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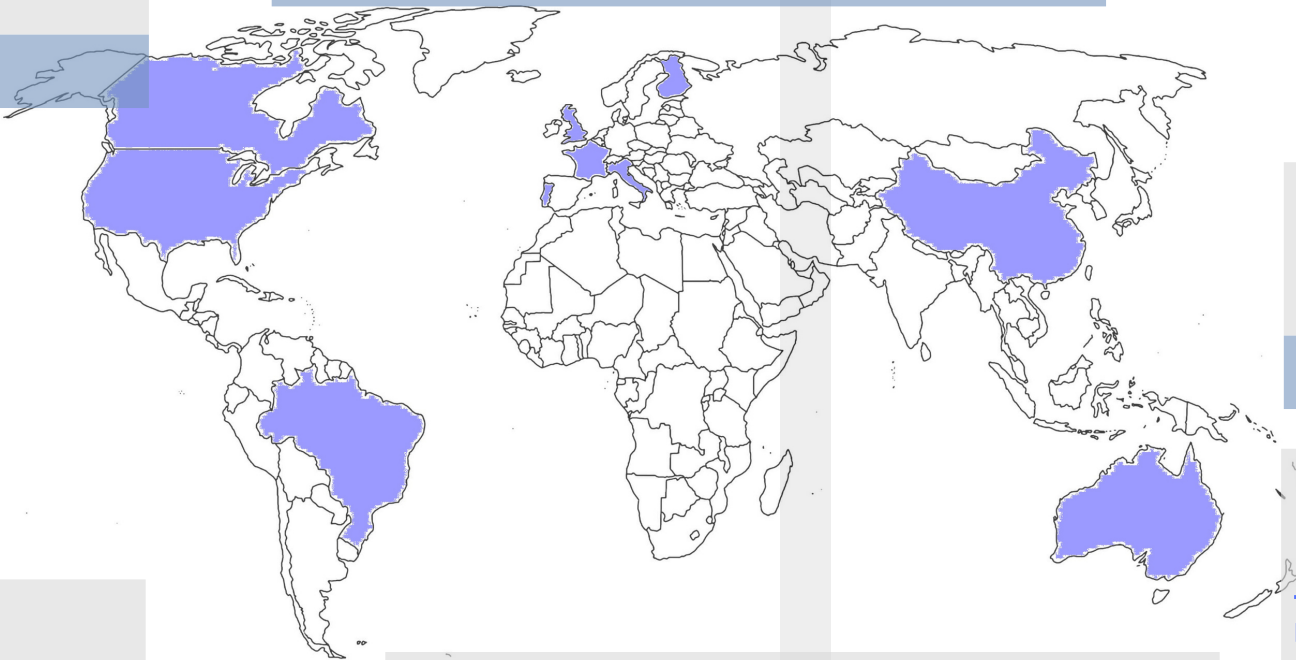
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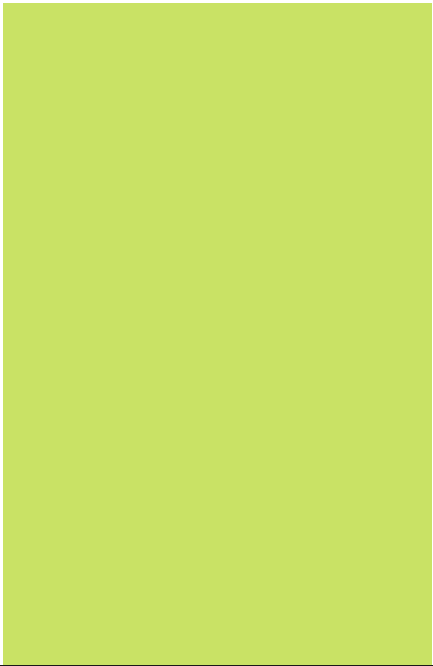


THE NEW HOTEL DEVELOPMENT PROJECT LIFE CYCLE

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DOING THE RIGHT NEW HOTEL PROJECT HOLISTICALLY, AND DOING IT THE RIGHT WAY

Abstract: Based on previous research, the authors know that nowadays, new hotel developers in Asia typically appoint interdependent – but non-integrated – separate entities during various phases of their projects, to make the business case, and to design, build, open and operate each new hotel asset. Consequently, important opportunities for integration and synergistic improvements between phases in new hotel development projects can be missed. There are inherent inefficiencies and crucial conflicts of interest in this approach, which inevitably lead to difficulties and problems during and after the project. Previous studies have also demonstrated the root causes and consequences of poorly planned and executed new hotel opening projects, where time delays of multiple months and multi-million US dollar cost overruns against the initial project budget goals, coupled with massive opportunity costs, are the norm. In this paper, the authors introduce a well-defined project framework that hospitality asset owners and developers can follow, in order to avoid these problems and develop their new hotels efficiently and effectively. It also illustrates how this framework can be used to understand project costs and shed new light on how to develop new hotels cost-effectively. There is surprisingly little research literature on these important topics. To ensure an optimal outcome is achieved, this paper advocates that all phases of this New Hotel Development Project Life Cycle must be considered holistically, in order to ensure coordinated planning and execution of project activities in each phase, and integration of the interdependencies across all phases.

