Effective stakeholder management and engagement is now universally acknowledged by project management practitioners and academics as a prime critical success factor for all projects. However, many projects still encounter serious unaddressed issues and challenges in dealing with their stakeholders, especially external ones. These can have damaging consequences both for the projects and their stakeholders. A major cause for this deficiency is the evident paucity of knowledge about the underlying psychological factors which profoundly influence stakeholders to act as they do towards projects. On many projects, especially in construction and civil infrastructure development, external stakeholders collectively tend to constitute an exceedingly diverse, large and complex community and their actions may range from supportive to neutral to adversarial. These stances can change over time potentially increasing the danger level to the project if not handled properly.

Based on an in-depth analysis of available information on numerous large completed and on-going projects across the globe, mainly in construction and civil infrastructure development, this research attempts to address this serious knowledge gap. It identifies and discusses six key psychological factors – motivation and concern, expectation and perception, and attitude and behavior – which apply universally to all internal and external stakeholders (individual, organizational or otherwise) - on every project. A thorough understanding of these factors and why they influence stakeholders to adopt positions pro or contra projects is essential in order to assist project owners, planners and executors craft effective management and engagement strategies which enable the development of an amicable, ethical, mutually beneficial and sustainable relationship with their stakeholders throughout the project life-cycle. By doing so, they can maximize the opportunities for their projects while concurrently and proactively reducing or minimizing the threats to them, existential or lessor, which typically would ensue from possible stakeholder opposition to their projects.

Introduction

Stakeholders are now acknowledged as the key driving force and most important critical success factor on every project. Even if a project is successful in the narrow conventional sense in that it achieves its goal within its cost, time, scope and quality constraints, modern interpretations of project success hold that the project cannot be considered truly successful if key stakeholders are dissatisfied with the way in which it was undertaken or if significant and unresolved stakeholder conflicts and issues emerged prior to project initiation, during the course of the project life-cycle or subsequent to project completion.
However, although the criticality of effective stakeholder management and engagement is undisputed by project management academics and practitioners, and in recent years has emerged as a major thematic area of research in which a voluminous body of literature now exists, stakeholder conflicts and issues are a given in most projects and are identified in several project performance surveys undertaken over time as constituting a prime reason for ‘project failure’. Long is the list of projects which experienced cost and schedule overruns, unwanted and unanticipated scope modifications, severe reputational damage, or which were doomed to premature termination because of flawed stakeholder management and engagement by the project’s decision-makers. Effective stakeholder management and engagement is hence an imperative for projects and is at least as important as effectively managing their cost, time, scope, quality and other ‘technical’ aspects. It is also a highly complex and challenging task because it requires a good understanding of the discipline of psychology and allied disciplines such as sociology which normally do not apply to the technical aspects.

The prime objective of this research was to develop an analytical value-adding psychological framework for projects. The authors are of the view that through judicious application of this framework projects can, on the one hand, significantly reduce both the opposition and the threats they encounter from stakeholders and, on the other, simultaneously identify and to the maximum possible extent exploit the opportunities which present themselves in their interaction with them. This combination may significantly increase the likelihood of project success and may boost project effectiveness and efficiency. Understanding and managing/engaging all stakeholders fairly is, moreover, the ethical responsibility of every project and this psychological framework, which is based both on simple logic and extensive empirical analysis, provides project owners, managers, planners and executors with significant insight into the reasons why stakeholders adopt positive or negative stances and courses of action towards projects and how these stakeholders, if properly managed and engaged, can be used as a force in favor of rather than against the project.

For their research the authors analyzed information available in the public domain on over fifty high-profile, well-documented and controversial on-going and completed projects across the globe primarily in Construction and Civil Infrastructure Development (CCID). CCID encompasses a broad category of projects which include, inter alia, creation of buildings of all types, industrial facilities, transportation, energy, mining and communication systems, and mines. This research has resulted in the identification of six fundamental and inter-related stakeholder psychological ‘attributes’ which can be grouped into three pairs: motivation and concern, expectation and perception, and attitude and behavior. The authors have also determined that these attributes are common to ALL project stakeholders regardless of whether the stakeholders are internal or primary, i.e., they have contractual relationship with and/or legal obligations to the project and are consequently actively involved in it and normally have a vested interest in its success, or are external or secondary, meaning they lie outside the project’s formal direct control and who may or may not want the project to succeed depending on whether they are positively or negatively affected by the project during its life-cycle or subsequently when it enters its operational phase. Furthermore, the attributes apply to stakeholders of any type – individuals, groups, communities, organizations and even countries – and to projects in all categories, of any duration, size and level of complexity regardless where they are physically undertaken. In other words, these six attributes have universal application.

