

The Integrated Life Cycle Management Framework (ILMF)
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Abstract

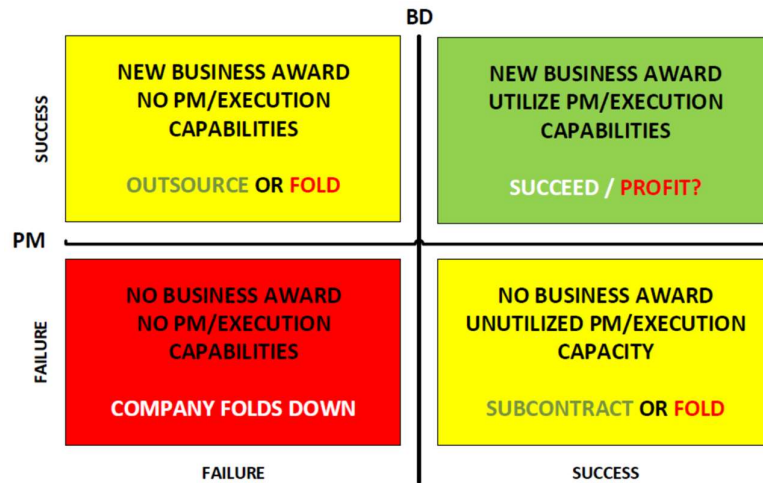
Business Development (BD) is a permanent organizational functional business unit that captures new business opportunities and manages proposals to turn them into actual contracts. Project Management (PM) is usually utilized to execute the contracts successfully, hence earning the full revenue and making profit for the organization. Winning proposals and then implementing them successfully makes clients happy and wanting to return, but to get the shareholders to be happy requires profit generation. The lack of collaboration and cooperation in a timely manner during the inception phase of projects is critical and might cause the organization to win rather non-profitable projects. Organizational leaders might be paying for the same mistake more than once. This research was conducted using a qualitative method, which is Classical Grounded Theory (CGT), which led to the discovery of the Integrated Life Cycle Management Framework (ILMF). In it, the BD life cycle is integrated with the portfolio management life cycle from inception, capture, proposal development, contract award, project execution, and handover until operations. The factors necessary for the success of the ILMF include a Management Governance Framework as the main driver, in addition to business and organizational culture, competency and knowledge management as internal factors. Supply and demand are economical external factors that affect the balance between BD and PM. The ILMF bridges the gap between different business units and functionalities, enhances synergy and collaboration and ultimately can help the organization to increase its profits.

Scope of Research

An initial literature review quickly revealed a gap in the knowledge regarding the relationship between BD and PM. Although there are numerous research on PM, and some on BD, very few considered the relationship between them. The search for literature attempts to identify any available references that cover the relationship between BD and PM. There are only few articles that address the relationship, such as Van Der Merwe (2002), where Merwe introduces for the first time research that analyzes both management and PM in an attempt to integrate strategy, structure, process, people and project for developing businesses. BD in this perspective focuses on making profits through being more client-centric, an edge offered by implementing project theory. On the other hand, there are multiple other researchers who addressed project marketing relationship with the organization, projects, customer, finance and providers (Lecoeuvre-Soudain & Deshayes, 2006; Cova & Salle, 2007; Tikkanen, Kujala & Artto, 2007; Lecoeuvre, 2009; Lehtimäki, Simula & Salo, 2009; Jalkala, Cova, Salle & Salminen, 2010; Bauers, 2014; Hempelmann & Engelen, 2015; Smyth & Lecoeuvre, 2015). Project marketing intersects with BD in the commercial aspect, but the later has a wider scope and coverage than project marketing. BD is managed via an extensive life cycle including concept, capture, proposal, contract implementation and customer relationships (APMP, 2015, Newman, 2015)). PM is extensively defined according to PMI (2013a) and OGC (2009). BD and PM are not cross-referenced nor analytically compared for commonalities and differentiators in published papers. The review is not limited to PM and extends to the study of portfolio management or portfolio of projects as well. The importance of initiating the project properly and thoroughly during inception is highlighted, along with its direct impact on project success (Kloppenborg, Tesch, Manolis & Heitkamp, 2006; Martinsuo & Lehtonen, 2007; Kloppenborg, Manolis & Tesch, 2009; Miller, 2012; Mullaly, 2014). A first-hand note shows clearly that project inception is discussed within the BD life cycle, in portfolio management and independently as well (Smith, 2005; Jim, Ray & Peter, 2008). In some cases, a phenomenon of silos that can exist between BD and PM has been exposed, which propels a counter effect on the constructive implementation of the project (Bowers, 2006; Nooravi, 2010; O'Reilly, 2010; Hansen, 2014; Ahsell, 2015). The review leads to the identification of a list of situations for the relationship between BD and PM that cultivate setting the scope of the research by focusing on one specific situation as an aim of the research: The circumstance that leads to identifying both a happy client and a happy stakeholder reflects a profit making stand by the organization (Chen, Chen, Liu & Wei, 2013). The research questions situate the direction and aim of the research, and lay the foundation for the selection of the research methodology that best serves to answer the research questions, in this case CGT. The exploratory research analyzed the four possible situations of BD and PM success and failure according to exhibit 1. The focus is set on the zone where BD succeeds in bringing on new business and PM succeeds in implementing the business, which is nominated as the Happy Client Zone. Nevertheless, shareholder's contempt comes from making profit, leading to dissect this targeted zone into four quadrants according to revenue versus cost. Only when revenues exceed the cost, organizations

