5. BIMC and enterprise environment

5.1 BIMC supports the business

In this chapter, the various capabilities are translated within the enterprise in specific processes, areas of attention and those responsible within and outside BIM coordination office (BIMC) are connected in a learning cycle (the PDCA cycle) so that BIMC can achieve its objectives. BIMC can only operate within properly defined parameters.

BIM Coordination (BIMC) is needed to support the BIM Board/ ISSC and coordinates the activities of the various Executive Committees with those of the ISSC and also acts as guardian of the data elements of the IS strategy. We use the DID framework, to describe, position and provide tools for the design of BIMC for the information assets of the enterprise. The DID framework has been set up to effectively shape BIM within an enterprise with the aim of better use of information and technology in the enterprise and therefore higher returns. BIM is concerned with **effective** business information management. Think portfolio and program management in line with the enterprise strategy; design of information services that meet business needs; agility, transformation and improvement of business information services; selecting the right technology and ditto technical infrastructure plus deploying the right competences at the right time. No less!

Within the enterprise BIMC fulfills the role of the strategic and tactical professional representation of the business that coordinates the business information services to achieve desired business outcomes, compliance with any related contracts and the control thereof and controls costs where applicable.

BIMC should therefore be responsible for data demand bundling and is the delegated client. The term is ‘delegated’, because someone from the board or general management is always responsible for the supporting services and will have mandated this responsibility to BIMC.

BIMC is positioned between the customer enterprise (business) and the supplier(s), internal and external. It is the intermediary who, as a delegated client, ensures that the client's needs (or the needs of the business) are well served by clear formulation of the needs and the translation thereof into purchased and delivered information services.

The core of BIMC is managing the organizational capability of the enterprise so that the correct specification for an information service can be drawn up; the value is actually obtained as a result of the benefits that the information service provides in implementation. The scope and nature of resources that are available internally (or that originate externally but are managed internally) are necessary to both improve and perform day-to-day activities.

With regard to digitization, the data, information and knowledge necessary for the enterprise almost certainly will arise from many sources and a capability to manage and control the entirety is needed to be effective. The function of BIMC is necessary particularly where outsourcing has taken place and data is shared, so that expertise about the business information (and business information services) within the enterprise is retained.

The ability to properly execute BIMC comes about through a combination of roles such as service manager, SLA manager (and or eXperience Level Agreement (XLA) Manager), contract manager, relationship manager, customer management; often the relationship role is an essential part of one of the other roles, and given the importance of data, it is recommended that it is the role of BIMC.

Sometimes the combined activities of BIMC are known as ‘operational management’ as opposed to ‘technical management’. We prefer Business information management coordination on behalf of the business/line of business. But call it Elvis if that suits you.

Commodity knowledge is at the basis of a successful result. Space for the inventive and creative role and involvement of people in the mix of the various ingredients is essential here. The quality of the employee is paramount. The use of generic components is less a law and more as a guideline as the office takes shape.

Several perspectives explain the tensions that arises because of the stakeholder’s interest. Coordination of BIM should include management of the points below:

1. BIMC people
2. Understand size of BIMC
3. Understand tension between supply and demand
4. Understand business management
5. Understand policy innovation and advisory management
6. Understand contract management
7. Understand performance management

5.2 BIMC and domain dependencies

BIMC maintains various relationships with the various parties (external and internal). Sometimes these are instrumental relationships, such as contracts or work agreements. Other relationships can also be identified, such as social, capability, dependency and negotiation relationships. The nature of the services that we discuss here is often secondary and generally supportive of the value chain. A characteristic of this type of work is that it is primarily a cost center for the enterprise. The choice to translate needs into a concrete range of products and services therefore mainly concerns the use and distribution of scarce resources. The BIMC team is therefore looking for the optimum balance between wishes and needs, and the services available in the market. But, as discussed, the wishes and needs of business, users and executive management are not necessarily the same. Users want maximum support, regardless of the costs. Business management will explicitly look at the costs in relation to the quality of service. In addition to the realization of the enterprise objectives, management or general management also has other interests in mind, such as social or political interests. This means, for example, selective cost reduction or standardization.

