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Erick Roth (*)

Behavioral Sciences Research Institute

Universidad Católica Boliviana "San Pablo" - La Paz

(*) Dr. Erick Roth U.

eroth@ucb.edu.bo

La Paz - Bolivia

Innovation Diffusion Model: Some considerations from an interactive change perspective.

Erick Roth U.
Behavioral Sciences Research Institute
Universidad Católica Boliviana "San Pablo" - LaPaz

The Innovation Diffusion Model (IDM) (Rogers, 1995), has been proposed in the context of communication for developmental paradigm. Terms such as diffusion, communication, information, dissemination, messages, channels, campaigns, are important IDM descriptors. Rogers defines diffusion as a "process by which an innovation is communicated through certain channels…" (p.5). But on occasions this over-emphasis has contributed to confuse social change process with diffusion: "Diffusion is a kind of *social change*, defined as the process by which alteration occurs in the structure and function of a social system" (p.6).

IDM had deep impact during the 60's and 70's, receiving special attention from sociologists and anthropologists interested in the adoption of new rural agriculture technologies. A Few years later, IDM spread abroad to developing countries where innovation diffusion was closely related with the concept of socio-economic development.

After several decades of diffusion initiatives in developed as well as non-developed countries, IDM began to get exhausted. The enthusiasm it awoke initially among practitioners and academics in early years turned to skepticism and distrust. The reason probably was the emerging critics targeting the rural development model, which is closed related to the so called "green revolution". The purpose of that movement was to incorporate new technological practices into campesino production processes (especially in Latin American countries) including the use of chemical fertilizers, improved seeds,

pesticides and modern mechanized devices oriented for massive food production. This new agricultural practice ran against the traditional practices, profoundly enrooted in the local culture. The new model offered a different vision of the use of natural resources, new productive practices and a renewed way of conceiving the link between man and nature. That new conception failed to harmonize with a socio-cultural context where ancient agricultural production practices are still inseparable components of cultural agency that emphasize the traditions and customs of the peasants and a qualitative relationship with the land as well.

Under those conditions, the problems stated between the cultural values and a utilitarian approach imported from other realities, made IDM fall into crisis. That crisis strengthened the ideological viewpoint of the socially oriented academics who perceived IDM as an aggression to the local culture, promoting ethnocide as well as ecocide effects, considering its cultural and environmental impact.

The Interactive Change Model (ICM) derives from emerging evidence on the relational nature of community phenomena. This approach focuses on interactions between individuals, groups and institutions, mediated by social, economical, political and cultural processes which embody the inter-disciplinary vision of the community analysis. Community problems are defined by ICM as complex products of such inter-actions, where the psychological perspective is just one of the several possible analytical levels.

Some assumptions endorsing ICM are: a) *Change is a psycho- social process* (change is produced by direct, intentioned and planned action with the purpose of promoting new ideas. This promotion is modulated by psychological variables operating inside the systems). b) *Change is produced by an interactive dynamic between systems* (change depends on the coincidence of multiple decisions and actions made by change agents and by potential recipients). c) *Change is a social construction* (it is a participant product derived from the change agent's initiative, knowledge and expertise, and from the recipient's experience and sense of reality). d) *Change is possible in the contexts of open systems* (change relations –implantation and assimilation-- are maintained through energy

interchange between sub-systems and with the provision of supplies such as norms, values, perceptions and other conventionalities that explain change decisions. e) *Change is possible through an impulse coming from outside the system* (change must be understood as a quantitative/qualitative step given from one logical level to another by effect of that impulse. ICM disregards the idea that a system could change through operations exclusively carried out inside the system). f) *Change is always a situational product* (change occurs mostly under the conditional influence of certain variables affecting the probability of adopting an innovation in a specific period of time).

From systemic and interactive points of view (Roth, 1986, 2000, 2009), the innovation processes can be explained through forces coming from outside the system. Nevertheless, it must also be understood as a social make up. That means the process is nurtured by the contribution of all social actors involved who have enough experience fostering the innovation. The ICM points out the variables that are considered relevant to the adoption process: those emerging from the change agent behavior and those offered by the recipient system. It is not enough to postulate the influence of recipient cultural characteristics on adoption as stated by the Innovation Diffusion Model. It is important to clarify the conditions under which "impeller" system must be accomplished in order to make that compatibility possible. Both variable groups must interact with the purpose of a harmonic build up of the new idea. In other words, change process requires behavioral adjustments in the "recipient" as well as in the "impeller" system.

When we assert the need of interaction, we mean that whatever the change agent does to initiate an innovation, should be in accordance with the adopter's characteristics and demands. It also means to affect their contextual circumstances to assure adoption. The interactive approach points out the pro-active role of change agent, beyond their traditional diffusion function.