do make profits, rendering the shareholders to be happy. A subset (1 of 4) of the PM-BD matrix presents that targeted zone for making profit as one of 16, which will not happen by chance and requires the full collaboration of BD and PM under the supervision of executive management (EM).

Exhibit 1 - Project Management and Business Development 4X4 Success Matrix



Unit of Analysis and Research Question

There are two related objectives that influence the selection of the unit of analysis; the social relationship (management, structure, culture, possibly others) between the three actors, implying the research of possibly a social process. The other objective is increasing profitability. Both profitability and the social relationship process might be related within a causal relationship; that is looking for the process that increases profitability, thus serving the organization. The unit of analysis is the organizational process. The research question is: How should EM, BD and PM manage and structure their working relationships in order to maximize organizational profits?

Research Method: Classic Grounded Theory

Research Aim

The researcher is looking for a solution approach via a theoretical framework to enhance or optimize the relationship between three important organizational actors who can play an effective role in the success of projects from inception through operations. Within a contracting organization, BD actors implement several activities in a continuum in order to identify leads, develop winning proposals and sometimes win profitable business for the organization (APMP, 2015). Upon award of a proposal, a contract is signed and handed over to PM and project managers in turn take on these signed contracts and manage their execution in a manner that fulfils the conditions of contract seeking to achieve profits for the organization.

Classical Grounded Theory

Glaserian or CGT focuses on the essence of any proposed substantive theory to emerge from the data and from existing literature (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1992). Since people cannot eliminate their memories or tacit knowledge, Glaser offers an advice of approaching the research with an open mind, rather than an empty head Glaser (2010). "CGT's particular value is its ability to provide a conceptual overview of phenomenon under study: what is actually going on. It focuses on the participant's perspective and gives them the opportunity to articulate their thoughts about issues with understanding, reflection and insights they consider important. CGT provides the conceptual overview with grounded interpretation, explanation impacts, underlying causes and effect and so forth. CGT provides a conceptual compliment to the descriptive finding of qualitative data analysis (QDA) and quantitative research. CGT is not superior, just complementary to in-depth description" (Glaser, 1998: 32). "Traditional concern over rigor and credibility to yield validity is built into the procedures of CGT methodology. Not to worry if following CGT procedures" Glaser (2014: 25). The constant

comparative method produces emergent patterns in which continual constant emergence from the data is self testing of their grounding in the data (Glaser, 2014: 25-26).

“CGT is about high level of abstraction, freedom, constant comparison, naturalism, emergence, trust and care about what the participants perceive and what their problems are” (Glaser, 1992: 123-124). Grounded theory is an independent research method; when combined to other methods that follow, CGT tends follow the Glaser (2007) doctrine all is data. The following four foundational concepts define CGT:

- “Discovery never verification
- Explanation never description
- Emergence never forcing
- The matrix operation” (Glaser, 2010):
 - Fit – whether the theory fits the substantive area in which it will be used.
 - Understandability – the capability of non-professionals concerned with the substantive area to understand and be capable of applying the theory.
 - Generalizability – the possibility for the theory to apply to a wide range of situations in the substantive area.
 - Control – the enabling power of the theory to allow the user some control over the “structure and process of daily situations as they change through time”? (Glaser and Strauss, 1967: 237).