The service providers do of course maximise profit. It is up to BIMC to coordinate supply and demand between these, sometimes conflicting, interests in such a way that everyone is sufficiently satisfied (this is known in the business literature as 'satisficing'[12]. Steering exclusively towards cost reduction will ultimately frustrate suppliers, which makes them inclined to focus primarily on minimizing their costs. Allowing users and buyers the free choice comes at the expense of the desire for cost control and standardization. Ultimate standardization sometimes disrupts the ability to develop new markets, so that users and customers become dissatisfied. This means that BIMC must balance between sometimes equal and sometimes different interests. In practice, this translates into a mixed approach to relationships: on the one hand demand or customer oriented, on the other hand by acting as the guardian and conscience of the enterprise for the services that fall under its responsibility.

[12] Simon, HA, (1959), Theories of decision-making in economics and behavioral science, In: American economic review, vol. 49, issue 3 (June 1959), pp. 253-283.

Different measures are specified within each DID-domain that BIMC can use to maintain and safeguard the dynamic balance.

5.2.1 Domain: Governance

Remember that the domain that is formed by the relationships between BIMC, its business/LoB and the executive board is of course Governance. The content of the activities within this domain are of a strategic nature. It concerns the policies and agreements that arise from the enterprise goals, legal frameworks and financial scope and that provide guidance (advice, information or guidance) for the development of services in the longer term. Think of architecture, agreements and sourcing policy, portfolio management and policy objectives. BIMC must also be accountable and draw up annual operation plans and investment plans. The role of the team coordinator in the management office focuses on these topics; this role monitors the effectiveness and efficiency of the service.

5.2.2 Domain: Strategy

In this domain the relationships between business/LoB, management and suppliers that relate to the agreements made between functional needs and the range of products and services based on price, time and quality are maintained. This means that BIMC is aware of current (and future) data needs and has translated those into delivery agreements with suppliers. This is done with support from the Purchasing department. BIMC maintains regular contact with the decision-makers in the enterprise with relationship managers or customer managers to identify the needs.

Several consultation bodies can be set up for an effective process. Consider, for example, consultations between suppliers and BIMC to discuss SLAs or the quality of the service (performance management). Periodic account conversations with relationship managers are advisable between customers and BIMC, as well as setting up and organizing a separate user platform for large-scale users. Consultation between suppliers and business is also desirable here to create short lines of communication, to obtain clarity and to maintain clarity about the actual need for functionality. The contractual, financial and legal relationships regarding data should continue to go through BIMC at all times.

5.2.3 Domain: Improvement

The domain is predicated on the relationships that BIMC has with customers and users and the management as well as the designers/builders of services (internal or external). The quality of the service is a result of the agreements that BIMC makes with business and suppliers, and the method of delivery. The board mainly benefits from the fact that employees can perform their work optimally. Tension can arise because users are not directly confronted with costs. That is why operational users will be more inclined to maximize their wishes and requirements. Certainly, in times of cost rationalization, the discrepancy between wishes and needs and available options will increase. This makes it all the more difficult for BIMC to influence user satisfaction more directly.

Business satisfaction can however be influenced in a number of ways. In the first place, ensure that the service provided by suppliers is good. Secondly, BIMC can regularly manage satisfaction surveys or customer or user panels. Thirdly, it can offer training programs. Fourth, BIMC can actively involve customers or users in pilots or innovative developments.

5.2.4 Domain: Operation

In this domain the relationships between business/LoB, suppliers and the management office that focus on the actual delivery of the services are maintained, meaning that it also concerns the actual implementation of agreed projects, (and changes) for which tenders have been issued. This also means that the products and services to be supplied are clearly identified and are recorded in a product and service overview. Service management, through use of a service desk/help desk, is the interface through which the supplier ensures that complaints and reports are channeled and resolved. Processes and procedures are to be properly documented and transparent. BIMC is kept informed through reports afterwards. Sometimes BIMC performs audits or manages them. Multiple forms of consultation monitor the operational process, for example operational consultation between business and suppliers and regular progress consultation between suppliers and BIMC.

Following these steps helps to make the responsibilities and the roles in a process concrete. BIMC will work with stakeholders to ensure appropriate consultation about major processes. Depending on the nature of the consultations, these may take place frequently. An example of the various consultations is shown in Figure 5.1.