1. INTRODUCTION

In an earlier study, the authors noted the strong growth in new hotel developments in China, the Asia Pacific and North America (Noordzy & Whitfield, 2014). More recently, others have noted the ongoing strength of new hotel developments, estimating that there are over 15,000 new hotel projects (or 2.45 million hotel rooms) in the current global pipeline (Dobrosielski, 2019). Given that new full service and luxury hotel rooms can cost between USD 350,000 and 700,000 each to build (Major, 2019), this pipeline potentially represents 1 trillion US dollars of capital investment. While the recent COVID-19 global pandemic has severely curtailed international travel, and it is too early to speculate, it seems clear that long-term trends will reassert themselves in coming years, albeit with some changes.

The authors' previous study also identified the many problems commonly occurring in these new hotel development projects. It was found that, compared to the initial project time plan and cost budget, time delays of several months and cost overruns of millions of US dollars were the norm for mid-scale and up-scale new hotel developments in Greater China. Subsequent studies in Southeast Asia indicated similar trends. The problems leading to these delays and extra costs were also analyzed by means of root cause analysis, and determined to be largely caused by poor project planning and execution (Noordzy, 2016, a). These results have since been confirmed by extensive anecdotal evidence gleaned from post-project reviews, targeted online surveys and interviews, as well as speaking engagements at hospitality and project management conferences, and hospitality educational institutions.

Moreover, from this earlier work, it is clear that the current status quo for new hotel development projects is one of interdependent, but non-integrated phases, whereby owner-appointed, but separate entities make the business case and design, build, open and operate each new asset. Unfortunately, in most cases, the business case and feasibility study are not developed at all, or they are not fully and consistently articulated (Noordzy, 2017). There are inherent inefficiencies and crucial conflicts of interest in this approach, which inevitably lead to difficulties and problems during and after the project. As a result, the overall project goals are unclear. For example, compared to hotel management companies, architects and interior designers often have very different perspectives about the requirements for the new hotel (The Economist, 2017). Moreover, construction companies are always focused on minimizing the risks and costs of the initial hotel construction, which often conflicts with the goal of minimizing the ongoing lifetime operating costs of the hotel (Whitfield, 2017). Finally, opening a new hotel involves totally different management systems and skillsets, compared to those needed to subsequently operate the property, but the work in the pre-opening phase is often executed by operational hotel staff with minimal project management experience.

Here, the authors follow up on this previous work, in order to propose an extensive and well-defined project framework that hospitality asset owners and developers can follow, so as to avoid these problems, and develop their new hotels efficiently and effectively.

This project life cycle for new hotels is the organizational and logical structure that underpins the delivery of new hotels. It is a conceptual model that defines the inter-related phases of new hotel projects, and provides a framework for governing the progression of the work. This new approach towards developing hotels ensures that all the project activities in all the sequential phases, and all the relevant interdependencies, are identified and planned for, in order to avoid problems and greatly reduce the risks of new hotel project failures.

From a basic understanding of the principles and practices of the discipline of project management (Association for Project Management, 2012; Project Management Institute, 2017), it is clear that the problems that can be avoided through our framework include schedule and cost overruns, scope creep, and excessive opportunity costs. It also minimizes any mismatches between the type of hotel developed and the local market demand, thus optimizing the return on investment for the new hotel and maximizing the positive cash flows from its subsequent operations. This paper focuses on defining the phases and activities in new hotel development projects, and how they are interrelated and coordinated. It also conceptually considers the relationships between the major costs in new hotel development projects and the hotel's subsequent ongoing operations to serve paying guests. Here, the authors are not concerned with the detailed work activities within each project phase, which the authors plan to consider in a series of future research studies.

There are ample bodies of knowledge and literature on various hospitality disciplines and related fields. They cover individual new hotel project phases, such as hospitality real estate development and investment, financing, architecture and design, engineering, construction, technology, and operations. However, the authors observe that the existing knowledge base is largely compartmentalized, mirroring the functional organizational structure of hotels and hotel companies, and with little consideration of how these different aspects of the development of new hotels are interrelated and how they impact each other.

This paper does not attempt to offer new insights into existing knowledge. Rather, it proposes a holistic framework for doing the right hotel projects and doing these hotel projects the right way. This paper advocates the simultaneous improvement of new hotel investment decisions, followed by designing, building, fitting-out and subsequently opening and operating hotels effectively, and then eventually disposing of these properties profitably by introducing and applying a single coherent and consistent project life cycle for new hotels.

In the authors' view, the same time-tested methods that have proven to be so effective in managing substantial projects in other fields, such as information technology, banking, telecommunications, pharmaceuticals, and construction, should be adopted for new hotel development projects. In these other fields, it has been amply demonstrated that projects must be driven by their underpinning business case, and that it is crucial to identify all phases of the project life cycle, and plan them as an integrated whole, before the project is initiated (Feng, 2015; Thomas & Mullaly, 2008).

The work involved in each new hotel project is virtually identical, which allows for the project activities and their sequencing to be standardized. Even if the levels of complexity and the length of specific work elements increase for larger, higher-class segment hotel projects (STR, 2020), the phases and sequences remain fundamentally the same (Noordzy & Whitfield, 2014). This allows us to define a single standard New Hotel Development Project Life Cycle and propose a holistic framework for carrying out projects in order to develop all-new hotels effectively and efficiently, in a consistent and predictable manner.

