

Users' Unrealistic Expectations: Emergence Causes and Effects

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Abstract

This paper discusses the common causes that can be attributed to the emergence/evolution of unrealistic expectations about the capabilities of the IS/IT. Unrealistic expectations of users is an old problem that still persists. Various causes for this problem are explored after reviewing 34 studies. The causes for unrealistic expectations of users to emerge/evolve are to do with organizations, individuals, IS developers, the IS environment, and technology itself. A taxonomy of the causes that produce unrealistic expectations is presented. The causes that relate to the IS environment seem difficult to control as compared to those that relate to individuals and organizations. The consequences of the unrealistic expectations of users are "user dissatisfaction" and "systems failures". Some suggestions are made to overcome the unrealistic expectations of users.

Keywords

User expectations, Information Systems, Unrealistic expectation causes

INTRODUCTION

Information Systems (IS) are not merely technical but social systems. An IS implementation will result in organizational changes. As people or users are an essential part of organizations and IS, so they will be affected by such changes. People/users within an organization may hold expectations about the new system's performance even before its implementation. If these expectations are unrealistic these can hardly be met, so causing users' disappointment with the system.

Despite improving technology and large investments in IS development, the image of IS is disappointing. Various IS disappointments/failures have been documented and also analysed by IS researchers (BBC documentary 'TheNet', 18th May, 1994, PC Week, 1995 p. 68, Beynon-Davies, 1995; Liebenau and Smithson, 1993; Oz, 1994; Sauer, 1993, Ewusi-Mensah, 1997, 1998). Many systems are not as successful as they should be, and are considered as disappointments/failures (Lucas, 1975; Lyytinen and Hirschheim, 1987; Allingham and O'Connor, 1992). Such disappointments/failures are evidenced in systems that are under utilised, abandoned, have cost overruns, are behind schedule, do not increase organizational efficiency and effectiveness, are incapable of providing returns on investments and do not fulfil stakeholders expectations (Lyytinen and Hirschheim, 1987; Nicholas and O'Connor, 1990; Allingham and O'Connor, 1992, Oz, 1994). According to Angell and Smithson (1991) the business community is not satisfied with computing, as

their expectations are not being fulfilled. Similarly, Willcocks (1992 p. 243) says “Investments in Information Technology [IT] are large and rising, but frequently the subject of disappointed expectations”. Stakeholders’ expectations fulfilment might be a basis for achieving user satisfaction and system’s success (Ginzberg, 1981; Lyytinen, 1988; Szajna and Scamell, 1993; Marcolin, 1994).

Stakeholders are an essential part of an Information System. They can be grouped as users, management and IS developers (Lyytinen and Hirschheim, 1987, p. 262). Their role towards IS development and implementation is very important and crucial. Users are an essential part of stakeholders and their perception of failure is very related to their expectations from the IS (Lyytinen, 1988a, 1988b; Jiang et al., 1998). Their level of expectation satisfaction with the system’s objectives/goals usually indicates the system’s effectiveness and success.

The worst kind of disappointment with an IS leads to its failure. IS researchers have explored different failure reasons. These reasons can not be confined to technology alone (O’ Connell, 1994; Poulymenakou and Holmes, 1996) but human and organizational factors are observed as more common causes of IS failures (Dickson and Simmons, 1970; Lucas, 1975; Avison and Fitzgerald, 1995; Doherty and King, 1997). Various factors such as user’s resistance, users’ expectations, user’s attitude, and user’s dissatisfaction are user dependent and always affect IS success. As users are a prime component of IS so their expectations have gained considerable importance towards achieving users satisfaction and IS success. Users may harbour unrealistic expectations about IS irrespective of the resources and time constraints of its development. Marcolin (1994) states that users develop expectations about IS, but hardly communicate with the management authorized to make decisions on IS investments. These expectations can hardly be satisfied. Such unrealistic expectations have been well recognized as a problem towards achieving system success (Ginzberg, 1981; Lyytinen, 1988; Szajna and Scamell, 1993; Marcolin, 1994; Doll and Ahmed, 1983; Markus, 1983; Conrath and Mignen, 1990; Kowal, 1992). Some IS researchers considered IS failure as the “systems’ inability to meet the expectations of stakeholders” (Lyytinen and Hirschheim, 1987; Lyytinen, 1988a, 1988b; Szajna and Scamell, 1993). Magal et al. (1988) argue that users’ expectations management is one of the critical success factor for IC (Information Center) managers. Keeping in view the importance of user expectations, Szajna and Scamell (1993) made a call to explore the causes of unrealistic expectation emergence/evolution as future research. We have explored different factors from prior research that may cause unrealistic expectations to emerge/evolve. We also classify these depending on their source and causes. Our objective is to further the understanding of causes that are likely to lead to unrealistic expectations. With this understanding, users, management and developers may control unrealistic expectations.