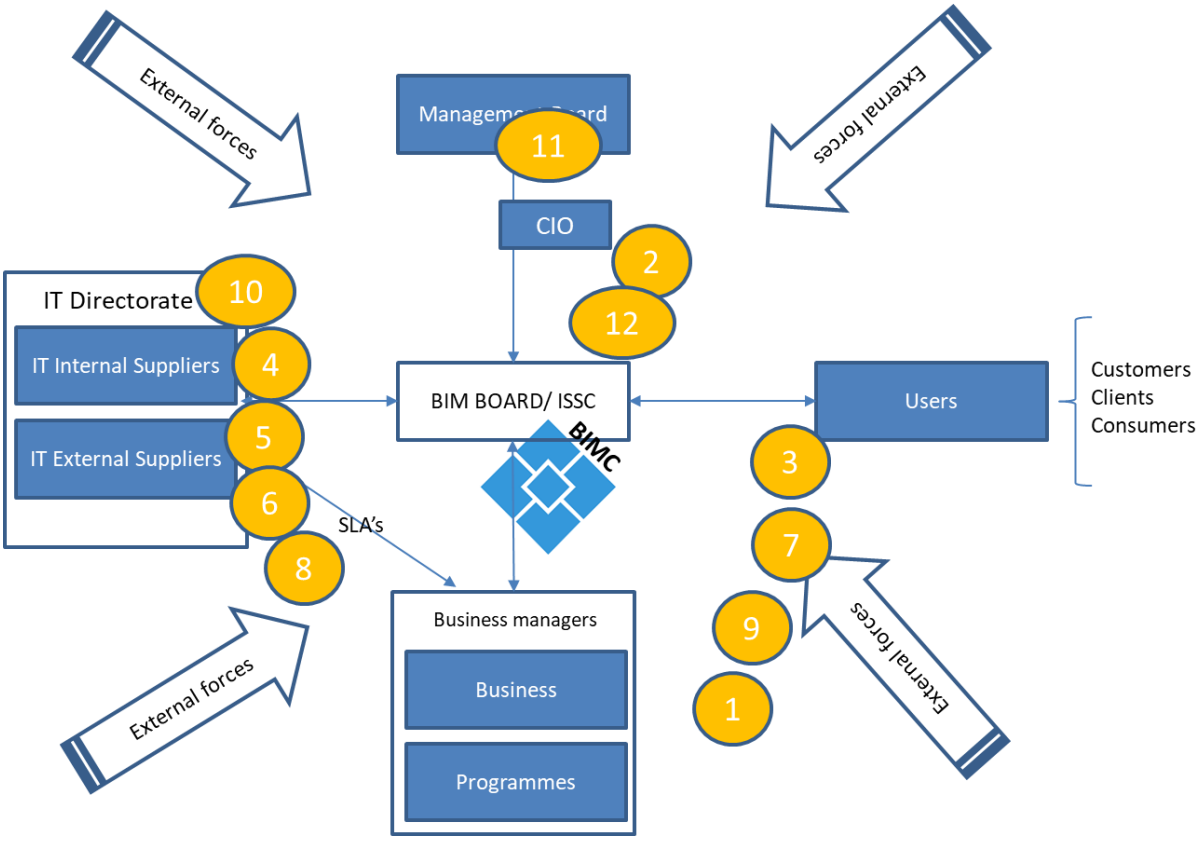

Figure 5.1 Examples of consultations between BIMC and stakeholders

- Consultation 1: Regular consultation with opinion leaders and large groups of users about the quality of current and future support will be needed. User panels can also be organized or individual conversations can be scheduled.

- Consultation 2: Administrative consultation between BIMC and general management (with the portfolio holder from the general management or owner) on the basis of annual plans, developments, etc., for example three times a year.

- Consultation 3: Management and control of technical / functional services between BIMC and business, sometimes with the management of the most important service providers. Consultation on substantive developments and the consequences for the enterprise, for example twice a year.

- Consultation 4: Management and control of the financial agreements between suppliers and BIMC. For example, once a year.

- Consultation 5: Management and control of supplier performance. Consultation between suppliers and BIMC about performance management (reports and such), for example once a month.

- Consultation 6: Management and control of proposals, RFCs and handling. Consultation between the account management of suppliers and BIMC about current user questions: once a week.

- Consultation 7: Control and management (including planning) of the functional requirement. Consultation between user management, BIMC and individual users. Topics covered include service level agreements, plans, needs, reports, etc. For example, four times a year.

