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INSTITUTE OF SINGAPORE IN TASHKENT

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# ABOUT MDIS TASHKENT

Since the establishment of MDIS Tashkent, the institute has educated more than 1,500 specialists in the fields of banking and finance, business and marketing, industrial management, business and enterprise management, tourism and hospitality management. So, according to the statistics, the number of students accounted for 3,121 in 2017-2018 academic year, which is more by approximately 200 students of 2016-2017. In particular, the number of bachelor students in 2017-2018 academic year made up 3035 whereas in 2016-2017 this figure accounted for 2821. Hence, this phenomenon in turn proves that the demand for high-quality education has been increasing.

Since its formation in 2008, the institute has trained over 1,500 specialists, who are currently employed in the fields of tourism and hospitality management, banking and finance, accounting, business and marketing, industrial management, and business and enterprise management.

Each year, the institute performs a placement survey of all MDIS Tashkent graduates. Placement information is obtained through the survey and is supplemented by data obtained directly from students and employers.

MDIS Tashkent assists students in identifying and developing their future career goals through better self-awareness and preparation techniques. Students are encouraged to take confident steps to build their careers through different job seeking strategies and career development workshops and activities offered by the institute. MDIS Tashkent provides internship opportunities for current students to obtain working experience in local or international companies operating in Uzbekistan. Internships are an excellent way for students to acquire necessary skills in a challenging environment provided by employers, as well as an added value to the graduate's Curriculum Vitae. Internal statistics show that graduates who completed internships were offered higher starting salaries by a greater number of employers, compared to those without internship experience.

Being one of the leading universities in Uzbekistan and having formed strong partnerships with recognized higher education institutions globally, MDIS Tashkent aims to prepare high caliber

professionals and future leaders in the areas of Business and Management, Banking and Finance as well as Tourism and Hospitality.

Having established itself as a truly multinational institution, MDIS Tashkent currently employs nearly 200 staff members, including highly qualified academic staff from Singapore, UK, Iran, Spain, Greece and more. Along with local professionals, MDIS Tashkent strives to attract prominent talents to ensure the best learning experience for its students.

All lecturers are supported by highly competent administration staff and are constantly offered professional training and guidance from Singapore. The aim of the institute is to ensure continual staff growth and professional development while fully complying with international standards and practices.

The unique feature of MDIS Tashkent is collegiality, empathy and unity among its personnel. The university is dedicated to cultivating excellence in teaching, a strong team spirit and most importantly, an environment for continuous staff professional and personal growth.

## **New campus building**

To accommodate on ever increasing number of new students and programs MDIS Tashkent is constructing a new and beautiful four-storey campus building across the canal, housing two Schools - the School of Business Management and the School of Fashion and Design.

The 1st floor of the new building will house 1 big lecture theatre for 120 students, a Financial laboratory, a Lecture Theatre, a Book storage hall, seven classrooms for 30 students each and a small Board room.

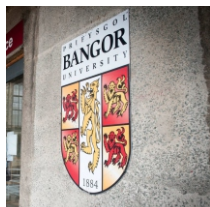
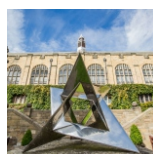
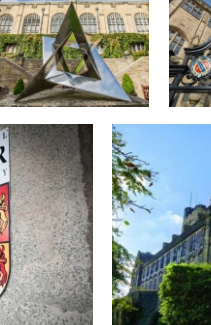
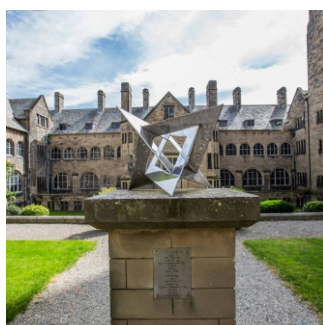
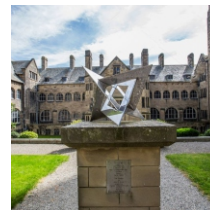
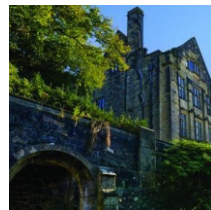
The 2nd floor will house another big lecture theatre for 120 students, two computer labs for 30 students each and two small classrooms for 30 students each. The library will also be on the 2nd floor.

The third floor will have two big lecture theatres, two computer labs, and four small classrooms with one medium classroom for 56 students. Reading hall of the library can be found on this floor.

The top floor will have two large lecture theatres, one computer lab, six classrooms. Discussion hall for students will be located on this floor.



# UNIVERSITY PARTNERS





# The University of Sunderland, United Kingdom



The University of Sunderland has 20,000 students studying University of Sunderland programs worldwide, including at its 3 campuses – two in Sunderland on the north east coast and the third in London.

Its global partnerships with learning institutions in 15 countries, world leading research, knowledge transfer partnerships with business, and collaborations with private and public regional leaders are focused on its key areas of strength; in sciences, advanced manufacturing, software, enterprise and innovation and creative industries.

The University of Sunderland has been instrumental in teaching since 1901, and became a university in 1992. Its latest campus opened in London in 2012.

Sunderland has been an important center for education since 674 AD, when Benedict Biscop built St Peter's Church and monastery – the Sir Tom Cowie Campus is based next to this famous church.

The University has been providing higher education in the city since 1901. The key to this longevity is its ability to adapt to change – something that former Education Secretary Estelle Morris highlights.

"The University is extremely good at adapting - constantly seizing new agendas and changing with society...when new ideas are announced academia trails in their wake, taking too long to adjust but Sunderland takes its opportunities and leads the field."

This approach has led to many awards and the University is regularly asked to pilot new Government initiatives and projects.

We are proud to be the best 'new' university in the UK for the overall quality, quantity and range of research. Our links with business and industry are also strong. We have close working relationships with some of the world's leading blue-chip companies.

The University is central to the £300m film academy and studios at Seaham, a coastal town just ten minutes drive from Sunderland City Centre. It is working with local organizations and an international consortium on the Centre of Creative Excellence. The project involves establishing a world class center for film and media, including a film studio complex, student campus and educational buildings, parkland, hotels and leisure facilities.



# Bangor University, United Kingdom



PRIFYSGOL  
**BANGOR**  
UNIVERSITY

Bangor University was founded as the University College of North Wales. It opened its doors on 18 October 1884 in an old coaching inn with 58 students and 10 members of staff. The students received degrees from the University of London until 1893 when the University of Wales, Bangor became one of the three original constituent colleges of the University of Wales.

Today, the University has over 11,000 students, 2,000 members of staff and twenty three Academic Schools. Bangor University is committed to providing teaching of the highest quality, conducting research of the highest quality, taking good care of its students and playing a full role in the wider community of Wales. Bangor University is ranked in the top 40 in the UK for research\*, according to the Research Excellence Framework (REF) 2014. The REF recognized that more than three-quarters of Bangor's research is either world-leading or internationally excellent, ahead of the average for UK universities.

Bangor University's students have again given the University a resounding testimonial in the annual National Student Satisfaction survey, placing the University eighth among the UK's non-specialist universities in the UK and second among Welsh Universities.

Bangor University has achieved a Gold Award, the highest rating possible, in the national Teaching Excellence Framework (TEF). Bangor University is the only university in Wales to achieve this standard.

We offer hundreds of courses across the arts and the sciences. We pride ourselves on the quality of our teaching and our courses and lecturers were rated third in the UK at the What Uni Student Choice Awards 2017.

We have ISO14001 and Green Dragon Level 5 accreditation for environmental management and we are in the top 5% of the world's greenest universities according to the Universitas Indonesia UI Green Metric.





# SCHOOLS

## School of Business and Management

Established in 2016 as the largest of four MDIS Tashkent schools, the School of Business and Management ensures the provision of academic leadership and strategic vision of MDIS Tashkent and of the School. It maintains the quality standards of the school's teaching and administrative processes. The school currently employs around twenty academic staff members and assists in implementation of the following academic degree programs: BA (Hons) Business and Management, BA (Hons) Business and Financial Management, BA (Hons) Business and Marketing Management, BSc (Hons) in Industrial Management, and BSc (Hons) in Business and Economics.

The School of Business and Management also acts as a liaison between MDIS Tashkent students, MDIS and its partner Universities. Just as the other three schools within MDIS Tashkent School of Business and Management assists MDIST in such areas as management, academic and staff development, quality assurance, marketing and communications.

As MDIS Tashkent keeps reaching new heights, the School of Business and Management will also keep extending greater support to our students.

## School of Banking and Finance

The School of Banking and Finance was established in 2016 to advance banking, finance and accounting by providing outstanding specialized education, tailored to the demands of today's society and economy. One of the primary aims of the School is to equip students with the knowledge and confidence to enter the competitive world of banking, accounting and finance. The School also takes a leading role in fostering students of MDIST to accomplish their professional ambitions, by applying acquired knowledge and skills in contemporary business environment. The School of Banking and Finance ensures that required quality teaching standards are constantly updated and enhanced to comply with international educational standards. At present, the school has more than 15 academic staff members.

The degrees offered by the School include the following: BA (Hons) Banking and Finance; BA (Hons) Finance, Investment and Risk; BA (Hons) Accounting and Finance.

The School of Banking and Finance acts as a mediator between MDIS Tashkent students, MDIS and its university partners, Bangor University and University of Sunderland. The School pays much attention to staff development, communication enhancement and quality assurance.

We realize that the banking and finance industry is changing at an unprecedented pace and therefore, our commitment is to strengthen our position as the provider of quality education across finance, accounting and banking disciplines.

## School of Tourism

Founded in 2016, The School of Tourism aims to excel as an internationally accomplished center of expertise in tourism and hospitality management, maintaining a renowned profile in education, training, professional practice and research. We are recognized in Uzbekistan as a leading contributor to knowledge creation and dissemination in tourism and hospitality. A team of professional academic staff and over 300 undergraduate and postgraduate students make us one of the principal and most prolific departments in the university. The combination of staff expertise and enthusiasm, knowledge excellence and co-creation with industry, produce innovation and best professional practices. Our approach is about creating value with everyone we work with, locally and globally, and sharing the benefits with our society.

Our approach to teaching is to inspire and empower – we want our students to develop their professional skills in a tourism and hospitality context, and to have the confidence to tackle future global challenges.

We foster an intellectual challenge, but nurture educational environment, encouraging our students to grow not only professionally, but also personally. We work closely with key academic and tourism industry professional bodies and committees, including the State Committee on Development of Tourism in Uzbekistan, Hyatt Regency, Wyndham, Radisson, Miran International, Grand Mir Hotel, Ramada, and many others.

We are also proud of our industry collaborations that enable us to co-create best professional practices through constant interaction and engagement. Real-world training is an integral component of our International Hospitality Management program. Our students are equipped with the knowledge, experience, and the practical learning opportunities using state-of-the-art facilities at the MDIS Tashkent Hospitality Training Centre. MDIS Tashkent Hospitality Training Centre has three main practicum laboratories that include - Front Office Service Operation, Food and Beverage Service Operation with well-equipped bar counter facilities, and Housekeeping Service Operation with a mock-up hotel guest room.

We are proud of our high quality teaching, great learning community, outstanding results in internships, rapid career progression, and development of excellent professional networks.

### School of Language and Communication

Formed in 2009 as the Department of English Language and renamed in 2016 to the School of Language and Communication it has two major goals: 1. to prepare the potential MDIST applicants for the entrance examinations; 2. sustain and develop the level of language proficiency of current MDIS Tashkent learners. Indeed, department staff members were the first to face MDIST intakes, ushering and guiding them throughout the years. The School functions have expanded to Business Communication and Public Speaking subjects, which has shaped the whole program, comprising three integrated skills academic courses: English Plus, English Advanced and Business Communication Skills.

The aim of the programs is to develop a requisite for academia proficiency in English language and equip students with the ability to learn and research both autonomously and in a team.

Apart from perfecting language skills, students also develop their communication competencies by learning and identifying the difference between academic and functional business language.

A student-oriented teaching approach is central to our school and all our tutors are dedicated, dynamic professionals able to provide students with academic tools necessary to survive further business courses. At present, the team numbers are over 15 academic staff members.





# Message from Rector of MDIS Tashkent

**DR. JASUR SALIKHOV, RECTOR OF MANAGEMENT  
DEVELOPMENT INSTITUTE OF SINGAPORE IN TASHKENT**



**Dear Colleagues, Partners, Alumni, Students,**

In early 2007, as a result of governmental talks between Uzbekistan and Singapore, the education sector was selected as an important area of mutual cooperation between the two nations. Many universities were considered as potential partners to join this prosperous market since over half of Uzbekistan's population comprised of youths. MDIS was a pioneer institution that appreciated Uzbekistan's National Programme on Personnel Development, and confidently stepped into the Uzbekistan education sector to establish a joint venture with the Uzbekistan Banking Association (UBA) in Tashkent.

A lot of hard work has been put in by MDIS Tashkent team this past decade in terms of establishing partnerships with reputable educational institutions around the world, creating and developing infrastructure, mastering educational processes and strengthening the Institute's positions by providing quality professionals for the local and international labor market. Above all, MDIS Tashkent is proud to be

the first higher educational institution in Uzbekistan to receive an international quality certificate in April 2015. The award has become a testament to the institution's unwavering dedication to provide its students with a world-class education.

Looking back on these last 10 years, we are overwhelmed with emotion, looking towards the future; we're remaining faithful to our original intentions – serving for the future prosperity of Uzbekistan.

I would like to express my gratitude to all those who have taken part in the creation and growth of MDIS Tashkent, including stakeholders, partners, staff members, alumni and students. MDIS Tashkent couldn't have succeeded without your professionalism, dedication and hard work, and I look forward to your continued focus and input.

We need to keep our feet on the ground, continue integrating the essence of education, keep a close eye on the pulse of the times, take aim at the world's future direction and embark upon a completely new path of developing higher education!

## Need to Enhance Students' Engagement through Student-Centered Learning Approach

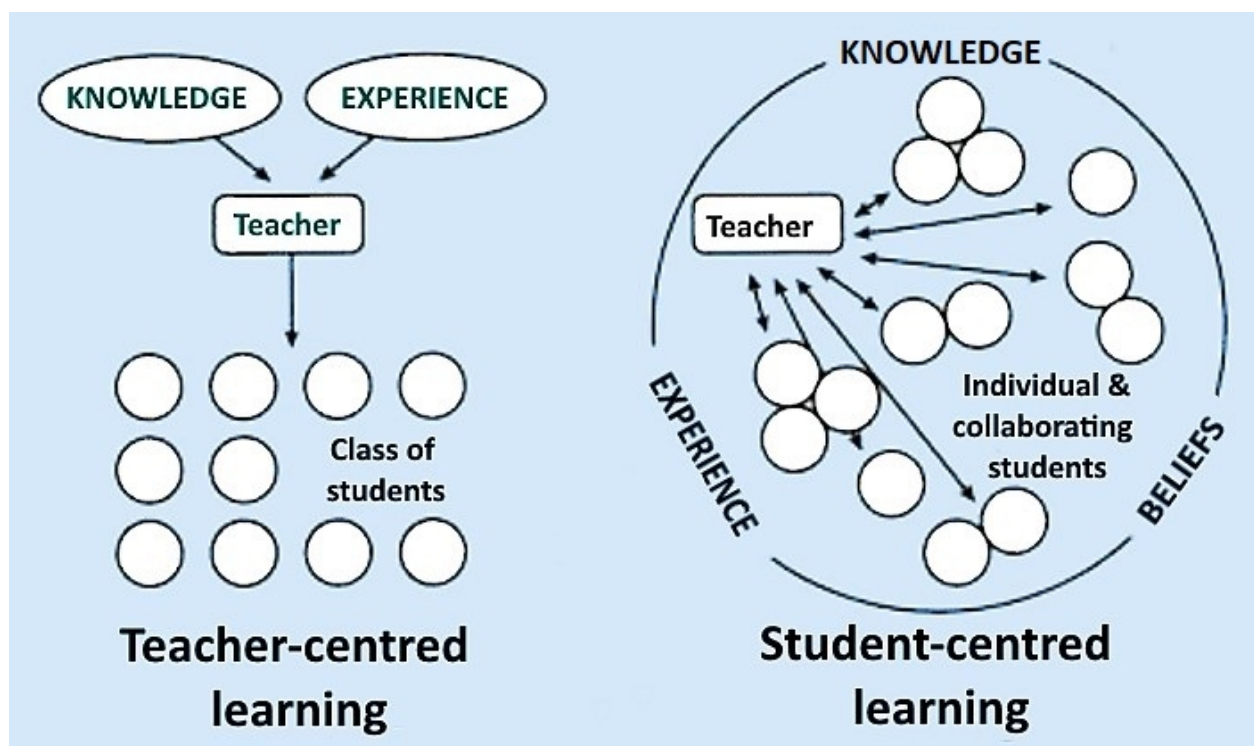


G V Nathan  
Adjunct Head (HRM),  
Senior Associate Lecturer  
MEd, MBA, BSc (Hons), PGDHE, GDMR,  
HDBM, DIR, DHM, CSM  
(*Managing & Leading People, Global Corporate Strategy  
Modules, and Dissertation Workshop & Research  
Supervision*)

As a member of the teaching faculty, I realized that there is a need to stimulate learning among the postgraduate students who come in with a wide range of work experiences. Their tacit knowledge combined with their embrained knowledge can help them enhance their learning process. Therefore, a student-centered approach to learning would certainly be a useful tool for the faculty members to apply in class. Student-centered-learning (SCL) is a learning approach during which students generate learning opportunities and reconstruct knowledge dynamically in an open-ended learning environment (Hannafin et al. 2014). Here is where our students assume increased autonomy and responsibility for their own learning. Students can identify individual learning goals to

pursue external goals. Students can build on unique background knowledge and experiences that they have and further explore, select, and use tools and resources.

