

# **Personal Assistance For Seniors Who Are Self-Reliant**

## **Self-Reliant Older Baby Boomers Are Now Better Connected to Goods, Services, and Care(2017)**

**Author:** Golant, Stephen M.

Compared to their grandparents living in the 1970s, our more self-reliant and empowered American aging baby boomers will be better able to access the goods, services, and care they need to age in place autonomously in their current dwellings. The emergence of the Internet economy and the prospects of gerontechnological advances will only increase this connectivity divide. However, one unintended consequence of increased connectivity may be a generation of more socially isolated older baby boomers.

## **Self-Reliant Community Development in a Semi-Urban Area of Bangkok: A Case Study of Community Well-Being(2021)**

**Author:**Suparp Thaithae, Araya Chiangkhong,Parinyaporn Thanaboonpuang.

Developing self-reliance in community plays an important role to enhance the well-being and participation of its members. This study aimed to understand the conditions which contribute to the success of community well-being and the strategies to develop healthy communities. Qualitative research methodology was employed. The data collection strategy utilized in-depth interviews of thirteen key informants from the core group leaders and local residents of the community and from community development networks in Bangkok, Thailand. Data analysis was conducted through content analysis methods. The results showed that two conditions contributed to the success in community well-being. Firstly, it included human potential capital such as having outstanding leadership capabilities, for example, being patient, team oriented, well respected, and the potential of the elder leader's core group in contributing their experience. Secondly it included the ability to foster community development; cultural capital, namely, having a traditional community with close family ties; and natural resource capital with some plants as an economic crop. In addition, the community need to collaborate with network partners. Those strategies in implementing community well-being operations included, 1) fostering community participation in a "healthy space"; 2) creating exposure to a wide range of organizational networks; 3) the implementation of a mentoring system; and 4) continuous development of the "healthy space" and opening it for public use, along with fostering cooperation with neighboring communities. Practical implications for sustainable development in the area of community well-being are discussed.

## **Self-Reliance, Mental Health Need, and the Use of Mental Healthcare Among Island Puerto Ricans(2002)**

**Author:**Alexander N. Ortega & Margarita Alegría.

This paper examines the relationship between self-reliance (preference to solve emotional problems on one's own) and 5 mental healthcare utilization outcomes for Puerto Ricans living in low-income areas. A random probability community sample of noninstitutionalized Puerto Ricans, ages 18–69, living in low-income areas of the island were selected and interviewed in 1992–93 and 1993–94. A series of logistic regression models tested the association between self-reliance and 5 mental health utilization measures, after adjusting for covariates measuring predisposing, enabling, need and barrier factors: any use of mental health services, any use of general health services for mental healthcare, any use of specialty care, use of psychotropic medications, and retention in mental healthcare. Self-reliance was found to be negatively associated with all 5 dependent service utilization measures. Those with a positive self-reliant attitude were 40% less likely to use care on any of the 5 outcome measures. An interaction was also observed between definite need for mental healthcare and having a self-reliant attitude when predicting mental health service use. Definite needers with a self-reliant attitude were 54%–58% less likely to use mental health services compared with definite needers who did not have a self-reliant attitude. Further, decreases in self-reliant attitude over the two data collection periods were associated with increases in mental health service use. Our findings suggest that self-reliance is a significant and robust predictor of mental healthcare utilization among Puerto Ricans living in low-income areas of the island.

### **Creating Self-Reliant Communities in a Global Age(2006).**

**Author:Michael Shuman.**

National drug chains squeeze local pharmacies out of business, while corporate downsizing ships jobs overseas. All across America, communities large and small are losing control of their economies to outside interests. *Going Local* shows how some cities and towns are fighting back. Refusing to be overcome by Wal-Marts and layoffs, they are taking over abandoned factories, switching to local produce and manufactured goods, and pushing banks to loan money to local citizens. Shuman details how dozens of communities are recapturing their own economies with these new strategies, investing not in outsiders but in locally owned businesses.

### **Self-Reliance and Military Service Training Outcomes**

**AUTHOR: James Campbell Quick,Janice R. Joplin,Debra L. Nelson,A. David Mangelsdorff&Edna Fiedler**

The purpose of these 2 studies was to examine the self-reliance of basic military trainees in the U.S. Air Force. Study 1 was a cross-sectional, comparative analysis of 3 groups of basic military trainees (N = 158). Study 2 was a predictive validity study of 13 groups of basic military trainees (N = 1,339). Both studies indicated that self-reliant trainees fared better in training than did their less self-reliant counterparts. They were healthier, had higher self-esteem, lower burnout, and higher completion rates. A post hoc analysis of self-reliance, self-esteem, and burnout is reported. Given that self-reliance appears important, we suggest developmental activities for enhancing self-reliance in military organizations.