The Notion of Expectations

Defining Expectations

User expectations are defined as beliefs and desires concerned with how a system will serve various stakeholders’ interests (Lyytinen and Hirschheim, 1987; de Abreau and Conrath, 1993). Szajna and Scamell (1993) considered it as a set of beliefs that are held by users about eventual system performance and their performance using the system. More or less all users develop their desires about a new system in terms of its outcome and

performance. These desires relate to their self-interests, tasks/jobs and organizational objectives. Such desires emerge in the form of users' preconceptions and expectations about the system. Users' expressions of 'what they want or what they are thinking to get from the system' emerge as their expectations. These expectations may be realistic or unrealistic and can not be confined to users only but stakeholders. Hartzel and Flor (1997) argued that expectations emerge due to a lack of absolute knowledge about the product [system] that does not exist at that moment. Lyytinen (1988a p. 46) considered the unfulfilment of user expectations as a basic cause for IS failure called "Expectation Failure". He defined Expectation Failure as a "gap between stakeholder's expectations expressed in some ideal or standard and the actual performance".

"No matter what the IS deliverable is -- information, applications, technology, user support -- it is critical that IS determine what it is that its users expect to receive" (I/S Analyzer, p. 4). However, the gap between what users expect and what they get from the system, or what system developers expect from management and what they found in terms of their co-operation, always appears to be problematic. The issue of unrealistic expectations has also been highlighted in prior research (Anderson 1978; Ginzberg, 1981; Doll and Ahmed, 1983; Szajna and Scamell, 1993). Other studies (Hayen et al., 1990; Madigan et al., 1998) described mismatches between 'expectations' and 'what some one gets' that also explains the expectations gap.

The Expectations Gap

The expectations gap defines 'the discrepancy between what one expects and what one gets eventually'. Anderson (1978) considered the emergence of expectations as a function of an individual's desires. He attributed an expectations gap to 1) a human's tendency to let his expectations be directed by his desires, 2) the system developers role, 3) technology hype, 4) and the ignoring of the importance of ISD (Information Systems Development) by top management. Kim (1990) stated that organizational resources constraints and management differences are major causes for IS not to deliver what users expect. Other researchers (Anderson, 1978; Doll and Ahmed, 1983; Lederer and Mendlow, 1989; 1990) also highlighted the problem of unrealistic expectations that appear as an 'expectation gap'. Factors that cause a discrepancy between "what is being delivered by the system and what users want" need to be explored and require resolution.

No doubt, the rapid development in technology is providing better options, but its limitations can not be overlooked. Overblown advertisements may raise individuals' expectations beyond reality. Such users' unrealistic expectations appear as a critical issue for organizations (Doll and Ahmed, 1983; Lederer and Mendelow, 1990), and user satisfaction (Ginzberg, 1981; Rushinek and Rushinek, 1986a; Kim, 1990; Szajna and Scamell, 1993; Watson et al., 1993). These are also cause for user disappointments (Rushinek and Rushinek, 1986a, 1986b) that ultimately affect systems success.

Shorrock (1990, p.26) says "unsatisfied expectations always were a major cause of systems development project failures and they will continue to be so in the world of end user computing". Watson et al. (1993) say that when a user's expectations exceeds his perceptions, the user feels dissatisfied. Doll and Ahmed (1983 p. 6) found that projects unable to fulfil user expectations ("what they [users] are going to get or what they are going to have to do to get it") erode user's confidence.

A gap between expected/desired and actual level of system performance may be termed as disconfirmed expectation. Disconfirmation of expectation may be evaluated by comparing the performance of the system with the developed expectations. Disconfirmation may be positive (i.e. performance exceeds expected performance) or negative (performance lags expected performance) (Remenyi and Money, 1991; Szajna and Scamell, 1993; Suh et al., 1994). A large gap (negative) indicates user dissatisfaction with the system performance. Remenyi and Money (1991) pointed out that a large 'positive' gap shows wastage of resources whereas a large 'negative' gap indicates that the system requires improvement towards its performance. These facts lead to the argument that users' unrealistic expectations are required to be aligned to narrow the gap between "what users expect and what they get" in order to satisfy the users.

