**Symbiosis Law School, Pune**
GUEST LECTURE ON
INTERNATIONAL APPROACH TO TECHNOLOGY LAW AND DIGITAL REGULATION
0n 15ᵗʰ Jan 2025 from 10 am to 12 pm

PAULINA KOWALICKA, Faculty, University of Milan, Italy

On 15th January 2025, Ma'am Paulina Kowalicka, a distinguished academic and researcher from the University of Milan, presented a guest lecture that provided an in-depth examination of the ongoing technological and cultural shifts currently transforming global society. This lecture, part of an international academic initiative, explored the intersections of technology, culture, and privacy, emphasizing the significant impact that technological advancements are having on individuals and communities alike. The lecture covered a range of topics, including the evolution of social media platforms, the implications of artificial intelligence (AI), the increasing role of privacy concerns, and how these elements are shaping societal dynamics in both developed and developing regions. Ma'am Kowalicka's expertise, particularly in the context of the SPARC Project and her work on global technological trends, offered invaluable insights into the changing landscape of technology in the modern world.
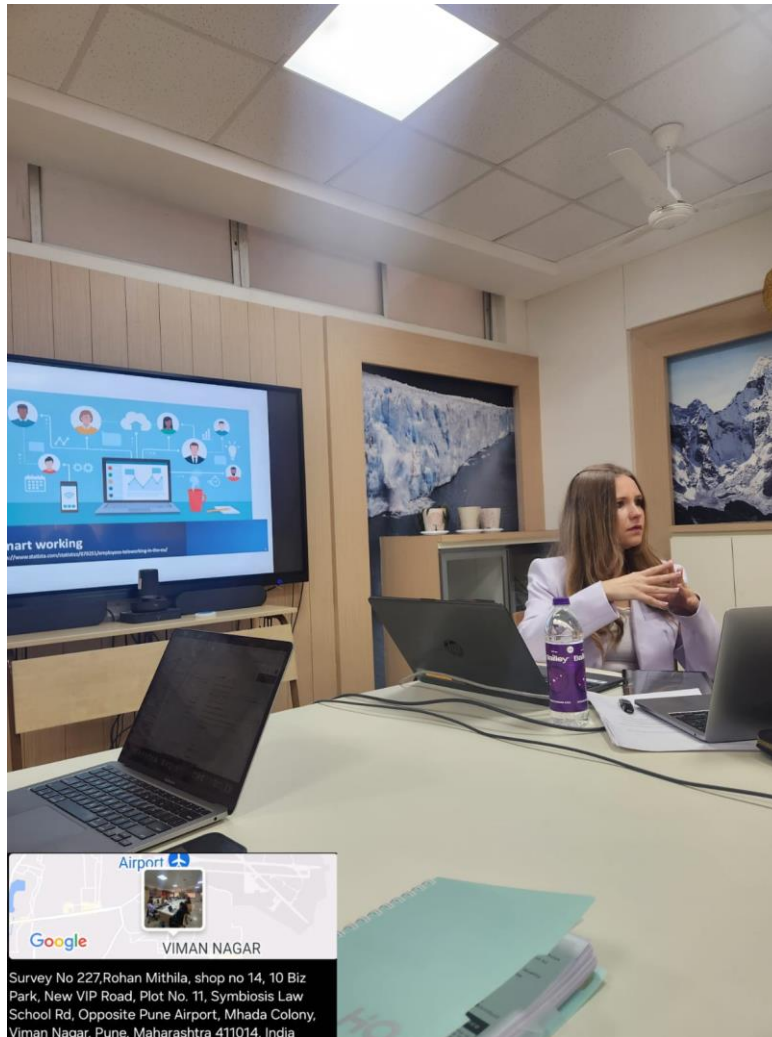
A. Technological and Cultural Shifts: A Vertical Revolution

Ma'am Kowalicka began her lecture by discussing the concept of the "vertical revolution," a term she coined to describe the profound convergence of technological advancements and societal transformations. She explained how the rapid development of new technologies is not only reshaping industries but also altering fundamental aspects of human life, culture, and interaction. This revolution is characterized by the growing centrality of technology in all facets of life, with technological devices and systems becoming integral to how individuals navigate their personal and professional lives.