Research Steps:

1. Conduct an interview and code the data
2. Analyze using constant comparative analysis
3. Use theoretical sampling to identify other interviewees and sources of data
4. Conceptualize using theoretical coding and discover categories, including core category
5. Construct the theoretical model from the categories, including properties and dimensions
6. Perform theoretical integration (literature review integrates the substantive theory with the existing knowledge)
7. Write the substantive theory

Data Collection and Interpretation

The overarching concept of CGT is that data collection, coding, comparing, analysis and conclusions occur all together within many iterations. Each time new data is introduced, categories might be realized, combined, decomposed or retired until theoretical saturation is evident (when new data does not provide substantial changes to the theoretical model). In this paper, the details are not presented; instead, two things are highlighted: the credibility of the sources and the end results. The theoretical model and framework are presented afterwards. Interviewee’s demographics/credentials:

- Number of interviewees: 20
- PhD Holders: 12 of 20 which is 60%
- Prac-ademicians: Authorities with contributions in both academics and business as practitioners: seven of 20 which is 35%, and the remaining 65% are SMEs - five with a PhD.
- Aggregate PM experience/Average PM experience (years): 462/27.6
- Aggregate BD experience/Average BD experience (years): 397/22.6
- Countries of Origin are ten, over 50% from the USA and the UK

The overarching selection criteria was to include SMEs involved in both BD and PM, with some aspect of research or consulting, while 60% have a PhD. Others have master’s degrees and other credentials. The group has several hundred years of experience, and an average of 25 years of experience per interviewee. This is all evidence of the validity of the resources from which data were collected, especially for an exploratory research based on CGT.

The interviews enabled the generation of over 500 codes, which were grouped under 32 categories. Following, the categories converged to a core category and 6 other supporting ones. The data and codes provided properties and dimensions that molded the relationships between the core and supporting categories, eventually presenting the theoretical and practical frameworks.

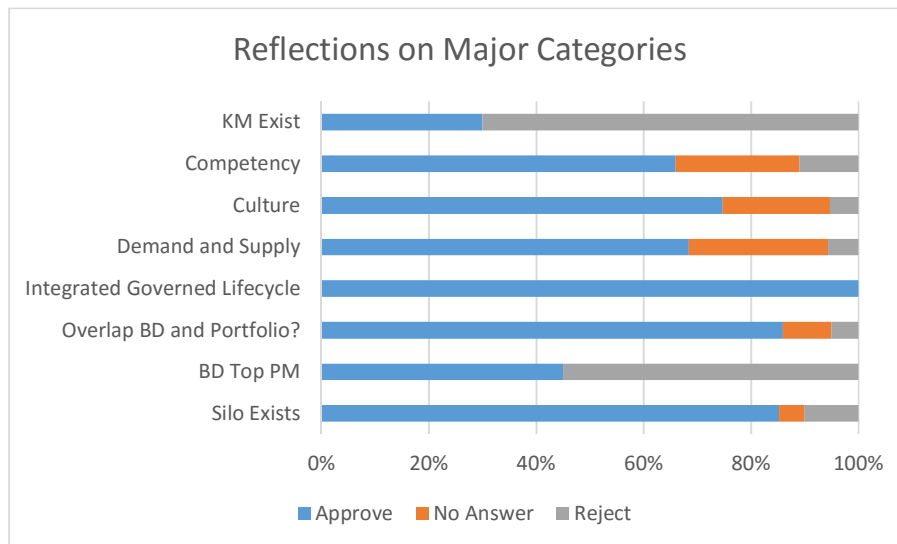


Exhibit 2 - Reflections on Major Categories

The following results shown in exhibit 2, are drawn from the transcribed interviews, presenting whether the members of the group (100%=20) approve or support the specific category and those who reject it. In some cases, no evidence for either is found in the data. To reflect on the theory, the following are the major notes:

- Over 80% of the interviewees agree there is a silo between BD and PM. One of the prac-ademicians said: “There are companies right now that have silos in every business unit”. Those who did not note any silos come from defense, aerospace, systems integration and mature enterprises that implement an Integrated Life Cycle approach.
- Each one of the interviewees without exception agreed that a governed Integrated Life Cycle approach is a viable and effective solution to enhance the relationship between BD and PM. This provides internal validity on the selection of the core category in an Integrated Life Cycle and enhances the trust in the category to explain existing situations and provide a projection for how things might occur once the theoretical framework is adopted and followed.
- Over 80% noticed the overlap between several BD and portfolio functionalities and objectives. This increases the trust in adopting an integrated approach that includes both functionalities within one coherent life cycle.
- The three categories of Demand and Supply, Business and Organizational Culture and Competency have around 90% acceptance, although 30% did not discuss these categories. This is normal in CGT, since these categories did not originate in the beginning of the research and were discussed by later interviewees.
- All the interviewees conveyed their views of KM, and only 30% saw KM as being implemented in a limited manner in organizations. This implies there is a great opportunity for further research and improvement. In fact the proper implementation of a governed Integrated Life Cycle should reflect on KM being implemented properly, but this is yet another hypothesis out of the scope of this research.
- The last statement is regarding a point of view that resonated amongst some of the interviews; making BD manage or sponsor PM. In this case the whole silo is not evident, and the Integrated Life Cycle will be quite easily implemented. Only 45% of the interviewees conveyed this solution might work, while the others did not agree.