- Consultation 8: Management and development of agreements with suppliers. Consultation, coordination and adjustment on the content of the concluded service level agreements: for example, twice a year.

- Consultation 9: Management and control of the project portfolio. Consultation about the projects, their progress and coordination, for example once a month. In the event of an escalation, a consultation line is followed: service management, user management, business management, executive management.

- Consultation 10: Service Management. Operational consultation between business / users and suppliers about the services that have been agreed within the service agreements / service level agreements. For example, once a year.

- Consultation 11: Various consultations with management, experts, BIMC) about architecture, strategy and sourcing.

- Consultation 12: Governance and strategic development. Strategic consultation on the content of the development and management, for example six times a year.

The nature of the aforementioned relationships can be informative, guiding or advising, depending on the purpose, the people involved and the mandate. Choice for the types of consultation, nature and frequency is determined by the needs in the enterprise. These are usually related to the size of the enterprise and the complexity of the topics that BIMC is concerned with. Keep in mind also that the list may appear long and dull to the point of boredom, but the likelihood is that these discussions are carried out but may not be recorded or formalized.

The way in which the mutual relationships (consultation structures), communication and accountability between service provider, users, business/lob and general management and BIMC are

organized, can be laid down in a governance or control document. Although all four domains must be completed for proper operation, we regularly see that the focus is often on demand bundling and delivery (Strategy and Operation) while the customer environment attaches the most value to governance and quality (Governance and Improvement). For BIMC to be able to develop into maturity, we cannot emphasize often enough that the management of BIMC must centre on data availability, management, processing and integrity, but must nevertheless also focus on agreements with general management, business/LoB and on user satisfaction.

The BIMC team must arrange initial critical consultations, for example, the periodic governance consultation, the periodic contract/SLA/XLA consultation and the service consultation.

5.3 BIMC and customers

Regardless of the sector, branch, government or non-government, if you offer services or a product, it is essential that you know and understand your customers. The relationship with the customer is an essential part of the demand side of BIMC[13]. BIMC's right to exist is partly determined by understanding of this relationship and how the customer perceives the experience of using services or products. This means both maintaining relationships within the environment and an expert translation of the need into a product and / or service to be purchased or built. These are the tasks of customer management and policy, innovation and advice management within BIMC. From the practitioner perspective, these are the most important.

5.3.1. Insight into the needs, behavior and motivation of the user

Motivation is the Capability in people that drives them to take action. This Capability comes from a tension that arises as a result of unmet needs. People consciously and unconsciously strive to continuously reduce this tension by selecting objectives and by displaying behavior that is aimed at achieving these objectives. The objectives that people want to achieve depend on:

- their personality;
- expectations and perceptions;
- previous experiences;
- attitude.

Needs and objectives depend on each other. The one does not exist without the other. Needs and objectives change and grow depending on the physical condition, environment, interaction with others and experiences. As customers achieve their goal, they develop new needs. If they do not achieve their goal, they will continue to strive to achieve the old goals or they will replace these goals with other goals).

Goals are at the basis of people's motivation. Especially Ronaldo's. A goal is subjective: it defines what an acceptable level of performance is for an individual. A goal is simply defined as what an individual wants to consciously pursue. People want to achieve objectives instead of maintaining a 'status quo'. Motivation of people is made plausible by the 'goal setting' theory of Locke and Latham (2013)[14]. This theory emphasizes the positive relationship between goal setting and performance. Their research shows that there is a linear relationship between the degree of difficulty of the goal

[13] In the case of BIMC it concerns internal customers or users, depending how they are called within your enterprise.
[14] Locke, EA, Lathan, GP edited by, (2013), New Developments in goal setting and task performance, Routledge.

and the performance. Naturally, a goal and the achievement to be achieved (and therefore the motivation) is influenced by many factors. Think of the knowledge, skills and personality, feedback on performance, involvement in the goals, task complexity, available resources and limitations imposed by the environment. Insight into the goals of customers and the possibility of achieving them gives the management office insight into the nature of the support.

5.3.2. Creating insight into the products and services package

To create optimal insight into the products and services package that BIMC may seek, at least three criteria are important.

1. Classification of data products and services (to the extent that they are centrally funded).
2. Classification of data products and services (according to the extent to which they are used throughout the enterprise or department-specific).
3. Classification of data products and services according to the extent to which the associated operational costs can be standardized.

There is, of course, a connection between these criteria, as is apparent from their description.

