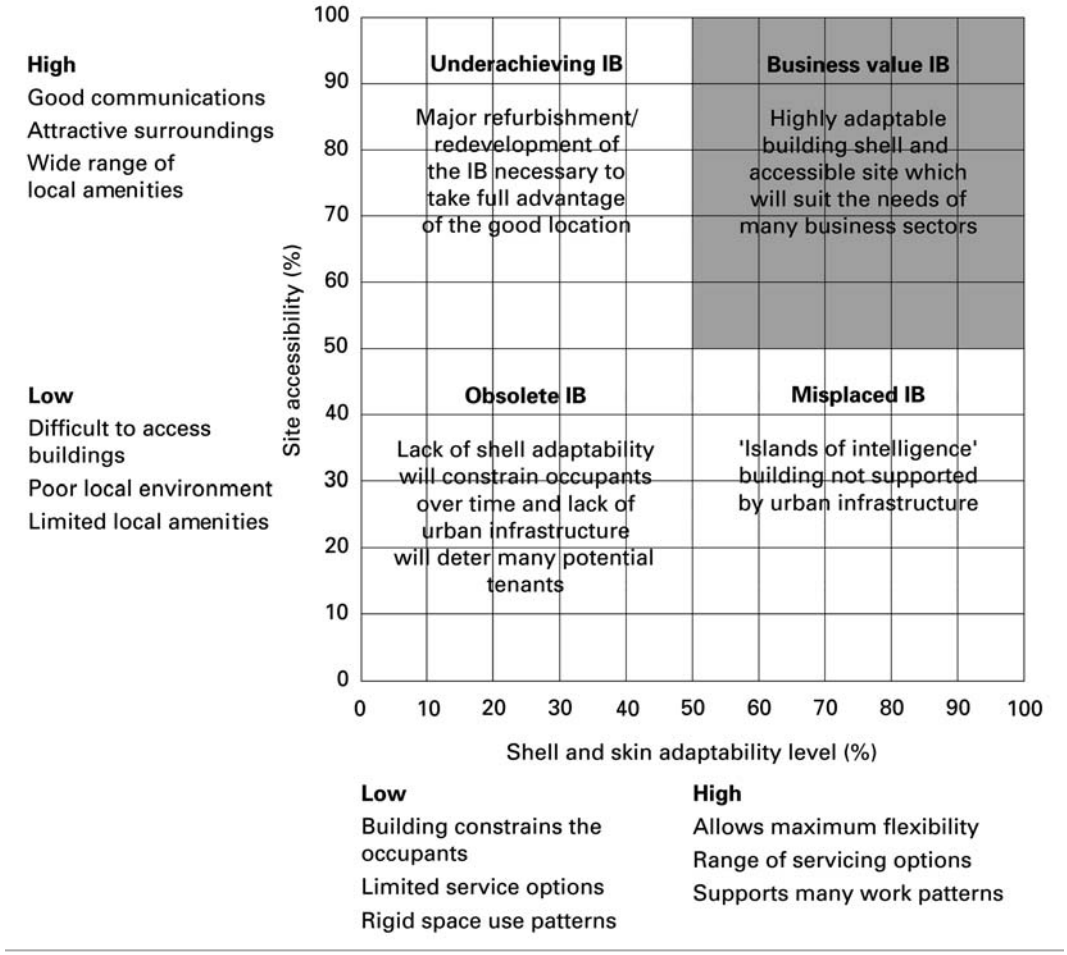

Figure 2.1
Intelligent buildings (IB) in South-East Asia.
(*Source*: Harrison *et al*., 1998; DEGW, 1999[1])

In recognition of these flaws, the models were developed further to incorporate a wider understanding of the requirements of urban inhabitants, and the processes they undertake. The final model developed in the DEGW studies defined a set of intelligent city attributes, related to the primary goals of living, moving and working (Figure 2.4). Each of these goals is broken down into a series of sub-tasks, from which the attributes are derived. The model recognized the significant role that infrastructure has, and suggested that it should be extended to include telecommunications systems. The study also recognized that effective management is equally crucial to maintaining this infrastructure and to long-term urban success.