Understanding these six psychological attributes and systematically collecting data and information on them is an integral part of the complex process of stakeholder analysis which constitutes the third step in the five step iterative process of project stakeholder management and engagement which the authors
previously proposed and discussed in their paper on a proposed project stakeholder governance framework which was presented at the University of Maryland’s first annual project management symposium in 2014. Sequentially the steps are contextualization, stakeholder identification, stakeholder analysis, and design and implementation of stakeholder management and engagement strategies. As stakeholder analysis is dependent on the preceding steps of stakeholder contextualization and identification, it is crucial that the latter are thoroughly undertaken. Stakeholders obviously must be comprehensively and accurately identified before they can be analyzed. All major project stakeholder identification methods were presented and discussed by the authors in the paper on the subject which they presented at the University of Maryland’s second annual project management symposium in 2015. Identification of internal stakeholders is comparatively easier and quicker to undertake than for the external stakeholders. Internal stakeholders on a large urban construction project for instance are typically the project owner, sponsor or client, project manager and team, financiers, consultants, contractors and sub-contractors, vendors, hired labor and various involved public agencies; important external stakeholders usually include the affected community, business community, environmentalists, political entities, the media, academia, and other public agencies which are not involved in the project but have some interest professional interest in it. Failure by the project to initially identify some external stakeholders can lead to complications later.

Projects must be mindful of the practical hurdles and limitations associated with analyzing their stakeholders’ psychological attributes. Both the internal and especially the external stakeholder community can be very large and complex in terms of, inter alia, their respective missions, interests, goals, priorities and culture (for organizations), and (for individuals, groups, communities) their social and cultural diversity, economic background, objectives, awareness, education and intelligence, family upbringing, norms, values and personal or shared experiences and so forth. The stakeholder psychological attribute analysis is only as useful as the quality of information it is based on, meaning, the information must at least be accurate, precise, relevant, specific, up-to-date, reliable and actionable. Finding information which satisfies this set of criteria on all stakeholders, especially external ones, can be very difficult, costly and sometimes impossible to do. Powerful or influential stakeholders must be prioritized. The difficulties are compounded when the dynamism of these six attributes over time is taken into consideration. These can change significantly and rapidly in response to project developments and such changes may need to be reflected in a prompt and corresponding change in the project’s stakeholder management/engagement strategies. Monitoring and tracking such changes would necessitate a situational or periodic repeat of the information collection task and stakeholder attributes analysis.

The challenge of attempting to devise and implement effective and customized stakeholder management/engagement strategies on the basis of the stakeholder attributes analysis can be immense, time-consuming and costly and offers no guarantee of success. Without qualified support, for instance in the form of a team of highly skilled, competent, creative and experienced analysts or hired consultants, such activities would excessively burden project managers and teams already heavily burdened with the arduous technical and administrative tasks they typically encounter in the day to day operations of their projects.

**Project Stakeholder Attributes: Motivation & Concern**

All Stakeholders have needs and wants. Satisfying these needs and wants is a key objective for them, regardless of whether the stakeholders are individuals, groups or associations of individuals, communities, or organizations. In his famous “pyramid of needs” the American psychologist Abraham Maslow identified
several universal human needs ranging from very basic and immediate needs (e.g. food, safety, sleep) at the bottom of the pyramid to complex high-level needs such as self-actualization at its top. Wants build upon needs, sometimes constituting a refinement of them and sometimes going way above them. For stakeholders in the form of organizations, it seems reasonable to assume that their needs and wants relate to the achievement of their missions, strategic goals and ambitions they are pursuing and which define the very purpose of their existence and where they ultimately seek to be.

