

DIGITAL DIVIDE - DIGITAL FOOTSTEP

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The digital divide is most commonly defined as the gap between those individuals and communities that have, and do not have, access to the information technologies that are transforming our lives. The term 'digital divide' describes the fact that the world can be divided into people who do and people who don't have access to - and the capability to use - modern information technology, such as the telephone, television, or the Internet.

Studies on diffusion of innovations show that adoption of new technologies is a complex process. In a given population, the number of people adopting a new technology in a given time often follows normal distribution. Adopters can roughly be categorized as innovators, early adopters, early majority, late majority and laggards. During the growth phase, differences necessarily grow. As the majority of potential users have not yet adopted the new technology, the gap between average members of the population and early adopters increases. This phenomenon depends on the maturity of the technology. For all new technologies there has to be a time when the differences in its adoption grow. In innovation diffusion research, as well as in the discussion on digital divide, the focus, however, is often on a specific technology or a product. Although it is obvious that Internet, for example, is continuously reinvented and has many different uses, we often assume that because we use a single word for it, Internet exists as a well-defined object. It is not, and for this reason innovation diffusion models fail to describe the dynamics of Internet adoption. Population surveys show that the level of income, education, and family structure correlate with Internet access. Market research, in turn, shows that the best selling computer software consists of tax preparation, money management, and financial planning software, games, virus protection software, electronic encyclopedias, office packages, and some educational software for children.

DIDIX, that was developed in an EU-funded project to benchmark and track national digital divides within EU member states. Based on the relative diffusion of computers and the Internet in four disadvantaged socio-demographic groups (compared to national averages), the index is intended as a descriptive metric to compare basic levels of inclusion in EU-member states. Because it reaches lower levels at higher rates of diffusion, however, DIDIX is neither proposed as a way to identify diffusion patterns at an early stage, nor to predict future developments. Its intent instead is to compare the diffusion of technology in at-risk groups with the population average. Results here suggest an increasing North-South gradient of cross-national inclusion prevailing in Europe. Applying the underlying methodology to other than simple access or use variables suggests that more attention should be paid to indexing the various skills and general benefits of IT.