**Feng Xia, Laurence T Yang, Lizhe Wang, Alexey Vinel**

**International journal of communication systems 25 (9), 1101, 2012**

We are witnessing the dawn of a new era of Internet of Things (IoT; also known as Internet of Objects). Generally speaking, IoT refers to the networked interconnection of everyday objects, which are often equipped with ubiquitous intelligence. IoT will increase the ubiquity of the Internet by integrating every object for interaction via embedded systems, which leads to a highly distributed network of devices communicating with human beings as well as other devices. Thanks to rapid advances in underlying technologies, IoT is opening tremendous opportunities for a large number of novel applications that promise to improve the quality of our lives. In recent years, IoT has gained much attention from researchers and practitioners from around the world. This special issue is focused on the latest results in the area of IoT. In response to our call for papers, we have received a very large number of submissions, out of which eight papers are finally accepted as a result of a thorough review process by international experts in respective areas. The selection provides a fresh snapshot of the state-of-the-art research in the field. Radio frequency identification is a dispensable technology for IoT. In the paper ‘Code division multiple access/pulse position modulation ultra-wideband radio frequency identification for Internet of Things: concept and analysis’, Zhang et al. propose to utilize low-pulse-rate code division multiple-access/pulse position modulation ultra-wideband in the tag-to-reader link to provide multiple tag access capability and build a high-throughput radio frequency identification system for IoT.

**Luigi Atzori, Antonio Iera, Giacomo Morabito**

**Computer networks 54 (15), 2787-2805, 2010**

This paper addresses the Internet of Things. Main enabling factor of this promising paradigm is the integration of several technologies and communications solutions. Identification and tracking technologies, wired and wireless sensor and actuator networks, enhanced communication protocols (shared with the Next Generation Internet), and distributed intelligence for smart objects are just the most relevant. As one can easily imagine, any serious contribution to the advance of the Internet of Things must necessarily be the result of synergetic activities conducted in different fields of knowledge, such as telecommunications, informatics, electronics and social science. In such a complex scenario, this survey is directed to those who want to approach this complex discipline and contribute to its development. Different visions of this Internet of Things paradigm are reported and enabling technologies reviewed. What emerges is that still major issues shall be faced by the research community. The most relevant among them are addressed in details.

**Kevin Ashton**

**RFID journal 22 (7), 97-114, 2009**

**June 22, 2009**—I could be wrong, but I’m fairly sure the phrase” Internet of Things” started life as the title of a presentation I made at Procter & Gamble (P&G) in 1999. Linking the new idea of RFID in P&G’s supply chain to the then-red-hot topic of the Internet was more than just a good way to get executive attention. It summed up an important insight—one that 10 years later, after the Internet of Things has become the title of everything from an article in Scientific American to the name of a European Union conference, is still often misunderstood.

**Li Da Xu, Wu He, Shancang Li**

**IEEE Transactions on industrial informatics 10 (4), 2233-2243, 2014**

Internet of Things (IoT) has provided a promising opportunity to build powerful industrial systems and applications by leveraging the growing ubiquity of radio-frequency identification (RFID), and wireless, mobile, and sensor devices. A wide range of industrial IoT applications have been developed and deployed in recent years. In an effort to understand the development of IoT in industries, this paper reviews the current research of IoT, key enabling technologies, major IoT applications in industries, and identifies research trends and challenges. A main contribution of this review paper is that it summarizes the current state-of-the-art IoT in industries systematically.

**Felix Wortmann, Kristina Flüchter**

**Business & Information Systems Engineering 57 (3), 221-224, 2015**

It has been next to impossible in the past months not to come across the term “Internet of Things”(IoT) one way or another. Especially the past year has seen a tremendous surge of interest in the Internet of Things. Consortia have been formed to define frameworks and standards for the IoT. Companies have started to introduce numerous IoT-based products and services. And a number of IoT-related acquisitions have been making the headlines, including, eg, the prominent takeover of Nest by Google for \$3.2 billion and the subsequent acquisitions of Dropcam by Nest and of SmartThings by Samsung. Politicians as well as practitioners increasingly acknowledge the Internet of Things as a real business opportunity, and estimates currently suggest that the IoT could grow into a market worth \$7.1 trillion by 2020 (IDC 2014). Mattern and Floerkemeier 2010). Since then, visions for the Internet of Things have been further developed and extended beyond the scope of RFID technologies. The International Telecommunication Union (ITU) for instance now defines the Internet of Things as “a global infrastructure for the Information Society, enabling advanced services by interconnecting (physical and virtual) things based on, existing and evolving, interoperable information and communication technologies”(ITU 2012). The fields of application for IoT technologies are as numerous as they are diverse, as IoT solutions are increasingly extending to virtually all areas of everyday. 4. In the smart home or building

area, intelligent thermostats and security systems are receiving a lot of attention, while smart energy applications focus on smart electricity, gas and water meters.