They can navigate unspecified paths, monitor progress, and develop personal strategies. Students can develop communication and consultation skills through engagement with others (Bransford et al. 2000; Brush and Saye 2000; Hannafin et al. 2014). This is very useful in the light of industries globalization and the need for students to be engaged in workplace, which is highly diversified. The need to move away from teacher-centered learning to student-centered learning.



Faculty members may need to appreciate that a Student-centered-learning approach is a complex learning process that must be supported through motivation, cognitive, and social aspects. Faculty members cannot assume that students will perform independently without external guidance (Hannafin et al. 2014). They should be scaffolded through the process from

owning the project, researching for the project, and sharing the project outcomes. According to McCombs and Whisler (1997), learner-centered approaches focused on how to support unique individuality of varying interests, needs, capacities, backgrounds, and perspectives. Figure 1 shows the effects of two different approaches to learning approaches.

<b>Figure 1: Comparison between Directed Instruction and Student-centred Learning Adapted from Jonassen (1991)</b>		
	<b>Directed Instruction</b>	<b>Student-centred Learning</b>
<b>Theoretical Framework</b>	Objectivism	Constructivism
<b>Nature of Learning</b>	Students process specified content	Students construct knowledge by exploring and analysing
<b>Methods</b>	Directed learning	Scaffolded learning
<b>Content</b>	Well-defined	Ill-defined
<b>Learning goals</b>	Defined by curriculum or teacher	Teacher negotiated and endorsed by students
<b>Student's roles</b>	Knowledge receiver	Knowledge generator and evaluator
<b>Teacher's roles</b>	Knowledge transmitter	Facilitator, scaffolding provider
<b>Locus of control</b>	External	Internal

Self-determination theory (SDT) highlights autonomy, competence, and relatedness as basic human needs to influence high quality motivation (Ryan and Deci, 2000). According to SDT, behaviors vary in relation to the degree to which they are mediated autonomously versus externally. SDT provides a key frame to understanding the influence of autonomy during learning. Ryan and Deci (2000) argued that intrinsically motivated individuals strive to extend their ability and enjoy doing the activity itself. Intrinsically motivated activities include those that individuals find interesting and would pursue even in the absence of externally imposed pressure (Ryan and Deci, 2000). When intrinsically motivated, students tend to set goals to understand a task, acquire new knowledge, and develop their abilities. Intrinsically motivated, autonomous behaviors help to engage students in deep, individual, meaningful processing. Students who pursue intrinsic goals tend to engage their learning tasks more actively than those who pursue primarily external affirmation, recognition by instructors, or avoidance of negative consequences (Meece et al., 1988).

In contrast, when extrinsically motivated, individuals act in accordance with external requirements rather than the individual's perceived value of learning (Deci and Ryan, 2000). Extrinsically-motivated performance goals emphasize demonstrated competence in defined outcomes. External forces may confound relationships between individual student needs and their outcomes, particularly when learning tasks involve flexible, heuristic, creative, or autonomous motivation for successful performance (Deci et al., 1999). However, distinctions between autonomous and controlled motivation do not adequately account for the complexities and intricacies of academic motivation (Alexander, 1997). When students make autonomous decisions, they assume greater responsibility for directing their learning, become more personally engaged, and deepen their understanding (Ryan and Deci, 2000).

Constructivism is a learning theory found in psychology, which explains how people might acquire knowledge and learn. It therefore has direct application to education. Schunk (1991) explains, "constructivism does not propound that learning principles exist and are to be discovered and tested, but rather learners create their own learning" (p. 236).

Constructivist teachers pose questions and problems, and then guide students to help them find their own answers. Constructivist learning involves iterative processes of discovery as students use their own mind to obtain knowledge for themselves and "rearranging or transforming evidence" to assemble "additional new insights" (Bruner, 1961, p. 22). Constructivism variants commonly suggest that learner, context, and understanding are connected and interdependent (Gauvain, 2001; Lave, 1988; Rogoff, 1990). Further,

social constructivism suggests that students interact reciprocally with peers and more knowledgeable others to support richer understanding than is possible individually (Vygotsky, 1978).

The learning environment such as classrooms and campus facilities does play an important part in the students learning experience. Environments promote learning by doing as well as learning by thinking and discussing what you do (Kafai and Resnick, 1996). Constructionists regard affect as critical for learning, whereas constructivists focus principally on cognitive development (Kafai and Resnick, 1996). Constructionists suggest that students become intellectually engaged when they work on personally meaningful activities and projects and thus become personally invested. This enthusiasm influences both students' attitudes toward the subject matter as well as their performance (Harel and Papert, 1991). Students become cognitively and emotionally engaged as they employ resources in a social context and design and refine both their understanding and artifact (Price and Marshall, 2013). According to constructionist, learning is an iterative process in which students "invent for themselves the tools and mediations that best support the exploration of what they most care about" (Ackermann, 2001, p. 4). Accordingly, a student's responsibility for individual understanding increases as associated ownership of both learning processes and products increase (Grabinger and Dunlap, 1995). Thus, the learning environment should support individual efforts as students construct personal meaning through artifact development (Wilson, 1996).

Scaffolding refers to guidance provided to support one's independent functioning (Vygotsky, 1978). The concept of scaffolding in education adopted the metaphor of scaffolding from architectural construction. A temporary structure supports on the outside of a building. As the building is gradually built permanently, the scaffold is removed. More knowledgeable others (instructors, peers, experts, or technology resources) guide and support an individual's learning. Scaffolds make available the knowledge, skill, strategies, and expertise of more knowledgeable others. When the individual demonstrates an acceptable level of competence, the scaffold is gradually faded to promote independent functioning. Scaffolding is vital to students' success during SCL (Raes et al., 2012). Many students, especially novices with limited background and experience in a domain, require explicit structure to make sense of content, make informed decisions, monitor their progress, and adapt to emergent challenges.

Scaffolding assists students to participate meaningfully by supporting efforts to identify relevant goals, pursue and monitor progress toward those goals, reconcile differences between existing



**Figure 2: Zone of Proximal Development (Vygotsky's Constructivist Approach)**



understanding and concepts yet to be learned, and construct and refine artifacts (Hannafin et al., 2009). Scaffolding during SCL takes a wide array of strategies including providing discovery questions, peer feedback, architectural solutions, explicit information, and systematic instructions (Azevedo and Hadwin, 2005; Brush and Saye, 2000; Sharma and Hannafin, 2007; Weigend, 2014).

#### List of References

Ackermann, E. (2001). Piaget's constructivism, Papert's constructionism: What is the difference? *Future of learning group publication*, 5(3), 438.

Alexander, P. A. (1997). Mapping the multidimensional nature of domain learning: The interplay of cognitive, motivational, and strategic forces. *Advances in motivation and achievement*, 10, 213–250.

Azevedo, R., & Hadwin, A. F. (2005). Scaffolding self-regulated learning and metacognition—Implications for the design of computer-based scaffolds. *Instructional Science*, 33(5), 367–379.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.

Brush, T., & Saye, J. (2000). Implementation and evaluation of a student-centered learning unit: A case study. *Educational Technology Research and Development*, 48(3), 79–100.

Bruner, J. S. (1961). *The act of discovery*. Cambridge: Harvard University Press.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

Gauvain, M. (2001). Cultural tools, social interaction and the development of thinking. *Human Development*, 44(2–3), 126–143.

Grabinger, R. S., & Dunlap, J. C. (1995). Rich environments for active learning: A definition. *Research in Learning Technology*, 3(2), 5–34.

Hannafin, M. J., Hannafin, K., & Gabbitas, B. (2009). Re-examining cognition during student-centered, Web-based learning. *Educational Technology Research and Development*, 57, 767–785.

Hannafin, M. J., Hill, J. R., Land, S. M., & Lee, E. (2014). Student-centered, open learning environments: Research, theory, and practice. In M. Spector, M. D. Merrill, J. van Merriënboer, & M. P. Driscoll (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 641–651). New York: Springer.

Harel, I. E., & Papert, S. E. (1991). *Constructionism*. New York: Ablex Publishing.

Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, 39(3), 5–14.

Kafai, Y. B., & Resnick, M. (1996). *Constructionism in practice: Designing, thinking, and learning in a digital world*. Mahwah, NJ: Lawrence Erlbaum.

Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge: Cambridge University Press.

Lunyk-Child, O. I., Crooks, D., Ellis, P. J., Ofosu, C., O'Mara, L., & Rideout, E. (2001). Self-directed

Self-directed learning: faculty and student perceptions. *Journal of Nursing Education*, 40(3), 116-123.

McCombs, B. L., & Whisler, J. S. (1997). *The learner-centered classroom and school: Strategies for increasing student motivation and achievement*. San Francisco, CA: Jossey-Bass.

Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology*, 80(4), 514.

Price, S., & Marshall, P. (2013). Designing for learning with tangible technologies. In R. Luckin, S.

Puntambekar, P. Goodyear, B. Grabovski, J. Underwood, & N. Winters (Eds.), *Handbook of Design in Educational Technology* (p. 288). Rutledge.

Raes, A., Schellens, T., De Wever, B., & Vanderhoven, E. (2012). Scaffolding information problem solving in web-based collaborative inquiry learning. *Computers & Education*, 59(1), 82-94.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American*

*Psychologist*, 55(1), 68.

Schunk, D. H. (1991). *Learning theories: An educational perspective*. New York: Macmillan Publishing.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

Sharma, P., & Hannafin, M. J. (2007). Scaffolding in technology-enhanced learning environments. *Interactive Learning Environments*, 15(1), 27-46.

Sharma, P., Xie, Y., Hsieh, P., Hsieh, W., & Yoo, S. (2008). Student learning outcomes in technology enhanced constructivist-learning environments. In M. Orey, V. J. McClendon, & R. M. Branch (Eds.), *Educational media and technology yearbook* (pp. 77-90). Westford, CT: Libraries Unlimited Inc.

Vygotsky, L. S. (1978). *Mind in society: The development of higher mental process*. Cambridge: Harvard University Press.

Wilson, B. G. (1996). *Constructivist learning environments: Case studies in instructional design*. Englewood Cliffs, NJ: Educational Technology Publications.



Source: [thepsychologist.bps.org.uk](http://thepsychologist.bps.org.uk)

# Teachers' Role in Legal Education

Mr. Carlos Martínez  
MDIS Tashkent



This essay will concentrate in teacher/student centred, deep and surface approaches to learning and I will also analyze two learning theories which I have incorporated in my modules when teaching law at Westminster International University in Tashkent and MDIS Tashkent.

In legal education, it is easy to fall into the error that the teacher has to be in the center of the class and students must simply take notes and research the recommended bibliography. This teacher-centered approach was the general rule during my University years in Spain.

As a student, I always thought that the teacher was the only important element of teaching and certain features should be part of his/her credentials as the center and only relevant member of the class: Having certain knowledge on relevant topics; professional teacher in possession of certain qualifications; being able to create a friendly atmosphere; well organized; patient; motivating; enthusiastic.

All these features alone are not sufficient to transmit or facilitate knowledge, and it is crucial to note that learning takes place through "The Active Behavior of the student: it is what the student does that learns not what the teacher does" (Tyler, 1949).

Through experience, I've learned that traditional teaching could not reach the final outcomes without involving students in learning activities, linked to the learning outcomes, where the center of the class is shared by teachers and students. In addition, these activities can support deep or surface learning and it is important to pay extra attention to them in order to create a favorable teaching and learning environment.

The two ways of teaching and learning which are prevalent in my own teaching practice are lectures and tutorials. I believe in the necessity of engaging students in the learning process in these two ways of teaching taking under consideration their ability to learn and emphasising on the activities planned by the teacher to move progressively from a surface approach to a deep approach to learning.

Reflecting on my own practice, I believe that a deep approach to learning needs a prior surface approach. In the first activity, which I created for my level 4

Constitutional Law students, I intended to move from a surface approach to learning to a deeper approach, following Bloom's Taxonomy.

In order to organize and develop the lecture I started by distributing a handout to explain in a clear and simple manner the definition of Constitution and its characteristics. Following (Biggs, 2003, page 112) I designed it to be interactive, "using tasks as chances for students to learn by doing".

The lecture handout was sent to students via email and also placed on the University intranet. I gave some instructions to students and kindly asked them to research on the Uzbek Constitution to have a practical understanding of the definition and characteristics of a Constitution.

I facilitated knowledge, following Blooms, and asked students to read the handout thoroughly before coming to the lecture. During the class, I explained the topic clearly using a Power Point presentation. At the end of the Lecture, the first three phases of the so-called lower level of thinking had already been achieved reaching a surface approach to learning:

1. The transmission of knowledge (handout);
2. Its comprehension (reading plus Power Point presentation).
3. Its application to a particular case (the Uzbek Constitution).

This surface approach was designed as a preliminary step to go academically further avoiding the statement "the surface approach arises from an intention to get the task out of the way with minimum trouble" (Biggs, 2003, page 14).

During this early stage, I can say that as a teacher I was almost always in the center of the class leading, structuring and organizing the whole process of teaching and learning. After finishing the Lecture, I focused all my efforts to motivate students so that they were also in the center of the class and at the same time acquire a deep approach to learning.

I intended to scaffold their knowledge in the way that learners build knowledge for themselves into an integrated understanding following social learning constructivist theories (Peter Jarvis et al, 2003, p.43).

1 Taxonomy means classification. Blooms taxonomy is a hierarchy of learning objectives while teaching: 1. TO REMEMBER facts and basic ideas; 2. TO UNDERSTAND or being able to explain ideas or concepts; 3. TO APPLY or use the information in new situations/scenarios; 4. TO ANALYZE or being able to connect ideas; 5. TO EVALUATE or being able to judge, support, defend or argue ideas and 6. TO CREATE or produce new original work.

2 Constructivism is a theory stating that learning is an active process and the learner is an information constructor rather than simply acquiring the knowledge. Constructivism states that all knowledge is constructed from the learner's previous knowledge regardless of how the teacher teaches. LEV SEMYONOVICH VYGOTSKY (1896-1943).

The activity planned in the next tutorial was posted on Intranet: a copy of the first Constitution of the world (the Mayflower Compact)<sup>3</sup>, which is an easy legal document to read. The task was the analysis of the Mayflower Compact from an economic, social and legal point of view, taking under consideration the historical facts, which surrounded this short but amazing document. Students were also supposed to translate it into their own language, trying to understand native English words.

In the tutorial, I divided students into three groups following Vygotsky and Engestrom cognitivism<sup>4</sup> idea of separation of labor (Peter Jarvis et al, 2003). Students were supposed to make a presentation on the Mayflower Compact, synthesizing it according to the definition and characteristics of constitutions and comparing it with the 1992 Uzbek Constitution.

At the end of the tutorial all the students participated in the elaboration of a mind map/poster, “which is an activity that allows students to interpret their experiences” (Brown and Glasner, 1999, page 100) evaluating the features of the Mayflower Compact according to their own point of view and reflecting on the definition and characteristics of Constitutions. By the end of the tutorial, the other three phases of Bloom’s taxonomy were met since students were able to analyze, synthesize and evaluate the text. In addition, I have to say that throughout the tutorial I was only coordinating the activities and at all times students were in the center of the class (student-centered approach). During my practice as a university teacher, I learnt that the role of a teacher as a facilitator of knowledge must be supported by activities in which students can participate towards achieving the learning outcomes.