2 A HOLISTIC NEW HOTEL DEVELOPMENT PROJECT FRAMEWORK

Colliers International (2014) noted that hotels are “a specialist asset class requiring active and focused oversight. Hotels are dynamic income-producing assets that if bought, developed, operated and disposed of at the appropriate time would yield superior returns”. To bring about these superior returns, real estate developers are well-advised to apply a project framework for new hotel ventures. Such a conceptual model defines the inter-related phases of new hotel projects and provides a structure for governing the progression of the work (Association for Project Management, 2012).

In the case of a new hotel project, both a product and a service are created. The project life cycle for new hotels is predictive: the product and services to be delivered are well-understood, and there is a substantial base of industry practice. At the same time, the project scope, and the budget required to deliver that scope, are generally determined at a very early stage.

Project boundaries delineate the phases that constitute a project, or in other words, they specify the work that has been included and excluded. A project does not exist until it has been approved and formally authorized, by means of a project charter in the approval phase. This charter provides the project manager with the authority to apply organizational manpower and other resources to project activities. The project manager leads a team of people with the required combinations of domain and project management knowledge and expertise, to carry out all the project activities and bring it to a successful conclusion. A project ceases to exist when its final results have been delivered (i.e., transfer of the finished hotel to operations) and the project team has been disbanded.

Broadly defined, hotel operations and management involve the domain of knowledge and expertise needed for new hotel development projects, in addition to knowledge and expertise in the general discipline of project management – both are equally important.

Figure 1 sets out our proposed Hotel Asset Life Cycle for understanding how new hotel development projects should be defined and implemented. The starting point of the Hotel Asset Life Cycle is the decision to investigate the need for developing a new hotel in a particular location and the endpoint is the final disposal of the resulting asset at the end of its economic life or upon execution of the owner's exit strategy (Baker, 2014). The phases have been reflected sequentially in Figure 1, but in reality, some phases may overlap or run in parallel, whilst

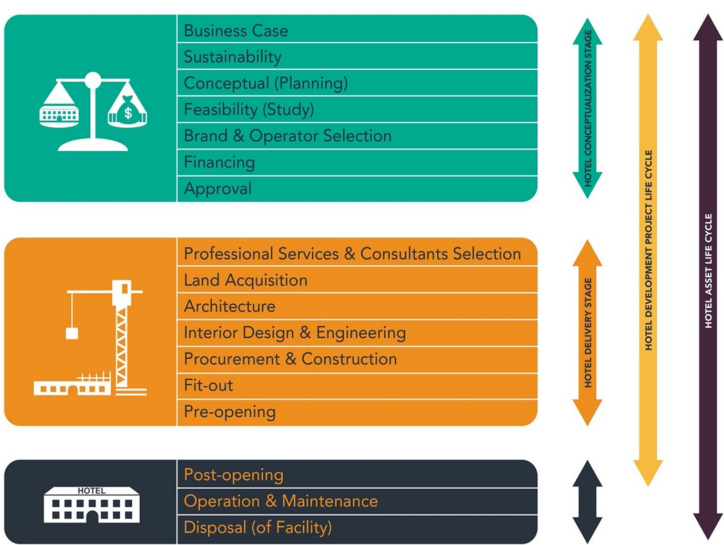


Figure 1. Hotel Asset Life Cycle.

others may require iteration. This is contingent on the type, size, location, nature, and urgency of the new hotel project.

In the authors' conception, the Hotel Asset Life Cycle can be naturally divided into 3 major stages, as shown in Figure 1. First, in the Hotel Conceptualization Stage, the market situation is analyzed, to determine the “optimal” hotel that can be built and to estimate the investments, costs, and returns that can be realistically expected over its working life. Second, in the Hotel Delivery Stage, the actual hotel is designed, built and fitted out at a particular location and prepared for opening (e.g., the operational staff is recruited and trained, etc.). Third, once the hotel is ready, the final operation and disposal stage of its life can begin, wherein the hotel accepts paying guests and is maintained until it is sold or otherwise disposed of many years later. During its long operating life, the hotel may be refurbished several times, in order to meet evolving market needs.

This paper mainly focuses on the first two stages of the Hotel Asset Life Cycle in Figure 1, which the authors call the New Hotel Development Project Life Cycle. The final operation of the life of hotels is a very comprehensive subject that deserves separate treatment, which the authors plan to consider in the future.

In the authors' experience, and based on the data the authors have previously collected (Noordzy & Whitfield, 2014), current practice for new hotel development mainly focuses on the architecture, interior design, procurement and construction, fit-out, and pre-opening phases of the Hotel Delivery Stage, and largely ignores the preceding phases. The authors concluded previously that this leads to many problems, and it is much better if new hotel opening projects are expanded to include all the phases in the New Hotel Development Project Life Cycle. Nonetheless, the entire Hotel Asset Life Cycle must be considered holistically from the very beginning – hotel operational issues are intimately related to the conceptualization and construction of the facilities.

2.1 New Hotel Development Project Life Cycle

Anecdotally, the authors hear all too often: “We have hired a [famous architect/interior designer], franchised [reputed hotel brand] and signed with [experienced third-party hotel operator], so what could possibly go wrong?” The authors respond by asking: “Who manages these service providers, and the interdependencies between their respective individual responsibilities?”