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**Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stamatis Karnouskos, Stefan Avesand, David Boyle**

**Academic Press, 2014**

This book outlines the background and overall vision for the Internet of Things (IoT) and Machine-to-Machine (M2M) communications and services, including major standards. Key technologies are described, and include everything from physical instrumentation of devices to the cloud infrastructures used to collect data. Also included is how to derive information and knowledge, and how to integrate it into enterprise processes, as well as system architectures and regulatory requirements. Real-world service use case studies provide the hands-on knowledge needed to successfully develop and implement M2M and IoT technologies sustainably and profitably. Finally, the future vision for M2M technologies is described, including prospective changes in relevant standards. This book is written by experts in the technology and business aspects of Machine-to-Machine and Internet of Things, and who have experience in implementing solutions. Standards included: ETSI M2M, IEEE 802.15. 4, 3GPP (GPRS, 3G, 4G), Bluetooth Low Energy/Smart, IETF 6LoWPAN, IETF CoAP, IETF RPL, Power Line Communication, Open Geospatial Consortium (OGC) Sensor Web Enablement (SWE), ZigBee, 802.11, Broadband Forum TR-069, Open Mobile Alliance (OMA) Device Management (DM), ISA100. 11a, WirelessHART, M-BUS, Wireless M-BUS, KNX, RFID, Object Management Group (OMG) Business Process Modelling Notation (BPMN) Key technologies for M2M and IoT covered: Embedded systems hardware and software, devices and gateways, capillary and M2M area networks, local and wide area networking, M2M Service Enablement.

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**Shancang Li, Li Da Xu, Shanshan Zhao**

**Information systems frontiers 17 (2), 243-259, 2015**

In recent year, the Internet of Things (IoT) has drawn significant research attention. IoT is considered as a part of the Internet of the future and will comprise billions of intelligent communicating ‘things’. The future of the Internet will consist of heterogeneously connected devices that will further extend the borders of the world with physical entities and virtual components. The Internet of Things (IoT) will empower the connected things with new capabilities. In this survey, the definitions, architecture, fundamental technologies, and applications of IoT are systematically reviewed. Firstly, various definitions of IoT are introduced; secondly, emerging techniques for the implementation of IoT are discussed; thirdly, some open issues related to the IoT applications are explored; finally, the major challenges which need addressing by the research community and corresponding potential solutions are investigated.

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Collisions and interferences among nodes pose a challenge for data aggregation in many applications. The paper ‘An energy efficient medium access control protocol for target tracking based on dynamic convey tree collaboration in wireless sensor networks’ addresses this issue. The authors refine slot allocation to nodes in a dynamic convey tree and design an energy-efficient Medium Access Control protocol called dynamic-time division multiple access. As a result, energy consumption in switching from sleep to active state can be reduced.

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**Rolf H Weber, Romana Weber**

**Springer, 2010**

The Internet of Things as an emerging global Internet-based information architecture facilitating the exchange of goods and services is gradually developing. While the technology of the Internet of Things is still being discussed and created, the legal framework should be established before the Internet of Things is fully operable, in order to allow for an effective introduction of the new information architecture. If a self-regulatory approach is to be adopted to provide a legal framework for the Internet of Things, and this seems preferable, rulemakers can draw on experiences from the current regime of Internet governance. In the near future, mainly businesses will operate in the Internet of Things. Civil society is only expected to make use of the Internet of Things, as it now does of the Internet, at a later stage (eg for healthcare).

The Internet of Things will have an impact in various areas. The regulatory framework must provide for provisions ensuring the security of the structure as well as the privacy of its users. Furthermore, legal barriers that may stand in the way of the coming into operation of the Internet of Things will have to be considered. However, the Internet of Things will also have positive effects in different fields, such as the inclusion of developing countries in global trade, the use of search engines to the benefit of civil society, combating product counterfeiting, tackling environmental concerns, improving health conditions, securing food supply and monitoring compliance with labor standards.

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**Miao Wu, Ting-Jie Lu, Fei-Yang Ling, Jing Sun, Hui-Ying Du**

2010 3<sup>rd</sup> international conference on advanced computer theory and engineering (ICACTE) 5, V5-484-V5-487, 2010



The Internet of Things is a technological revolution that represents the future of computing and communications. It is not the simple extension of the Internet or the Telecommunications Network. It has the features of both the Internet and the Telecommunications Network, and also has its own distinguishing feature. Through analysing the current accepted three-layer structure of the Internet of things, we suggest that the three-layer structure can't express the whole features and connotation of the Internet of Things. After reanalysing the technical framework of the Internet and the Logical Layered Architecture of the Telecommunication Management Network, we establish new five-layer architecture of the Internet of Things. We believe this architecture is more helpful to understand the essence of the Internet of Things, and we hope it is helpful to develop the Internet of Things.

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