Users' Unrealistic Expectations: A Problem

Users evaluate the system by how well it meets their expectations. Shorrock (1990) indicated that according to system people, user expectations were always not realistic and they demand much more than resources. Callaway (1996) said that the problem of managing user expectation about "what IT can/can't do" has been usually faced by IS managers. Similarly, Doll and Ahmed (1983, p. 11) wrote "Among the firms studied, unrealistic expectations was ranked as the number one problem influencing the success of the systems departments in these organizations". Conrath and Mignen (1990) ranked it the second highest factor among 33 that affect user satisfaction. A survey of 500 IT managers in the United States and the UK pointed out that changing user requirements, poor planning and unrealistic expectations are the most common reasons for IT project failures. The unrealistic expectations problem was ranked second on Moad's list (1998). Similarly according to the 1988 NCC members' survey the 'IT failures, high costs, and senior manager's unrealistic expectations' were the most difficult barriers faced by IT managers (Computer Weekly, 19th Nov, 1998). Lederer and Mendelow (1989) state that sometimes users' manager expect IS management to include systems that might be infeasible or have not been allocated sufficient resources.

The problem of unrealistic expectations is not only restricted to IS departments but whole organizations might be affected (Lederer and Mendelow, 1990). Suh et al. (1994) argued that mixed findings in research regarding a relationship between system usage and system performance are due to difference in users expectation levels. Very high expectations are more difficult to meet. Unrealistic expectations about what computers can do contribute to the dissatisfaction of users (Rushinek and Rushinek, 1986a, 1986b) and are a cause for systems failure (Lyytinen 1988a). Such evidence highlights the importance of user expectations, their management for user satisfaction, performance and eventually for system success. Kowal (1992) says that user expectations need to be aligned to systems behaviour for system's success.

Similarly, according to Cale and Curley (1987) users opinion about success closely reflects how their achievements match up with their expectations. Unrealistic expectations affect user satisfaction so the performance of dissatisfied users may decline. Compeau and Higgins (1995) noted that individuals with higher expectations exhibit lower performance. Some argue that a user's rising expectations may compel system developers to improve system capabilities (Schmall, 1992) but it may only be fruitful if expectations are restrained

to be realistic. User unrealistic expectations cause IS failures (Faerber and Rattiff, 1980; Lyytinen and Hirschheim, 1987; Lyytinen, 1988a, 1988b), affects user satisfaction (Ginzberg, 1981; Barki, 1988; Remenyi and Money, 1991; Watson et al., 1993; Suh et al., 1994; Hirschheim and Newman, 1988; Rushinek and Rushinek, 1986a, 1988b; Kowal, 1992; Szajna and Scamell, 1993; Ryker et al., 1997), affects system usage (DeSanctis and Courtney, 1983; Szajna and Scamell, 1993) and ultimately influences IS success (Lederer and Mendelow, 1990; de Abreau and Conrath, 1993; Kowal, 1992; Kim, 1997). Keeping in view the above background we argue that restricting expectations to be realistic may contribute towards achieving user satisfaction and system success.

The Evolution of Unrealistic Expectations

Users may hold preconceptions and expectations such as how a new system will serve their tasks, interests and organizational objectives. These expectations are related to internal tendencies and biases, and also depend upon beliefs about technology, and previous experiences with contemporary IS within or in other organizations. During the early system development phase, users may hold expectations that are far from reality. Karten (1988, p. 82) says, "Many users have expectations that far exceed what's technically and organizationally feasible". Ein-Dor and Segev (1978) said that expectations may be self-induced by users depending upon their beliefs. Some argue that sometimes expectations are only formulated to justify the efforts and investments in IS (Lyytinen and Hirschheim, 1987). According to Bozman (1990, p. 26), the rush to downsize mainframe applications led to overblown expectations from users and confusing product claims from vendors. Common causes for unrealistic expectation emergence/evolution are related to technology hype, management, users themselves, IS developers, and the IS environment (Figure 1).