A post-project review of 635 new hotel openings in Greater China revealed that 70% of projects did appoint a construction manager (Noordzy, 2016, b). Of course, this is just one specialist consultant contributing to one of the 15 phases only, which alone will not bring about a successful new hotel project. The authors ask: “Who manages the project activities in the predecessor and successor phases, before and after construction?”

To avoid these kinds of inefficiencies, the authors strongly advocate that all phases of the entire Hotel Asset Life Cycle, from inception to final asset disposal, are considered holistically, to ensure planning and execution of project activities in each phase, and integration of the interdependencies across all phases.

2.1.1 Hotel Conceptualization Stage

This stage is the work of deciding on a suitable hotel concept and its environmental, economic and financial viability, and it should proceed in seven phases, as follows. It is summarized in **Table 1**.

Phase 1 is to determine the necessity of the new project, and estimate the current unaccommodated demand, as well as the future evolution of the market. This is documented in the Business Case. In Phase 2, an understanding and appreciation of the environmental sustainability implications of the new hotel is developed. The conceptual plan will be developed in Phase 3, outlining what the ideal hotel will look like (in terms of its scale, facilities and qualities). Phase 4 deals with determining the economic and financial viability of the proposed project, i.e., can one afford to develop the hotel? Based on the total development costs and projected free cash-flows generated from operations, the financial planner can calculate the Internal Rate of Return and determine whether a project is viable or not. The milestone is the decision as to whether or not to proceed. Assuming the project proceeds, in Phase 5, the project sponsor must examine whether the hotel will be more profitable if (a) under its own brand or under a franchised brand and (b) if self-managed or managed by a third-party hotel operator.

Table 1: Main Objectives and Deliverables – Hotel Conceptualization Stage

Main Objectives		Main Deliverables
Business Case	Studying the economic potential and determining whether there is a need for the hotel.	A high-level document describing whether or not the project is worth the required investment, based on business needs, cost/benefit analysis, and accommodate demand.
Sustainability	Identifying sustainability risks and opportunities for the short-, medium- and long-term.	- Initial understanding, based on global and local regulatory, physical, and market concerns. - A detailed document identifying all items to be incorporated into the discussions and service contracting during each subsequent phase.
Conceptual (Planning)	Defining the distinctive attributes that make up the future hotel's "brand DNA" for a competitive advantage.	A clear definition of what the hotel's brand stands for: a unique combination of style, values, differentiators, guidelines and standards, and a brand platform and promise.
Feasibility (Study)	Analyzing the economic and financial viability of the new hotel project to confirm its feasibility, based on market assessment, profit and loss projections, risk analysis, and the prevailing social and regulatory environment.	A detailed document describing what would be the ideal hotel product to maximize market penetration, performance, and internal rate of return on investment for the holding period.
Brand and Operator Selection	Determining whether the business case is best sustained by: - Brand affiliation through a franchise agreement or house brand, <i>and</i> - Management by a third-party operator through a management agreement or self-management.	An informed decision, based on a comparative study of the brand's performance vs. the house brand, and operator's performance vs. self- management.
Financing	Securing capital for the new project, based on a realistic budget that maximizes resources.	Funding for the project budget in its entirety, including the acquisition of land, construction and fitting-out of the building, legal fees, professional services and consultant fees, pre-opening activities, contingency fund, and working capital for the first 3-9 months after the opening, for debt service and operations.
Approval	Obtaining formal internal and external approvals for commencing the new hotel project.	- Formal internal approvals, based on competent economic evaluation and due consideration for adequate financing. - Formal external approvals, such as regulatory licenses and permits. - A project charter, formally authorizing the project.

Source: Derived from Noordzy, G. (2014).

Phase 6 deals with securing financing for the project in its entirety. Internal and external approvals happen in Phase 7, the final phase of project conceptualization. The final milestone of the Hotel Conceptualization Stage is the Project Charter authorizing the project manager to design, build, fit-out and open the new hotel, with agreed high-level scope, timeline, and budget.

2.1.2 Hotel Delivery Stage

This stage is the work of developing and delivering the completed new hotel project to the hotel management team and getting the premises technically, operationally, and commercially ready – simultaneously – for paying guests. It should proceed in eight phases, as follows. This is summarized in **Table 2**.

Based on the project charter, the project manager now has the authority to apply organizational resources to project activities. In Phase 8, the project manager will put together the project management team and the project team, including relevant professional services, specialists and specialty consultants. Unless the performing organization has a "land bank", the land will be acquired in Phase 9. The overall footprint and exterior and interior style of the building are done by the architect and interior designer in Phases 10 and 11. The design must reflect the business case, so that the hotel can operate efficiently and profitably. It is advisable to design and build the hotel so that it can easily adapt to changes in market needs and advances in operating technologies during the periodic renovations that will be carried out during its long operating life.

It is important to point out that the efficiency and effectiveness of ongoing hotel operations and renovations can be severely hamstrung if there are significant mismatches between the kinds of services the hotel was designed to provide and the demand in the local market.

Hotel designs that have reduced initial construction costs at the expense of subsequently increased operating expenses are equally problematic; to take just one common example, imprudently under-specifying building insulation requirements can reduce the initial costs, but this leads directly to unnecessarily high ongoing heating and air-conditioning costs that may far outweigh the initial savings.

