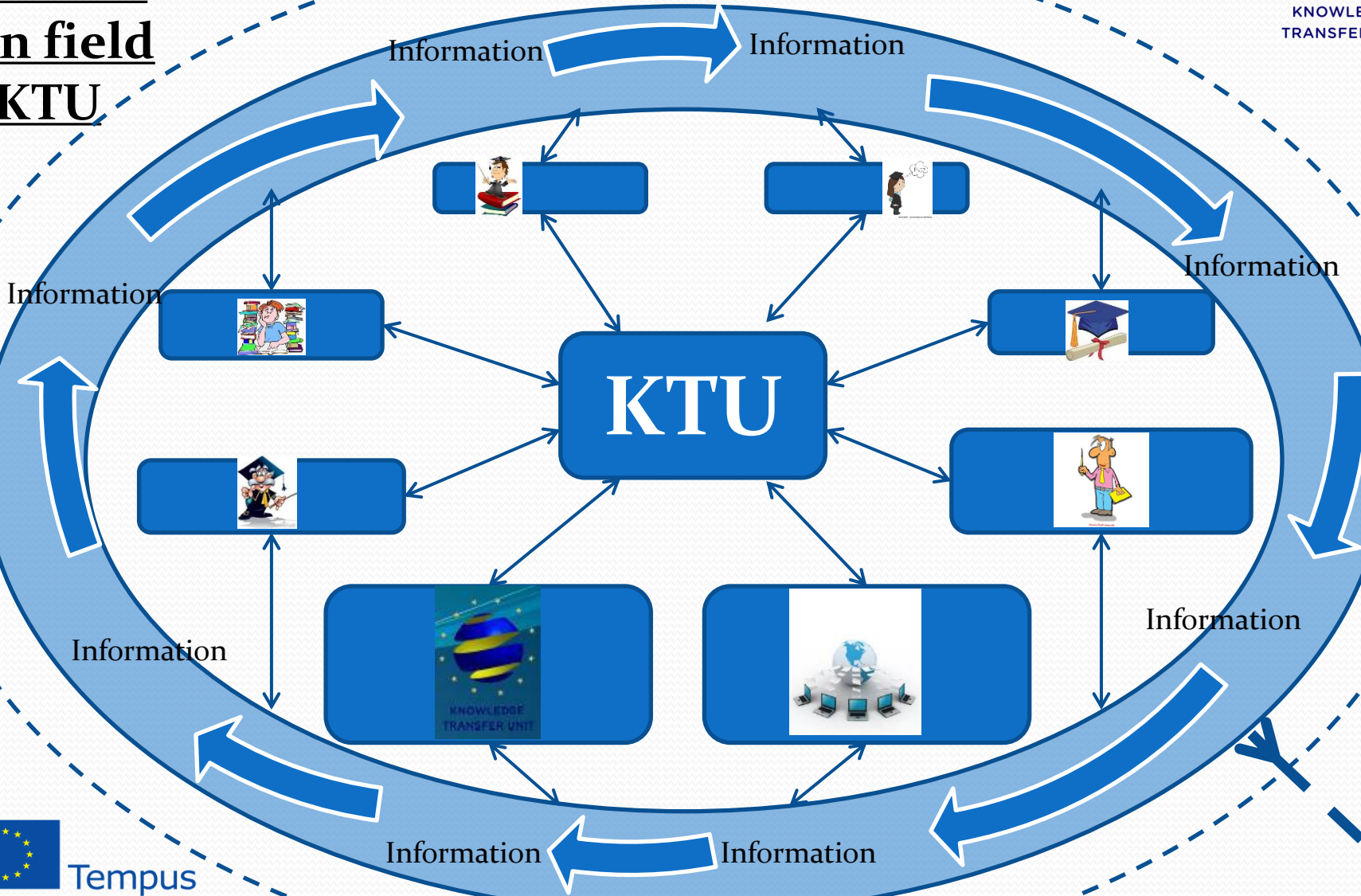
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