Projects offer stakeholders a potential opportunity to satisfy their general and specific needs and wants and stakeholders are naturally interested in ascertaining if, how and to what extent this is possible. Projects thus constitute a source of motivation for stakeholders; this is good for the project because the greater this motivation is the more likely it is that stakeholders will view the project in a positive light, and vice versa. The practical implication in project perspective is that project owners, planners and executors must carefully research stakeholder motivation and seek to align their projects with their stakeholder needs and wants to the maximum extent possible within the given project resource, time and other constraints. Doing so serves the twin objective of reducing actual or potential stakeholder opposition to the project, and the danger this may entail, while concurrently ensuring that the project fulfills its ethical responsibility towards its stakeholders who consequently derive value from it.

Stakeholders are not a homogeneous group; they embody a wide spectrum of, inter alia, economic backgrounds, education and intelligence, norms, values and belief systems, personal goals and interests and (organizational) missions, goals and objectives, and ambitions. For some the project offers greater motivation than for others. Some are closer to the project than others. Internal stakeholders are contractually or legally bound to the project and hence are actively involved in it and normally have a vested interest in its success. For these stakeholders the motivation is especially high given the considerable and multidimensional benefits they reap from their direct involvement in the project. During the project life-cycle these include, for example, remuneration from the provision of consultancy services, labour and tangible or intangible inputs, professional and personal networking, acquisition and enhancement of expertise, knowledge and experience, career advancement, image and reputational gain etc., and, after the project completion when it enters its operational phase, the financial, material and other value-adding benefits which are subsequently realized over time for the project owner, client or users and other stakeholders concerned.

For external or secondary stakeholders, which by definition lie outside the project’s formal control and are not entitled to the benefits of the internal stakeholders, gaining an understanding of their motivation vis-à-vis the project is more complex and requires a closer and more careful consideration. In their review of CCID-projects the authors have identified several fundamental motivation factors which incline external stakeholders favorably towards projects and which are briefly discussed below:

If the project serves to overcome a problematic condition or situation whose solution is widely regarded as being one of public urgency then the project is likely to be welcomed. For example, the widening of town roads (to relieve traffic congestion), commissioning of new power stations (to eliminate power outages or reduce the pressure on the existing system), initiation of urban regeneration schemes (to overcome dreariness and combat crime), construction of sewage treatment and garbage incinerator facilities (to prevent a public health hazard), opening of new kindergartens, schools and hospitals (to meet growing
public demand) and launching of a technical and vocational training initiative (to help reduce chronic youth unemployment) all fall under this.

Employment is a big motivator worldwide and CCID projects usually offer ample opportunities here throughout their life-cycle, especially prior to commencement of and during the execution phase, and after project completion when the project output created becomes operational. Job creation on a large scale for skilled, semi-skilled and unskilled labour is considered a major selling point for projects and actually is frequently used by project advocates as a ‘weapon’ to generate stakeholder support and counter opposition. In less affluent communities where unemployment is acute and chronically high, the economy is depressed and stagnant, and job opportunities are otherwise hard to come by, such projects can deliver significant financial, material, experiential and other benefits to many people over time besides ensuring a source of sustenance for their families.

Business is another motivating factor for external stakeholders. CCID projects can constitute an important source of business opportunities for the localities where they are undertaken during their life-cycles and often also after their completion. Usually they require large quantities of tangible and intangible inputs sourced commercially. Some inputs are supplied to the project formally through contractual agreement (in which case the supplying entities become internal stakeholders) while the rest are supplied informally. This happens, for example, when project employees avail regular use of the project locality’s shopping, eating, entertainment, recreational and other commercial facilities and attend local events. The departure of non-local employees after project completion can also constitute a significant loss of business for the locality, especially if the number of employees concerned is large and departure is sudden.

Completed CCID projects may subsequently prompt follow-on projects resulting in an increase in investment and commercial activity in the project localities and their environs. For example, improvements in transportation infrastructure can result in new factories, warehouses or other industrial/commercial facilities being created or existing ones upgraded with a view to benefitting from the enhanced logistical ease of moving products. The construction of a dam can encourage the development of fisheries and agro-based industries. A newly established university in a small town may prompt companies to set up offices there with a view to undertake collaborative activities with the university or to employ its graduates. Follow-on schemes like-wise can bring about significant job creation, business opportunities and other benefits for stakeholders.