The speaker emphasized that this revolution is not merely about the rise of new gadgets or systems but about the far-reaching cultural changes that accompany these technological shifts. She argued that technology is now embedded in the very fabric of society, influencing how people form relationships, engage with institutions, and shape their identities. From social media platforms that foster virtual communities to artificial intelligence systems that revolutionize business practices, Ma'am pointed out that technology is shaping cultural norms and expectations in ways that were unimaginable even a decade ago.

Additionally, Ma'am discussed how the rapid expansion of technology has raised pressing concerns regarding privacy and security. The collection and analysis of personal data have become central to the business models of tech giants, leading to increasing questions about the ethical use of this data. The lecture delved into the challenges posed by the widespread use of surveillance technologies and how these technologies are being deployed not only by corporations but also by governments, leading to potential threats to civil liberties. Ma'am stressed the importance of developing robust frameworks for data protection, urging stronger privacy regulations and calls for greater transparency in how personal information is used and shared across platforms.

B. Social Media Usage in India: Analyzing Population Segments
In this section of her lecture, Ma'am Kowalicka focused on the unique patterns of social media usage within India, offering a detailed analysis of how different population segments engage with digital platforms. India, with its vast and diverse demographic, has become a global hotspot for social media activity. The country's massive population and the rapid digitalization in recent years have made it a key market for social media giants like Facebook, WhatsApp, and Instagram.

Ma'am outlined the generational divide in social media engagement, noting that younger people, particularly those aged 18-34, are increasingly drawn to platforms that provide interactive, visually stimulating content such as TikTok, Instagram, and Snapchat. These platforms have capitalized on the youth's preference for short, engaging, and personalized content, often curated through complex algorithms that analyze user behavior to deliver tailored recommendations. The lecturer pointed out that the rise of influencers and content creators on these platforms has created a new form of entertainment and marketing, transforming the way brands and individuals communicate with large audiences.

In contrast, older generations in India, particularly those aged 35 and above, tend to gravitate toward more established platforms such as Facebook and WhatsApp. These platforms cater to different needs, such as maintaining social connections, staying updated with family members, or sharing news and long-form content. Ma'am elaborated on how WhatsApp, in particular, has become a critical communication tool for millions of Indians, enabling individuals to connect in real time and share everything from personal updates to political news.

Ma'am also highlighted the rising profitability of these social media platforms within India. With over 500 million internet users in the country, India represents a goldmine for advertisers looking to tap into this vast and engaged audience. Social media platforms collect detailed information about users' behaviors, preferences, and interests, which allows advertisers to create highly targeted campaigns. While this has led to significant revenue generation for tech companies, it has also raised concerns about the ethical implications of data harvesting, and the need for greater transparency regarding how this data is used.
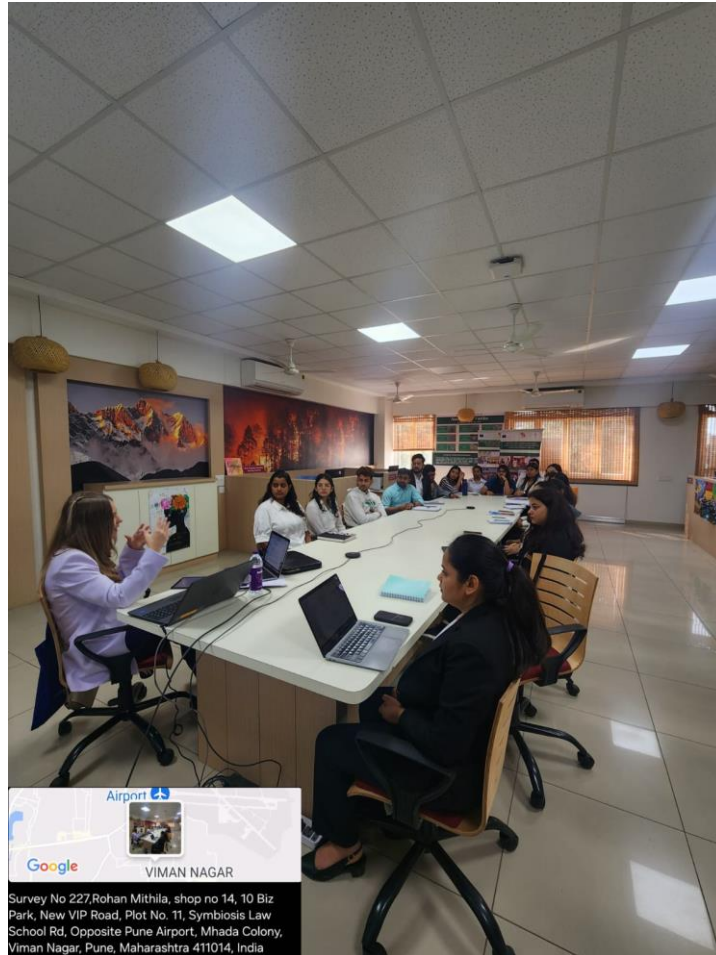
C. Facebook's Popularity and Usage