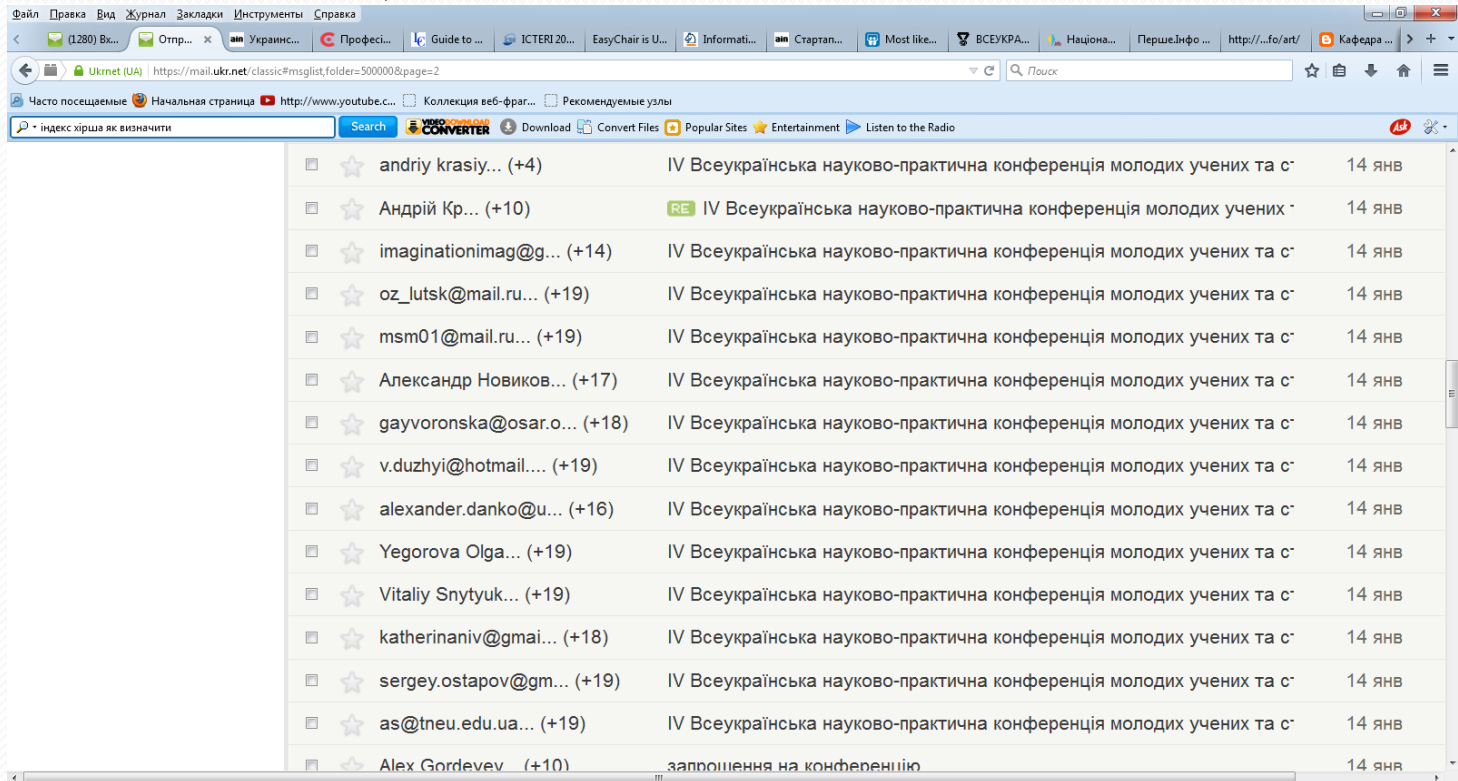
Information field of KTU