Teachers and students must form a team complimenting each other and the activities created by the teacher must be based on the different capabilities of the students. Moving on to learning theories I believe that the process of learning depends on the combination of factors (cognitive, emotional, type of environment, applicability, level of previous knowledge, etc.) which will make possible to broaden our knowledge or widen our point of view. The information provided has to be absorbed by the students according to their capabilities; internally processed and analysed and retained to be used in practical cases (Natasha Zeitel-Bank and Ute Tat, 2012).

Learning theories are the different hypothesis that

explain how information is absorbed, processed and retained and ultimately will guide us to find solutions for the resolution of practical cases. I have analysed the following six learning theories: Behaviourism, Multiple Intelligence, Cognitivism, Neurolinguistic Problems, Constructivism and Social Constructivism. During the last academic years, I have incorporated two learning theories in my modules, which I will describe in the next paragraphs.

The theory of Multiple Intelligence was first proposed by Howard Gardner in 1983 in his book *Frames of Mind* and it is characterized by establishing that intelligence is the ability to learn.

It is not possible to say that this ability of our mind is the same for every human being. Each person is potentially intelligent but there are different types of intelligence in which we can fit. Howard Gardner in his book “*The discipline of mind*” (1999) stated that “Even the best students in our best schools do not understand very much of the curricular content”, (Gibbons, 2002, p. 19). Memorizing on its own does not provide a full understanding of the topic even though I agree with the statement “memorization is probably the most commonly accepted understanding of learning” (Jarvis, Holford and Griffin, 2003, p. 63).

According to Gardner there are seven types of intelligence and five of them can be applied when teaching Law, depending on students’ ability to learn: linguistic, mathematical, visual, interpersonal and intrapersonal (musical and bodily apply better in other academic areas).

For the purpose of knowing to which type my students could fit in and subsequently to elaborate specific handouts for the future, I created the following activity based on Gardner’s Multiple Intelligence:

Students were divided into 3 groups according to their preferences after explaining the characteristics of every type of intelligence:

The same concept of law (women’s discrimination) was described in three different formats related to three types of intelligence:

Group 1: Linguistic intelligence: the Lecture handout included different articles covering the rights of women. The information provided was written and exhaustive (12 students joined this group).

Group 2: Visual intelligence: the Lecture handout was based on three photos of women who suffered discrimination. Below-mentioned articles explain the protection of women worldwide but without disclosing too much information (8 students).

3 The Mayflower Compact was written in 1620. It was the first governing document of the Plymouth North American colony (see appendix 2).

4 The cognitivist revolution replaced behaviorism in 1960s as the dominant paradigm. Cognitivism focuses on the inner mental activities – opening the “black box” of the human mind is valuable and necessary for understanding how people learn. Mental processes such as thinking, memory, knowing, and problem-solving need to be explored. Knowledge can be seen as schema or symbolic mental constructions (<https://www.learning-theories.com/cognitivism.html>).



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Group 3: Mathematical Intelligence: the Lecture handout provided relevant statistics from the European Union stating women's discrimination. Underneath I mentioned the articles, which protect women worldwide (5 students).

After using three different handouts to explain the same issue, I can say that is true that every person is

potentially intelligent and depending on internal and external factors, we can identify the type or types of intelligence where we fit in to optimize the level of understanding and learning. Law is an area of study characterized by memorization, which is insufficient for a good practical implementation of knowledge. To identify the type of intelligence of our students will help us to break the barrier between theory and practice.

The final outcome was that in any handout I must incorporate information to cover these three different types of intelligence. Interpersonal and intrapersonal intelligences need also to be taken under consideration and integrated in the whole process when needed.

I have also taken into consideration Behaviourism which is a learning theory characterized by focusing on what is observable to society, the teacher, the class, other students and not what is observable only for the individual (thoughts, ideas, points of view).

Hence, this theory concentrates on the observation of human behaviour after stimulating someone to achieve certain results. I agree with the statement "learning is a social as well as an individual activity" (Cohen, Manion and Morrison, 1997, p. 42). In the same line, Vygotsky reminds us that "all higher order of cognition is socially learned and transmitted".

Following (Cohen, Manion and Morrison, 1997, pages 177-178), behaviourism has several characteristics which are: a particular stimulus provokes a particular response; behaviour that is positively reinforced is learned; repetition lead to learning; learning can be programmed; motivation is extrinsic and instrumental and behaviourism lays emphasis on external rewards (grades, marks, working to avoid being told off, working to please the teacher).

In the Module European Union Law, as a form of formative assessment, I created weekly quizzes to make students more responsible and to position them at the center of the teaching process, stimulating them to achieve satisfactory results and also stimulating further research, since I agree with the phrase "multiple choice exams test how fast students think, rather than how fast they write" (Race, 2001, page 53). With the student's consent, the marks were published exposing them to the public. Students in general are very competitive in Uzbekistan and very much concern about the publicity of their marks.

A grading list was also elaborated for the students to know their rank in the class from 1 to 25. The very first stimulation was the publicity of the marks, moralizing how important is for the society, the individual and the family to get good results. In the first tutorial quiz, only one student got 100% (19 out of 19 right answers). I kept sending stimulations like establishing a competition to get internship in the local European Union representation in Tashkent for the best three students. I also publicly congratulated every student who got 100% and their names were posted on the

Law Department board. By the end of week, five students out of 25 got 100% and altogether at the end of the semester 15 students out 25 got 100% in some of the 10 quizzes.

I used Behaviorism as an instrumental approach to teaching and learning and I agree with (Peter Jarvis et al, 2003, p. 31) when saying, “When it comes to human beings, instrumentalism is sometimes of dubious value and morality. Why then is widely accepted and practiced? It gets results”.

This theory can have negative / demotivating effects if used incorrectly. For this reason, I asked my students for permission to post the results. At our university, the process of assessment is blind and the results are given to the identification number of students. Teachers cannot and should under no circumstances know the identity of students. For Informal formative assessment, it is possible to know the identity and tell students how they can improve in the Module.

In general, it is possible to stimulate students and I think I have proven this point but the use of this theory can be contradictory.

To conclude, in this essay I have covered teacher/student centered, surface and deep learning approaches, creating two activities in lectures and tutorials to follow Bloom’s taxonomy. I also explained in which ways I incorporated multiple intelligence and behaviorism into my own practice.

### List of references

- Maurice Gibbons (2002) The self-directed learning handbook.  
Phil Race (2001) The lecturer’s toolkit.  
Peter Jarvis, John Holford and Colin Griffin (2003) The theory and practice of learning.  
John Biggs (2003) Teaching for Quality Learning at University.  
Sally Brown and Angela Glasner (1999) Assessment Matters in Higher Education.  
Cohen, Manion and Morrison (1997)  
Electronic sources:  
<https://www.learning-theories.com/cognitivism.html>  
“Networked Learning” at the Management Centre Innsbruck, Austria. (Natasha Zeitel-Bank and Ute Tat, 2012).  
[www.ideas.repec.org](http://www.ideas.repec.org)  
[www.learningandteaching.info](http://www.learningandteaching.info)  
[www.intime.uni.edu](http://www.intime.uni.edu)  
[www.mustboil.in](http://www.mustboil.in)  
[womensphere.wordpress.com](http://womensphere.wordpress.com)  
Spanish Ministry of Internal Affairs.  
Photos by V.V. Chrisman, Marcos Sánchez Parejo and Cecilia Escudero.



Source: [www.seneca-eu.net](http://www.seneca-eu.net)

# What exchange rate means to you: Turkish currency crisis case

Jasurbek Nizomov

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The concept “exchange rate” refers to the value of one country’s national currency, in particular, the Turkish lira, expressed in terms of another currency, such as the Euro or the rest of currencies. In fact, the foreign exchange market is one of the largest financial markets in the world and roughly 3.2 trillion USD is traded every single day (Investopedia.com, 2018). There are mainly three types of the exchange rate which are fixed, managed float, freely floating. In fact, Turkey has a freely floating exchange rate system. Firstly, in the fixed exchange rate, the value of a currency against other currencies is constant and usually determined by the government that manages the currency. On the other hand, if the price of one currency is determined in foreign exchange market (forex) in terms of the demand and supply for the currency, then this exchange rate system is named freely floating. Lastly, managed float is also known as “dirty float” is a regime of floating exchange rates but central bank or government occasionally intervene to decline currency fluctuations. For developed and emerging market countries like USA or Turkey, currency’s external value is extremely essential as it impacts other things such as prices of foreign and domestic goods and services or the fluctuations in exchange rate can lead to current account deficit or surplus. Moreover, devaluation or revaluation in the value of Turkish lira against other major currencies will make Turkish goods and services less cheap or more expensive for a foreign purchaser, and also it might go up or down demand for Turkish products. For instance, if the supply of one currency becomes lower than its demand in the forex market, then the value of the currency is increased. However, it is depreciated when the demand is less than its supply. Actually, rational investors will more likely select to purchase specific

currencies only if reward or profit on this certain currency is high. Furthermore, greater interest rate within a country, the greater demand for the country’s currency is. If we look at the graph, we can see a huge currency depreciation of Turkish lira with respect to US dollar in 2018, and these economical tough days are named in the world of economy as “Turkish currency and debt crisis”. Actually, the lira has lost 24.57 percent of value compared to USD in August, 2018. And its fast-growing economy became an issue for high inflation and depreciation of Turkish lira. Why and how?

The reason is that if demand exceeds supply (causing demand-pull inflation), the fast-improving economy tends to drive prices of goods and services higher. In short, if prices are constant, the currency only tend to keep its worthiness. The Turkish lira became so weak because the Turkish economy imports more than it exports; plus require huge amount of foreign capital and investment. Moreover, Turkey is suffering a current account deficit. As the value of Turkish lira decreases, foreign investors will pull their money out of Turkish stocks and bonds as their lira investments have lost value; they will commence selling their lira — worsening the value of the currency. Eventually, the fallen value of Lira will increase the cost of standard living for Turkish citizens as prices raise up because imports of consumer goods will become less affordable. Turkish companies and firms that borrow money in dollars or euros will explore that principal repayment, coupon payments and dividends are much more expensive due to currency drop. Therefore, corporate bankruptcies or bank panics become a reality. Now, let’s look at the main factors which made its contributed to the currency crisis.

(Turkish Lira per US-dollar)



Source: OTC Interbank. [Tradingeconomics.com](https://tradingeconomics.com)

Tradingeconomics.com. (2018). Turkish Lira | 2018 | Data | Chart | Calendar | Forecast | News. [online] Available at: <https://tradingeconomics.com/turkey/currency> [Accessed 20 Dec. 2018].

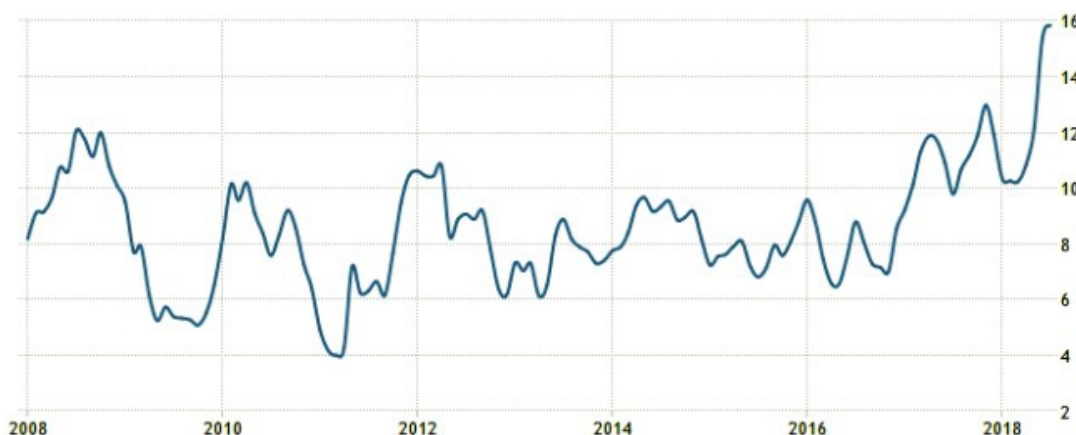


### Increasing inflation rates

Rises in the price of goods and services which is the inflation rate play the basic role in international trade activity that affects the demand for and supply of the currencies and then impacts exchange rates. For instance, in August in 2018, the inflation rate was nearly 18% which is very higher than inflation rate of other Turkey's trade partners` and then domestic products became less affordable for national consumers due to high prices, in other words, foreign goods and services became more attractive for Turks. Therefore, they attempted to import more products from other countries. For example, if Turkish

businessmen want to purchase raw materials in the US, then the buyer is required to make payment in USD, not lira.

Moreover, the purchaser exchanges some amount of Turkish lira into the US dollar. In this case, supply of lira in the forex market is raised up (demand for lira is went down) and demand for US dollar is dramatically going up. Consequently, foreign currency (USD) tend to appreciates but domestic currency (TRY) depreciates. In contrast, greater demand for Turkish national products (from internal and external sources) tends to raise up the value its currency.

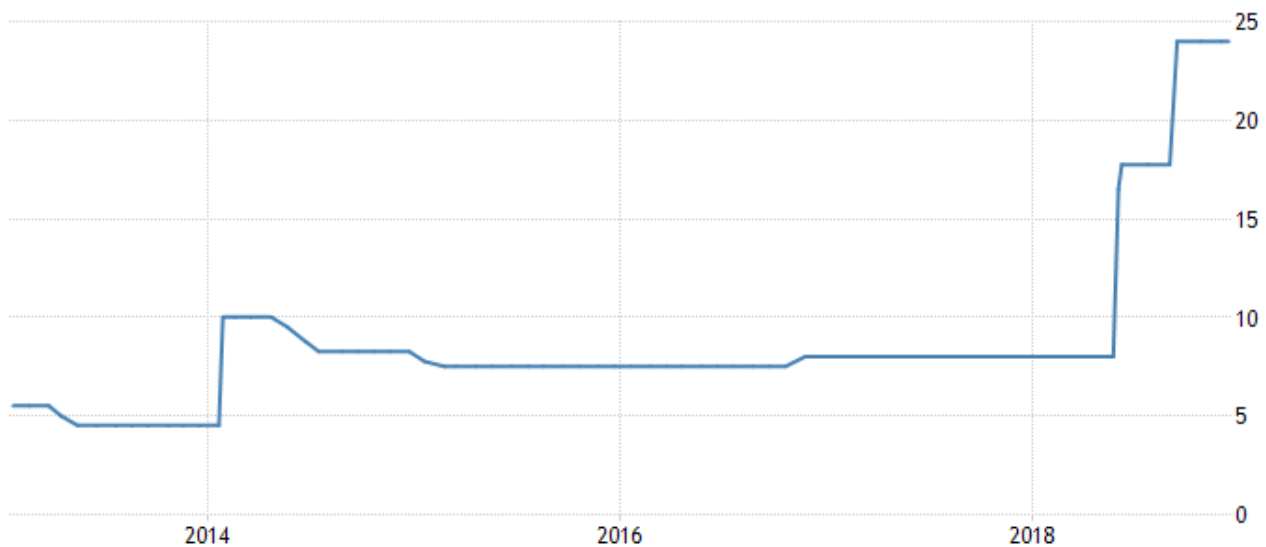


Source: Turkish Statistical Institute. [Tradingeconomics.com](https://tradingeconomics.com)

### Low interest rates:

Interest rate and inflation rate are interrelated. Higher inflation rate leads to higher interest rates. Moreover, increasing the interest rate is an enemy of high inflation. Higher interest rate is not also attractive for national residents but also foreign investors that eventually leads to boosting the value of domestic currency. However, if inflation here is higher than elsewhere, investors might be less keen about such assets, fearing that inflation would erode their value. In this case of currency crisis, Turkish central bank have to conduct open market operations which is stabilizing the economy by selling sovereign bonds and also raise up the refinancing rate in order to remain the value of the lira. By doing that, the bank would take a lot of lira, in other words, money supply in the market goes down. As a result, a declined supply of lira would raise

up its value and keeps constant its price. However, the president of Turkey, Recep Tayyip Erdogan was against to increase the rate of interest as he said in his speech to business people in Ankara, referring to snap elections on June 24 in 2018 "If my people say continue on this path in the elections, I say I will emerge with victory in the fight against this curse of interest rates. Because my belief is: interest rates are the mother and father of all evil. Interest rates are the cause of inflation. Inflation is a result, not a cause. We need to push down interest rates" The Mr. President had another solution in mind as he encouraged Turks to exchange their dollars, euros and gold into lira to shore up the national currency. "Do not fear", he convinced citizens, "We will emerge victoriously". (Recep Tayyip Erdogan, 2018).