Criterion 1: financed centrally
With the first criterion, a classification of products and services is made according to the extent to which they are financed centrally and are therefore actually purchased centrally for all employees in the enterprise. One of the members of the board often owns the operational management portfolio. *De facto,* this board member is therefore the client for BIMC of the data products and services that fall under the generic basic package. This also means that these so-called basic products and services cannot be influenced by the employees in the enterprise in terms of nature, volume and price.

Criterion 2: global, regional and local
Over time, enterprises have been confronted with a plethora of data solutions that are difficult to control and / or coordinate. The costs are correspondingly high. Cost is the reason why action is taken and an attempt made to create broad basic data management applications and services that are suitable for everyone within the enterprise. This has led to a general subdivision of the products and services packages between global (available for everyone), regional (available for a select group) and local (available for one department or person). How is data classified in your enterprise?

Criterion 3: degree of standardization
The third criterion relates to the degree of standardization. The management office strives to standardize as many of the supplied products and services. This naturally has major advantages, not only in terms of costs but also in terms of the time that the management office has to spend on user questions. BIMC distinguishes between standard customer requests and questions and non-standard user questions. The idea behind standard user requests is that they can be made without intervention from BIMC. This will be possible because BIMC will make prior agreements with business/LoB and suppliers.

5.3.3. Segmenting and filling in the environment

Why should you have to segment the products and services differently after they have already been classified according to the three criteria described? Depending on the purpose, a segmentation principle is chosen. From the supply side, the previous segmentation along the line of financing and standardization helps to realize cost benefits and to create simplicity in the total service portfolio.

From the demand perspective, it helps to look more closely at the nature and character of the customers. BIMC cannot of course talk to anyone and retrieve information from everyone. BIMC would therefore do well to divide its stakeholders into different groups so that it can respond to the diversity in the enterprise to the maximum.

From the perspective of BIMC, segmentation can be made into different groups based on user characteristics. In the first instance, BIMC segments according to the four previously recognized main groups: business/LoB management, executive management, users and suppliers. A further subdivision can then be made within each of these main groups (business or user profiles). This subdivision depends on the specific enterprise. For example, in a hospital, specialists will be seen as a separate group, in an international enterprise this might be the expats or the foreign offices and in political enterprises politics and its support form a separate group. Priorities in the work based on (Capability) position and status. The line between formal agreements (blueprint) and informal reality (red print) is thin but exists, and BIMC is wise not only to be aware of this but to act accordingly.

Innovation and renewal can also be a good reason to create space and not to opt for a dogmatic approach. Innovation and renewal tend to manifest in places unexpectedly. This also leads to a shift in the classification of 'global, regional and local' in the long term. Space for new initiatives leads to a signal effect and can lead to innovations being picked up quickly and spread more widely throughout the enterprise. In this way local developments can lead to global services.

Case; It's better to have and don't need than need and don't have
Don Covay (look on You Tube) sang after reading DID. Well, technically that is a lie, but it is at least an attention-grabbing start. This case study concerns knowing and understanding what you need rather than simply wanting something because it is fashionable or shiny and new or you can get a nice badge. The Stones also read DID and wrote *You can't always get what you want, but if you try sometimes, you get what you need….possibly.*

Failings in defining need
OK they didn't but, a large government department was in the process of contracting for a modern technology platform as part of a major business transformation. The platform was intended to open new opportunities to manage data and improve flexibility when adding new or improved applications/functionalities such as business analytics and data information messaging. The new solution would be totally different from the legacy situation. Key to acceptance was that a platform would be implemented, instead of different, loosely coupled independent information systems that would drive a totally new approach in business working processes.

It soon became clear (in the pre-contracting period) that lack of experience in defining project acceptance criteria and a practical acceptance process for IT driven business information service was going to be a problem.

This was primarily caused by business leaders not having sufficient insight into what they really needed; they were focusing mostly on what they believed they wanted based largely on the functionality they already had. As a consequence, the contract was not well-defined. And even worse, users had little idea of what they would be receiving in terms of services, changes to processes or training plans. During the course of the project it had also become clear that the supplier did not have enough knowledge of the core business of the department while users did not really understand how the new platform had to be configured.