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HOW? we are planning to involve to the partnership through session «Transfer of information technologies. International experience» of conference «ITSP-2015»:

- E-mail invitations to all categories of stakeholders (sent over 270 letters of invitation)



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- Conference page with details on the department website:
<http://spr.khnu.km.ua/index.php/content/index/321>

The screenshot shows a web browser window with the URL <http://spr.khnu.km.ua/index.php/content/index/321>. The page content includes:

- Header:** Міністерство освіти і науки України, Хмельницький національний університет, Чернівецький національний університет імені Юрія Федьковича.
- Event Details:** 22-24 квітня 2015 року, провадять Всеукраїнську науково-практичну конференцію молодих учених та студентів «Інтелектуальні технології в системному програмуванні».
- Logo:** A circular logo with a globe in the center, surrounded by the text 'Інтелектуальні технології в системному програмуванні' and '2015'.
- Left Sidebar:** A list of navigation links including 'Ключові дати', 'Умови участі', 'Оформлення матеріалів', 'Організатори конференції', 'Контакти', 'Організаційний внесок', 'Програма конференції', 'Конференція ІТСП-2014', 'Конференція ІТСП-2013', 'Конференція ІТСП-2012', 'Навчальні посібники та монографії', 'Держбюджетні теми', 'TEMPUS', 'Презентація', and 'Справи перспективні'.
- Right Sidebar:** Social media icons for Facebook, Twitter, and YouTube. A section titled 'Конференції' with a sub-section for '2015' and a 'Детальніше >' link. Another section titled 'Останні новини' with two news items: 'Запрошуються студенти!!! ЗАПРОШУЮТЬСЯ СТУДЕНТИ!!! Викладач-ентузіаст...' and 'До уваги всіх дівчат-студенток кафедри системного програмування!!! Шановні студентки! Ви маєте унікальну...'. Both news items have 'Детальніше >' links.



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- I created action (event) on Facebook:
https://www.facebook.com/events/603396973127460/?ref_dashboard_filter=upcoming

The screenshot shows a Facebook event page for the 'IV Всеукраїнська науково-практична конференція молодих учених та студентів «ІНТЕЛЕКТУАЛЬНІ ТЕХНОЛОГІЇ В СИСТЕМНОМУ ПРОГРАМУВАННІ»'. The event is organized by Татьяна Говорушко and is scheduled for April 22, 2015. The page includes a description of the conference, a list of invited guests, and a list of attendees. The event is titled 'ІНТЕЛЕКТУАЛЬНІ ТЕХНОЛОГІЇ В СИСТЕМНОМУ ПРОГРАМУВАННІ' and is held at the Khmelnytskyi National University, Faculty of System Programming.



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WELCOME!!!



Once again we invite all partners to participation in the work of session "Transfer of information technologies. International experience" of All-Ukrainian conference "Intelligent Technologies in System Programming", which will be held on the 22-24th of April in Khmelnytsky!

All materials send me:

tat_yana@ukr.net,
sprdepartment@gmail.com.

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University event

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For additional involvement of students and Masters for partnership and research work I created **student scientific group (section) «SOFTWARE»**, devoted to the problems of design, development and evaluation of software systems, and also to the problems of software quality and safety (<http://spr.khnu.km.ua/index.php/content/news>)

Хмельницький національний університет

Головна | Абітурієнту | Студенту | **Новини** | Викладачі | Наука | Профайл | Контакт | Галерея | Форум | TERNUS KIU

Навігація

- Завантажити файли

Адміністрування

- Список користувачів
- Список файлів
- Створити пункт меню
- Змінити пароль
- Резервувати пункт меню
- Сторінка новин
- Резервувати новину
- Резервувати навігатор

Архів новин

- 2015
- Список
- 2014
- Грудень
- Листопад
- Серпень
- Листопад
- Червень
- Травень
- Квітень
- 2013
- Грудень
- Листопад
- Жовтень
- Вересень
- Серпень
- Листопад
- Травень
- Квітень
- Вересень
- Листопад
- Список
- 2012
- Грудень
- Листопад

Новини

ЗАПРОСІТЬСЯ СТУДЕНТИ!

Доктор кафедри системного програмування кандидат технічних наук, доцент **Головничук Тетяна Олександрівна** формує **студентський науковий гурток** для виконання наукових проектів за **наступними напрямками досліджень:**

- Проблеми проектування, розроблення та оцінювання програмних систем.
- Безпека та якість програмного забезпечення.

До співпраці запрошуються студенти різних курсів:

- зазветь, небайдужі, креативні та ініціативні;
- яких вабить світ наукових досліджень;
- які мають творчий потенціал;
- які дбають про власне майбутнє;
- які хочуть знати та вчитися більше, ніж може надати програма навчання в університеті;
- які не байдуже про своє майбутнє CV (резюме) та хочуть знайти успішну ексклюзивну роботу;
- які хочуть навчатися аналітично та критично мислити;
- які прагнуть навчитися ефективно працювати в команді;
- які хочуть отримувати різнорівні гранти та стипендії ЄС та США;
- які не бажать бути просто «кодерами», а хочуть стати фахівцями з розроблення технологій та відкривати власні прибуткові start-up'и.