SOURCE: TRADINGECONOMICS.COM | CENTRAL BANK OF THE REPUBLIC OF TURKEY

Tradingeconomics.com. (2018). Turkey Interest Rate | 2018 | Data | Chart | Calendar | Forecast | News. [online] Available at: <https://tradingeconomics.com/turkey/interest-rate> [Accessed 20 Dec. 2018].

### Raising up tensions with the US

On August 10, 2018 US President Donald Trump commented that he doubled steel and aluminum tariffs on Turkey, which made a contribution to the lira to hit new record lows compared to US dollar. "I have just authorized a doubling of Tariffs on Steel and Aluminum with respect to Turkey as their currency, the Turkish Lira, slides rapidly downward against our very strong Dollar! Aluminum will now be 20% and Steel 50%. Our relations with Turkey are not good at this time!" (Donald Trump, 2018). Another key issue is that Turkey have not got adequate foreign exchange reserves to preserve this tough economic situation. The country has foreign reserves which equals \$130 billion with a short-term foreign obligation of \$180 billion. Roughly 70 percent of its total loan of \$460 billion came from foreign investment.

### RECOMMENDATIONS

We reviewed above how the currency crisis is arisen. Now, let's look through what solutions can be given for the recession in Turkey's economy. Taking everything into consideration, Turkey can cope with its currency crisis through the following options. Firstly, the Turkish government could gain loans from the International Monetary Fund that aims to promote global economic growth and financial stability, to encourage international trade, and to reduce poverty. These funds help to correct balance of payment deficit in Turkey and help to meet short-term liabilities by taking long-term debt from IMF. Secondly, another option is aid from other countries such as QATAR & CHINA. Because, Qatar and China, both have good

trade relationships with Turkey. Actually, Qatar has already pledged \$15 billion of direct investments for Turkey to deal with its currency crisis. Above-mentioned ways are external solutions that both parties have to reach an agreement. From my perspective, the final and most efficient and also most recommended solution, in this case, is ensuring the independence of Turkey's Central Bank. In other words, allowing the Central Bank to conduct a tight monetary policy. It can lead to constricts aggregate demand, curbs inflation, reduces borrowing, slowing business expansion, decreasing consumer spending and business production.

### CONCLUSION

According to the financial experts' expectations (tradingeconomics.com), the Turkish Lira is expected to trade at 6.26 in 2019. As we can see based on calculations and expectations, the value of the currency is going to depreciate against major currency which is the US dollar. In fact, one of the main reasons, that the value of this currency falling is higher inflation in Turkey. The higher inflation means the higher devaluation of domestic currency. In addition, advanced economies have core inflation rate, in other words, constant price stability that is ensuring currency stability and economic health. Turkey's economic fundamentals are weak and we believe the economy is heading towards a substantial slowdown. Some fear that Turkey may face an economic crisis or recession going forward. Actually, an economic crisis is characterised by falling GDP – two quarters of negative GDP growth when economists call officially

a recession - drying up of liquidity and increasing unemployment. An economic crisis is not triggered by one factor, but often a combination of factors.

### List of References

1. Tcmb.gov.tr. (2018). Central Bank of the Republic of Turkey Exchange Rates. [online] Available at: [http://www.tcmb.gov.tr/kurlar/kur2018\\_en.html](http://www.tcmb.gov.tr/kurlar/kur2018_en.html) [Accessed 15 Sep. 2018].
2. TurkishLiraToday.com. (2018). *Central Bank of Turkey Exchange Rates, Convert Turkish Lira*. [online] Available at: <http://www.turkishliratoday.com/central-bank-of-turkey-exchange-rates.php> [Accessed 15 Nov. 2018].
3. Elliott, L. (2018). *How serious is Turkey's lira crisis and what are the implications?*. [online] the Guardian. Available at: <https://www.theguardian.com/world/2018/aug/13/how-serious-is-turkeys-lira-crisis-and-what-are-the-implications> [Accessed 15 Nov. 2018].
4. U.S. (2018). *Erdogan has limited options to save Turkey from financial crisis*. [online] Available at: <https://www.reuters.com/article/us-turkey-currency-analysis/erdogan-has-limited-options-to-save-turkey-from-financial-crisis-idUSKCN1LK215> [Accessed 15 Nov. 2018].
5. Anon, (2018). [online] Available at: <https://www.quora.com/Why-does-Turkish-lira-lose-its-value-Can-it-be-economic-crisis-in-Turkey-Can-the-government-do-something-to-prevent-it> [Accessed 19 Nov. 2018].
6. Inman, P. (2018). Turkey raises interest rates to 24% in startling bid to curb inflation. [online] the Guardian. Available at: <https://www.theguardian.com/business/2018/sep/13/turkey-raises-interest-rates-to-24-in-startling-bid-to-curb-inflation> [Accessed 19 Nov. 2018].
7. En.wikipedia.org. (2018). Central Bank of the Republic of Turkey. [online] Available at: [https://en.wikipedia.org/wiki/Central\\_Bank\\_of\\_the\\_Republic\\_of\\_Turkey](https://en.wikipedia.org/wiki/Central_Bank_of_the_Republic_of_Turkey) [Accessed 19 Nov. 2018].
8. Anon, (2018). [online] Available at: <https://seekingalpha.com/article/4201778-turkish-currency-crisis-can-teach-us> [Accessed 19 Nov. 2018].
9. The Conversation. (2018). Turkey's currency collapse shows just how vulnerable its economy is to a crisis. [online] Available at: <http://theconversation.com/turkeys-currency-collapse-shows-just-how-vulnerable-its-economy-is-to-a-crisis-101556> [Accessed 19 Nov. 2018].
10. BBC News. (2018). Turkish lira crisis - BBC News. [online] Available at: <https://www.bbc.co.uk/news/topics/c6xkk152803t/turkish-lira-crisis> [Accessed 19 Nov. 2018].
11. Anon, (2018). [online] Available at: [https://www.washingtonpost.com/business/2018/09/21/turkeys-currency-crisis-is-really-banking-crisis-country-isnt-doing-anything-about-it/?noredirect=on&utm\\_term=.9ad51011c0d3](https://www.washingtonpost.com/business/2018/09/21/turkeys-currency-crisis-is-really-banking-crisis-country-isnt-doing-anything-about-it/?noredirect=on&utm_term=.9ad51011c0d3) [Accessed 19 Nov. 2018].
12. Mueller, A. (2018). The Turkish Currency Crisis and What It Can Teach Us. [online] Aier.org. Available at: <https://www.aier.org/article/turkish-currency-crisis-and-what-it-can-teach-us> [Accessed 20 Nov. 2018].



Source: Diego Cupolo/NurPhoto via Getty Images



# MANAGEMENT AND INNOVATION

## Stimulating Urbanization and Economic growth in Uzbekistan

Azizbek Keldiyorov

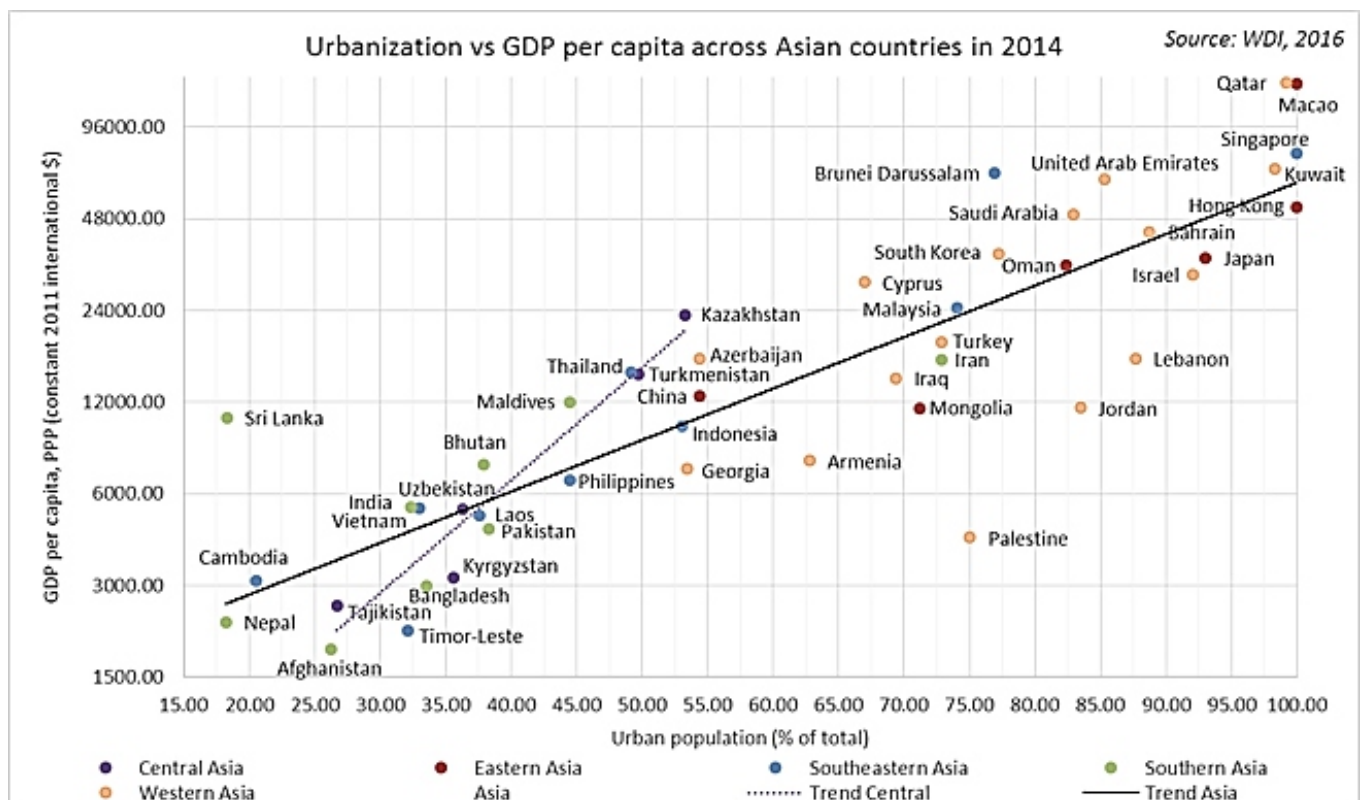
Student of MDIST

### Abstract

Urbanization has been closely linked to modernization and industrialization of the economy. As country becomes more urbanized, its economy transforms, and more productive industries form a larger share of economy. The purpose of this paper is to analyse the impact of urbanization on economic growth of a country. To identify the relationship, the paper examines how urbanization affects the structure of the economy based on examples of China, Thailand and Indonesia. The analysis shows that there is a strong correlation between the urbanization rate and economic growth of the country. The research concludes that urbanization and economic growth are strongly correlated and higher rates of urbanization lead to an increase in economic output and development of country.

### Introduction

It has been argued that strong urban economies are the backbone and motor of the wealth of nations. As countries focus more on manufacturing and services and less on agriculture, urban areas are more likely to become important for fostering positive externalities, nourishing innovation, providing a hub for trade, and encouraging human capital accumulation. This should be particularly important for developing countries since trends in urbanization show that the share of the urban population has increased substantially in these since the 1950s (World Bank, 2018a).



### Urbanization & Economic Growth

According to World Bank, nearly all middle-income countries are at least 50% urbanized and for high-income countries this percentage equals 70-80%

(2017a). Estimated coefficient of determination ( $R^2$ ) for world between GDP per capita and urbanization rate equals 0.57 (Henderson, 2010). The correlation is even stronger for Asian countries.

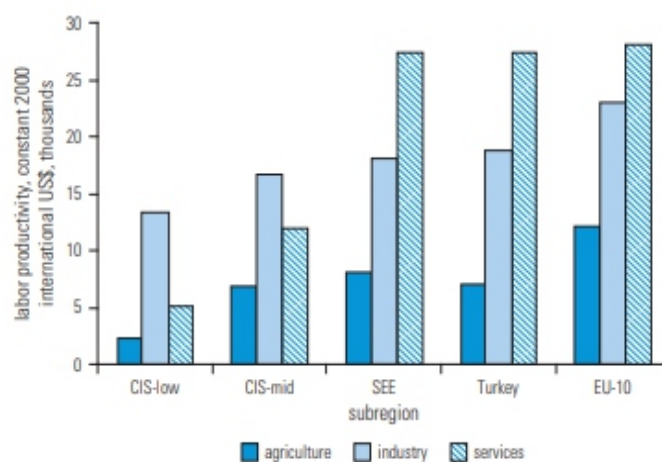
Urbanization affects economic growth through structural changes in GDP composition. Higher rates of urbanization shift focus from agriculture (low productivity sector) and promote sectors such as services and manufacturing, where labor productivity is 3-6 times higher than agriculture's (Spence, Annez and Buckley, 2009).

Switching to highly productive sectors results in more

efficient use of resources and, consequently, higher level of output.

In fact, manufacturing and services sectors are crucial for growth of developing countries: **86 percent of the value-added growth in developing countries between 1980 and 1998 came from services and manufacturing** (World Bank, 2017).

**Higher Value Added per Worker in Services Raised Overall Labor Productivity in Most Countries, 1999–2004**



Sources: World Bank staff calculations; World Development Indicators Database 2007.

#### Note

- Agriculture includes farming, fishing and forestry
- Industry includes mining, manufacturing, construction and energy production
- Services include all economic activities that don't involve the purchase of material goods

#### Urbanization success cases

##### China

China is often viewed as an ideal example of how urbanization can drive industrialization and transform the economy. China achieved the historic milestone of 50% of its population living in urban areas in 2011, up from only 20% in 1980. Over the period, real per capita income increased by about 20 times in since 1980 lifting half a billion people out of poverty (Turok and McGranahan, 2013). Manufacturing and services

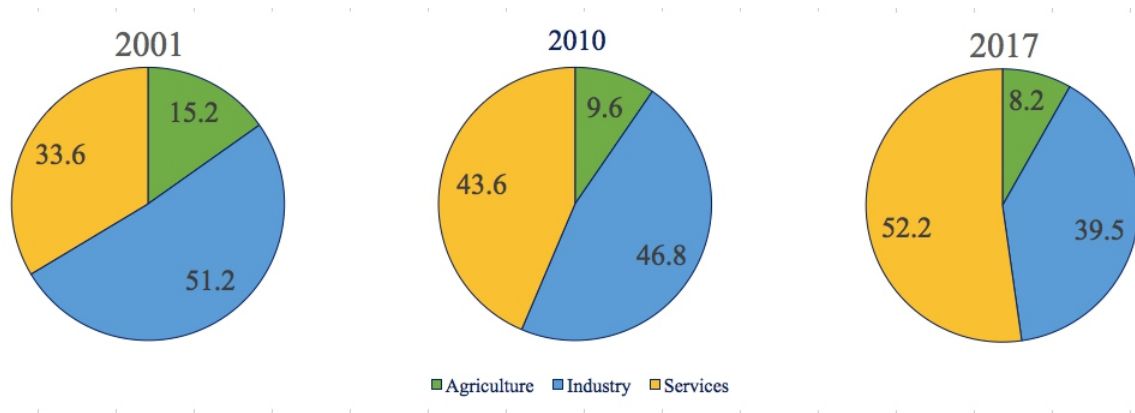
industries were the key contributors to the rise of Chinese economy.

In 1978, nearly 70 million people were employed in the manufacturing industry, and by 2011, the number had increased to 225 million, with annual growth of 3.6 percent. Employment in the service industry rose from 49 million people to 273 million people, for average annual growth of 5.3 percent.