The consequences

Failing to properly define acceptance criteria was bad enough; failing to understand what was really needed made matters worse, including:

- Not enough involvement of key users and local BIMC
- Users feeling not part of the change
- No understanding of what information would be needed as input or what information would be delivered
- Poor communication between LoB management and the teams responsible for renewal/ future of the services
- Not enough communication with users
- No change management program within the LoB
- Insufficient control defined in the acceptance and 'go/no-go' criteria

The existence of the overall program and the projects involved, and the success of the business transformation were endangered. After thorough investigation by central BIMC, it was agreed that they needed to intervene to correct matters.

BIMC impact

The BIMC team proposed a course of action where it was necessary, first, to get everybody together on the same track, making clear what was going to be designed and delivered, what the consequences were going to be for the business and how to prepare for the new situation. Secondly, together with the IT department and the supplier, changes were made to plans to create a more buzzword -compliant 'agile' configuration. What 'agile' really meant was that the original design was not sufficiently flexible and needed to be changed to reflect the actual business need. These changes had consequences for contract agreements but the advantages far outweighed extra costs.

At first the Senior Responsible Owner (SRO) was reluctant to approve the proposals as she could not see why this was necessary. In her view the contract was clear; thus, deliver what was specified in the contract. Also, there was a widespread belief that doing this it would reignite the discussion about why there needed to be new business information systems anyway.

In the past there was widespread resistance to proposed changes and it was feared that discussions would be reinvigorated. Unfortunately, the uneducated proved once more that it is not possible to overestimate the innate stupidity of people when presented with simplistic solutions and only chaos can be guaranteed.

So, the steering committee, principally the senior buyer who was director of the LoB and the senior supplier (the director of the IT department) convinced the Senior Reponsible Owner (SRO) that it was necessary to make changes in order to mitigate risks that the overall program would be shelved.

Central BIMC together with local BIMC, IT experts, a representative group of business management and of course potential users, together with the supplier used an approach based on Collaborative Business service Design (CBSD)[15] to create a plan of action where:

- Detailed Terms of Reference were documented and used to inform all stakeholders about the added value of the new platform and to furnish explanations of the capabilities of the

[15] Johnson, B. and L.P. de Rouw, Collaborative Business Design; Improving and innovating the design of IT-driven business services, Cambridgeshire, 2017

new platform in relation to both the 'as-is' situation and the anticipated consequences for the users;

- An explicit, outcome focused overview, of services and subservices was provided, together with impact assessment on the work processes;
- The scope of the project was adapted to focus on the needed outcomes
- A communication strategy and plan was circulated, focused on the common denominators which lead to understanding between the different parties;
- Explicit demonstrations and descriptions provided about the impact of the transformation, training needs and defining a change program outline for the business;
- Full definition of the acceptance process and defining a process for short-cyclic development and configuration of functionality which would inform acceptance criteria
- Documenting a general agreement between management and the supplier to make sure that changes in the way of working would not conflict with the contract; where problems did arise, these would immediately be identified and brought to the steering committee to validate and discuss.

The overall program and most project outcomes could be salvaged and ultimately it was possible to implement the new solution, although time and budget estimates were exceeded, some significantly. After a full post-mortem of what went wrong, central BIMC handed over operational control to local BIMC to monitor and manage.

5.4 BIMC and enterprise policy and innovation

In general, users do not think in terms of concrete products and services, but in terms of needs or solutions combined with more or less technical solutions that they know from their personal environment. This means that a match must be made with the available products and services within the enterprise. If a product or service is not offered in the current service catalogue, a service must be sought outside the existing range. This match is limited by the available resources and the policy principles that the enterprise uses. If the demand is new and falls outside the existing provisions (and therefore budget), BIMC will look for solutions. This may require investment.

Making the match means that the users demand is disconnected from the actual management of the delivery process through BIMC. Decoupling customer demand and delivery process is a well-known phenomenon in logistics. Through this disconnection, BIMC takes over the issue. BIMC translates the question into the necessary activities to be performed, the associated resources (in number and hours), the required security levels: BIMC takes over the concerns of the business and user.

User management will translate questions from users in the business into activities. In this way, user management decouples business demand. At that time, substantive activities are requested and the emphasis shifts to policy, innovation and advisory management. The knowledge to make the right decisions with regard to every customer demand comes from the 'policy, innovation and advice' area of focus. This focus area preferably invests the activities within existing agreements. This means that BIMC must have insight into the content and added value of these activities as well as the most important aspects that contribute to the activities being carried out properly.