Для визначення напрямку досліджень та теми наукового проекту звертайтеся на кафедру системного програмування, **вул. 1217, до буд. Головного залу 110**, або за електронною адресою: ts.golovnichuk@khnu.km.ua.

Соціальні мережі

- Facebook
- Twitter
- LinkedIn

Конференції

Дізнати більше

Останні новини

Дізнати більше

Дізнати більше

Дізнати більше

Дізнати більше



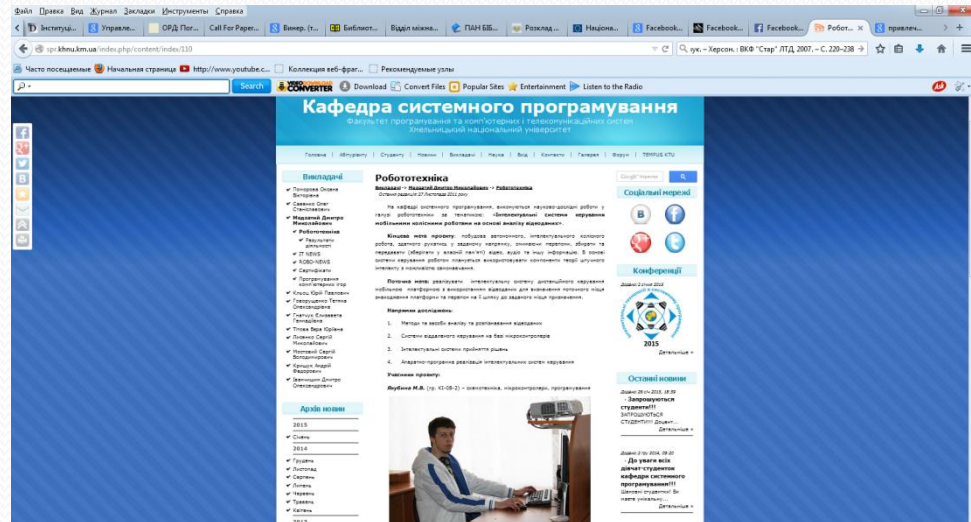
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University event

KNOWLEDGE
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For additional involvement of students and Masters for partnership and research work Dmytro Medzatyi created **the student scientific group (section) of Robotics**, devoted to the development of intelligent control system of mobile wheeled robot (<http://spr.khnu.km.ua/index.php/content/index/110>)



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National activity

+

University activity

To highlighting of the TEMPUS KTU project results we use the website of system programming department (<http://spr.khnu.km.ua/index.php/content/index/285>):

The screenshot shows a web browser displaying the website of the Department of System Programming at Khmelnytskyi National University. The page features a navigation menu, a sidebar with social media links, and a main content area. The main content area includes a header for the department, a central logo for the Knowledge Transfer Unit, and a list of news items. The news items are:

- Конференція ІТСП-2015
- Конференція ІТСП-2014
- Конференція ІТСП-2013
- Конференція ІТСП-2012
- Навчальні проблеми та монографії
- Держбюджетні теми
- TEMPUS
- Що таке Темпус
- Проекти кафедри
 - SAFEGUARD
 - IPMASTER
 - ASSEMBLY
 - KTU
- Новини
 - Мета та завдання проекту
 - Напрямки діяльності за проектом
 - Партнери та учасники проекту
- СЕРВЕР
- Скандинавія
- Презентації
- Спроби перспективи

The central content area also features a large logo for the Knowledge Transfer Unit and a text block:

Knowledge Transfer Unit - From Applied Research and Technology-Entrepreneurial Know-How Exchange to Development of Interdisciplinary Curricula Modules