Theoretical Model

The Integrated Life Cycle Management Framework

The triangular relationship of BD, PM and EM can affect the success and profitability of an organization positively if governed and managed properly. The portfolio of projects within the organization has an integral

relationship with various BD processes across defined phases within an Integrated Life Cycle Management Framework (of both BD and portfolio).

The following factors act in favor of successful collaborative relationship between BD and PM (exhibit 3):

1. Governance, part of the Organizational Management Framework, is the main driver for the successful relationship between BD and PM.
2. Business and Organizational Culture are internal factors that shape the relationship.
3. Demand and Supply are an external economic factor that might affect the relationship and should be taken into consideration for managing/balancing resources.
4. Competency is essential for EM to govern and sponsor, BD to master BD skills and learn PM skills, and PM to learn business skills.
5. KM is both a success factor and a beneficiary from the successful trilogy.

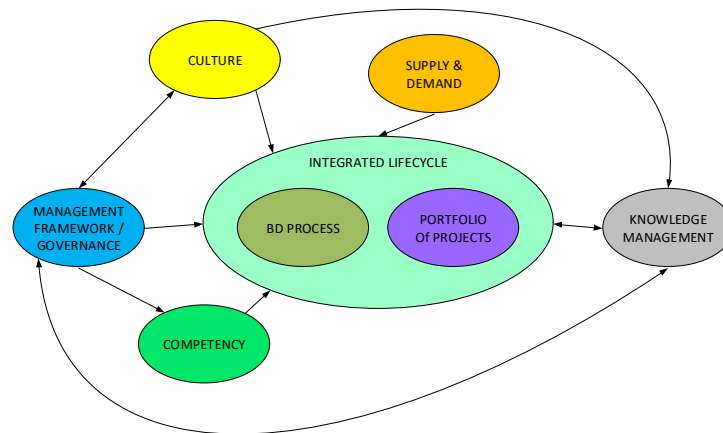


Exhibit 3 - The Integrated Life Cycle Management Theoretical Model

Whereas the model presents the theoretical relationships between the categories, the theoretical framework answers the question on the organization and relationship required between BD, PM and EM to enhance the profitability of the organization. The ILMF is composed of two independent frameworks: the BD process life cycle and the Portfolio life cycle, noting that each one starts from inception and ends in operations.

Practical Applications

The Integrated Life Cycle Management Framework is an organizational system for governing and managing different business units, permanent and temporary, including diverse roles working in numerous functionalities. Business owners, EMs and BoDs can leverage this framework in order to bridge any existing silos amongst business units that need to collaborate effectively and in timely manner for the sake of success. In exhibit 4, the BD life cycle (APMP, 2015; BDII, 2015; Newman 2015) and PfM processes (PMI, 2013b) are integrated presenting one possible way of process relationship, eventually leading to an organizational process, which is the ILMF. The ILMF is unique in that it provides a continuum, starting from strategic functions, with the respective involvement of both BD Capture Management processes and PfM Strategic Alignment processes. Following, the operational components, such as Proposal Management of BD works in harmony with the management of demand and supply of PfMP, where resource management and allocation are planned and assigned according to the business pipeline. After business award, BD focus on customer relationship management, while PfM charts projects for execution and provides health check through Performance Management Processes. The author does not claim that this model is conclusive, because practical implementation in organizations will be subject to several constraints, where the five success factors listed in the theoretical model need to be addressed.