Requests that come in through user management have consequences for the content of the service. This includes requests such as *'I want a new application', 'I want a new service' or 'I want new functionality*'. Questions that BIMC is subsequently confronted with are: how do we assess the technological impact and how do we assess the consequences for the totality of service provision? This certainly applies if several service providers are involved. What developments are there in the market and how does this question (and any suggested solution) fit in? And, also important: do the new products or services not disturb the cohesion of the enterprise data policies?

Regardless of the tasks that are performed, Policy, Innovation and Advisory (PIA) has three functions. In the first place, there is management of the (technical) environment that has been outsourced and that must seamlessly connect with the rest of the enterprise. Secondly, there is an advisory task, such as substantive information and advice to stakeholders about technical possibilities, about policy frameworks or proposals for policy frameworks and offering a substantive solution for customers in the existing infrastructure. Thirdly, there is the innovation function. If it appears that no solutions are possible within the existing frameworks, it must be examined whether it is useful or feasible to look for and implement new developments.

5.5 BIMC and contract management

Contract management aims to organize the supply, delivery and management of the requested generic services, both for internal and external service providers, in such a way that the objectives are met.

The interpretation of contract management is, more than the other focus area within BIMC, a group effort in which different experts make their contribution in the different phases of the process, from requirement statement, to contract negotiation and performance management.
That is why almost always purchasing or tendering teams are put together with specific expertise in tendering and procurement processes. Expertise that is generally required:

- Buyer: the buyer knows the market, prices and procedures.
- Lawyer: the lawyer knows the legal frameworks and the formal handling of contracts.
- Economist: the economist makes financial capacity analyses, conducts market surveys and / or market research, draws up economic price models to be able to tender according to the applicable award criteria.
- Subject matter experts: ensure a SMART-formulated question.
- Service level (and/or Experience level….) manager: monitors the performance of the delivery.

Add to that the specific expertise needed to ensure business needs regarding information will be met and it becomes clear that an intelligent agency should focus on all aspects of business need in the enterprise to ensure consistency and assist with levels of digitization. These experts can be present in different positions within the enterprise, or can be hired. Different phases are distinguished within contract management. These phases are:

- needs assessment, support demand articulation;
- requesting parties through an RFI (Request for Information), RFP (Request for Procurement), market consultation;
- award phase;
- management of the contract;
- the further design and realization of demand;
- putting the result into service.

Formally, contract management enters halfway through when functional demand must be translated into a supply-side solution, but in practice it is more sensible if contract management is involved in demand articulation from day one. Once an initial selection has been made, the negotiation process begins. The business has a different interest than the supplier. Business focusses on outcome and wants to have solved a problem at acceptable (preferably minimal) costs with as little hassle as possible. This interest is not always explicit with the supplier. In the long term, the supplier must earn money to safeguard its own continuity.

5.6 BIMC and management control

5.6.1 Measuring is knowing

A good contract is only the beginning of the relationship with the supplier. Proper, active management of contracts (and therefore monitoring of performance) offers many opportunities for BIMC. Active management relates to three themes. Does what is delivered actually match the agreements made? Does the offer still match the current needs and demands of the internal enterprise? The challenges of management control within BIMC are obvious. Management takes place by comparing the delivered performance with the agreed performance. In the analysis, BIMC connects all measurement results with each other with the aim of improving the total process. Do I get what I asked for according to the agreements made and are contracts being used optimally? Where necessary, this leads to giving an order for (additional) management to the supplier. The following are intended with control management:

- Control and measurement. Monitoring the quality of service. This includes measuring, analyzing, evaluating and improving the results (quality, costs, satisfaction) of services and managing the service catalogue.
- Control. Monitoring and checking the efficiency and legitimacy of the services provided.
- Financial control. Monitoring the entire budget (services, purchasing, management and management). Preparing the financial analyses and coordinating payments to the supplier with the financial administration. Promoting transparency in costs.

The conclusions of these analyses must be traced back to improvements in the contract, or SLAs, improving the way that specifying requirements that are set for the solutions are found or suggestions for improvements to the process and product and services.