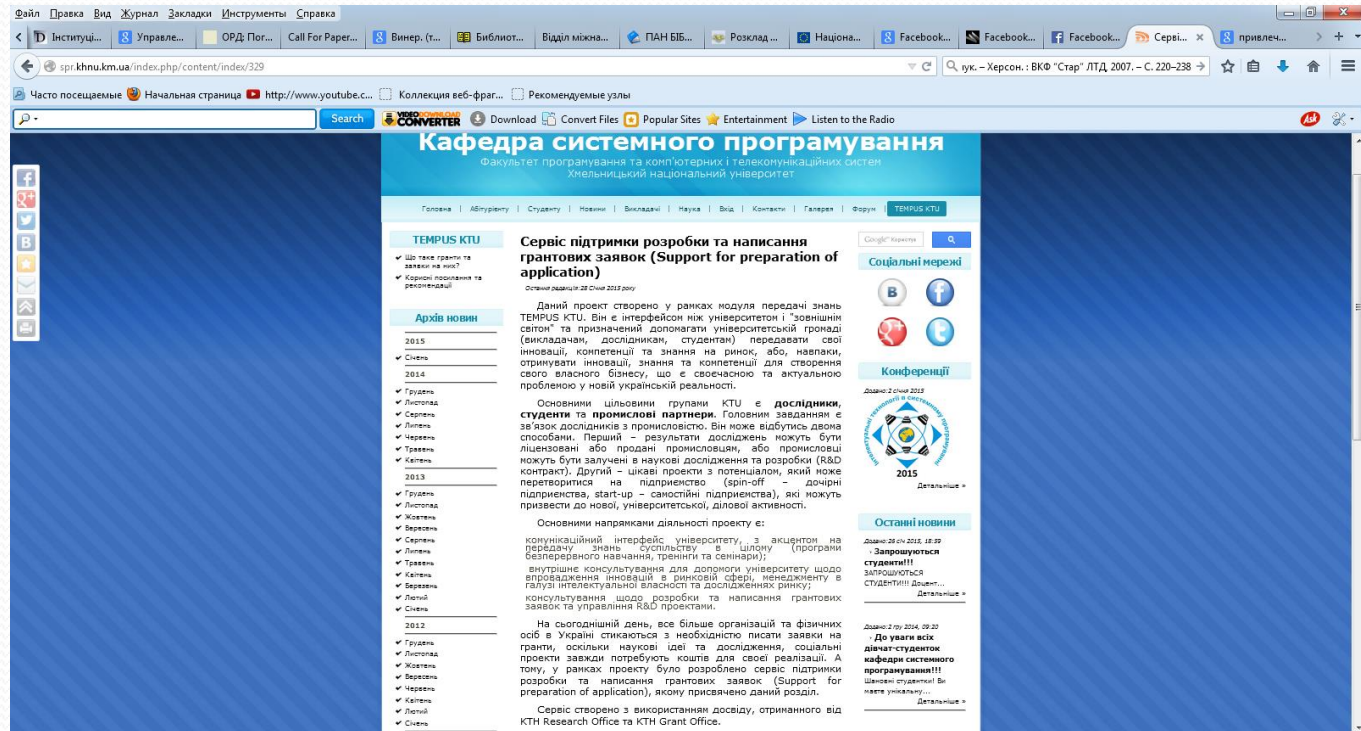
"Модуль трансферу знань - Від прикладних досліджень і обміну технологічно-підприємницьких ноу-хау до розвитку міждисциплінарних навчальних програмних модулів"

544031-TEMPUS-1-2013-1- AT-TEMPUS-IPNES

Офіційний сайт проекту: <http://my.ktu.eu/>

The sidebar on the right includes social media links for Facebook, Twitter, and YouTube, and a section for conferences and news.

On the department website Vira Titova created a separate section «TEMPUS KTU» (<http://spr.khnu.km.ua/index.php/content/index/329>), dedicated for the first service of our KTU (Support for preparation of application), about Vira Titova will tell later



The screenshot shows a web browser displaying the website of the Department of System Programming at Khmelnytskyi National University. The page is titled 'Кафедра системного програмування' and features a section for 'TEMPUS KTU'. The main content area is titled 'Сервіс підтримки розробки та написання грантових заявок (Support for preparation of application)'. The text describes the project's goals, which include supporting university students and industry partners in preparing grant applications. It mentions that the project is part of a module for transferring knowledge from the university to the external world. The page also includes a sidebar with a list of news articles and a search bar. The footer of the page contains the text: 'Сервіс створено з використанням досвіду, отриманого від KTI Research Office та KTI Grant Office.'