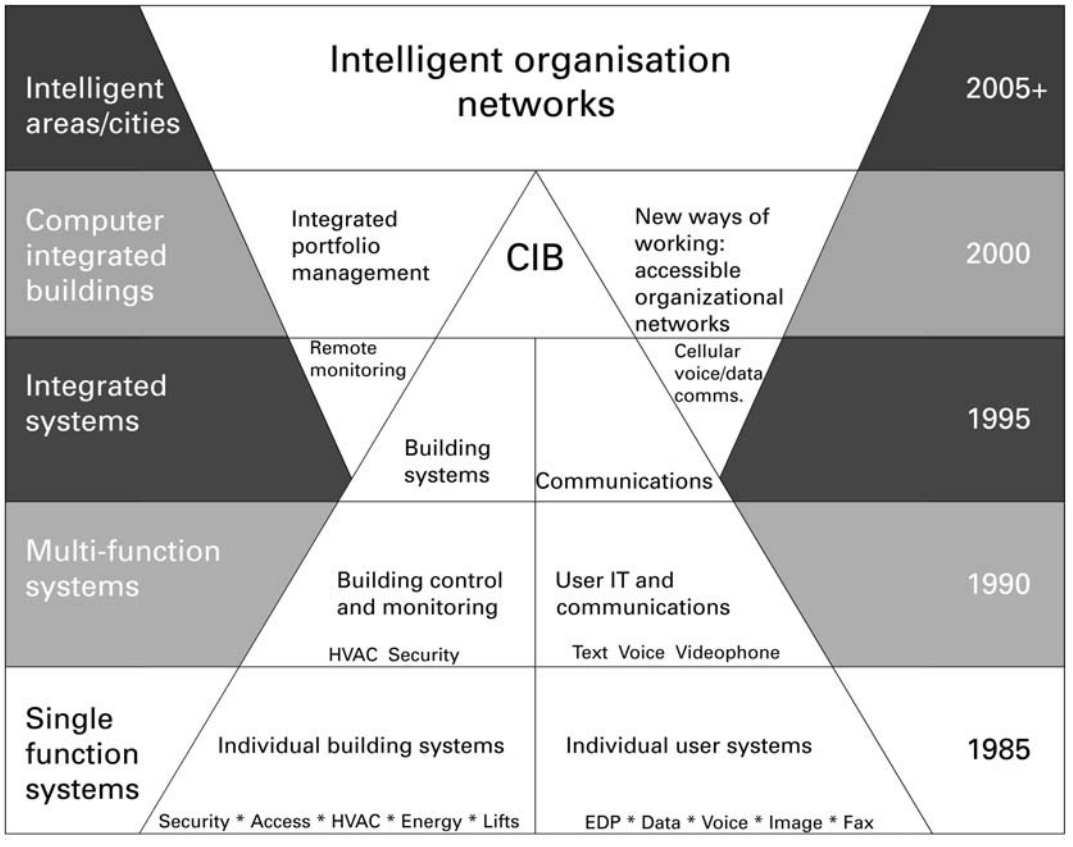

Figure 2.2
The CIB is intrinsically about systems. The intelligent building has emerged as different building systems have become integrated. The next step is to integrate systems across buildings to create intelligent organizational networks based in intelligent areas.
(*Source*: DEGW, 1999.)
Note: HVAC refers to heating, ventilation and air conditioning systems; EDP refers to electronic data processing.

Redefining the intelligent city

Although a useful starting point, the output from this study remains rather mechanistic, simply providing attributes rather than deriving a useful and workable definition of the intelligent city. To refine the concepts contained in this model, we need to examine further:

- **the city's fundamental role**
- **the relationship between its fabric and processes**
- **the key attributes that enable the city to successfully realize its role**

Cities exist because of two major human requirements (or drivers): to facilitate transaction and to enable freedom. The origin of the city as a physical construct lies in trade or the economics of exchange, and the exchange of ideas and goods remains one of the fundamental driving forces behind city