

The aim of the project is to examine of a **new motivation model** in the management of technical universities. The motivation of academic scholars may **act as a mediator** between **institutional resources** (adequate and fair remuneration, style of leadership) and **scientific effectiveness** (scientific productivity, organizational citizenship behaviours and work engagement). The theoretical framework for the problem is a link between **the management of organization** paradigm including strategic paradoxes (synergy of antinomies; Leja, 2013) and **the Positive Organizational Scholarship** (Cameron & Spreitzer, 2011). The changes that have taken place in university education after 2011 aim at increasing the significance of Polish science. Therefore, we are convinced that universities need a new model of academic scholars' motivation to work – a model allowing them to achieve greater effectiveness and competitiveness in the international area.

Why are we doing this? What we already know about motivation to work in science is insufficient. Being an effective scientist manifests itself in publishing articles, managing grants and internationalization of scientific research. Most of existing research concentrates on institutional determinants, which are poorly supplemented with individual factors. Their serious limitation is the failure to take into account the diversity of motives to work and the needs satisfied by that work. Consequently, according to the assumptions of **the self-determination theory** in the context of work (Deci, Olafsen, & Ryan, 2017; Pink, 2009), the new motivation model consists of **three motivation types**: autonomous motivation (e.g., intrinsic motivation), controlled motivation (e.g., external and financial motivation) and lack of motivation (which means that professional goals are not achieved). Moreover, motivations are related to **three basic needs, i.e. need of autonomy** (independence at work), **need of mastery** (to become more and more competent) and **need of maximization of the purpose** (meaningfulness of work). Therefore, we will verify the relationships between motives and needs in connection with scientific effectiveness. In addition, we will investigate how adequate remuneration and involved leadership shape the academic scholars' motivation, thus influencing scientific effectiveness.

How are we going to do this? We shall implement mixed methods research. We shall carry out **qualitative research** – thorough interviews with representatives of technical university authorities. We will also conduct **quantitative research** among the academic scholars employed in technical universities. We want to invite academic scholars from different scientific fields: engineering and technology (e.g. civil engineering), natural science (e.g. physics) and social (e.g. economy and business). We will carry out our statistical analyses on several levels in order to present the **scholars' perspective** and take into account the **scientific field perspective**.

What do we want to achieve? First, we want to describe and verify the new model of academic scholars' motivation in the context of technical university management. Second, we want to integrate the results from the institutional level and the scholars' level. Third, we want to check the diversification of motivation depending on the scientific fields. The scientific problem we have touched upon, that is, the **new motivation model in university management**, will broaden the knowledge of management science in the field of research on universities.