Despite the rise of newer platforms, Ma'am Kowalicka emphasized that Facebook remains one of the most widely used social media platforms in India, with over 300 million active users in the country alone. While Facebook's user base has experienced some decline in other markets, particularly among younger demographics, it continues to be a major player in India, where it serves as an essential platform for personal and professional interactions.

Ma'am provided an in-depth analysis of how Facebook continues to dominate despite competition from other platforms. She noted that the platform's versatility enabling users to share photos, videos, and articles, participate in groups, and engage in live-streaming has contributed to its long-standing success. Ma'am discussed how Facebook has been able to adapt to new technological trends, such as integrating video and live streaming, to keep pace with competitors. Additionally, she pointed out how Facebook's introduction of new features, such as Marketplace for buying and selling goods, has allowed the platform to remain relevant in a fast-evolving digital landscape.

Ma'am also highlighted Facebook's role as a primary source of news for millions of Indians. In many rural and semi-urban areas, Facebook is one of the few platforms where individuals can access up-to-date information on both local and international events. Given the vast diversity of languages and cultures in

India, Ma'am noted that Facebook has also localized its content, allowing users to consume news and content in a variety of regional languages. This has helped bridge the digital divide and ensure that more individuals can access critical information, especially in remote areas.

However, Ma'am also acknowledged the growing concerns regarding Facebook's impact on society. The spread of misinformation, particularly around political events, public health issues, and social causes, has become a significant challenge for the platform. Facebook's algorithmic content recommendations have been criticized for amplifying falsehoods, leading to confusion and mistrust among users. In response, Ma'am argued, Facebook must increase its efforts to address these concerns by enhancing fact-checking capabilities and implementing stricter regulations on the types of content allowed on the platform.

D. Combating Disinformation Among Older Adults

In one of the most thought-provoking sections of her lecture, Ma'am Kowalicka discussed an innovative European initiative aimed at combating disinformation among older adults, particularly those within the 45-65 age group. This demographic, which has traditionally been underrepresented in discussions about digital literacy, is becoming increasingly vulnerable to the spread of false information online. Many older adults are not as familiar with digital tools and platforms, making them prime targets for disinformation campaigns.

Ma'am outlined how older adults are often exposed to disinformation through social media platforms and messaging apps like WhatsApp, where misinformation spreads rapidly. These individuals are often more likely to trust information that is shared by friends or family members, which can lead to the unchecked spread of falsehoods. Given that older adults may not have the digital skills to critically evaluate the content they encounter online, Ma'am stressed the importance of providing targeted educational programs that focus on digital literacy, fact-checking, and media consumption skills.

The European project, which Ma'am discussed in detail, aims to teach older adults how to identify disinformation and provides tools to help them make more informed decisions about the content they engage with. The project's success, she argued, could serve as a model for other countries, especially in regions like India, where older adults make up a significant portion of the population. She also recommended that tech companies work closely with governments to create accessible digital literacy programs and resources tailored to this demographic.