We must understand *implantation* as dynamic processes which introduce innovation into any system with the purpose of promoting social change. It is a systematic institutional

effort seeking assimilation. Through *assimilation*, on the other hand, any system appropriates the implanted innovation to carry out changes seeking its own benefit.

The loss of reputation the IDM has suffered could be related, precisely, with an over-emphasis on diffusion. In this model, the success of the change program depends on the number of adopters in a given period of time. That constrains some pressure on people's rising distrust and resistance. Innovation from this point of view contributes very little to solve people's problems.

Implantation is not equivalent to diffusion. It is much more than an information task, it comprises a multiple strategy determination driven by the change agent in order to make the new idea attractive, but also to build social and material conditions for innovation assimilation. In this process, information is a necessary but insufficient condition. Implantation means competence developing for innovation management, it seeks to reduce risk and uncertainty, two side effects naturally related with novelty, and to enhance a favorable attitude toward change.

Assimilation is also not equivalent to diffusion. For IDM, adoption is "…a decision to make full use of an innovation as the best course of action available" (Rogers, 1995, p.171). Assimilation in ICM is a terminal state which includes, in addition to adoption, (use decision) the implementation (the use of innovation itself) and confirmation (consolidation of a favorable attitude toward novelty). When a new idea is assimilated we presume the decision as an indicator of change disposition. We understand that, as a consequence of the decision, the recipient system makes effective and efficient use of innovation, (according to Klein and Knight, 2005), confirming a new attitude toward the innovation. We do not think it appropriate to assume an implantation process when some of these conditions are missing, nor when we think an innovation has been adopted even if the system does not use it for its own benefit. Assimilation means making the new idea part of oneself, part of the recipient's axiological structure.

ICM includes sustainability notion into the innovation related chained processes. It is not just a confirmatory phase as was sated by Rogers (1995), but as an influence or transference of the new idea over other elements of the system itself. Stated differently, when the adopted innovation by some element of the system is generalized to other elements of the same system (or toward other systems), the innovation relevance increases and its trustworthiness rises (Roth, in press).

On the other hand, IDM rejection could be caused by the scarce attention given to psycho-social research oriented to enlighten the individual, social and cultural determinants of change adoption. Research should probably contribute with more information on the impact of cultural and psychological variables related with individual or group innovation decision processes as well as on its contextual and situational influences. We probably need additional qualified information on indicators or adoption and assimilation predictors; and surely, we should explore new ways of measuring different expressions of these dependent variables. Nevertheless, IDM research has been oriented in another direction. For example, the trend went deeper into the analysis of conditions where it was possible to get information related to rhythms and adoption rates in different social systems to understand why an innovation is adopted differently in two diverse contexts. In the same logic, people's perceptions on innovation adoption characteristics, and the relevance of mass media (individual communication versus social communication) in diffusion of innovations was studied. Finally, research was oriented to clarify the influence of leadership, education and social status on innovativeness (Rogers, 1995).

Although these studies have produced a great amount of information concerning innovation diffusion dynamics, the data obtained was of little help to initiate a debate on the following topics: information technology development, productivity and entrepreneurship, market behavior, society trans-acculturation, etc. With no exception, all these issues demand the consideration of implantation and /or assimilation of new ideas along with the incorporation of new actors in renewed scenarios.

Watching to the future, we should ask about the kind of research needed in order to go forward in clarifying the role of innovation in our society. From an ICM point of view, we should at least be interested in getting strong answers on the following issues: a) it will be important to build a valid and reliable measurement of quantitative variations of change adoption; b) we have to obtain trustworthy behavioral innovation adoption indicators, different from others already studied such as attitudes, intentions or readiness to change; c) it is also important to confirm if those attitudes and intentions to adopt new ideas are indeed reliable predictors of adoption behavior; d) we probably also have to focus on studying the psychological attributes considered valid predictors of adopting behavior (or intending to adopt); e) because of the relational and systemic nature of ICM, we have to provide information concerning qualitative and quantitative links between potential adopters and innovation impellers. Especially important in this relationship are the characteristics of change agent behavior; f) during the innovation process; culture is the context for exchange between the interrelated systems. It would be necessary, then, to study the influence of conventionality on impelling and adopting behaviors. In the same line of research it would be interesting to evaluate the inter-cultural responses to innovation initiatives.

These are some of the topics innovation research must be interested in during the future in order to provide selected answers on the role of individual and groups inducing and adopting changes, and to enlighten the psychological influences on social or economic developmental processes.

REFERENCES

Klein, K.J. and Knight, A.P. (2005). Innovation implementation. Overcoming the challenge. *Current Directions in Psychological Science*, 14, 5, 243-246.

Rogers, E.M. (1995). *Diffusion of Innovations*. New York: The Free Press.