Individuals and organizations actively involved in CCID projects usually require living quarters and office space located in proximity of the project site. These must be rented or purchased if the entities concerned are not from the locality or are out of commuting range. For local landlords the projects hence constitute a potential source of rental income while for local property owners they present an opportunity to sell their property more quickly and at a higher rate than would normally be possible without the projects. Premises for rent or purchase may also be required after project completion for non-locals employed in operating the functional buildings and infrastructure, and likewise for subsequent follow-on projects. Increasing demand for property for rent or purchase causes upward pressure on rents and on residential or commercial property purchase prices which constitutes a wealth gain for landlords and property owners besides giving a feeling of satisfaction to those landlords and owners uninterested in renting out or selling their properties.

Tourism constitutes a pillar of the global economy and is the prime source of income and wealth for many communities, cities and countries. Tourists the world over like to flock to places far and wide offering fun
and adventure, sightseeing and recreation, cultural learning experiences and the possibility to meet and forge lasting relationships with people whose outlook on and way of life may be considerably different from their own. For local people, meeting and interacting with tourists proffers an opportunity to learn about other places, people, outlooks on life and life-styles. Tourism thus constitutes an excellent means of inter-cultural relationship building and mutual experiential enrichment and tourism-based projects, such as the construction of resorts and infrastructure, thus tend to attract widespread support.

All stakeholders harbor a keen interest in enhancing their quality of life over time. In the contemporary context quality of life is usually viewed as ensuring access, inter alia, to a broader, superior and cheaper range of goods, services, comforts and experiences, and by providing a safer, cleaner, healthier and more happier and enjoyable environment to live and work in. Consequently, projects which transform these needs and wants into reality stand a high chance of acceptance. Typical examples are shopping malls and supermarkets, restaurants and food courts, cinemas and entertainment centers, theme parks, sport and recreational facilities, libraries, museums and art galleries, music and exhibition halls, urban regeneration schemes, and facilities producing new products and services.

Some stakeholders relish the prospect of change which CCID projects bring about along with the accompanying excitement and distractions – unlike their more conservative peers who are resistant to change and would cringe at the prospect. For them the projects are looked upon as a good idea signifying progress, development and modernism in addition to delivering considerable benefit to the many stakeholders who will utilize the newly created buildings and transportation, energy and communications infrastructure.

In the contemporary age of superlatives, projects which stand out in their class constitute a great source of pride and sense of accomplishment for many of their stakeholders. Whether the project in question is about erecting the tallest skyscraper, the longest bridge, the highest road, the largest airport and dam, the biggest theme park, or the most innovatively designed building and so forth, it usually will generate considerable attention, interest and support among stakeholders which are impressed, inter alia, by the vision, huge financial investment, and the successful overcoming of the enormous technical and managerial challenges which all converge in these projects. The pride effect can also surface in localities where CCID projects undertaken are on a comparatively much less grander scale if the structures subsequently created exceed dimensionally existing ones within the locality or in neighboring ones.

Projects evidently can go a long way towards satisfying stakeholder needs and wants and hence ensuring high stakeholder motivational intensity towards the project. At the same time on-going and completed CCID projects can give rise to serious misgivings, apprehensions, fears or worries which can incline some or many of their stakeholders disfavorably towards them. This counterweight to motivation is called Concern and the authors’ research clearly reveals that both the internal and external stakeholders may have numerous and diverse general and specific concerns in connection with CCID projects. The nature of concerns are different in each stakeholder each category and addressing them comprehensively and completely may be extremely challenging. Concerns are determined by various factors - personal, social, cultural, environmental and others – and may emerge at any point in time before a project’s formal approval and initiation, during its life-cycle or even after its completion. The intensity of the concerns may increase or decrease over time. New concerns may eventually surface. Some concerns are specific to individual stakeholders, others are collective. Some stakeholders may have more concerns than others. Some concerns are prioritized over others. Concerns tend to be context-sensitive. Failure by the project to adequately
address and overcome at the very least the more salient stakeholder concerns may prompt stakeholders to adopt courses of action having a serious negative impact on the project or its goals and objectives, in the extreme case possibly even resulting in its premature termination. Hence, it is critical for the project to comprehensively identify, monitor and carefully assess stakeholder concerns and implement (for internal stakeholders) management and (for external stakeholders) engagement strategies which aim to eliminate or, more realistically, to reduce their concerns to the maximum extent feasible. Addressing external stakeholder concerns is thereby comparatively more difficult than addressing those of the internal stakeholders for the project because these stakeholders can be very numerous and heterogeneous and information about them may be considerably more difficult to collect and analyze. Some of the major secondary stakeholder concerns identified by the authors are briefly discussed below.