E. Personalized Content and Algorithmic Filtering

Another critical topic that Ma'am Kowalicka addressed was the role of algorithmic filtering and personalized content in shaping online experiences. Algorithms power many of the digital platforms that people use daily, including search engines, social media platforms, and e-commerce websites. These algorithms analyze users' past behavior—such as search history, clicks, and interactions to predict and recommend content that users are likely to engage with.

While Ma'am acknowledged the benefits of personalized content, such as improved user experience and more relevant product recommendations, she also pointed out the drawbacks. One major concern is that algorithmic filtering can lead to the creation of "filter bubbles," where users are only exposed to content that aligns with their existing views and interests. This can reinforce existing biases and limit individuals' exposure to diverse perspectives, which is particularly problematic in the context of political discourse.
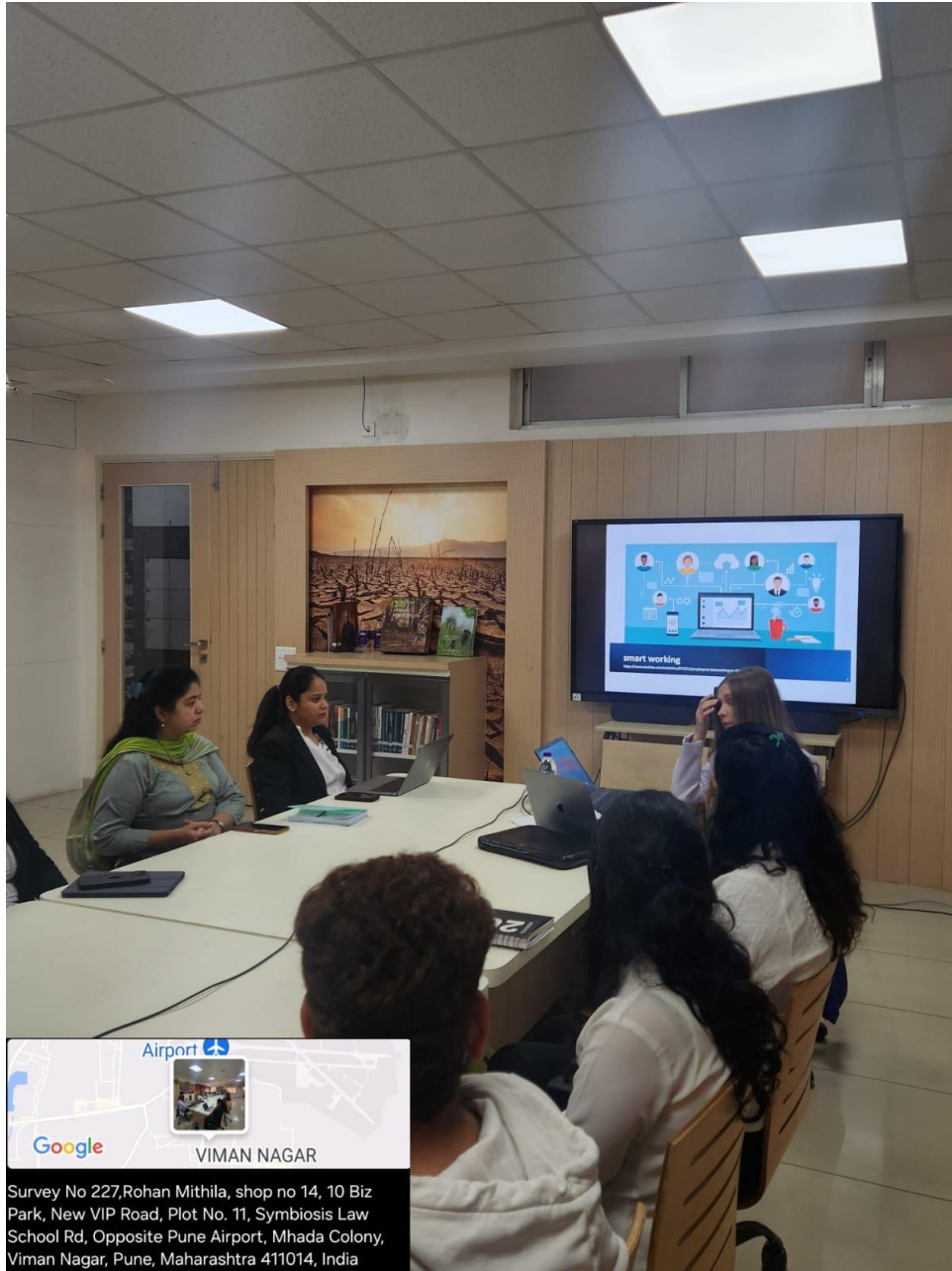
Ma'am elaborated on how the use of personalized algorithms can contribute to the polarization of society, particularly when it comes to sensitive issues like politics and public health. She cited examples of how algorithms can exacerbate ideological divides by continually serving users content that supports their pre-existing beliefs, creating echo chambers where misinformation can flourish. Ma'am argued that while personalized content can enhance engagement, platforms must be more transparent about how their algorithms work and provide users with more control over the type of content they encounter.