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We provide information about all study visits to European universities-partners of TEMPUS KTU project on the department's website in the section "News"

The image displays a screenshot of the Knowledge Transfer Unit website, showing a news section with several articles and photos. The website is viewed through a browser window. The main content area features a list of news items, each with a date and a brief description. Below the list, there are several photographs showing groups of people, likely students and faculty, engaged in discussions or presentations. The website also includes a sidebar with navigation links and a footer with the Tempus logo and the European Union flag.

Візит ж.з.н. доцентів Говорухиного Т.О. та Мадатого Д.М. до Університету Жирона (Іспанія)
Довід: 17 липня, 27 червня 2014 року в 10:22
Додаток: Фото: Мадатого

17-18 червня 2014 року доцент кафедри системного програмування Говорухиного Тетяна Олександрівна та Мадатий Дмитро Миколайович перебували в Університеті Жирона (Іспанія) в рамках Програмного проекту TEMPUS KTU в межах стажування та етичного курсу в об'єднанні перекладачів і викладачів українських університетів-партнерів.

До уваги всіх
Діяти студентів
кафедри системного програмування!
Щодо історичної Ві-
кити університету...

Участь викладачів
кафедри системного програмування
Людмила С.В. в міжнародній конференції
13-14 листопада 2014 року
в Києві...



Knowledge Transfer Unit

KNOWLEDGE
TRANSFER UNIT



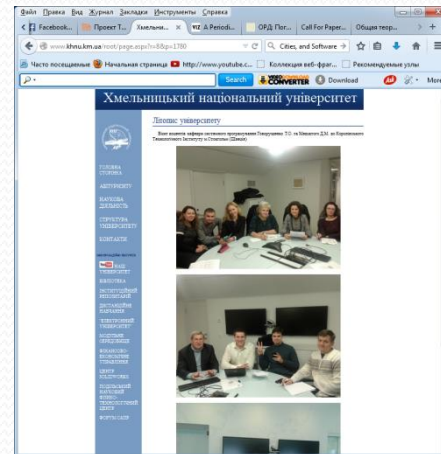
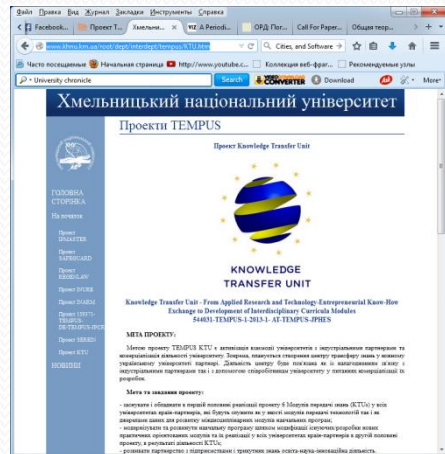
National activity

+

University activity

To highlighting of the TEMPUS KTU project results we use the website of Khmelnytsky National University (<http://www.khnu.km.ua>):

- section «TEMPUS» with page about KTU project (<http://www.khnu.km.ua/root/dept/interdept/tempus/KTU.htm>)
- information about all study visits to European universities-partners of TEMPUS KTU project in the section "University chronicle"



Tempus



Tasks of stage 6.2

Tasks of stage 6.2	Who	When
1. Preparation of reports (and publications) on All-Ukrainian scientific conference “ITSP-2015”	PCUs	31.03.2015
2. Participation in All-Ukrainian scientific conference “ITSP-2015”	PCUs	22-24.04.2015
3. Plan of events for marketing and informing of stakeholders	PCUs	Graz meeting (???)
4. Forming of information field of KTU	PCUs	31.12.2015
5. List of potential partners (organizations, which is in close area)	PCUs	01.04.2016
6. Memorandum of understanding (MoU) or other formal document	PCUs	30.11.2016



6.3 Tools & processes dev. for curriculum mod



It should be:

- perform inspection of all stakeholders for curriculum modernization;
- provide FHJ & WUS of the information about the progress of the implementation of specific tools & services, which generalize this experience;
- FHJ&WUS will developed curriculum for consortium members