Perhaps the most important concern identified on the CCID projects reviewed by the authors is the involuntary displacement of people from ancestral lands and resettlement in other, sometimes distant, locations. CCID projects stand out amongst all project categories in that they tend to have the largest people displacement effect. Dam projects in particular are notorious in this regard. According to the World Commission on Dams the number of people affected worldwide since the end of World War II stands at approximately 40 million. The mammoth Three-Gorges-Dam project in China alone resulted in the displacement of around 1.5 million people. For the affected stakeholders forced displacement carries with it heavy psychological, health, emotional, social and economic cost and more often than not the monetary and material compensation they receive by way of return falls far short and often is handed out unwillingly after years-long delays. Even for those not displaced, CCID projects can have a devastating impact on their livelihoods, access to food, and way of life. This has occurred on numerous occasions over time whereby indigenous and tribal people often are compelled to bear the brunt of the change. For this reason these stakeholders are usually fiercely opposed to CCID projects in their areas, their highly-publicized ‘David versus Goliath’ epic struggles, often violent and dragging on for years, against powerful energy and mining corporations allied with national governments.

Environmental damage is another major priority concern for stakeholders. Large tracts of land need to be cleared in preparation for CCID projects. Factories, power generating stations (especially nuclear and coal-fired ones) and pipelines cause or risk causing extensive soil, air and water pollution with damaging repercussions for the health of stakeholders with consequent high attendant cost. Nature’s pristine beauty is degraded and its fauna and flora threatened, sometimes with catastrophic consequences for plant, bird, animal and insect species whose habitats are destroyed by the land clearing.

The past and present occasionally encounter each other on on-going CCID projects. The ensuing damage to or the destruction or demolition of sites of archeological, historical or cultural significance often encounters stakeholder condemnation and stiff resistance. The construction of oil and gas pipeline projects in particular are often opposed by native tribes aghast at the notion of the pipelines traversing land ‘sacred’ to them.

CCID projects in urban localities usually cause considerable traffic obstruction, congestion and diversion in their execution phase which can extend over months and during which the risk of vehicle accidents and consequent damage, and personal injury and death increases. Commercial activity in the affected locality may be negatively impacted by restricted vehicular and pedestrian access. Most stakeholders dislike the
inconvenience, dust and dirt, noise, stress and vibrations caused by construction sites located in close proximity of their residences or office premises.

For some stakeholders building construction projects are a cause for concern because they are deemed unsightly or architecturally disharmonious with the urban landscape in which they are embedded or because they obstruct the stakeholders’ view of the natural landscape and surrounding environs. Taller structures constructed in earthquake-prone zones may arouse concern among stakeholders worried about the risk and possibility of their collapse. Stakeholders residing or working in close proximity of newly constructed or under construction buildings may be upset at the unwanted shading and cooling effect stemming from their blockage of the Sun’s light and warmth. More historically conscious and sentimentally inclined stakeholders may resent the demolition of decades or centuries old or familiar buildings to make way for modern replacement structures in their place.

Stakeholders may be concerned about the possible economic or financial loss they may incur as a result of some CCID projects. Established businesses may stand to lose out to new incoming competitors, consumers may apprehend a rise in the cost of goods and services, tenants may worry about possible rent hikes and the prospect at being forced to relocate to more affordable accommodation in outlying areas, and potential property buyers may anticipate an increase in residential or commercial property prices. Landlords and property owners may oppose certain CCID projects because of the anticipated downward pressure these may have on their property rental and sale values. Other stakeholders are simply opposed to the phenomenon of change and consequently oppose CCID projects because these are admittedly the main vehicle of effecting visible change. Gentrification projects are encountering increasing opposition for this reason.

In many places water and energy resources are scarce commodities and public access to them may be severely limited. CCID projects typically require large amounts of these resources, both while on-going and subsequently after completion when they enter their operational phase. Due to the intensified resource competition in future, stakeholders access to water and energy may be further curtailed and apprehension about this can generate considerable opposition among them to such projects.