Roth, E. (1986) *Competencia Social: El Cambio del Comportamiento Individual en la Comunidad*. México: Trillas.

Roth, E. (2000). Cambio social y decisiones comunitarias. Análisis de factores psico-sociales. *Revista Latinoamericana de Psicología*, 32,1, 9-29.

Roth, E. (2009). *El estudio Psicológico del cambio: Análisis de los determinantes de la disposición a innovar*. Cochabamba: Verbo Divino.

Re-defining Development: Can Psychology help?[1]

Erick Roth
Behavioral Sciences Research Institute
Universidad Católica Boliviana "San Pablo"- La Paz

Local development stresses the importance of new local actors' participation (individuals, groups and institutions) and their social function in a context of a new political dynamic emerging from decentralization, popular participation reforms and from a growing need for regional self-determination. This autonomic sense comes from the inefficiency of centralism, "bureaucratism" and "statism". Local development seeks self directed alternatives where poverty and exclusion reigns, and where the State is still absent. Those who postulate this model, assume that their planning and operation could be more efficient in the local context more than in the national level. Exercising social participation from the base (grassroots), social control should guarantee that decisions affecting citizens in their surrounding areas will make developmental process more democratic. In brief, local development is a model seeking maximum participation of local elements around a concerted economic project that inspires credibility and interest of majority. It is oriented to improve population's quality of life and their human development indexes.

The local value of development acquires a special interest for psychology because in this approach those personal variables traditionally neglected by more traditional economics perspectives stands out. These personal variables are the basic elements explaining the

[1] This report was published at *The Broker*, Issue 11, December, 2008.

reasons why people are ready to change or to clarify the motives that address the search for new ways to face improvement in their lives.

Therefore, personal and group expectations, subjective perceptions, acquisition of new values and beliefs also make up part of the locality. These manifestations are the elements in people's daily life not only determining individual behaviour, but the collective conscience as well, defining the actions that can lead towards development.

If culture as the conventional referent of human behaviour (the referential frame in which individual behaviour is acquires and put to practice) is one of the components that defines a local action, then the psychological subject matter must be a part of it and should contribute to explaining the developmental processes.

Social and Personal Change, Psychological Foundations of Development.

Change then, should be conceptualised as a component of social development notion. This idea implies qualitative and quantitative variations in collectives through consensual decisions and actions made by the group with the assistance of external or internal agents, in order to make improvements to their daily lives.

Development is in the first place a qualitative change because it constitutes a modification of individual, family, institutional and other group behavioural patterns, caused by planned actions from an external or internal intervening agent. It is also a quantitative change because it brings to the community life, new goods and services that were previously inexistent.

Social and personal change is in a sense, the psychological basis of the development process. This is because it guarantees the consideration of extra-economic factors such as habit formation, value modification, behaviour patterns acquisition (or elimination), interest orientations and so on, establishing new individual, group and institutional lifestyles. Social change states that the economic phenomena is not an exclusive condition of development;

its analysis must be integrated into the reflection concerning motivation, behaviour and people's value systems, who are the central actors of the process.

Social change must be understood as a planned and systematic modification of lifestyles in order to adopt innovation to increase the probability of success. It is a development facilitator closely related with dispositional psycho-social factors.

This proposal is entirely compatible with the idea of development as a combination of mental change in a given population, with intervening factors such as growth, accumulation and global product. Development implies economic, social, political, technical and psychological concerns, all being, first and foremost, human problems.

This statement leads us to think that if both elements complement each other and are necessary and sufficient to understand development, this process could only occur if both concur with similar influence. The development of a given society does not only occur due to improvements in the income per capita of its inhabitants or to the availability of better social services. It also emerges through implanting lifestyles compatible with change, expressed in a renewed value system, attitudes, beliefs and competences that could support innovative decisions and to impulse new initiatives in order to improve quality of life.

With illustrative purposes, let us consider the following example. At least half of the active Bolivian economic population is focused in the field of agriculture as a main productive activity. Nevertheless, their contribution to the National Gross Product (NGP) is still below the expectations and far enough from that expressed by other Latin American nations. This condition defines an economic sector with real difficulties to play a relevant role in development. In order to explain that problem, we use arguments such as "lack of investment" and "insufficient financial aid" to the sector, "technological gap", "weather factors", "scarce availability of markets", etc., neglecting those variables emerging from the psycho-social dynamic.

Even if we could improve our financial, technological and market conditions for the agricultural sector, this activity would not grow enough to achieve better standards of living until it could fulfil the psychological conditions to face the change.

In other words, they must deeply modify their *manifested belief system,* expressed for example in the following statements: "*the government must be the main source of solutions for the sector*" or "*the Bolivian peasant, due to the fact of being poor, must be a permanent subject of charity*".