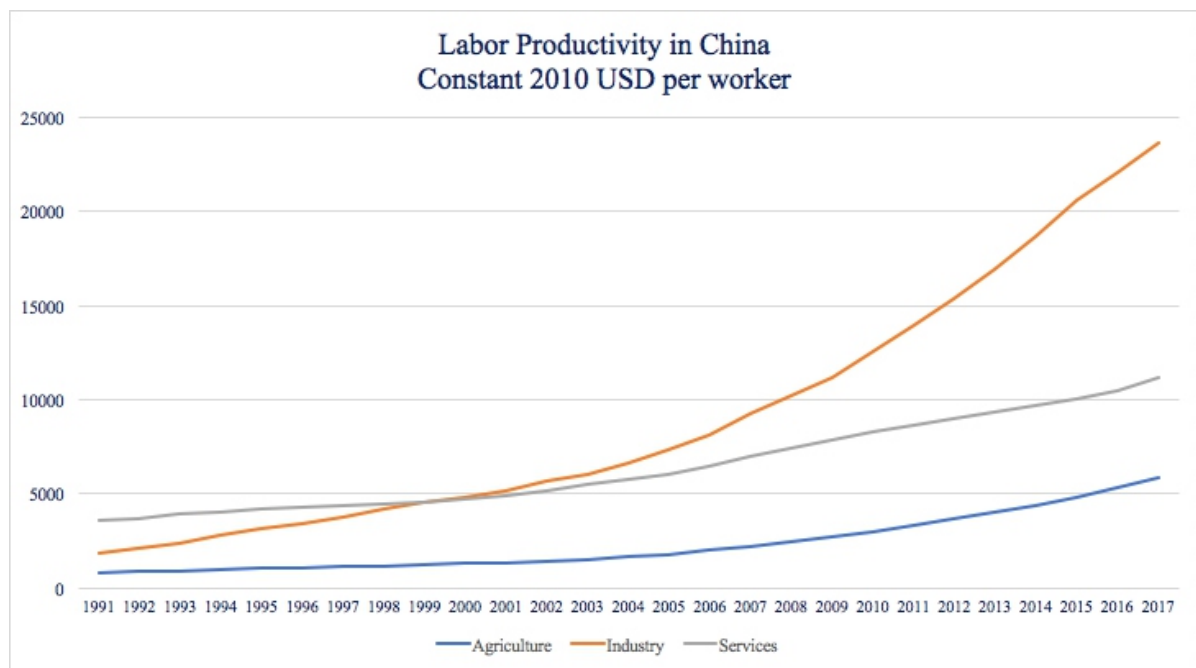
Between 1991-2017 period, labor productivity in all sectors exhibited an upward trend. The productivity in agriculture increased from \$812 to \$5802, in industry from \$1809 to 23621 and in services 3561 to \$11150 per worker. Despite this, it should be noted that over this period agriculture sector was less productive in comparison with services or industry, where labor productivity was constantly 3-4 times higher.



## GDP Composition of Chinese Economy



Source: World Bank, 2018



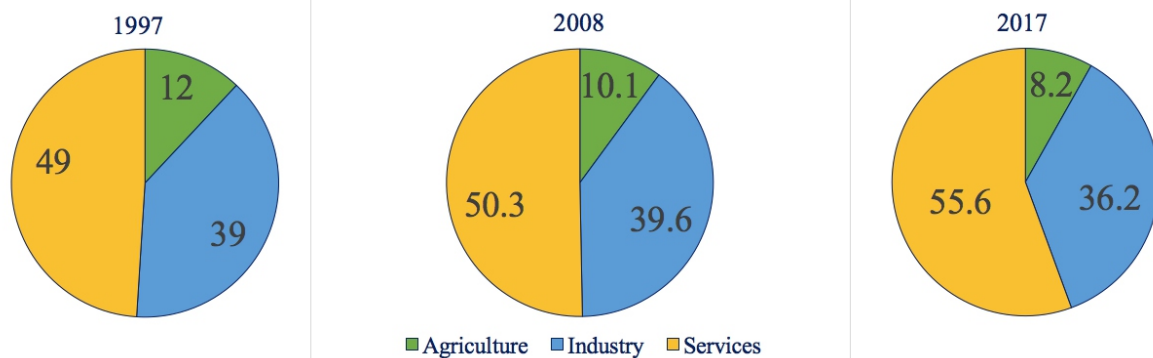
Source: World Bank, 2018

Some other examples of an impact of urbanization on the economic growth are:

- **Thailand**

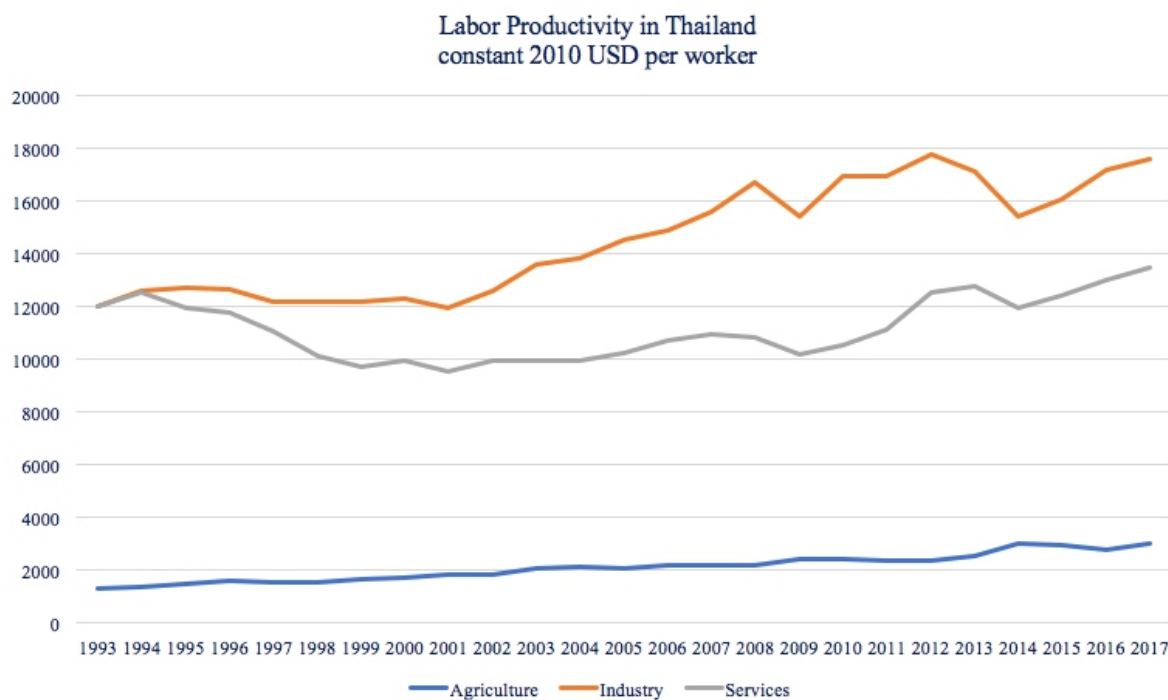
- o Urbanization rate went from 31% in 1997 to 52% in 2016 allowing Thailand to reduce its dependence on agricultural sector while growing services sector from 49% to 56%.

## GDP Composition of Thailand Economy



o In 1993-2017 period, labor productivity in agricultural sector remained lowest, rising from \$1300 to \$3011 per worker in 2017. In comparison, the productivity in industry rose by \$5600, reaching \$17569 in 2017.

Although, the growth in services sector was modest (increase by \$1448 since 1993), it remained at the level 5 times higher than agriculture's.

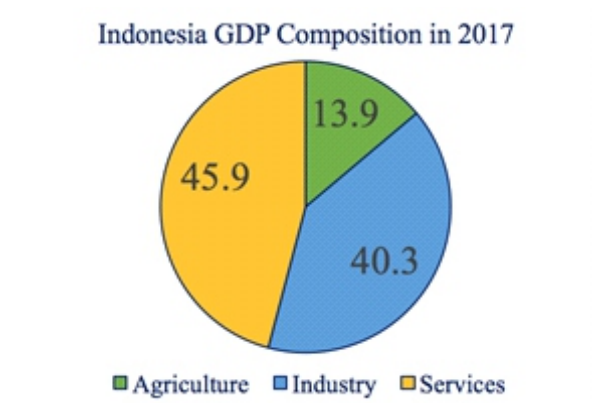
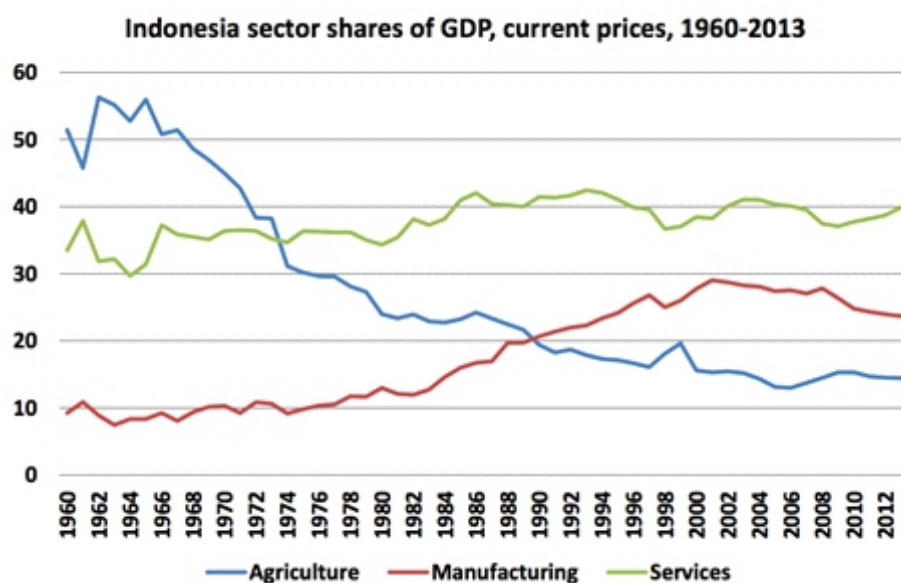


o PPP-adjusted GDP per capita increased from \$7,230 in 2000 to \$16,913 in 2016.

### • Indonesia

- o Urbanization rate went from 42% in 2000 to 54% in 2016.
- o Over the same period agriculture's share in economy decreased from 15% to 13.9%, while services sector's share increased to 46%, 6% increase since 2000.

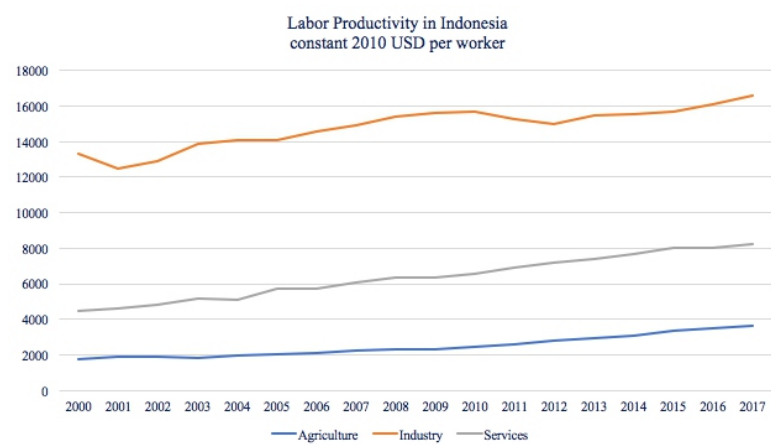
## GDP Composition of Indonesian Economy



Similar to Thailand, productivity in industry sector was highest followed by services and agriculture being the least productive sector. Over 2000-2017 period, productivity rose by \$2000 in agriculture, by \$3200 in

industry and by \$3800 in services.

On average, workers in industry and services sectors were 6 and 3 times more productive, respectively, than average worker in agriculture sector.



- o PPP-adjusted GDP per capita increased from \$4,300 to \$11,609 between 2000-2016.

#### Fundamentals for successful urbanization

All of the above-mentioned countries shared the following macroeconomic fundamentals closely resembling frontier markets at the early stages of urban development:

- Low urbanization rate (<50% of the total population)
- Relatively low GDP per capita (under \$10 000, PPP)
- Largely under-industrialized economies (over 25% of the workforce involved in agriculture)

Uzbekistan fits the characteristics of an under-urbanized frontier market with a 36.6% urbanization rate making it only the 151st most urbanized country in the world. Uzbekistan has the GDP per capita of \$6

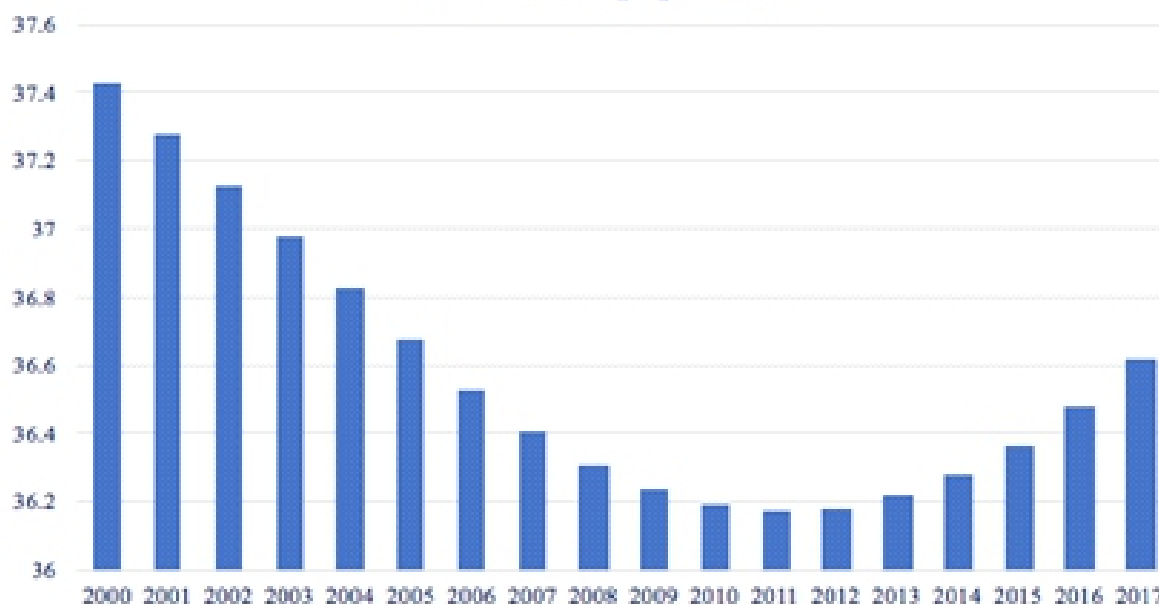
560 (PPP) while the agriculture sector still accounts for about 20% of GDP and over one-third of employment, closely resembling the respective base rates of **the above-mentioned countries**

#### Urbanization in Uzbekistan

Urbanization in Uzbekistan has been hindered by restrictive administrative measures (such as registration system preventing internal migration), absence of employment opportunities and a general lack of industrialization in cities due to the economic stagnation.

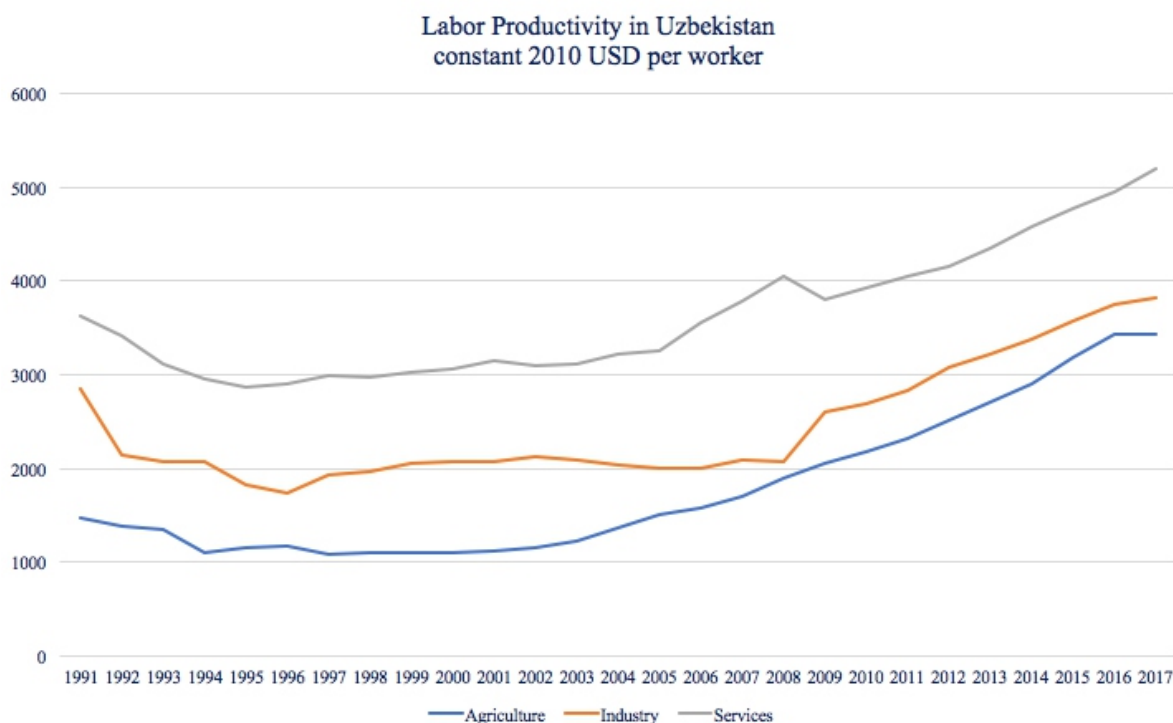
For instance, Uzbekistan's fertilizer industry is still reliant on heavily subsidized energy resources. Because of these barriers, between 2000 and 2011, the urbanization rate fell from 37.4% to 36.4%. Only in 2012, the trend reversed and currently it is equal to 36.6%.