Stakeholders frequently question the necessity of CCID projects, especially those pursued by the public sector, considering them a squander of resources which could be utilized as or more effectively on less costly alternatives. Sometimes stakeholder opposition to projects stems from their conviction that the project cannot realistically deliver on its tall promises and assurances, at other times because the stakeholders believe the project owners stand to derive enormous benefits while they (the stakeholders) are the ones who will ultimately have to live with the risks and other negative consequences which inevitably accompany such projects.

Social, cultural, ideological and religious considerations appear to play an important and evidently increasing role in how stakeholders regard projects. Some stakeholders oppose certain projects because they deem them to be morally offensive or conflicting with their personal values and beliefs, others oppose projects simply because their owners or main beneficiaries are foreign or hail from an ethnic or religious minority community whose alien beliefs, norms and rituals are considered offensive and abhorrent by the majority and whose intent in undertaking the project is looked upon with suspicion.
A major irritant for stakeholders is the lack or total absence of consultation with them by project owners, planners and designers, and executors prior to initiation of the projects and during the project life-cycles. Consultation and information inadequacies breed a feeling of resentment towards the projects by their stakeholders which come to regard them as arrogant and inconsiderate, prompting them to look upon the projects in a less favorable light than they may have done otherwise. Non-conformance to established rules and procedures by project owners, for example, failure to undertake proper environmental and social impact assessments or a thorough feasibility study, lack of transparency, irregularities in the tender or procurement processes of public sector projects and rampant cronyism and patronage in them, all serve to arouse suspicion and generate hostility and opposition among many stakeholders.

Stakeholder opposition may also surface because of the negative image, reputation and undesirable policies and practices, past and present, of the organizations and individuals owning or undertaking the projects. They may also be concerned at the projects’ inadequate or non-existent engagement towards them or harbor suspicion and skepticism about their ability or intent to follow up on their assurances and specific commitments given to the stakeholders. This is especially true for the projects of mining and energy companies in developing countries where environmental and human rights standards are lower than in developed countries, where unethical practices are rife and corruption and bribery in the political and public administrative spheres is high and often unchecked. Projects in such places are often associated with reports of strong-arm tactics and brutal harassment and intimidation methods by the project which not infrequently involves incidents of brutalization, forced disappearances and the assassination of project opponents. The influx of outsiders employed on on-going projects can also give rise to concern at the possibility that some of the newcomers are criminally inclined or that the completed project when it enters its operational phase will serve as a magnet attracting criminals into the locality.

In the post 9/11 age security has emerged as a major stakeholder concern. Stakeholders have voiced fears over the possibility of terrorists launching attacks on nuclear power stations, chemical, explosives and weapon factories, and other strategic facilities, with potentially disastrous consequences, and oppose the pursuit of such projects in their localities.

In many countries which are afflicted by civil upheaval and years-long insurgencies, many stakeholders oppose CCID projects simply because they view them as symbolizing the state and government they detest and have resorted to drastic, often violent means to prevent or disrupt these projects.

**Project Stakeholder Attributes: Expectation & Perception**

Expectation is the belief a stakeholder has that general or specific project-related conditions, situations, events, targets, objectives or other developments considered of interest or substantive importance to the stakeholder will or will not happen or be realized during the project’s life-cycle or after project completion. It is futuristic. Most stakeholders can at some future time expect to experience benefit and/or incur cost in consequence of a project. Benefit reflects the degree to which the project satisfies stakeholder needs and wants while cost reflects the problems, issues and other disadvantages the stakeholder will inevitably encounter because of it. Benefit and cost can be monetary and/or non-monetary and their occurrence spread over different time horizons in which they can manifest themselves synchronously (i.e., they both occur at or approximately at the same time) or asynchronously (i.e., cost first, benefit later, or vice versa). For some stakeholders the benefit and cost may extend throughout the project life-cycle, even for years after the project enters its operational phase, while for others these may be confined to just a single phase or sub-
phase of the on-going project. Stakeholder expectation is hence basically derived from motivation and concern and is determined in large measure by the information the stakeholder acquires about the project and which can stem from its own direct and indirect observations and information gathering, its interaction with other stakeholders, its information processing ability, and its intuition and personal experience.