Tasks of stage 6.3



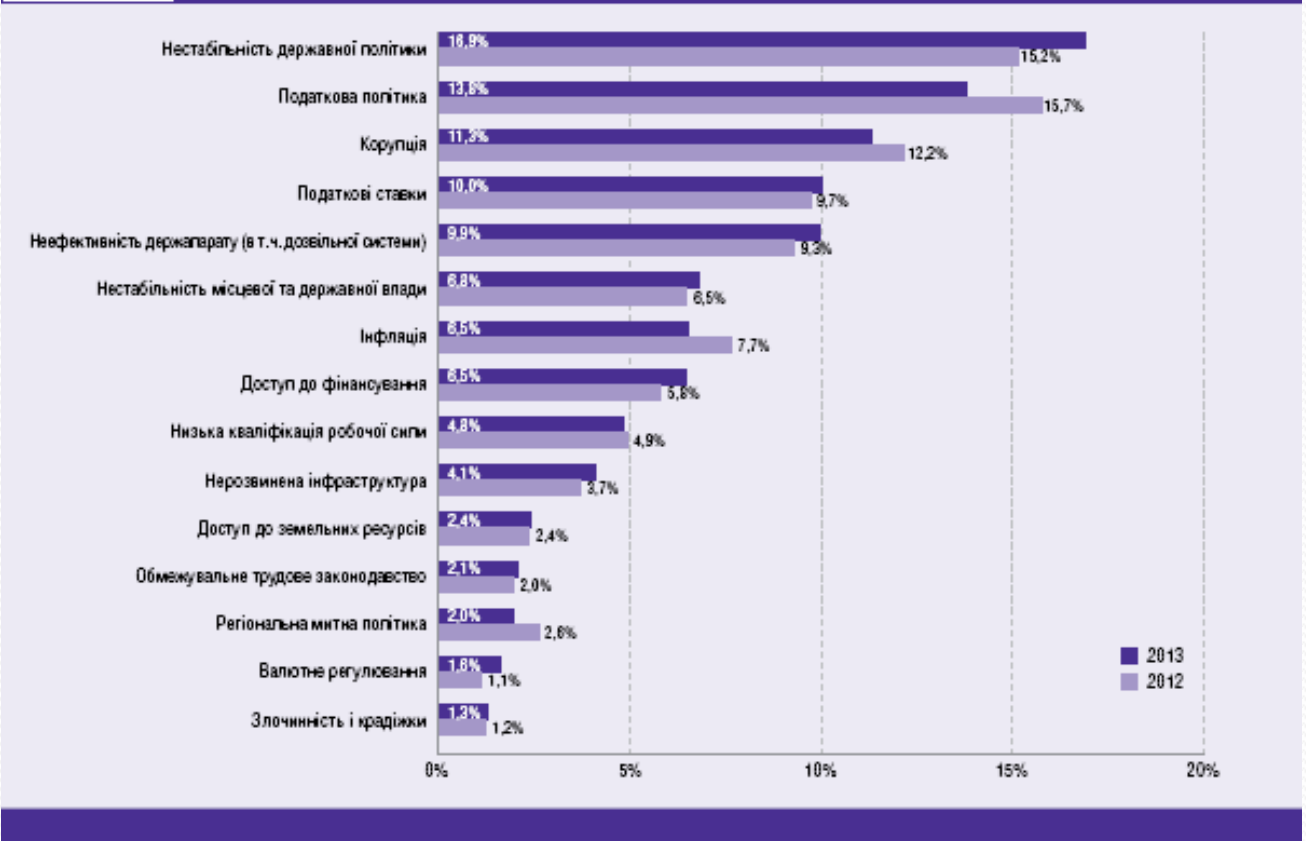
Tasks of stage 6.3	Who	When
1. Survey all relevant stakeholders for the curriculum modernization	PCUs	31.10.2015
2. List of tools available and ready to sharing	All partners	28.02.2016
3. Development of curriculum, specific tools&services	FHJ&WUS (+ PCUs)	???
4. Development of Database for projects - will be developed for KhNU to collect contacts of companies	KhNU	29.07.2016



Problem factors for doing business in Ukraine (2080 heads of companies)*

* Fund "Effective management". Polls of managers in 2013 // http://competitiveukraine.org.ua/uploadfiles/reports/files/feg_report_2013_rus_03chapter4.pdf

Рисунок 4.1 Найпроблемніші фактори для ведення бізнесу



We believe in success and sustainability of our KTU!

THANK YOU FOR ATTENTION!

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