Authors	Unrealistic Expectations Reasons																
	User Sophistication & Computer Literacy	Personal Needs	Lack of system knowledge	User Experience/In Experience	Use developer Communication Gap & Lack of Information	Misconception About Representative Claims & Priorities	Developers' Lack Understanding about Business Functions	Developers' Lack of Understanding about Business Services	Word-of-Mouth Friends' Co-Workers	Seeing Committee's Role	Educational Institutes	Self-Induced by Users	PC Impact/ITCI User-friendly software	User Lack Use of Education & Skill	Media Journalistic/Informatic Hype	Complacency Role	Technology Rhyth
Ginzberb (1981)				✓													
Lyytinen (1988a)			✓									✓					
Ein-Dor & Segev (1978)						✓				✓							
Ramamurthy et al. (1992)			✓														
Marcolin (1994)	✓		✓											✓		✓	
Kaye (1990)			✓														
Alter (1980)										✓							
Lederer & Mendelow (1989,1990)										✓							
Land (1982)										✓							
Ang & Soh (1997)												✓					
Ryker et al. (1997)	✓		✓			✓	✓	✓		✓		✓		✓			
Lucas (1974)					✓										✓		
Doll & Ahmed (1983)							✓			✓					✓	✓	
Anderson (1978)				✓	✓							✓					
Szajna & Scamell (1993)												✓					
Oz (1994)					✓												
Kim (1990)					✓												
Rushinek & Rushinek (1986a,1986b)				✓													
Teichroew (1971)															✓		
McBride (1997)															✓		
Iivari & Karjalainen (1989)																	✓
Alavi (1984)																	✓
Pitt et al. (1995)	✓		✓			✓	✓							✓			
Benrad & Satir (1993)															✓		
Spreng & Olshavsky (1993)				✓													
Morell (1988)										✓							
Kador (1991)														✓			
Suh et al. (1994)			✓														
Watson et al. (1993)			✓														
Hartzel & Flor (1997)		✓															
Karten (1988)										✓							
Shorrock (1990)						✓				✓							
Bozman (1990)										✓				✓			
Bikson & Gutek (1983)			✓														

Figure 1: User Unrealistic Expectations Reasons

A TAXONOMY (UNREALISTIC EXPECTATION CAUSES)

The reasons for the emergence/ formation/evolution of unrealistic expectations may be classified depending on the nature of the source and cause. These can be specified as exogenous (external to the organization) and endogenous (internal to the organization) broadly. Further, these reasons fall in to different domains related to technical/ technological, management, IS department, individual characteristics and IS environment. The endogenous factors that cause unrealistic expectations are supposed to be controllable whereas expectations that emerge due to the influence of exogenous factors are hardly controllable. Keeping in view the above mentioned facts we may classify the sources/causes that are supposed to produce unrealistic expectations as in Figure 2.(Fig. 2)