Procurement of the building materials and construction of the building “shell and core” by the main contractor, as well as installation of the systems by the sub- and specialty contractors take place in Phase 12. The milestone is a topped-off, partially completed building ready for to be fitted out, which happens in Phase 13. In this phase, fixtures, furniture and equipment, as well as IT hardware and software are installed in all front-of-house and heart-of-house areas. The hotel must take advantage of the best available technologies and be able to adopt new technologies as they emerge in the future. Prior to the hand-over of the building to the hotel management team, all of this will be tested and commissioned, and defects will be rectified.

Phase 14 is the pre-opening of the hotel. Upon hand-over of the completed building from the main contractor to the hotel owner, the pre-opening team will prepare the facilities for occupancy by associates and paying guests. This includes cleaning, set-up, on-site training and simulation exercises. Operating supplies and equipment are also procured, and standard hotel operating procedures are defined and set in place. Once the hotel has been authorized to open for paying guests, the hotel is formally transferred to operations and the hotel development project is formally closed. Phase 15 is the post-opening phase, in which the hotel is open for business. This 30-90-day period serves to bridge the transition from project to operations. It serves to resolve any and all unresolved/pending pre-opening issues, such as outstanding equipment and supply deliveries, non-critical permits (e.g., cigarette license) and solving any “teething problems”.

Table 2: Main Objectives and Deliverables – Hotel Delivery Stage

Main Objectives		Main Deliverables
Professional Services and Consultants Selection	Selecting and procuring competent professional services, and appointing specialists and specialty consultants.	The formation of the project team to plan and execute all phases of the Hotel Delivery Stage.
Land Acquisition	Acquiring land for the construction of the new hotel project.	A legal document granting temporary or perpetual ownership of the land for the purpose of developing a new hotel project.
Architecture	Developing the overall footprint, exterior geometry, and finishes of the building, and defining the general interior layout of the building, incorporating basic zone planning to facilitate the operational and logistical requirements.	Formally approved concept planning and 3D renderings, through to detailed dimensioned construction documentation, including detailed drawings, materials specifications, and areas analysis.
Interior Design and Engineering	Developing the interior style of the building, defining the detailed interior planning, spatial geometry, finishes, furniture, and equipment, and providing environmental control for user comfort.	Formally approved concept planning and 3D renderings, through to detailed dimensioned construction documentation, including detailed drawings, material specifications, and samples for the interior design and mechanical, electrical, and plumbing systems of the building.
Procurement and Construction	Procuring building materials and constructing the shell and core, and installing the systems by the main, sub-, and specialty contractors.	A partially completed new hotel, ready for fit-out.
Fit-out and IT	Manufacturing, supplying, and installation of fixtures, furniture, and equipment, and IT hardware and software	A fully furnished, tested, and commissioned hotel, ready for hand-over to the hotel management team for cleaning, set-up, onsite training, and simulation exercises.
Pre-opening	Preparing the facilities for occupancy by associates and paying guests, and maximizing the business ramp-up.	A new hotel asset, technically, operationally, and commercially ready, and authorized to operate.

Source: Derived from Noordzy, G. (2014).

3 CONCEPTUAL COSTS IN THE NEW HOTEL DEVELOPMENT LIFE CYCLE

To give a taste of how this New Hotel Development Project Life Cycle framework can provide added value, let us conceptually consider the costs of developing a new hotel. New hotel development is capital-intensive. For example, in the United States of America, the total development cost per key (guest room) for a full service and luxury hotel room ranges between USD 350,000 and 700,000 (Major L, 2019). Therefore, it is important to understand the basic composition of these costs when endeavoring to develop new hotels effectively and efficiently.

Based on the authors' working experience and previous research investigations, **Figure 2** below provides a conceptual breakdown of the overall costs of developing a new hotel. It divides the overall project costs into eight important components and illustrates cash outflows, as the project work progresses across the phases of the project life cycle.

3.1 Costs in the Hotel Conceptualization Stage

1. Soft costs. These initial costs are to pay for the activities to confirm the market needs, conduct the conceptual planning, determine the financial and environmental viability and potential overall returns of the tentative new hotel project. In addition, these soft costs may include commitment fees to franchisor and operator, as well as licensing and permitting of the proposed new hotel project. The end point of this stage is the decision as to whether to go ahead with the project or not. Normally, these costs are borne directly by the developer, and will not be recovered if the outcome is not to proceed with the project.

2. Financing. New hotels are often developed using some form of debt financing. The cost components are the financing charges and loan repayments. Generally, financing for the new hotel development in its entirety must all be in place by the time the decision is made to proceed with the project. However, the completed hotel will not start generating income until it opens for paying guests.

Before then, any financing charges and interest payments must be included in the development project budget. Once the hotel starts producing income, the interest payments can become a normal operating expense, and the principal can gradually be repaid from operating profits.

3.2 Costs in the Hotel Delivery Stage

3. Land acquisition. The developer will acquire the land for development, unless the company has a "land bank". Even if the developer has a land bank, there will often be a title transfer to the new venture operating business entity at an agreed price. In addition to the cost of acquisition and possible change of use costs, there will be legal and notary public fees, levies and taxes to be paid.

4. Planning, architecture and design (PAD). The first step will be for the Project Manager to hire the project team, including the architect, interior designer and MEP (Mechanical, Electrical, and Plumbing) engineer. These costs are concerned with deciding exactly what hotel to build and how to build it, and producing detailed architectural and interior design drawings, with the assistance of specialists and specialty consultants, and then gaining initial regulatory approval for construction to begin. As part of quality assurance, this team will subsequently monitor the construction and fit-out work, in order to ensure that the hotel gets built as specified. By the time the building has been topped-off and the fit-out begins, the detailed interior design work will have been largely completed.

