

## How does regulation shape innovation?

*The relationship between regulation and technological or business innovation is manifold. There are questions about (i) the degree to which the existing regulatory framework acts as a constraint on innovation, (ii) the degree to which regulatory interventions are used to facilitate certain types of innovation rather than others and (iii) how innovations might be a result of particular regulatory arrangements in the first place.*

These kinds of questions are at the heart of considerable regulatory concern, in particular as they touch on various dimensions of regulatory practice as well as formal regulatory frameworks, and the intricate relationship between regulatory standards and legal regulatory frameworks. For some, the relationship between regulation and innovation related to questions of 'administrative burdens' that were placing alleged transaction costs on innovation. At the same time, using regulatory strategies with a clear intent, for example, seeking to deter particular business practices, had proven highly effective and was used to make the UK a market leader for the industry and for desired regulatory standards. The industry wanted to be regulated and this had become a 'gold standard'. Here UK regulation came to be seen by industry as a value-adding brand. Further, it was discussed that a 'code of practice' could be seen as unduly 'restrictive'; and the importance was not to regard change as being good for its own sake. It was more important to engage, disseminate and be informed about changing practices oneself.

In other areas, especially those involving individual users and consumers, the approach towards new technologies (such as AI) was one of regulatory caution. It was about careful support for innovative practices, such as through 'sandboxing' or through 'waivers', carefully stripping away certain regulatory requirements. At the same time, it was possible to see the emergence of certain products, such as apps, in various sectors where regulation was playing a game of 'catch up'. Regulation had to be, in these areas, reactive by default and one had to maintain a wider view of the developments in the sector, in terms of the emergence of particular products themselves as well as about the wider impact on professional standards.

At the heart of regulatory activity in this area was the 'de-risking of technology' in view of the individual user. It was important for regulators to explain their decisions; in turn, providers had to explain how a particular innovation was supposed to work. The goal was to understand the

changing ways in which services were delivered, but also to have a wider goal, namely to enable more individuals to access services through the introduction of new technologies (e.g. apps).

For some other regulators, a key role was to act as facilitator of other peoples' innovation, by, for example, highlighting what a 'good innovation' might look like. However, at the same time, one had to be careful about certain myths. Not all claims regarding innovations and their impact were correct. An announcement by a regulated entity was not an innovation in itself either. It was also not always easy to remain up to date with innovative practices, especially where one did not have the authority to conduct inspections. To understand how sectors were changing, one way was to recruit staff from organisations regarded as innovating. One could thereby obtain insight into changing business practices. Within regulatory organisation, the challenge then was to ensure that inspectors were aware of innovative practices elsewhere.

There was also a trend where regulation needed to deal with undesired consequences of earlier policy decisions. So regulation had to catch up on developments that had emerged from previous policy decisions and that were deemed undesirable. This, in turn, generated a range of hurdles that needed, or would need, addressing in institutional and legal reforms.

Particular technological innovations could shape professional practices and knowledge in ways that might be problematic in the long-term. A reliance on AI in making decisions potentially meant that there was a replication of existing patterns without necessarily being able to update the system. This is why it was important to test the biases of technological innovations, by 'sandboxing' them, thereby cultivating expertise and learning about the risks and opportunities linked to certain technological innovations. In these areas the regulatory boundaries were not necessarily clear-cut and it was important to have a conversation with users, professionals and developers. In general, the idea was that innovation would support access to certain regulated services and it was therefore important to consider via guidance and clear responsibility allocation how to ensure wider goals.

Existing legislative frameworks, in some areas, were seen as very difficult to change, given that this required departmental attention and parliamentary time. This, in turn, can stifle innovation. Alternatives were to give guidance and incentives where one had scope to act. This required, however, a social license to act and a wider societal acceptability. By raising certain issues in the

media, it was much easier to receive attention for a certain problematic practice than by issuing some guidance document.

Finally, technological innovation could also support existing regulatory practices, especially where regulatory inspections dealt with potentially hostile situations. Having recording equipment, for example, was regarded as helpful to support inspectors in their work in potentially hostile and risky environments.

ML

November 2018