（一）以下是取自前 MIT 建築學院院長 William Mitchell 的著作 【e-topic】書中的部份內容，探討數位網路城市的未來發展，請翻譯成中文。(60%)

The global digital network is not just a delivery system for email, Web pages, and digital television. It is a whole new form of *urban infrastructure*—one that will change the forms of our cities as dramatically as railroads, highways, electric power supply, and telephone networks did in the past. This book examines this new infrastructure and its implications for our future daily lives.

■ *Doing Your Bit*

We must put in the necessary digital telecommunications *infrastructure*, create innovative *smart places* from electronic hardware as well as traditional architectural elements, and develop the *software* that activates those places and makes them useful. Finally, we must imagine the architectural, neighborhood, urban, and regional *spatial configurations* that will be sustainable and will make economic, social, and cultural sense in an electronically interconnected and shrunken world—a world in which distance has lost some of its old string, but also much of its capacity to keep challenges and threats comfortably removed.

It is a moment to reinvent urban design and development and to rethink the role of architecture. We must learn to build *e-topias*—electronically serviced, globally linked cities.

■ *Pixels, Pixels, Everywhere*

In a world of proliferating screenspace and speakers, smart surfaces, video-projected displays, virtual reality, and augmented reality, luminous digital information ubiquitously overlaid on tangible physical reality. Signs and labels are becoming dynamic, text is jumping off the page into three-dimensional space, murals are being set in motion, and the immaterial is blending seamlessly with the material.

Architecture is no longer simply the play of masses in light. It now embraces the play of digital information in space.

■ *Form Fetches Function*

Consequently, product designers and architects face some new sorts of design quandaries. Should they build multipurpose hardware, such as multimedia personal computers, or should they create families of interacting, single-purpose devices like cell phones, digital cameras, and portable electronic books—information appliances that fragment and disperse the functions? Which capabilities of a system should be built into hardware and which should be permanently resident in a device and which should derive, as necessary, from interconnections and downloads? In the end, some affordances will drive from material structures and mechanisms, some from resident code, some form

software and services sucked down a wire as needed, and some from interactions of all of these.

In the design of smart things and places, form may still follow function — but only up to a point. For the rest, function follows code. And if you need to alter these code-enabled functions, you don't rebuild, reshape, or replace material components; you just connect, fetch, and load.

■ *Computers For Living In*

What will *smart places* do for us?

They will, of course, collect and spit out information — much as computers and telecommunication devices have always done. More importantly, though, they will attend, anticipate, and respond to our daily needs in a vast variety of new ways. And they will become delivery points for a still-unimaginable range of services made available by providers scattered around the globe.

■ *Our Town Tomorrow*

In the twenty-first century, then, we can ground the condition of civilized urbanity less upon the accumulation of things and more upon the flow of information, less upon geographic centrality and more upon electronic connectivity, less upon expanding consumption of scare resources and more upon intelligent management. Increasingly, we will discover that we can adapt existing places to new needs by rewiring hardware, replacing software, and reorganizing network connections rather than demolishing physical structures and building new ones.

Physical settings and virtual venues will function interdependently, and will mostly complement each other within transformed patterns of urban life rather than substitute within existing ones. Sometimes we will use networks to avoid going places. But sometimes, still, we go places to network.

We can create e-topias — lean, green cities that work smarter, not harder. Their basic design principles may be boiled down to five points: (1) Dematerialization (2) Demobilization (3) Mass customization (4) Intelligent operation (5) Soft transformation.

（二）請針對以上的描述，表達你個人對資訊科技在未來智慧型建築空間與城市發展的影響。(40%)