5. Procurement and construction. These costs are largely to do with buying all the raw construction materials and equipment, then building the shell and core of the hotel, and installing the mechanical, electrical, and plumbing systems, including life safety features. It is the largest cost component (Major, 2020) in a new hotel development because hotel construction and fit-out work are very labor- and material-intensive. These costs are progressively incurred as the hotel structure is built.

6. Fit-out. Once the building has been topped off and the windows have been installed (so the building is watertight), the interior fit-out begins. Costs are incurred for the purchase, manufacture, and installation of all the furniture, fixtures and equipment for all spaces in the hotel, both interior and exterior. For example, the guest rooms will be fitted out with wallpaper, carpeting, lighting fixtures, bathroom tiles, bathroom fixtures, bed box and mattress, desk, chairs, television, minibar, etc. At the end of the fit-out phase, the facilities will be tested and commissioned. Almost in parallel with the fit-out phase, the general manager of the hotel will commence the pre-opening phase, as outlined in Cost Item 7.

7. Pre-Opening. This comprises two major cost components for the new hotel project. First, while fitting out of the hotel spaces is underway, the general manager of the hotel and the pre-opening management team will plan and execute a detailed plan to prepare for the operational and commercial readiness of the hotel and its opening for paying guests. Major activities include mass recruitment and training of the hotel staff, preparation and execution of the pre-opening sales and marketing plan, finance planning (e.g., insurance and operating license applications), procurement and installation of the IT hardware and software. The two main cost items are the payroll and related expenses, and the pre-opening sales and marketing expenses. Other expenses include rental of temporary offices and training facilities, etc. Upon hand-over of the hotel by the main contractor to the hotel operator, the team will clean and set up all guest rooms and front- and back-of-house areas, and conduct in-situ training and simulation exercises. Second, the pre-opening management team will establish detailed lists for the procurement of hotel operating supplies and equipment (OS&E). For example, the guest rooms need to be supplied with duvets, bedroom linen, garbage bins, water kettles, mugs, glasses, towels, bathroom amenities, etc. All these materials and equipment must then be purchased, delivered, installed and checked. The pre-opening phase ends once the asset has been approved for guest and staff occupancy, and has been transferred to operations, marking the practical end of the new hotel development project (Whitfield, 2015).

to the overall hotel asset life cycle profitability. Finally, it must be realized that the initial soft costs can only be recovered from the hotel development budget if the project actually goes ahead, otherwise the developer will have to pay them "out of pocket".

Within the Hotel Delivery Stage, the procurement and construction, and fit-out costs are the largest, and they are often comparable in size. Like a residential property, hotels incorporate very high levels of fit-out and specialized living spaces, so that this relativity is quite understandable. Land acquisition costs can also be quite large and site preparation works can be extensive. Next in terms of size are the planning, architecture and design and pre-opening costs. Generally, the pre-opening costs are larger because there are more staff involved, and pre-opening involves purchasing the initial stock in terms of the entire hotel operating supplies and equipment (OS&E) inventory. The smallest costs during the Hotel Delivery Stage are Financing, but even here, they can be substantial, because several members of staff may be needed to coordinate payments to many sub-contractors and suppliers.

Logically, new hotel developers should be aiming towards maximizing the overall life cycle profitability of the entire hotel venture. The conceptual model above is useful in helping to identify strategies to achieve this goal. For example, the construction and fit-out costs are clearly the first target for cost reduction, because they are the largest cost components in the New Hotel Development Project Life Cycle. If construction and fit-out costs can be significantly reduced there is a direct benefit, but the financing that is needed for the project is also reduced, so there is less debt to be serviced over the whole long operating life of the hotel. Similarly, if the construction and fit-out work can be completed more quickly, without significantly increasing the costs, then the whole project timeline can be shrunk, and the hotel can open sooner. This can significantly reduce the opportunity costs in terms of financing – one makes fewer interest payments before they become an ongoing operating expense, and the completed hotel asset starts generating income sooner. Prefabricated modular construction is widely touted as a good way to speed up building construction (Bertram et al., 2019).

However, sometimes the strategy that should be adopted to maximize the overall life cycle profitability of the hotel venture is not so clear-cut. For example, being especially careful to ensure good building insulation in the hotel facilities will somewhat increase the construction and fit-out costs, but it will then substantially reduce the subsequent electricity costs over the long operating life of the hotel (because insulation reduces the heating and cooling load on the buildings, thereby reducing the electricity needed to heat and cool them). Even a cursory understanding of building science indicates that, generally, for most hotels, the operating lifetime electricity cost reductions far outweigh the increase in construction and fit-out costs in terms of the value of building insulation ("Building insulation", n.d.).