F. Fusion of Physical and Digital Reality

The fusion of physical and digital reality is another area that Ma'am Kowalicka examined in her lecture. With the rapid development of technologies like augmented reality (AR), virtual reality (VR), and the Internet of Things (IoT), the boundary between the physical and digital worlds is becoming increasingly blurred. This transformation is creating new possibilities for both individuals and industries to engage with technology in innovative ways.

Ma'am provided several examples of how this fusion is already taking place. In industries like healthcare, AR and VR are being used for medical training, diagnosis, and treatment. Surgeons, for example, can now use AR to overlay digital images of organs during operations, helping them make more accurate decisions. In education, VR is being used to create immersive learning experiences, allowing students to explore virtual environments that would otherwise be impossible to visit.

While these technological advancements offer numerous benefits, Ma'am emphasized the challenges they present. One significant issue is access to these technologies. As AR and VR become more mainstream, it's important to ensure that everyone has the opportunity to benefit from them, regardless of their socio-economic status or geographic location. Ma'am also cautioned that the rapid pace of technological adoption could lead to new forms of inequality, where those who lack access to these tools may fall behind in education, employment, and healthcare.

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G. Healthcare and Technology: The Role of AI in Medicine

Finally, Ma'am Kowalicka turned her attention to the role of artificial intelligence in transforming healthcare. AI has the potential to revolutionize patient care by improving diagnostics, personalizing treatment plans, and enhancing patient outcomes. Ma'am discussed how AI-powered systems are being developed to assist healthcare professionals in analyzing medical data, detecting diseases earlier, and recommending the most effective treatments.

However, Ma'am noted that the integration of AI into healthcare also raises concerns about accuracy and ethics. While AI has shown promise in areas such as radiology and dermatology, where it can identify patterns in medical images, it is not yet perfect. In some cases, AI systems have struggled to make

accurate diagnoses, leading to potential risks for patients. Additionally, Ma'am highlighted the issue of bias in AI algorithms. If AI models are trained on biased or incomplete data, they can perpetuate inequalities in healthcare delivery.

To address these challenges, Ma'am called for stronger regulation of AI in healthcare, including standards for data collection, model validation, and transparency. She argued that while AI has the potential to greatly improve healthcare, it must be developed and deployed responsibly to ensure that it benefits all patients fairly and equitably.

H. CONCLUSION

In conclusion, Ma'am Kowalicka's lecture was a profound exploration of the intersections between technology, culture, and society. Her insights into the ethical, social, and economic implications of technological advancements offered a comprehensive framework for understanding the challenges and opportunities that lie ahead in the digital age. Her lecture was an invaluable resource for students and researchers interested in understanding the broader societal impacts of technology and the role of academia in addressing these complex issues.