**Urban Population in Uzbekistan  
as % of total population**



Even in Uzbekistan, where government stimulates agriculture through subsidies labor productivity remained lower than other sectors. In 2017, the

productivity per worker in services and industry sectors were higher than agricultures by \$1770 and \$400, respectively.



### Potential impact of stimulating urbanization in Uzbekistan

Historical data provided for the number of countries indicates that there is strong positive correlation between urbanization rate and economic growth of country. Specifically, every 1 percent increase in urbanization rate led to 13% in GDP per capita in India, 10% in China, 8% for Vietnam and 7% for Thailand.

Given the fact that Uzbekistan has all features needed for successful urbanization, the country has strong potential to exploit the advantages of urbanization and boost its economy.

### Conclusion

The research focused on impact of urbanization on economic development of country. The literature

review of previous researches and the analysis of three Asian countries, namely China, Thailand and Indonesia revealed that urbanization rate and economic growth measured by GDP per capita are strongly positively related. Urbanization results in growth by reshaping the composition of GDP. The process is linked to increased importance of services sector in the economy, where labor productivity is high, and decreasing share of agriculture, where labor productivity is lowest. In most urbanized countries, services sector accounts for half of the output, whereas the share of agriculture is about 10%. If we consider the fact that nearly all urbanized countries are middle- or high-income countries, the research suggests that promoting urbanization can be a driver of long-term economic growth.



Source: [www.morphocode.com](http://www.morphocode.com)



Source: [www.fcw.com](http://www.fcw.com)



## List of References

World Bank (2017a). Urban Population. World Bank. Available from <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=XO> [Accessed 2 July 2018].

Henderson, J. V. (2010). Cities and development. *Journal of Regional Science*, 50(1), 515–540. Available from: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1467-9787.2009.00636.x> [Accessed 29 June 2018].

Spence, M., Annez, P.C. and Buckley, R.M. (2009). Urbanization and Growth. Commission on Growth and Development.

Available from: [https://siteresources.worldbank.org/EXTPREMNET/Resources/4899601338997241035/Growth\\_Commission\\_Vol1\\_Urbanization\\_Growth.pdf](https://siteresources.worldbank.org/EXTPREMNET/Resources/4899601338997241035/Growth_Commission_Vol1_Urbanization_Growth.pdf) [Accessed 28 June 2018].

Turok, I. and McGranahan, G. (2013). Urbanization and economic growth: the arguments and evidence for Africa and Asia. *Environment and Urbanization*, 25(2), 465–482. Available from <https://doi.org/10.1177/0956247813490908> [Accessed 1 July 2018].



Source: [www.peoplematters.in](http://www.peoplematters.in)

# Budget failure and successful budgeting of SMEs in Uzbekistan

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Budgets are part of management control designed to promote the efficient use of resources and to provide support to other critical functions of business. The extent to which any budget is successful is extremely dependent on its acceptance and the attitudes of workers towards it. This paper focuses on the crucial role of the behavioral aspects of budgeting and how an understanding of its importance can contribute to a successful budgeting process among business environment of Uzbekistan.

Almost every business, regardless of size, complexity or sector, try to rely heavily on budgets and budgetary systems to achieve strategic goals. The success and importance of budgeting relates to the identification of organizational goals, allocation of responsibilities for achieving these goals, and consequently its execution (Shah, 2007; Robinson, 2007; Drake and Fabozzi, 2010). Budgeting stimulate different units of business to better coordination, cooperation and communication among each other. By linking various departments together, it promotes understanding and dialogue in order to ensure the attainment of common objectives.

Unfortunately, it tends to fail if some of the vital budgeting rules are not considered. The failure of budgeting process, in our business environment, is mostly related to frequent changes in budget, process draining, variance, coordination, motivation and evaluation.

## 1. Frequent changes

As a country with emerging market, Uzbekistan has frequent changes in economy and business; it is very difficult to keep particular business process constant. Therefore, the traditional model of budgeting, generation of annual report of budget, has been considered as inefficient and ineffective. The frequent changes in long-term and short-term plans of organization lead to the divergence in annual budget (Robinson, 2007).

Whole budget report becomes useless, as soon as non-budgeted actions take place, also, comparison of budgeted and actual expenses would give vague outcomes. Consequently, there is no ability to update and upgrade data as often as it is needed and the whole work done by budget designer becomes useless. The case of "NHS Connecting for Health" happened in United Kingdom is a clear example of failure caused by budget inefficiency (Maughan, 2010). In order to solve this problem, most of well-developed international companies use rolling forecast system that allows company to update forecasts as frequent as needed and it helps to create "what if" scenarios and make budget more definitive. However, for small and middle size businesses, too frequent changes in budget

also not preferable as the budget would expend on one way with expenses and budget itself would become meaningless.

## 2. Resource draining process

Most of CEO's in Uzbekistan state that the design process or procedure of creating and generating budget is the most significant aspect of budgeting and it tend to eliminate most of vague data. Of course, as much detailed data and analysis is included in forecast as more accurate it becomes in overall view. As far as budgeting is relatively fresh tendency for emerging market, most of top managers are trapped in this designing process and relatively ignore crucial aspects of budget such as analysis and expectations. Consequently, it becomes a reason why budget does not meet initial expectations as long as initial expectation analyzed incorrectly (Hope & Fraser, 2003). The process of determination which spreadsheets or software to use, and the process of gathering teams for exhausting meetings is not a process where the most value should be.

## 3. Variance

It should be noted that there is no perfect competition (or ideal) business world and it is impossible to make exact forecast and develop a perfect budget. There always going to be variance between actual and budgeted expenses. Of course, variance is always considered in a budget. As lower percentage is taken for variance, the higher probability of failure is expected. Consequently, low consideration of variance may lead to failure of budget expectation. However, high variance between forecast and actual sum of expenses may either cause a failure.

On condition that selected variance is too high, the budget itself is considered as overvalued. Adequate calculation of variance is not the last important part in budgeting. Particularly, for currently performing companies in Uzbekistan, it is recommended to keep variance for 2% or 3% higher in order to be prepared for upcoming huge economic and political improvements in near future.

## 4. Coordination

Provided that each organizational element is managed to meet its budgeted objectives, then coordination built into the budget through planning process will not be lost. Ordinarily, business conditions tend to change and not all units meet the budget. Subsequently, primarily built budget is not able to fulfill the company expectations, as activities of various parts of organization change, while the consolidated plan of actions for them does not change. Therefore, it is better to make parallel developing steps in both operation and budget. As stated by Bonner (Bonner, 2008), it is better to change consolidated action plan when expectancy arises.

## 5. Motivation

The commitment of budgeted objectives partially depends of managers' motivation. One of the technics used in budgeting process is the linkage of performance evaluation of manager with the organizations incentive system. At the time when managers realize that the level of compensation depends on the degree of performance, their commitment to budgeted objective may be enhanced or diminished. Diminished commitment to budget can be an effect of low level of compensation, which leads to demotivation and budget expectation failure. On behalf of company, it is unreasonable.

## 6. Evaluation

During the evaluating process, the effect of uncontrollable and unforeseeable environmental change, which accrued during the budget period, should be removed. Because of uncontrollable environmental variables like: unexpected increase in the cost of raw material or labor unrest, the forecast for next year might be artificially either increase or decrease. As a result, the budget might be calculated incorrectly and expectations will be ignored.

### Behavioral factors of successful budgeting

Budgets are part of management control designed to promote the efficient use of resources and to provide support for other critical functions. The extent to which any budget is successful is very much depend on its acceptance and the attitudes of workers towards it and such behavior is particularly same over the world including Uzbekistan. Behavioral factors of successful budgeting include involvement of managers in budgeting process and cooperation of participants.

#### I. Managers involvement

Managers' involvement is considered as an essential aspect of successful budget as it is an action and strategy that is frequently used in order to streamline the process of budget. In other words, it is a practice where managers of organization are involved in process of objective settlement and its' transaction to effective practice.

Participation in process of objective settlement encourages manager to take part in budget and make influence on the budgeted targets. It is proved by recent studies (Peterson & Fabozzi J, 2010) that participation in budgeting targets encourages managers to accept it and motivates them to achieve it. In addition, it has been recognized that managers who were involved in a process of budget preparation have higher level of satisfaction in comparison with managers who are not consulted.

On the other hand, the participation of managers tends to cause negative subsequences by influencing on settlement of corresponding target. As long as

corresponding target is affected, the performance may become too low and the objectives become too easy to achieve. Consequently, the performance indicators of manager and company increase artificially.

It can be evaluated that the great budgeting process should contain limited participation of managers in order to avoid negative affect of involvement. Moreover, the involvement should not be eliminated.

#### ii. Cooperation of participants

Another behavioral factor of successful budgeting exercise is a cooperation of participants. Cooperation of participants is very important in terms of effective process of budget control and it can be described as a form of interaction that requires join action of several people to achieve common goals or objectives (Eamets Raul, et al., 2008).

Moreover, studies evaluated four aspects of cooperative relations' development that should be in successful budgeting process:

§ Trust. Successful interplay of operational management people and management controlling people strongly depends on trust level. The trust tends to foster cooperation among them.

§ Performance. Performance of organization has ability to influence the climate of trust among staff. In a case of good performance, managers will use budgeted processes; however, on poor performance condition managers tend to modify information sources. Therefore, the observation of operation control system in parallel to performance is the best way in terms of efficient use of resources and in order to expand relations between controllers and users of system.

§ Controllers. The behavior of management controller is very important in terms of relations with operational staff. As long as the achievement of overall goals depends on cooperation and commitment, controller should act with diplomacy and understanding to operational staff in order to get needed staff performance. Oppositely, the satisfaction and cooperation level might drop and negatively effect on budgeted objectives.

§ Support. Support given by senior management is responsible for ensuring adherence to operational control and to increase the quality of relations between officials and operational staff."

Mentioned aspects of cooperative relations are crucial, but, it doesn't state that every successful organization follow all of them. In real business world, it is very difficult to take into practice even one of these aspects (Boon , et al., 2007). So, it is desirable for every company to practice all aspects of cooperation of successful budgeting, but, it is not the strict regulation for strategy of budgeting.



### List of reference

Hope J. & Fraser, . R., 2003. Beyond Budgeting. Concordville, Pennsylvania: Soundview Executive Book .

Anon., 2016.

<https://www.apple.com/retail/business/financing/> [Online] [Accessed July 2017].

Anon., 2017. Decreases of the Dividend Payout Ratio. [Online]

Available at: <http://finance.zacks.com/decreases-dividend-payout-ratio-1070.html> [Accessed 07 2017].

Bonner, S. E., 2008. Judgment and Decision Making in

Accounting. Pearson Education Inc.

Boon , O. K., Arumugam , V., Safa, M. S. & Baker, N. A., 2007. HRM and TQM: association with job involvement. Personnel Review, 36(6), pp. 939-962.

Eamets Raul, R., Mygind , N. & Spitsa , N., 2008. The development of employee financial participation in Estonia. Baltic Journal of Management, 3(2), pp. 218-231.

Peterson , D. P. & Fabozzi J, F., 2010. The Basics of Finance: An Introduction to Financial Markets, Business Finance, and Portfolio Management. Hoboken, New Jersey: John Wiley and Sons Inc.



Source: lmchouston.com



Source: www.thewilsonbeacon.com



Source: <https://www.unit4.com>

# INTERVIEWS

**Interview with the student of MDIS Tashkent An interview with Samandar Ravshanov about his "Haxgraph Super Computer" innovative project.**



**Interviewer: What is Haxgraph in nutshell?**

S.R.: Well, it is basically both a mobile supercomputer and peer-to-peer back-end service to build fair and fast applications. It is the technology of the future generation which brings opportunity for every developer to write ambitious apps which does massive computation with zero marginal cost.

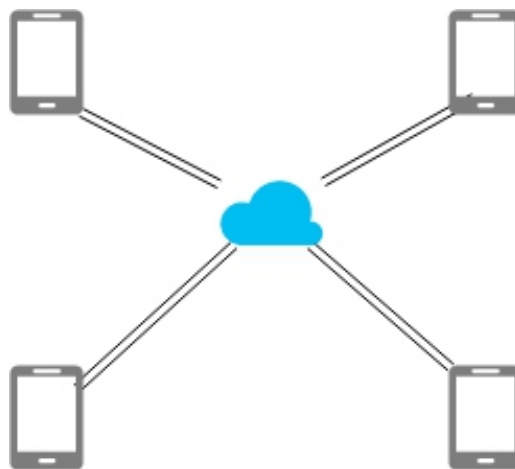
**Interviewer: Is it only for mobile developers?**

S.R.: The initial target market is indeed mobile app developers as there are currently about 4 bln. smartphones in use globally and it is expected to grow 50% or 6 bln. smartphones by 2020, according to IHS Markit (Kharpal, 2017). You can imagine how much aggregated computing power we can have. I think that using existing computing resources is greener (environmentally friendly) rather than generating massive heat and waste electricity on mainframe supercomputers. Therefore we can proudly say that Haxgraph is green technology.

**Interviewer: What does back-end service mean here?**

S.R.: Generally any end-user faced software consists of back-end and front-end part. Front-end is from where a user interacts or communicates with the system and sends requests to the server, the back-end is where end-user input requests are handled, stored and processed for further results.

Today many developers rely on cloud services like AWS, Azure and Google Cloud for their back-end. Cloud services provide not only virtual machine and web-servers but also access to a database, storage, routing and etc. It is very useful for end-users since they can collaborate with each other. Their data is stored and synced to cloud and their peers can receive a sync. This is how massive multi-player online games, search engines, social networks works today. But cloud services cannot provide two important things: (1) zero marginal cost for developers and (2) fairness for end-users.



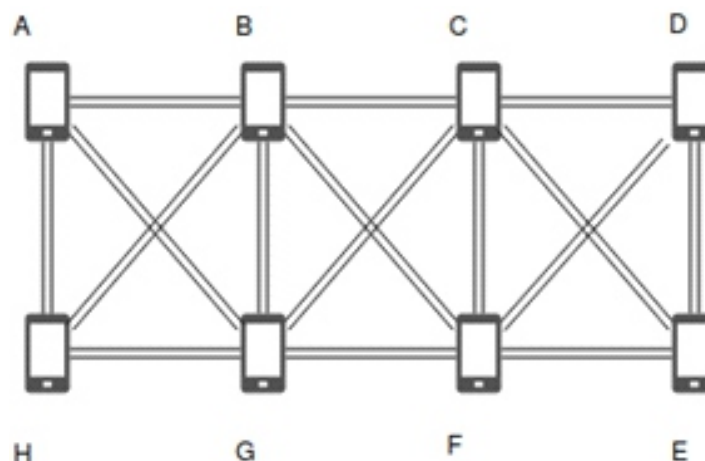
**Fig 1. Cloud service powered mobile apps**

As the user base grows your server costs grows accordingly. We'll discuss later what fairness means for end-users. I think it is a great value proposition that developers can sell pretty well and make their users happy.

**Interviewer: What is peer-to-peer back-end service?**

S.R.: Using Haxgraph developers do not have to write any server code to build collaborative apps or multi-player games. Since it will be handled by mobile phones of every user. They can just focus on front-end part of their application.

It means there is no single server needed to handle user requests and computations. It is cost-effective for developers since they do not have to rent cloud servers like AWS, Azure and etc.



**Fig 2. Haxgraph powered mobile apps**

Unlike cloud servers Haxgraph apps are always available, never shut down and impossible to DDoS attacks. In order to shut down the system, you have to power off or attack every single mobile device which is impossible for large N, where N is your number of users. With Haxgraph as your N grows your marginal cost stays 0 and you'll never have to worry about it. If device C will be unavailable for some reasons then still system can function without it. More end-users developers have more secured their system going to be and more computing resources they can leverage.

**Interviewer: What 'fairness' mean in this context?**

S.R.: Let me first give some definitions for state and transaction of Haxgraph.

1. The **state** is the object made up of properties like user\_id, user\_data and etc. If it is game then in user\_data we can store information about health points or level of the player.