Expectation is evidently very important because of its role in shaping the attitude and behavior – the last pair of remaining attributes - that stakeholders form and adopt towards projects. Assuming stakeholders think and act rationally then it is reasonable to assume that if their expected benefit from the project per se or from its constituent phases, activities etc. exceeds their expected cost - i.e., condition of expected net gain - the stakeholders will feel positively about the project and consequently develop ‘positive expectation’ about it, or vice versa, if their expected cost is larger than their expected benefit - i.e., condition of expected net loss - they will think negatively about it and develop ‘negative expectation’. Higher positive or negative benefit-cost differentials translate into correspondingly higher degrees of positive or negative sentiment towards the project. The certainty factor also plays a crucial role in the determination of stakeholder expectation. Stakeholders expecting a net gain from the project with a high likelihood will presumably be more favorably inclined towards it and develop higher positive expectations than other stakeholders which attach a lower likelihood. Conversely, stakeholders expecting a net loss with a high likelihood will presumably develop a higher negative expectation about the project and will tend to oppose it more than stakeholders which attach a lower likelihood to this happening. Many combinations of expected benefit and cost, and their likelihood of occurrence, are possible and this will determine the stances stakeholders respectively adopt towards the project.

Failure to satisfy a stakeholder’s positive expectation or showing stakeholders that their negative expectation is unfounded can have important consequences for the project. If, for example, a stakeholder develops a positive expectation that a mall construction project soon will offer him an excellent technical employment opportunity close to his home but then realizes that no such opportunity is or will be forthcoming, disillusionment with the project may set in. Any project-specific concerns he has may now start to preponderate in the absence of any other expected benefit from the project and henceforth he may oppose the project. On the other hand, a stakeholder having to commute daily past the mall construction site may develop a negative expectation that the project will cause considerable traffic nuisance while under execution resulting in inconvenience and delay for the stakeholder but then experiences the contrary because an alternative and better route is opened for traffic. In this case the stakeholder may curtail or cease its opposition altogether towards the project.

A stakeholder may develop a chain of expectations relating to different future points in time spread across the project life-cycle and beyond when the project enters its operational phase, and these expectations may change over time depending on the level of fulfillment of preceding expectations as well as on other influences. Expectation’s sister attribute Perception plays a crucial role in this regard. All stakeholders have the ability in varying degree to perceive the project reality as it affects them at any point in time and any observed disequilibrium which manifests itself between their expectations and perceptions – the ‘expectation-perception gap’ – will determine how their subsequent expectations develop. Stakeholders can expect either a net gain (i.e., expected benefit is greater than expected cost: Situation A) or expect a net loss (i.e., expected cost is greater than expected benefit: Situation B). For both situations there are four possible expectation-perception combination scenarios, namely, (1) perceived benefit and perceived cost both exceed expected benefit and expected cost, (2) perceived benefit and perceived cost both fall short of
expected benefit and expected cost, (3) perceived benefit is less than expected benefit while perceived cost exceeds expected cost, and (4) perceived benefit exceeds expected benefit while perceived cost is less than expected cost. For Situation A (expected net gain) the fourth scenario is obviously the best from stakeholder perspective because it normally offers the possibility of attaining the highest net gain and the stakeholder will consequently tend to view the project favorably which it would not do if it felt that the project is causing, or in future will cause it, either a net loss or yield no net gain. For Situation B (expected net loss) the fourth scenario offers the lowest incurred net loss which may serve to dampen its opposition towards the project.

Stakeholders who perceive they are receiving a net gain from the project will probably have confidence in its ability to fulfill their subsequent expectations, assuming they have any, and will become or remain favorably inclined towards it – provided that their subsequent expectations too are also fully, or at least in large measure, fulfilled and they have as no reason to fear experiencing a net loss in future. The same applies vice versa. Hence, stakeholders must enduringly perceive that they have received a net gain from the project so that their support for it is ensured and sustained. The implications and challenges for the project’s stakeholder engagement are thus two-fold, namely, to ensure that stakeholders develop positive expectations with a high degree of certainty towards the project, and which extend throughout its life-cycle, and that stakeholders recognize and appreciate that the project is consistently fulfilling, largely fulfilling or exceeding their expectations. Care must be taken to ensure that stakeholders do not develop unrealistic positive expectations as these will be difficult, if not impossible, for the project to satisfy and the consequence therefrom could be a large number of disenchanted and annoyed stakeholders who could pose a serious headache for it.