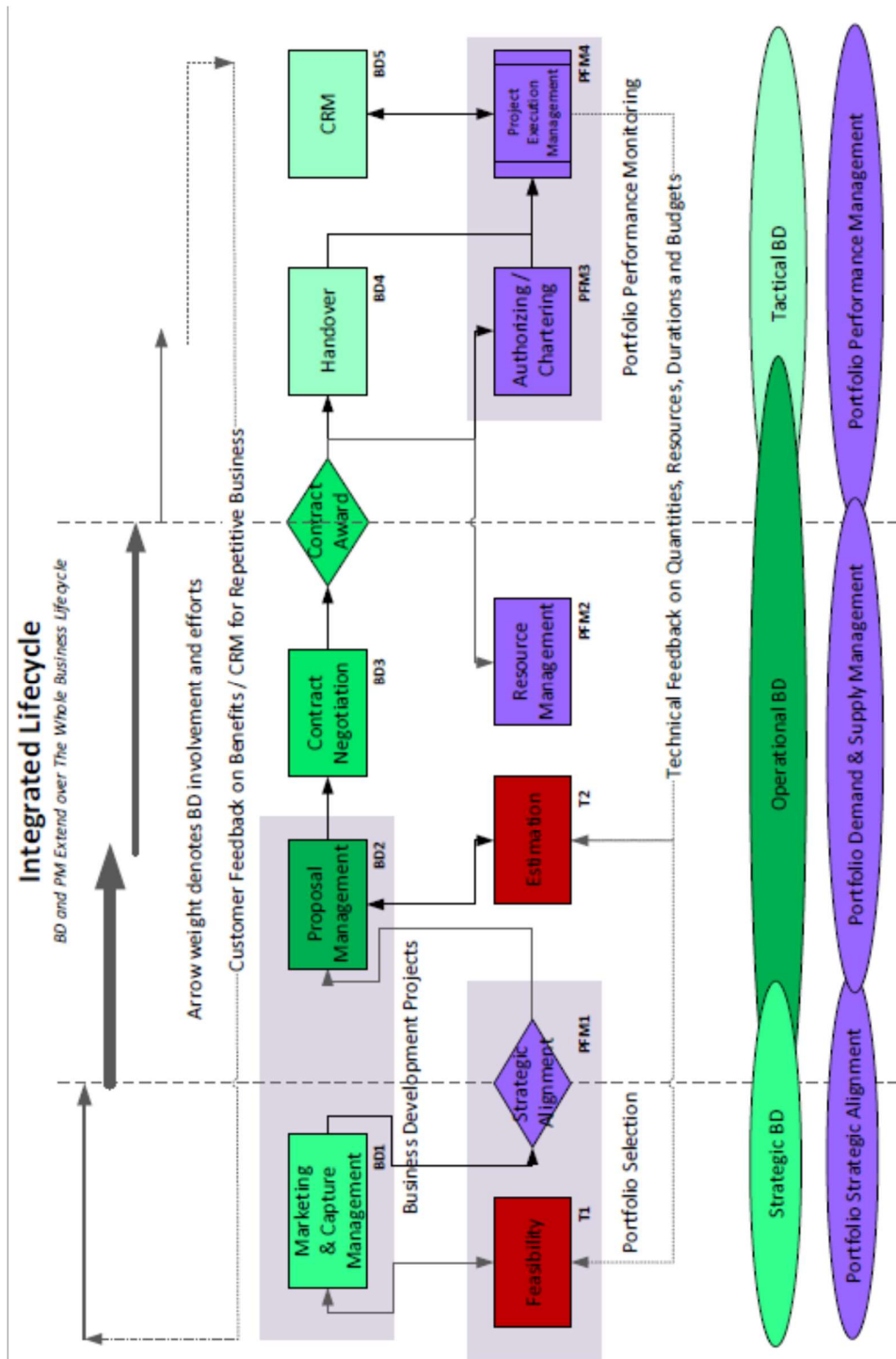


Exhibit 4 – The Overlapping of BD Life Cycle and Pm Life Cycle that Formulates an ILMF

Organizational leaders do not seek to merely win any business, but rather profitable business, such as contracts that they can – according to their existing competencies, capacity and capability, whether by their own staff or through efficient sub-contracting – implement in a profitable manner. This requires two distinct teams, each must be efficient in their own field, and both need to collaborate together as an organizational team to ultimately get both clients and shareholders happy. A company that previously suffered financial losses that were due to lack of collaboration between BD and PM changed in a radical manner into a profit-making business after the ILMF was implemented. The implementation of an organizational major process with sub-processes and

distributed ownership is not a simple system to realize and requires a formal change management program to succeed.

Conclusions

What started as a research to resolve the problem of enhancing the collaboration between BD and PM lead to an outstanding framework that exceeds the benefits of answering the research questions. This is due to the utilization of CGT, rather than setting an initial hypothesis, which steered the research to investigate PFM, which is much broader than PM, and the results is the discovery of the ILMF. The ILMF is an organizational process that integrates all functionalities and roles of an organization and resolves the silo phenomenon, which is not limited to BD and PFM, but can be easily extended to resolve silos between innovation and marketing, sales and production and other areas. Furthermore, the ILMF presents a pragmatic operationalization for the concept of Organizational Project Management. We believe this exploratory research opens the door for a wide range of applied research that enhances our knowledge and leverages the ground for strengthening the communications between PM and other management disciplines.

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