In this short think piece, I will discuss the new processes that we witness in the Higher Education (HE) industry. I will focus in particular on the challenges that digitalisation brings to the study of HE markets. I will limit myself to the UK; however, the processes that I discuss are equally valid in other contexts.

The criticality of research in this piece is highlighted first by unpacking the concepts of HE industry, markets and marketisation. Too often these are still taken for granted as if it is clear what they include and especially dismissive of the micro-processes of marketisation and everyday experience of HE actors. Second, the critical approach is also understood by searching for new theoretical and conceptual approaches that can explain contemporary dynamics and challenges that we are witnessing. Sticking to theories, approaches and concepts that do not provide enough explanatory power is, I argue, not critical research and does not contribute to developing HE research. Finally, the critical approach benefits from a fruitful interaction of relevant and much needed close-up research with more broad and macro analysis of the HE sector.

Context: digital technology becoming a part of the higher education industry

HE is an important export sector for the UK for many years. The new International Education Strategy (HM Government, 2019) reiterates the value that HE brings to the British economy and plans to strengthen its contribution even further. Also, it foregrounds Education Technology (EdTech) as part of the education industry in which it wishes to become a global champion. Moreover, in a strategy specifically on technology and education entitled ‘Realising the potential of technology in education: A strategy for education providers and the technology industry’ (Department for Education, 2019), the Department of Education positions a dynamic EdTech business sector as one of its key aims.

EdTech innovation and digital solutions are thus high on the national agenda, as they are in other counties including main English speaking competitors to the UK (USA, Australia and Canada), its global competitors (China), as well as its European counterparts (Germany and France). Competition is high, and innovation and investment in EdTech are unprecedented (Brighteye Ventures, 2019). It is safe to expect the substantial and fast expansion of EdTech in future.

This dynamic and fast innovation in EdTech speaks to the fundamental digital transformation that universities are undergoing. Course delivery via digital platforms, personalised learning with the support of artificial intelligence, real-time metrics such as learning analytics for students or business analytics for managers, and smart university campuses are only a few examples of contemporary digital initiatives in HE (Williamson, 2018). It is not exaggerating to say that universities are undergoing fundamental transformation with digitalising all of their operations. Universities, however, do not and cannot deliver this digital transformation on their own. They partner with various private companies to collect and process data, build digital infrastructure, and create digital solutions. This is where EdTech meets universities operations and their IT systems to innovate and deliver new solutions.
When marketisation marries digitalisation

The global HE industry consists of many different and variegated markets that work in different ways and under different rules (Komljenovic & Robertson, 2017). It includes universities, who increasingly act as sellers of not only teaching and learning but also other services. They also increasingly act as buyers of things and services; as well as working in partnerships with private companies (Komljenovic & Robertson, 2016), for example, offering online degrees together with Online Programme Management Companies (Perrotta, 2018).

Importantly, the industry consists of new actors who have entered the HE sector and span from for-profit companies, non-governmental organisations, philanthropists, policymakers, and so on. Each of these actors operates across scales (institutional, national, regional and global) along their strategies and power position; as well as they engage in education policy networks (for example, Ball, 2012).

HE scholars have studied marketisation of the sector for years. Some authors argue that the overall approach was too static and reliant on the simplistic conceptualisation of markets derived from neoclassical economics (Komljenovic & Robertson, 2016; Verger, Lubienski, & Steiner-Khamsi, 2016). Such an approach does not seem to be able to explain the contemporary market-making dynamics in the sector. Notably missing is the analysis of the micro-processes and micro-foundations of market making as I argue with Robertson elsewhere (Robertson & Komljenovic, 2016). Close-up research with detailed in-depth qualitative analysis on case to case basis is essential to understand how different markets get imagined, constructed, and maintained in the HE sector. On the bright side, there appears to be a shift in the literature more recently from discussing whether HE is or could ever be a ‘real’ market towards addressing various types of governing it as a market (for example, Jungblut & Vukasovic, 2017; Marginson, 2018). This is only the beginning of studying HE markets in this more detailed, varied and processual way and there is much to learn by applying more detailed close-up research.

The digitalisation of universities brings yet new challenges to the study of marketisation in HE; as the intersection of marketisation and digitalisation produces new forms of privatisation and new types of university unbundling (Czerniewicz & Walji, 2019; Swartz, Ivancheva, Czerniewicz, & Morris, 2018). There are at least two forces of privatisation and market making in the sector related to digitalization. First, the marketization of HE as such supported by government policy and led by many actors including universities. And second, the marketization of HE via digitalisation led by proprietary digital solutions.

Digital solutions and their nature

There are many different types and forms of digital solutions used by universities and their actors (students, staff, and leadership). These solutions span from traditional software such as Microsoft Office to new applications such as Amazon Alexa. Most of these digital solutions are proprietary and targeted to universities who pay for them and allow free use to students and staff. They may also be targeted directly to students or staff who pay for their use. In this case, providers circumvent universities. There is much to say about this, but I will highlight only two specifics of such digital solutions.

First, what the user (either the university as an institutional user or an individual) pays is not a price for a transfer of ownership rights over the product, like there is the case with commodities. When consumers buy either a tangible or an intangible commodity, they pay the price and get rights over that commodity. However, here the user pays monthly or annual fees for access to the digital service. The user cannot change or interfere with the service, does not get ownership rights over
that service; and often also no rights over the digital data that it or its constituents leave behind, which leads me to the next point.

Second, students and staff leave enormous amounts of data when using such digital applications and software. We do not know all of the uses or potential uses of this data. One of them is to further develop the service. In this case, the service provider is able to offer even better and improved solutions due to network effects (Srnicek, 2017). However, the business model charges fees (not prices!) and more or less always develops a vendor lock-in for users. The latter means that is is not possible to leave the service or that the costs would be too high.

Universities, therefore, collaborate with companies in various ways in that they integrate external digital solutions into their infrastructures to a more significant or lesser extent. Universities may also develop their own ‘internal’ digital applications. This creates a varied ecosystem of internal, external and mixed digital solutions. Not all of the collected data in this ecosystem is (yet) processed and applied, but there are motivation and lubrication of innovation around what will happen with the data. The key questions are what kind of privatisation and monetisation are we witnessing; how is this happening; and what are the consequences?

I argue that these digital innovations are not commodities, but assets; and that what is charged are not prices, but rents. Consequently, commodification and marketisation as theoretical frameworks (especially in how they have developed in the HE literature) do not allow enough explanatory power to analyse and explain what is happening in the intersection of marketisation and digitalisation of universities. I propose to incorporate theories of capitalization and assetization (Birch, 2019; Muniesa et al., 2017) into our analysis of the HE sector. There is a severe empirical lack of how assets get constructed in general (Birch, 2019), let alone in the HE sector. However, we know that assetization is varied, variegated, and path-dependent. Assets are thus constructed in very different ways in complex economic, social and political processes which include power relations and struggles between interested actors. We have to study these processes in-depth and on a case to case bases. Such close-up research of cases will further develop HE research; as well as has a potential to contribute to the emerging scholarship on assetization. This way the learnings deriving from the micro-level do not only illuminate particular cases but also how they are constitutive of global interrelated HE industry.

**Conclusion**

This think piece gives food for thought on many and various processes. First, it invites a discussion on HE industry and markets. Second, it puts a focus on digitalising the HE sector. And finally, it gives an opportunity to engage in a debate on close-up research and critical approaches more generally.

What does it mean to do critical research? How can we place close-up research within the macro phenomena? What is the interaction of close-up research and criticality? These are only a few examples of the broader questions I have introduced and invite HECU participants to potentially find others.

**References**