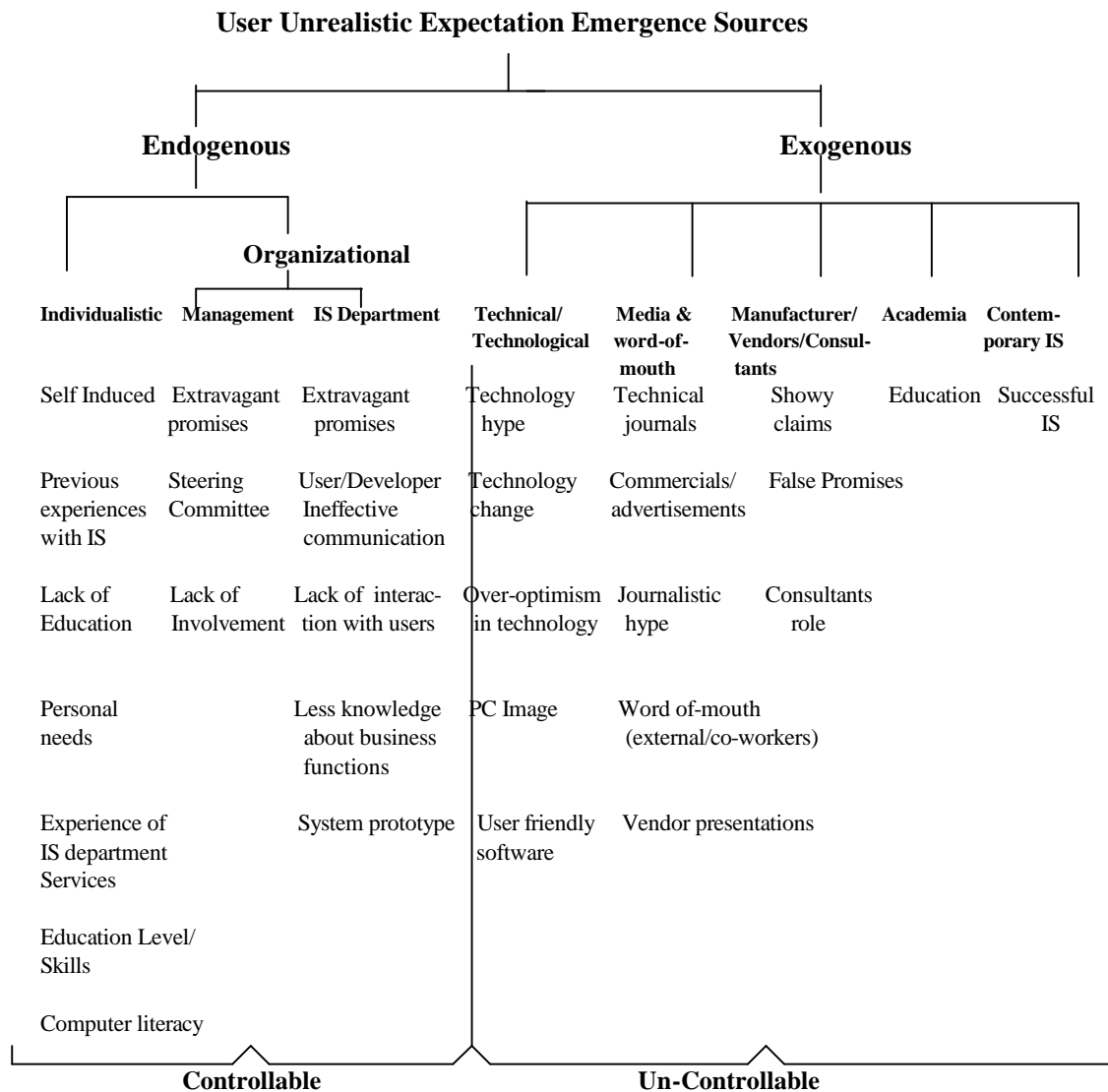


Figure 2: Taxonomy of Users Unrealistic Expectations Emergence Causes

Different causes of concern to management, the IS department and individuals are supposed to be controllable whereas others that relates to the IS environment (external factors) are difficult to control. Educating users about constraints within organizations, limitations of technology, and of developers may restrain them.

SUGGESTION TO OVERCOME UNREALISTIC EXPECTATIONS

Unrealistic expectation emergence, formation or evolution is an old but continuing problem. Its consequences are normally negative and affect user satisfaction, performance and systems success. The importance of managing user expectations has been advocated in the IS literature. For example Ginzberg (1981) indicated that the realism of user's expectations is an important determinant of user satisfaction and systems success whereas unrealistic expectations lead to dissatisfaction. Similarly, a study from Barki (1990) indicated that higher expectations usually cause a low feeling of satisfaction. The causes relating to the exogenous domain are less controllable as these are external to organization. Karten (1988, p. 82) says "Its difficult to persuade users that something isn't possible when ads suggest a product can help them do whatever they want to do—instantaneously". It looks difficult to control unrealistic expectations formation absolutely. The following suggestion may be helpful in mollifying its severity. IS department/system developers should avoid extravagant promises and help users with management orientation about systems development complexities, technological and resources constraints. User training along with an awareness about technological/technical limitations may restrict them to expect beyond/below "reality". It may also acquaint users with over-blown claims/hyperbole about Information Technology. Greater users participation in IS development may provide them with an opportunity to be aware of organizational constraints, complexities of system development, and human limitations as problem solvers. So, users' awareness about systems development complexities of large systems might change their thoughts already developed on using PC applications. User-developer effective communication may also play a vital role in managing user expectations. It may assure users 'what is going on and what they are going to expect'. Top management may play a positive role and their effective communication with users and developers may also restrict users' expectations.

SUMMARY

Users' unrealistic expectations are an old but continuing problem that affects user satisfaction and systems success. Different causes for unrealistic expectation emergence have been explored after reviewing 34 studies on the subject. Users' unrealistic expectation emergence/evolution causes and contributing sources are discussed and classified broadly. The causes that fall in the exogenous domain (external) are difficult to control whereas endogenous (internal) causes may be mollified by contribution from the efforts of users, developers and management. A number of suggestions (for example user participation, user training, and effective communication among stakeholders) may assist in managing expectations. Future research aims to find out those causes that are more influential towards the emergence of users' unrealistic expectations as compared to others.

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