Another example is that the work done in the initial soft costs and planning, and architecture and design phases can have a major impact on the subsequent construction and fit-out and hotel pre-opening and operation costs. By "front-loading" these planning and design costs and spending more time and effort in the initial planning and design stages one can potentially (1)

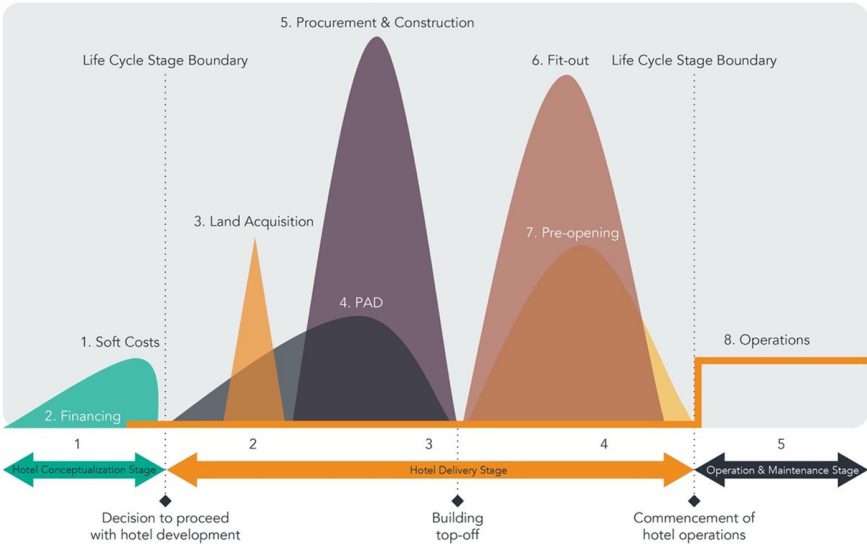


Figure 2: Conceptual Cost Breakdown and Cash Outflow Model for New Hotel Developments

3.3 Costs in the Operations and Disposal Stage

8. Operations. Once the hotel has opened for paying guests, operations are the next major cost component, which will continue throughout the entire working life of the property. Ongoing costs will include normal staff and other operating costs, debt servicing, maintenance and periodic renovations.

3.4 Implications of these Cost Structures

As illustrated in **Figure 2**, the bulk of the project spending occurs during the Hotel Delivery Stage. However, the initial soft and financing costs and the continuing hotel operation costs after the end of the development project are crucial because they set the project goals and budget and define the success of the new hotel venture. Also, the financing costs continue for much of the operating life of the property, so they eventually become an important issue in the overall asset life cycle profitability. The hotel operation costs also continue for the entire operating life of the hotel, so they are also very important

reduce the overall construction and fit-out costs substantially and (2) also considerably reduce the ongoing hotel pre-opening and operation costs. Specifically, there is a lot of research to demonstrate that prefabricated modular hotel construction methods can reduce the time needed for hotel construction and fit-out by up to 50%, and costs by up to 20% (Bertram et al., 2019). These methods require much more “upfront” hotel planning and design work. Similarly, by investing much more initial design effort into increasing the environmental sustainability of the building and incorporating more operational automation, one can greatly reduce the ongoing lifetime operating costs of the hotel. This is achieved through considerably reduced ongoing electricity, water and other costs, and substantially reduced operational staffing needs. Thus, increasing the planning and design budget and effort in new hotel development projects should provide very good long-term payoffs in many situations.

One final fairly obvious way to reduce the initial construction and fit-out costs in some circumstances is to build the property in phases, i.e. initially build a smaller hotel and then expand the property several years later. Developers generally try to build hotels in regions that are growing, so that the demand increases continually, which also tends to increase land values. In these situations, hotel operating demand and profitability grows with time, thus increasing the value of the hotel operating business and the capital growth of the land value. Phasing the hotel construction over several years means that its guest capacity can grow with the growing demand and the market trends that were estimated in the initial hotel feasibility study can be verified over time, while simultaneously minimizing the initial project investment. Moreover, the initial operating profits can be accumulated to partially offset the capital investment needed to expand the hotel, in order to further minimize the initial total investment. Initial planning for later hotel expansion can also simplify the work involved to reduce the cost of implementing the expansion, and the hotel's operating track record can make it easier to raise funds needed to do the work. Thus, there can be many benefits to constructing hotels in phases. Nonetheless, this approach is only feasible in some situations, e.g., remote beach-side resorts, and it is more difficult in other positions, e.g., high-rise city hotels on constricted sites. Modular, pre-fabricated construction should streamline and speed up this kind of hotel expansion project.

There is much research still to be done in terms of analyzing new hotel development project costs and their interactions with the subsequent hotel operating costs. This important work in understanding the overall lifetime profitability of a hotel venture can only really be undertaken by considering all the costs and incomes holistically, over the long operating life of the hotel, from its initial conception until its eventual disposal. This will be investigated further in the future.

4 HOLISTICALLY MANAGING NEW HOTEL DEVELOPMENTS

According to extensive data previously collected and an abundance of anecdotal evidence, the hospitality industry now largely sees new hotel development projects as mainly

spanning the architecture and design, construction and procurement, fit-out and pre-opening phases of the New Hotel Development Project Life Cycle, as presented in this paper. Moreover, where hotel management companies are involved, their work is currently largely a peripheral involvement in the feasibility analysis (to justify the hotel management or franchise agreement), architecture and interior design (primarily for brand standards compliance), possibly some involvement in hotel fit-out procurement (as a revenue generator) and the pre-opening activities (as a contractual obligation). All of this work is now largely done by corporate and hotel operations staff, who mostly lack training and understanding of project management concepts, and do not have any appreciation of the interdependencies between all the project phases. The authors have previously found that this approach is flawed, and it is the genesis of many of the problems and causes of delays and cost overruns in new hotel openings (Noordzy & Whitfield, 2014).