1. A **transaction** is a function which changes the state of the network. Say, a player A shoot player B and B lost 5 health points A earned 15 level points. That is an example of the transaction which A made. Well, basically fairness establishes when cheating became impossible. With Haxgraph you can achieve fairness at an unprecedented level. First, let's explore what cheating attempts might occur without Haxgraph.

Well, basically fairness establishes when cheating became impossible. With Haxgraph you can achieve fairness at an unprecedented level. First, let's explore what cheating attempts might occur without Haxgraph.

Imagine you are playing an on-line shooting game with your friends and the money prize will be given for the winner. What if the admin was bribed to re-order transactions (shooting order), added more power to your opponent, decreased your health points or anything like that?

Say you're participating in an on-line auction but what if some other participant bribes the admin so that it changes the order of transaction for his/her own benefit? What if malicious party sends viruses and shuts down the system?

**Interviewer: What is supercomputer and why we need it?**

S.R.: A supercomputer is a computer but with higher performance capabilities. It is designed to perform computationally intensive tasks in parallel by dividing it into subtasks.

Today many mobile apps and games use advanced machine learning, AI algorithms, virtual reality and augmented reality technologies to enhance user experience.

It requires computing power which mobile devices cannot handle.

That's why developers rent cloud services (some fraction of supercomputer) to perform computations for voice recognition, predicting user intention, natural language processing and etc.

With Haxgraph developers enjoy massive computing power of their end-user devices. Haxgraph provides special programming interface or API where developers can easily define the specification of the computationally intensive task and let the network to perform it in a couple of seconds by parallelizing it across all available devices.

**Interviewer: Why it was not possible before Haxgraph?**

S.R.: The idea of peer-to-peer applications is not new. But those are not fair and fast enough to be usable. Unfair because you could easily cheat on games. It is slow because the processing power of mobile devices is very limited to handle computationally intensive tasks. That's why currently 99% of all apps use cloud services rather than the peer-to-peer network. Also, we had distributed computer for a long time. But

all they required to be in specific location and infrastructure to maintain them. It is both costly and does not scale to interplanetary level.

Big corporations like Google have special distributed computers to organize world's knowledge and handle users search query. Google is not just covering its costs but also capturing enormous profit by leveraging its advertisement network.

The problem is that Google's business model is not optimal everywhere. Many mobile developers put ads on their apps but it rarely covers their server costs. If we could provide them Haxgraph then it could cut their monthly recurring server costs.

**Interviewer: How does it work? Could you provide some technical overview?**

S.R.: Sure! The following diagram shows that a task should be divided into subtasks or "chunks" based on the specification defined by the developer. It should be a perfectly parallel problem which is usually matrix based and divide-and-conquer algorithms.

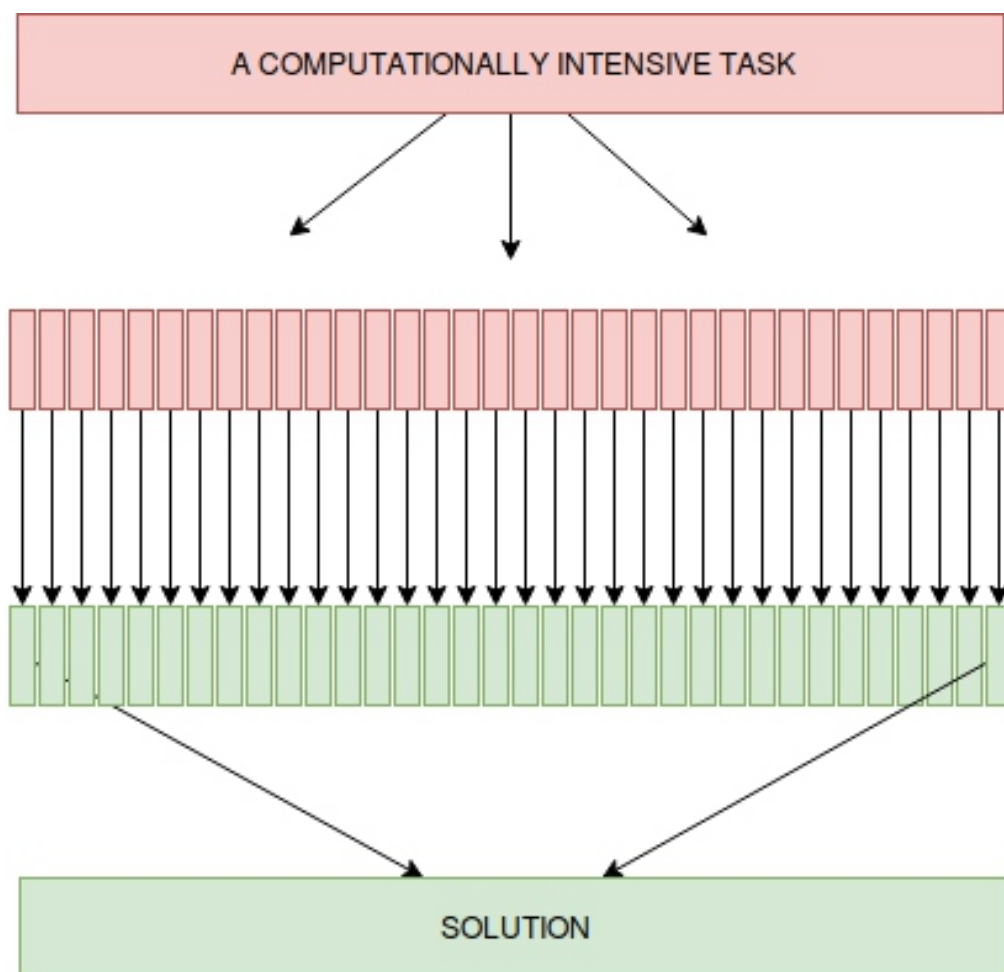


Fig 3. Parallel computation



Let  $T$  denote a computationally intensive task. It will be divided into subtasks  $t_1, t_2, \dots, t_n$ . Then for each randomly chosen user device, we assign by 2

subtasks to compute and verify. Then compile solutions of each subtask to one final solution.

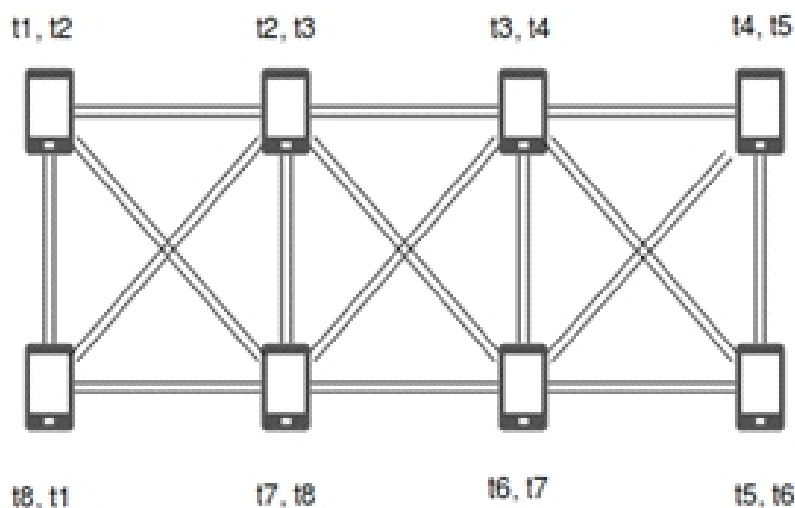


Fig 4. This is how subtasks will be assigned for each device

**Interviewer: Why peer-to-peer mobile-supercomputer was not possible before?**

S.R.: Before Haxgraph it was not possible for parties to come into agreement on computing resource allocation, data exchange, task division, and etc. Someone may end-up doing more computation than other. Therefore it was very easy to cheat each other.

**Interviewer: What programming language is chosen to develop Haxgraph and why?**

S.R.: Great question! I did very careful considerations when choosing a language. The core of Haxgraph is written in Haskell functional programming language which provides a greater level of safety and performance than traditional object-oriented or procedural languages. The word “haxgraph” derives from Ha(skell) + “x” + Graph where “x” represents lambda function, since Haskell language based on and inspired by lambda calculus.

The reason why I have chosen Haskell is to reduce the possibility of software bugs to zero percent. Cost of a software bug in decentralized systems is very high. Because developers have less control over the decentralized system than a centralized one.

**Interviewer: Why end-users need Haxgraph powered apps?**

S.R.: Finally they can have:

- trustworthy systems
- mobile supercomputer to run massive calculations
- fair multi-player games
- ad-free apps

Haxgraph powered apps and multi-player games will be audited and certified for trustworthiness and guaranteed fairness. Also, developers who use Haxgraph are expected to remove ads from their apps since they have zero server cost and with Haxgraph they can unlock a new type of business models which were not possible before.

# INTERESTING TO KNOW

## Blueprint of Elon Musk Akmal Alikhodjaev- Student of MDIST

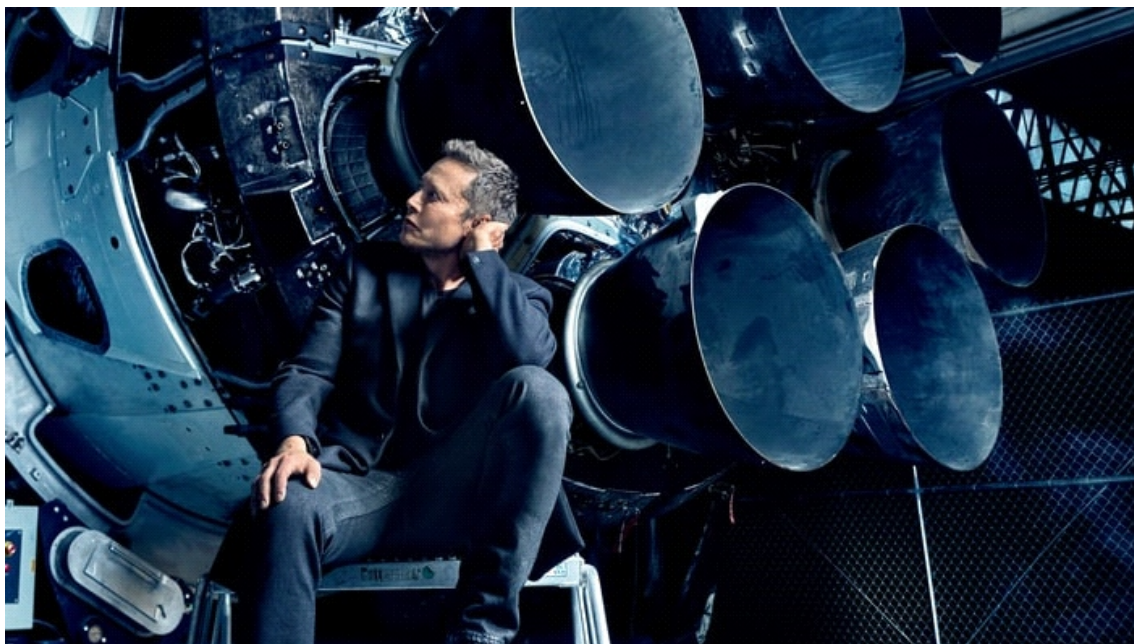
Doubtlessly, he is regarded as arguably the most successful and important entrepreneur in the world. He is probably the only person who has started four billion-dollar companies. At his core, he is not a businessperson or entrepreneur. He is an inventor and technologist. Moreover, he is a naturally gifted engineer.

At the different times, he was the founder and co-founder, CEO, lead designer and product architect of Zip2, X.com, PayPal, SpaceX, Tesla, SolarCity, Hyperloop, OpenAI, Neuralink and The Boring Company. The inventor and engineer Elon Musk is

changing and probably saving the world at a time.

Elon Reeve Musk is a South African-born, Canadian and American business magnate, investor, and engineer. Elon Musk was born in Pretoria, South Africa. Most of his early life and childhood he spent in South Africa. From early childhood, Elon developed an interest in computers and made his first software and games.

Elon Musk studied at Queen's University, University of Pennsylvania and at Stanford University, with majors on economics, physics and energy physics.



Musk at SpaceX in Hawthorne, California. Source: <https://www.rollingstone.com>

### Zip2 and PayPal

One of the first companies, which Musk started, was Zip2, a web software company, developed and marketed in an Internet for the newspaper publishing industry. An online city guide, Zip2 was providing content for the new websites of newspapers and magazines.

Later on, Musk co-founded X.com, an online financial services and e-mail payments company. An X.com acquisition the following year led to the creation of PayPal as it is known today.

### SpaceX

Musk founded his third company, Space Exploration Technologies Corporation, or SpaceX is an aerospace manufacturer and space transport services company, with the intention of building spacecraft for commercial space travel. SpaceX reached incredible milestones as the first time a private company had sent a spacecraft to the International Space Station or SpaceX saw the successful flights and landing of a rocket booster made from reusable parts, a development that opened the door for more

affordable space travel by symbolizing Musk's dream of relatively low-cost interplanetary travel. Following that, Elon Musk is going to build a permanent moon base in a nearest future, and further funding SpaceX by creating passenger rockets capable of traveling to any

city in the world in less than an hour, a form of transport called "Earth-to-Earth." If Musk finds the way of sending people to the other planets, he will likely as one of the most seminal figures of this millennium.



*SpaceX's Falcon 9 at Cape Canaveral, 2016*

Source: <https://www.flickr.com/photos/spacex/25728664603/>

### **Tesla Motors**

Elon Musk is the co-founder, CEO and product architect at Tesla Motors, a company dedicated to producing affordable, mass-market electric cars as well as battery products and solar roofs. Tesla manufactures various car classes, as sport car, sedan and semi-truck. Musk oversees all product development, engineering and design of the company's products. The accomplishment, for Musk, is not just in making cars, but likely setting a trend to car-manufacturing market, as other giant companies

are planned to eliminate gas cars and go all-electric. Nevertheless, what he has done is something that very few living people can claim as astonishing, with no experience whatsoever, into two fields with ridiculously high barriers to entry as car manufacturing and rocketry, created the best products in those industries, as measured by just about any meaningful metric you can think of. In the process, he has managed to sell the world on his capability to achieve objectives so lofty that from the mouth of anyone else, they would be called fantasies.



Source: <https://www.flickr.com/photos/spacex/25728664603/>



### **SolarCity and Hyperloop**

Inspired by the ideas of promoting and advancing sustainable energy and products for a wider consumer base, Elon Musk founded an energy company, SolarCity that operates in providing of solar power to consumers as electric cars and energy companies. Latterly, SolarCity, a solar energy services company that is now a subsidiary of Tesla, and operates as its chairman.

Musk unveiled a concept for a new form of high-speed transportation system called “Hyperloop”, an invention that would foster commuting between cities while severely cutting travel time.

The concept of invention is based on renewable energy, low-pressure tubes and air-compressors. In addition to his primary business pursuits, there are ideas of a vertical take-off and landing supersonic jet electric aircraft with electric fan propulsion.

### **OpenAI and Neuralink**

Elon Musk has pursued an interest in Artificial Intelligence, becoming co-chair of the nonprofit OpenAI. The research company launched with the stated mission of advancing digital intelligence in a safe and beneficial way to humanity. Moreover, launching of OpenAI lead to the founding of Neuralink, which is working on ways to implant technology into our brains to create mind-computer interfaces.

In yet another innovation, he founded The Boring Company, an infrastructure and tunnel-construction company with the prime mission finding the way to reduce traffic by devoting resources to boring and building tunnels. That is just some of Musk's ambitions, including converting automobiles, households and as much industry as possible from fossil fuels to sustainable energy. Implementing a new form of high-speed city-to-city transportation via vacuum tube. Relieving traffic congestion with a honeycomb of underground tunnels fitted with electric skates for cars and commuter. Creating a mind-computer interface to enhance human health and brainpower and saving humanity from the future threat of an artificial intelligence that may one day run amok and decide, quite rationally, to eliminate the irrational human species. So far, Musk 46, has accomplished most of own goals.

Our culture always needs heroes and geniuses. However, despite opinions to the contrary, Elon Musk is not a robot sent from the future to save humanity. Nor is he a Silicon Valley savant whose emotional affect has been replaced with supercomputer-like intelligence.

Inside the inventor's world-changing plans to inhabit outer space, revolutionize high-speed transportation, reinvent cars – and hopefully find love along the way.



Source: [www.vanityfair.com](http://www.vanityfair.com)



## Aziza Doniyorova Alumna

Recently, it has been announced that the President of Uzbekistan Shavkat Mirziyoev signed the document of e-currencies usage legalization. Particular attention will be given to the development of using contactless payment technologies, such as PayPal, Alipay, Visa and Mastercard. With certain inherent advantages and some smart new policies, our country tries to attract investors and integrate into the global virtual currency ecosphere.