They also must change their *attitudes*. For example, there is a general tendency to suspect that markets work against their interests: "*the markets' pricing system is unfair and merciless with the sector".* Consequently they will probably reject their terms and conditions; or "*competitiveness, high quality, private initiative or globalisation are capitalist notions that can not be permeable to the national campesino movement",* and of course, these must be avoided.

Their prevailing *values* are cultural products and sometimes could play an important role in changing decisions: for example, "*the cohesion of unions and its integrity are more important than free competition of their affiliates*" or "*the work is fine, but the fiesta is more important*".

Additionally, the state of their *skills and productive competences* are also aspects to be considered in the perspective of change. For example, financial management, technological knowledge or market negotiation skills, could not fit with the conditions prevailing in the actual world scenario of agriculture economy. Certainly, those psycho-social expressions can not be only understood through financial and technical means; they require a renewed vision of the development process, along with new competences that could project that economic sector toward new self-defined goals and proactive roles.

Finally, this approach should contribute to revise the current role of NGO´s, as well as other change agents who are permanently interested in development models concerned with people as the central protagonists of change.

After 2015: Pro-poor growth after the MDG's
Forum on-line discussion[2]

Some Comments on Well Being's Social and Subjective Dimension

Erick Roth U.
Behavioral Sciences Research Institute
Universidad Católica Boliviana "San Pablo"- La Paz

Sumner in his challenging paper "Beyond 2015" (The broker, Issue 14), encourage us to rethink the development policy and reconsider the need, nature and dimensions of MDG's from the real expectations of poor people instead of donors interest. The author points out the importance of debating on the process to promote new targets for post-MDG's period. The discussion must, of course, focus on how those targets should reflect the real needs of most vulnerable segments of societies.

Poverty is clearly related with quantity and quality of service provision and of course, with resource allocation, social equity, solidarity, and with clean and safe human environment among others well known conditions that improve people better living. Those development ingredients were conceptualized by MDG's agenda and their indicators are being periodically monitored. Nevertheless, measuring progress from the real need structure of people should be equivalent to take into account additional targets constructed from down to top; a human centered indicators reflecting local or proximal urgencies.

The human well being approach seems to be a good proposal to create new targets locally defined for at least two reasons. First, because it calls for the attention toward the subjective dimension of development, shifting the focus from "what people can do and be to how people feel about what they can do and be". Indeed, there is relevant evidence derived from psychological research informing that "what people feel (or believe) they can

[2] This brief report was published at *The Broker*, Issue 14, June, 2009. It can be found at: http://thebrokeronline.eu/en/debate/after-2015/well-being-s-social-and-subjective-dimention

do, has a strong impact on that they will actually be able to be and do" (Sumner, 2009, p.11).

What Sumner suggests is quite similar to Professor Albert Bandura, (1997) conception of "agentic" nature of behavior. This approach makes the individual agent of his own behavior through symbolic processes and self-regulatory mechanisms allowing control over thoughts, feelings, motivations and actions, substituting external by internal control. Only when the person (or the group) *believes* he (they) can produce wanted effects through his (their) actions --says Bandura-- he (they) will be capable to develop incentives for that action. In other words, persons guide their lives by virtue of their personal self-efficacy. Believe in personal self-efficacy is the key factor of human agency.

From a subjective point of view, something is a problem only if it is perceived in such a manner. This is a reasonable argument to endorse the idea of developing targets which takes into account individual or group aspirations, expectations, believes, attitudes and values; that is the subjectivity of involved people. Assuming that poverty is enhanced or maintained only by limited access to goods and services means somebody else (for example state or NGO's interested in development) have to do things to deliver services, to distribute resources, to improve environment or to recover solidarity in order to develop well being. But as was mentioned by Vaitilingam (see The Broker, 2009, issue 12), "governments in both developing and donor countries do not deliver well being; men, women and children achieve this through their relationship with others in society" (p.7), and I would add, according to their subjective priorities.

In second place, well being approach stressing on individual or group subjectivity, implicitly stands out the importance of local realities. Allister McGregor (Vaitilingam, 2009) from the Institute of Development Studies at the University of Sussex stated that well being is a profoundly social concept only achievable through the relationship of individual with others in society. This relationship is only possible at the local level and consequently, decisions concerning targets to monitoring development would rise from people subjectivity, socially determined in the near surrounding.

REFERENCES

Bandura, A. (1997). *Self-Efficacy. The Exercise of Control*. New York: W.H. Freeman and Co.

Sumner, A. (2009). Beyond 2015. *The broker*, June, Issue 14, p.11.

Vaitilingam, R. (2009) Be Well…*The Broker*, February, Issue 12, p. 7.