Here the authors have presented an alternative conceptual approach and framework for new hotel development projects, that addresses and resolves these problems and issues in a holistic and proactive manner. It provides significant new insights into how hotel developers can carry out new hotel development projects more efficiently and effectively and achieve better project outcomes. In the past, the authors have seen that a flawed new hotel concept and poor coordination during design, construction and fit-out, and pre-opening activities mostly leads to delays in technical, operational, and commercial readiness of the hotel prior to opening, and sub-optimal subsequent operation of the hotel (Noordzy & Whitfield, 2014). By adopting the New Hotel Development Project Life Cycle, future hotel developers will reduce the probability and/or impact of negative risk, in order to optimize the chances of project success.

In our view, to ensure that an optimal outcome is achieved, the New Hotel Development Project Life Cycle must be holistically implemented as a single, integrated new hotel development project. Moreover, focusing on the following key issues can greatly help in achieving this goal.

Leadership and Organization. It is crucial for hotel owners to appoint a suitably experienced and qualified project manager from the very beginning of the New Hotel Development Project Life Cycle. This general project manager can then oversee the development of the business case and coordinate the selection and appointment of the entire project team, including all professional service providers and consultants, and set the scope and nature of their roles within the project. In this way the project manager can ensure that their efforts are effectively coordinated without duplicated efforts and with streamlined work and handover processes throughout the New Hotel Development Project Life Cycle. The project manager must be well versed in the principles and practices of project management, as well as having a detailed knowledge and understanding of the whole Hotel Asset Life Cycle, from the initial business case to the final disposal of the property at the end of its long working life. All team members also need to understand both project management and their respective specialties within the New Hotel Development Project Life Cycle.

Goal Setting and Planning. Most importantly, the project manager and the entire development team must understand that the overall goal for a hotel venture is to maximize profitability over the long life cycle of the asset; it is not to build and open a hotel cheaply. The initial business case and feasibility study, and the subsequent hotel operations must closely inform the actual design and construction of the hotel and they must all be consistent with seeing the hotel as a long-lived entity that closely matches the needs of its local market and can adapt to changes in the local market over many years. The whole new hotel development project must be carefully planned, with clearly defined goals and performance measures for each project phase and activity. As the different project phases are completed, the skill-sets needed among the team members change greatly, so that new team members need to be brought on board and team members who have finished their contributions can move onto other projects. These team changes must be carefully coordinated, and the information and materials passed from one phase to the next must be well defined and easily understood.

An essential part of project planning is to identify and manage project risks. Based on past experience with similar projects, it is often not too difficult to identify the things that can go wrong and put initiatives in place to minimize the chances of such problems occurring in the current project. For example, there is a well-known conflict of interest between property owners and the construction companies that build their properties, whereby the construction company has no incentive to spend extra money on construction, in order to reduce subsequent operating costs, because they do not share the benefits. It is quite possible to build subsequent operating cost reduction incentives into construction contracts, so as to avoid this potential problem entirely.

The interrelationships between the important costs incurred during the development of the new hotel and over the long working life of the property must be understood and considered holistically and strategically when specifying the actual hotel to be built and how it is to be built.

Communications, Coordination and Adaption. By its nature, each new hotel development project is unique and requires coordinated efforts by a broad range of experts. Thus, excellent communications and coordination within the whole project team and all project stakeholders is essential. Moreover, it is inevitable that some unforeseen problems will emerge during the process, and these can only be identified and dealt with quickly through close and effective communications. All team members and stakeholders must also be flexible and able to adapt and compensate their work and contributions, in order to bring the project to a successful conclusion.

5 CONCLUSIONS

The authors' earlier research showed that current approaches and practices to new hotel development are severely flawed and result in the endemic time delays and cost overruns currently seen throughout the industry. The authors firmly believe that the current processes and practices of new hotel development must change and that going forward, the industry cannot tolerate the current problems and inefficiencies.

This paper presents a well-defined framework for carrying out new hotel development projects, that addresses and resolves the current problems by strongly emphasizing a structured, holistic approach to managing these projects according to the well-proven principles and practices of the discipline of project management. By following our New Hotel Development Project Life Cycle, hotel developers can systematically create the right hotel to satisfy the market needs and meet their financial goals for the life cycle profitability of their asset and the venture as a whole. They can also strategically manage how their investment funds are spent and ensure that project work is carried out effectively and efficiently, while minimizing the risks of time delays and cost overruns. Moreover, they can more effectively balance their initial capital investment in the hotel with the ongoing operating costs of the property over its long working life, in order to maximize their overall lifetime investment returns.

This paper also identifies several potentially fruitful avenues for future research, including refining our understanding and standardizing of the detailed work involved in each project phase of the Hotel Development Project Life Cycle; better understanding as to how the work in each project phase impacts the other phases; further developing the conceptual model of the Hotel Asset Life Cycle; examining the actual and potential impacts of adopting modular and prefabricated construction methods to new hotel development; investigating hotel sustainability and automation, and phasing hotel development projects over several years, to better match growing market demands.

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THE NEW HOTEL
DEVELOPMENT PROJECT
LIFE CYCLE

Doing the Right New Hotel
Project Holistically, and
Doing it the Right Way