So, what is cryptocurrency and how does it work?

Cryptocurrency is a digital, decentralized currency, the separate units of which are called “coins”. The virtual currency is having a bit of a moment right now, everyone must have probably seen the headlines trended worldwide like “Bitcoin millionaire at 18”, “Where can I buy bitcoin?”, “Who is Satoshi Nakamoto?”. But despite the fact that cryptocurrency reached its boom relatively recently, the digital currency for exclusively electronic use was created in the distant 1990 by a computer scientist David Chaum. He launched a company called DigiCash and in 1994 it put forth the first electronic transaction over the Internet. The transactions of the company were unique and innovative in that they were anonymous due to the cryptographic protocols developed by Chaum. Unfortunately, the company went bankrupt in 1998, the idea was ahead of its time and did not find its buyer, just like its followers Flooz and Benz.

The situation has changed in 2008, the next one who joined the game was someone named Satoshi Nakamoto, who published a protocol and working principle of the new cryptocurrency “Bitcoin”. None of the investigation services has not established the true identity of mysterious Satoshi Nakamoto, it is still unknown whether it is a man, woman or the whole group of developers. Although, Satoshi Nakamoto vanished in 2011, the mystery is still trending, because the Bitcoin's creator may be worth \$6 billion.

Yes, you heard that right – six billion dollars. The bitcoin created by Satoshi Nakamoto is not owned by any country, group or a person. It is owned only by users of this virtual currency. The principle is: the new bitcoins have to be mined (issued), the miners get some bitcoins, those later can be sold to other people through specific market places or even mobile apps,



Source: [www.corporatecomplianceinsights.com](http://www.corporatecomplianceinsights.com)

called “cryptocurrency exchanges”, which operate almost like the usual stock trade.

The issued or bought coins are stored in “digital wallets”, which can be online and offline. Online ones are more common and easier to use, but offline ones are safe, because hackers cannot steal digital assets that are not connected to the internet. The wallets are kept in the cloud or a server and used to buy/sell the virtual currency and transfer it from one account to another as a form of a payment or transaction.

When the coins are stored in the wallet, the user is free to start making purchases. Currently, more than 3000 businesses, including “Lamborghini”, “Microsoft”, fast food restaurant “Subway”, “KFC Canada”, etc. accept bitcoin payment.

Let's pretend that one fine day you will decide to buy Lamborghini Huracane valued \$200,000 and the current bitcoin price is \$10,000. You will send 20 BTC to Lamborghini company for the car. And there is no bank or credit card involved in this transaction.

Since the creation of Bitcoin (BTC), many other cryptocurrencies have been evaluated: Litecoin (LTC), Ethereum (ETH), Ripple (XRP) and etc, which are not that expensive and well-known as bitcoin, but also demonstrate the growth rate. Even Pavel Durov, the founder Telegram is now developing the idea to mint his own cryptocurrency. Some kind of crypto fever is happening. Referring to the distinction of cryptocurrency, it is all about the absence of internal or external administrator. Put simply, banks, tax, judiciary and any of the government authorities have no influence over any of the emission or transactions running in this payment system. Thus, nobody is able to cancel, block or forcibly make a transaction without the private password of the owner of the coins and any operation demands the agreement of every participant.

**But each “coin” has two sides, right? And crypto coins are not the exception.**

First of all, virtual currency has no tangible value that can be hidden in vault and be used in difficult times. Second of all, the fluctuation of the currency is crazy, even though the value is going higher, does not mean it will not go down soon. Last, but not the least, no one is safe from the hacker attacks.

Now let's see what famous entrepreneurs think about this whole new trend:



Source: [www.goodfon.ru/](http://www.goodfon.ru/)



Bill Gates profile picture on twitter

**Bill Gates, the co-founder of Microsoft.**

“Bitcoin is exciting because it shows how cheap it can be. Bitcoin is better than currency in that you don’t have to be physically in the same place and, of course, for large transactions, currency can get pretty inconvenient.”



Source: [www.shutterstock.com](http://www.shutterstock.com)

**Warren Buffett, business magnate, CEO of Berkshire Hathaway.**

“I can say almost with certainty that cryptocurrency will come to a bad ending.”



Source: [www.chartwellspeakers.com](http://www.chartwellspeakers.com)

**Eric Schmidt, former Executive Chairman of Google.**

“Bitcoin is a remarkable cryptographic achievement... The ability to create something which is not duplicable in the digital world has enormous value... Lot’s of people will build businesses on top of that.”

But regardless of the opinions and labels this innovation is admitted to be revolutionary. But still, it remains an open question as to whether it will replace centralized money controlled by the government with

decentralized money controlled by the market. Only time will tell, because the new currency has already shown its unpredictability.



Source: [www.engadget.com](http://www.engadget.com)



Source: Traviswolfe/Gettyimages



# Tourism Innovation Co-learning Center

On October 10<sup>th</sup> 2018, MDIS Tashkent hosted the grand opening ceremony of Tourism Innovation and Co-learning Center, created within the framework of the Resolutions of the President of the Republic of Uzbekistan "On measures for further development of the tertiary education system" and "On measures to ensure the accelerated development of domestic tourism." The activities implemented by the Tourism Innovation and Co-learning Center will mainly include the creation of a business platform for the selection and implementation of innovative projects and business ideas in the field of tourism; development and implementation of short-term courses for vocational training of professionals as well as the implementation of applied research in the field of tourism and related industries. The opening ceremony was attended by representatives of the *Ministry of Innovation Development* of the Republic of Uzbekistan, the State Tourism Committee of Uzbekistan, the Chamber of Commerce and Industry of the Republic of Uzbekistan, as well as the representatives of Management Development Institute of Singapore and Partner Universities - the Bangor University (UK) and the University of Sunderland (UK).



On December 12, 2018 Tourism Innovation and Co-learning Center welcomed its first speaker - Mr. Laziz Otayorov, region operations manager for Central Asia in "G Adventures" Travel (Canada). The meeting was organized with the kind assistance of MDIS Tashkent Head of Tourism & Hospitality School, Ms. Gulnoza Usmonova.

Mr. Laziz Otayorov delivered a comprehensive presentation on "Tourism Leadership and Communion". The guest also shared his personal and professional experience in "G Adventures" Travel. At the end of the presentation, which was mostly

attended by International Hospitality & Tourism Management and Applied Travel, Tourism and Hospitality Management students, the honorable guest kindly provided a valuable advice on developing professional skills in the field of tourism. Besides, the guest expressed his deep interest in recruiting candidates among MDIS Tashkent students and graduates for vacant positions at "G Adventures" Travel in Central Asia.

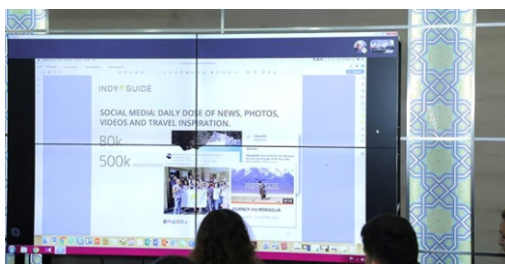


Another meeting was hosted on December 18, 2018 with Mr. Rustam Husanov, a tour operator and the founder of the urban research community "X-places Tashkent". Mr. Rustam Husanov is also the author of articles about the history of Uzbekistan and the creator of the local history web-site "Virtual Samarkand". The "X-places Tashkent" community and Mr. Rustam Husanov personally have developed about 30 excursions across Tashkent and Samarkand cities, which are becoming increasingly popular among both local and international tourists. He delivered a presentation on "How to develop and promote the national tourist product based on the experience of the X-places network community".

The guest also shared his personal and professional findings and observations on Tourism sphere and provided some useful information about national heritage of Uzbekistan.



On February 26, 2019, MDIS Tashkent Tourism Innovation and Co-learning Center organized an Online Session on “Destination Marketing for Central Asia” with Mr. Atahan Tosun, a travel blogger and the founder of Indy Guide (Switzerland). Mr. Atahan Tosun holds his master's degree in Finance & Business Administration from the University of Zurich and University of Tulsa and has an extensive experience in the banking sphere of Switzerland. The guest also talked about the creation of Indy Guide. Mr. Atahan Tosun shared his impressions of the trip to Uzbekistan and talked about the importance of good infrastructure for tourism development.



On March 27, 2019, MDIS Tashkent Tourism Innovation and Co-learning Center organized an Online Session with Ms. Khilola Yusupova, a travel blogger, Logistics and Sales manager at BSC Travel B.V (Amsterdam, Netherlands). During the presentation called “Europe is more achievable than you think”, Ms. Khilola Yusupova shared her impressions of trips to Europe and talked about the importance of choosing the right transportation means, as well as getting affordable airfare and accommodation during the trip.



On April 22, 2019, Tourism School, School of Business and Management, Research Innovations and Consultancy Centre and MDIS Tashkent Tourism Innovation Co-Learning Center organized a guest lecture with Mr. Alessandro Fiorentino, an experienced strategy and services marketing professional with strong experience in luxury hospitality, tourism and transport. Mr. Alessandro Fiorentino has also worked in Italy and abroad in the private and public sector in the areas of strategy development, marketing management, international business development, market research, organizational design and capacity building.



His senior level experience ranges from family owned businesses to large organizations such as Deloitte Consulting and Trenitalia, and includes serving as member of the Board of Directors in different companies.

Mr. Alessandro Fiorentino delivered a presentation on

“Luxury Tourism”. He explained the concept of luxury tourism, and its importance for travelers. The guest also shared his personal and professional experience and observations on Tourism sphere and provided some useful information about tourism industry in Italy.



# International Conference

## “Investments and entrepreneurship: challenges and prospects”

On May 7th, 2019, MDIS Tashkent hosted an International Conference on “Investments and entrepreneurship: challenges and prospects”.

The objective of the international conference was to explore contemporary approaches in entrepreneurship and evaluate the importance of investments in economic and social sectors, addressing these issues from the point of view of both mature and young researchers and practitioners.

The conference was attended by the guests from South Korea, India, Russia, Kazakhstan, Kirgizstan, Spain and Uzbekistan.

The event addressed the following topics: Investment into education;

Financial resources for business activities;  
Social entrepreneurship (education, healthcare, social security);

Experience in innovative entrepreneurship development;

Patterns and trends in modern entrepreneurship development;

Legal aspects of entrepreneurship and self-employment development;

Entrepreneurial competencies development in foreign economic activity;

Theory and methodology of ensuring the competitiveness of business structures.

The conference focused on the discussion of up-to-date problems in business and education and provided an opportunity for scientists, and professionals from Uzbekistan, Russia, Turkey, Kazakhstan and USA to highlight the problems and suggest the solutions.

In addition, the event became an excellent opportunity for network expansion and experience exchange.





## Research methods in social sciences

Within the framework of the conference "Investments and entrepreneurship: challenges and prospects" held in Management Development Institute of Singapore in Tashkent on May 7, 2019, Dr. Dedahanov conducted a workshop for MDIS Tashkent academic staff and students.

The workshop highlighted the quantitative and qualitative research methods in social sciences.

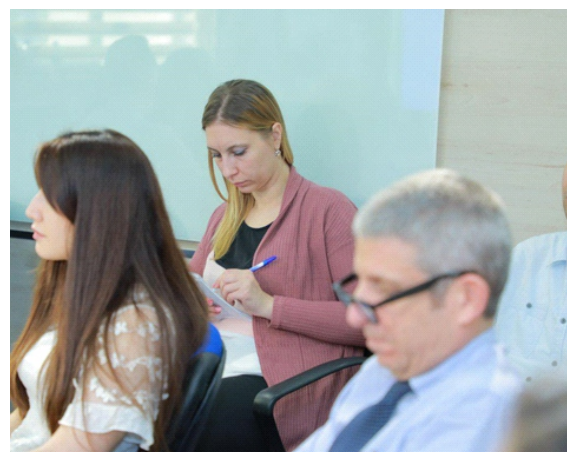
In addition, Dr. Dedahanov talked about:  
How to identify research gaps;

How to create an effective research model;

How to write compelling introduction, literature review and hypotheses development parts of research articles.

Moreover, Dr. Dedahanov presented one of his research works entitled "Cultural Dimensions and Prohibitive Voice: The mediating Role of Conflict Avoidance".

MDIS Tashkent expresses its sincere gratitude to Dr. Dedahanov and wishes him the best of success in his future research.





# PROJECTS

## The International Student Festival

The International Student Festival brought all local and international students together from Turkey, Russia, Kazakhstan, Kyrgyzstan, Turkmenistan, Tajikistan and many more local universities. The theme of the festival was “Gastronomic tourism”, which was also be addressed by renowned speakers in roundtable during the festival. In addition to the workshops, the International

Student Festival highlights the festival theme through a vast cultural program consisting of concerts, fashion shows, through singing and dancing performances, countries’ booths, culinary creations and many more. The program also offers an extensive range of events for the invited participants to explore Uzbekistan, its nature, traditions, culture and cuisine.





# PROJECTS

## Student summer tour 2018 - Singapore

For the “Student Summer Tour 2018” program 20 of the brightest students, winners of the annual MDIS Tashkent contest, were given the opportunity to visit Singapore in September, 2018. During their visit, they had a chance to gain:

- New knowledge through three training workshops, for which they received special certificates

- New experiences through learning about Singapore’s economy, culture and traditions

- The chance to explore MDIS’ structure, history and formation

- More friends among the students of MDIS

Our students had a great opportunity to introduce Uzbekistan to local students and staff by preparing a





# PROJECTS

## Discover Turkey 2018

Under the Student Exchange Programme, MDIS Tashkent has launched a new comprehensive programme, organized in cooperation with Selcuk University (Turkey) with the aim to reward and encourage MDIS Tashkent students to put more effort into their studies and spend summer holidays in a more productive manner. The weekly “Discover Turkey” programme comprises educational and cultural aspects and includes training courses with certificates and a rich cultural and entertainment program.

A group of 8 of MDIS Tashkent’s brightest students were given the opportunity to visit Turkey in September 2018.

Some of these comments demonstrate how students are satisfied and impressed with student exchange programmes.

**Shakhnozakhon Fakhriiddinova** : “At the frames of student exchange programme MDIS Tashkent launched a new comprehensive programme “Discover Turkey”, organized in cooperation with Selcuk University (Turkey). Only eight nominated students who passed successfully competitive selection were given the opportunity to visit Konya, Turkey. I am proud of being one of the participants of this programme.

My name is Shakhnozakhon Fakhriiddinova, I am year 3 student of BSc (Hons) in International Hospitality and Tourism Management. It was a great opportunity for discovering one of the leading tourism destinations in the world to understand better my sphere. In addition, programme offered special course “Tourism in Turkey” where I was able to find out how international tourism standards and methods are used to develop both local and international tourism in Turkey. Last few years Turkey has made significant investments on tourism and transport modernization and improvement of roads, bus services, airport, and air terminals. Turkey has domestic flights to all major cities and touristic centres. Additionally, high quality

service of tourism personnel who adore their work and always-warm welcome and ready to help with smile on their faces impressed me more. I was fascinated with their service delivering methods and I found out other new ideas in Tourism, which I will implement in Uzbekistan in the future. Besides, we were able to visit various tourist sites such as, Ince Minare Medrese, which is a 13th century madrasa, now it is operating as a museum of wood art and stone, Sahip Ata Mosque and Museum-both monuments were built in 13th century AD in the time of Selcuk empire, Mevlana Turbesi and Museum-is the mausoleum of Jalal ad-Din Muhammad Rumi or Mevlana. Nowadays, it is a museum and there are 17 dervish cells and the kitchen where it was used for teaching and educating the dervishes, Silile-is a small Turkish village near the Konya city. It was inhabited by Greeks who had been living there over 800 years, Kyoto Japanese park- it is a thematic park with full of flowers that makes everyone feel like in Japan. We also excited with beautiful view and warm environment of the park, Beyşehir -it is the largest freshwater lake in Turkey, where we were able to have a boat trip on this beautiful freshwater lake, and many other tourist attractions.

Furthermore, the programme offered me a chance to be acquainted and better understand core values of Turkish culture and traditions. In courses of Turkish language, we could practice Turkish language in real atmosphere and had more friends among students of Selcuk University.

Besides, we had Turkish history lesson, it contained from two parts theoretical and practical. In practical part, we visited ancient proto-city settlement Chatalhoyuk, which is considered one of the pearls of the UNESCO World heritage site.

Overall, I was very excited and impressed by “Discover Turkey” programme, it helped me to gain new skills, being able to work with initiative and strong team and expanding worldviews. In addition, for all



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