

On Developing of Digital Communities in Rural Areas

Dr. Armein Z.R. LANGI

Senior Lecturer - Information Technology Research Group, School of Electrical Engineering and Informatics | Head - Research Center on Information and Communication Technology, Institute of Technology Bandung - INDONESIA
armein.z.r.langi@stei.itb.ac.id

ABSTRACT

This paper shows how digital technology can satisfy the needs of communities in rural areas, living in low, mid, and top tiers. It defines three levels of needs: (i) basic-living needs, for people in low tier; (ii) productive-living needs, for people in mid tier; and (iii) meaningful-living needs, for people in top tier. The problem is how digital technology can help communities to satisfy those needs. We propose five key ideas to innovate its solutions. First idea is for the people in all tiers to innovate values. The second idea is (i) for people in middle tier to provide services to satisfy basic, productive, and meaningful needs, (ii) to make basic services available and affordable for people in low tier, and (iii) to mobilize investment from people at upper tier for the those services. The third idea is to organize smart communities to produce most of those services. The fourth idea is to provide smart environments, including living environment and infrastructures, to enable smart communities develop and delivers valuable services. The fifth idea is to embed learning and research in the community. The paper shows how existing digital technology can implement those five ideas, especially within the context of rural areas.

Keywords: *rural ICT, digital communities*