**Project Stakeholder Attributes: Attitude & Behavior**

Attitude is the feeling of affinity, indifference or dislike a stakeholder has about a project while it is ongoing or after it enters its operational phase. Stakeholder attitudes are not static and can change over time, sometimes significantly from affinity to dislike or vice versa. Attitude formation is complex and is a function of the stakeholder attributes motivation, concern, expectation and perception in relation to the project. Understanding and appreciating these is essential for the project in order for it to design and execute management and engagement strategies which influence stakeholders in favor of the project. Internal stakeholders are usually voluntary and active project participants and it can be assumed that they have an automatic affinity with the project which they are contractually or legally bound to pursue professionally and responsibly. However, this may not be the case if some internal stakeholders come to perceive that the project will not bring them the net gain they anticipated when they joined it or when an irreconcilable major conflict of interest with the project surfaces.

Behavior is the stakeholder’s conduct towards the project. It is the outward manifestation of stakeholder attitude and is normally, but not always, the mirror reflection of attitude. Behavior spans three categories - supportive, neutral, and adversarial - which directly correspond to the stakeholder attitude categories affinity, indifference, and dislike. Both supportive and adversarial behavior can be further subcategorized into strongly, moderately or marginally supportive or adversarial. Furthermore, supportive and adversarial behavior can be either passive or active whereby the degree of activeness may vary greatly in intensity ranging from almost negligible on the one extreme to very intense on the other. Analogous to attitude, stakeholder behavior may change over time, moving within and between categories, and going up and down
the intensity scale. It is reasonable to assume though that the more strongly a stakeholder feels about a project, regardless of whether the feeling is supportive or adversarial, the more likely it will behave more intensely towards it. For instance, some intensely adversarial stakeholders may behave very aggressively - even violently confrontational - towards the project while their marginally adversarial peers may register their opposition to it with a vigil or by publishing a negative newspaper editorial about the project. The positive or negative impact a stakeholder has on a project is a reflection of the power and influence it possesses and which it exercises through the options available to it. These options are discussed in detail by the authors in their second paper for this symposium.

Stakeholder behavior is hence a crucial performance indicator of the effectiveness of a project’s stakeholder management and engagement strategies and must be carefully monitored throughout the project. If opposition to the project decreases this implies its strategies are effective but if opposition persists or increases over time this signifies strategy ineffectiveness and the project must redesign or modify its strategies until they have the intended effect. Unlike the internal stakeholders whose behavior is generally predictable, dealing with external stakeholders is more challenging and risky because they lie outside the project’s formal control and generally less is known about them. External supportive stakeholders may have much to offer the project by way of moral support and other forms of formal and informal cooperation. These constitute potential opportunities for the project. On the other hand, external adversarial stakeholders can cause serious complications for the project or even endanger its very existence depending on the spectrum and potency of options available to it and the extent to which they are willing to exercise these options against the project. Prudent and effective engagement of external supportive stakeholders means that the project will on the one hand seek to mobilize, bolster and sustain their support for it which they can do through good expectations and perception management. Powerful or influential secondary supportive stakeholders must thereby be prioritized in order to prevent them from turning into indifferent or adversarial stakeholders which could harm the project. On the other hand, engagement must attempt to eliminate or minimize the danger external adversarial stakeholders present to the project through exercise of their options. It can do this through a careful and thorough analysis of these stakeholders which seeks to ascertain the causes of their adversity and then attempt to address all the causes fairly. Project interest is especially well served by attempting to convert powerful or influential adversarial stakeholders into supportive or at least into neutral ones. The engagement strategies which can achieve all these objectives will be discussed by the authors in a future symposium paper.

**Concluding Remarks**

The authors’ research shows that six psychological ‘attributes’ – motivation and concern, expectation and perception, and attitude and behavior - can explain the nature and intensity of relationship between any project and its internal and external stakeholders. By acquiring deep insight into these six attributes, which can only be undertaken through a systematic and rigorous stakeholder analysis, the project can reduce its major risks, existential and other, and at the same time fulfill its ethical responsibility towards its stakeholders ensuring that for both a win-win solution is attained.