Not everything can ultimately be provided analytically. For example, room for future expectations of users requires attention. Even though the contracts concluded are legally sound and the process went perfectly. If the service is not in line with the wishes of the business, this leads to dissatisfaction, which is annoying for both the provider and BIMC. Long-term contracts must therefore offer sufficient room to move with the dynamics of enterprises. This will be easier for market parties than for procurement law enterprises.

Operational compliance

In order to make management control and financial control possible, the service must be operationalized at which point the relationship with the supplier is completed. Performance management and quality and risk management close the Deming circle to proceed to a new cycle. Management monitors that the specifications of the needs are and remain measurable. Only then can it be properly addressed whether everyone complies with the agreements made or can adhere

to them. Sometimes the customer asks questions that are impossible to answer. They ask for the cheapest solution, but of top quality. The supplier needs to explain that quality has a price and by specifying the desired quality a realistic price can be estimated.

It is up to the business and therefore to BIMC to be well aware that, for the right considerations, specific requirements must be set for the design method and the request. The needs that are set must also be operationalized. BIMC ensures that suppliers are professional and help customers to offer high-quality solutions at acceptable costs. This is not always easy in environments where procurement rules prevail.

5.6.2 Quality and risk management

Risk management is associated with quality. The BIMC has to take account of unpleasant consequences. Risk management focuses primarily on unpredictable events that may result in a part of the enterprise's primary process being seriously affected. This is not easy. Risk management forces the BIMC to explicitly taking uncertainty into account. A well-known example is a switch box of a telephone provider that caught fire, causing a large part of the mobile telephone traffic in a part of the country to be disrupted. At the time, insufficient action had been taken to quickly switch to an emergency facility, exposing a failure in defining business continuity management measures. In addition, an environmental analysis was insufficiently carried out to identify single points of failure. A failure analysis (FMECA Failure Mode Effect & Criticality Analysis) would undoubtedly have exposed this issue. Depending on certain factors, it took from a few hours to a few days before the mobile telephone traffic became operational again.

The structured management and coordination of activities and processes and making a contribution to the supervision of the quality of the services to be delivered is also a responsibility of Performance management.

The purpose of the quality measures is to gain insight into the nature and behavior of the results of the services and to reduce the variation in them successively. The goal is of course to have control over the quality of the service and to have information in order to be able to manage. When these measures are properly applied, they also provide insight into the relationship between costs and quality.

The data that becomes available also help with risk management. Think of understanding what can go wrong with the service and which events can cause which damage. Examples of risks are: supply risks, HR risks (mandates, knowledge), financial risks, geopolitical developments (threat, terrorists), less functioning of the enterprise because employees fear their job, discontinuity of the (primary) process, supplier reliability, risks in transition process, loss of knowledge.

To recognize these risks, it is wise to think about this beforehand. Incidents can be life-threatening, but it becomes different if the supplier's services can immediately lead to life-threatening situations. An example: it is not obvious that software is error-free. Software errors in healthcare, for example, can have disastrous consequences if data about blood values are incorrectly linked. This requires scenarios with measures that help prevent or limit damage.

It is wise not to choose the most obvious key performance indicators (KPIs) such as availability and response time too quickly. Think about KPIs that are less measurable, such as the extent to which a supplier keeps quality manuals up to date or, for example, the periodic testing for reliability or the available security level of data centres. Critical success factors (CSF) and performance indicators help to monitor and compare the purchasing relationship with norms and standards. These norms and

standards are based on our own measurements and experiences, benchmarks and (scientific) research.

The foregoing theoretical discussions are not abstract; they are directly applicable to a BIM practitioner working strategically. A case study in chapter 10 illustrates how much of the strategic guidance and the practical tips were used to kick-start BIM in a large, data dependent industrial enterprise. But first, let's in the next chapters take a look at taking these design issues forward in more detail by exploring some specific activities in BIMC.

Key points

BIM Coordination (BIMC) is needed to support the BIM Board/ ISSC and coordinates the activities of the various Executive Committees with those of the ISSC and also acts as guardian of the data elements of the IS strategy.

The core of BIMC is managing the organizational capability of the enterprise so that the correct specification for an information service can be drawn up.

BIMC maintains various relationships with the various parties (external and internal).

It is up to BIMC to coordinate supply and demand between these, sometimes conflicting, interests in such a way that everyone is content.

The relationship with the customer or user is an essential part of the demand side of BIMC Regardless of the sector, branch, government or non-government: if you offer services or products it is essential that you know and understand your customers.