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Defining the Value of the Business Analyst

In achieving its vision, key CCS partnerships involve working directly with business leaders to understand their business improvement opportunities and to translate those requirements into technology and knowledge solutions. CCS Projects should be defined on and measured by these business improvement objectives.

A Business Analysts (BA) contributes to the success of IT projects by bridging the gap between the viewpoints of business managers and IT analysts. The role of the BA is to describe the business problem, solution alternatives, and deliverables of a project in business terms. The BA adds value through better defined projects resulting in more successful technology and knowledge solutions. The result is lower risk, more cost effective, and highly successful projects.

The BA understands business management practices and processes and is an advocate for the business leader. The BA has the skills to apply industry-best-practice business analysis and the competencies to build relationships and to effectively communicate business and technology concepts and solution values to many audiences. The BA is a valued enterprise team player.

The BA is not just another IT person - the BA would not have Project Management or IT Specialist roles. As the BA role develops, the BA should report to the Office of the CIO and be seconded to a business unit planning during a project, rather than just be part of a CCS project team.

To convey the value of the BA, a shared University vision of the business analysis process needs to be developed and communicated. CCS can facilitate the adoption of the BA by business units by defining and communicating this vision, in a very similar way to that of Project Management. Like project management, business analysis activities are best managed and communicated in a process framework. Such a framework model should be developed by CCS to support the BA.

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Executive Summary

<u>Value of the Business Analyst</u>
The successful Business Analyst
- facilitates the development of the business requirements in business terms for the client.
- translates business needs into technology requirements for the IT project team.
- is a continuing participant of project teams providing solutions to business units?
- ensures project success is communicated in business terms to the community.
- bridges projects by relating business needs across projects and across business units.

The value of a Business Analyst is directly related to how the role is defined and how that role engages with client business units. A concept definition of the role and accountabilities are described in this report.

<u>Deploying Business Analysts</u>
Ideally the Business Analyst would report to a business leader, responsible for improving business processes. However, as the opportunity for business analysis grows, centrally reporting Business Analysts can be seconded to business units to support business improvement projects.

Care is required to avoid the perception that the Business Analyst is not just another IT staff role. Business Analysts should not be Project Managers, nor should they be part of the technical team. It is recommended that this role report to the Office of the CIO and BA's be assigned to client business units at the outset of the problem definition and project conceptualization.

<u>Value of Business Analysis</u>
The Business Analyst applies "business analysis" methodologies to understand and communicate business goals, objectives, and deliverables to both the business client and the IT project team. Like project management, business analysis activities should be managed in an appropriate framework model. Such a framework model can be an effective tool for communicating the process of business analysis and the role of the business analyst to the CCS client community.

<u>Developing a Business Analysis Framework</u>
While there are mature models in industry, they are slowly being adapted for higher education at a number of universities. CCS can begin the development of a business analysis model in the same way PMF was developed. Business analysis methodologies are complementary to infrastructure architecture strategies that focus on enterprise data and data centre technology.

Summary of Recommendations
1. **…that, to ensure value is perceived appropriately, the BA role be full-time rather than just an activity of IT staff with project management or IT specialist responsibilities.**
2. **… that Business Analysts role report to the office of the CIO, be seconded to business units early in project formulation, and remain part of the project team to completion.**
3. **… that CCS and the office of the CIO develop a common vision of the place of business analysis in CCS and in the University, documented as a reference framework.**
4. **…that the Office of the CIO invest in a consultant to guide the development of this business analysis strategy.**

Investigation - Defining the Value of the Business Analyst

Request
This investigation will consider the value a Business Analyst can play in the University and how CCS can provision such a service.

Investigation
This investigation

- consulted Gartner Inc. concerning business analysis best practices and the role of the BA,
- analysed the dialogue on several business analysis forums,
- explored the online literature on the Business Analyst in higher education institutions, and
- contacted several Canadian and US universities about BA roles at their institutions.

Conclusions

Definition of the Business Analyst role
During the early stage of client engagement, the BA

- assists the business leader to define the business requirements and communicate them to the IT project team.
- is a crucial role in creating and maintaining the strategic partnership between Business needs and Technology delivery.
- is responsible for bridging the business community and the IT community, linking business and IT language.
- is responsible for developing statements of business requirements and related business processes based on the Business Unit needs.
- identifies requirements and generates gap analyses via industry standard analysis techniques such as data flow modeling, workflow analysis, and functional decomposition analysis.
- solicits business unit input on requirements, constraints, value, and risks through interviews, workshops, and existing process documentation.
- identifies and documents IT design specifications based on collected analysis of business unit needs.

During the development stage of a project, the BA

- maintains active communication with the client business leader ensuring progress, risks, and evolving solution is described in business terms.
- is engaged as a member of IT Project teams, discovering optimal solutions by analysing the business processes. Done early in the project development, this can lead to improved business-*oriented goals and objectives.*
- serves as a member of software development and business process reorganization teams.

During the deployment phase of the project, the BA

- ensures that changes are successfully integrated into the business unit and ensures that business process problems are linked back to solution concerns.
- works closely with the Business Partner and Business Subject Matter Experts in the definition, testing, training, implementation, and support of functional requirements.

- documents business processes and information flow, in business terms, of the completed solution for the Business Unit.
- participates in regular project meetings with both Technology and Business Partners to convey the business perspective of progress, changes, risk, budget, and timeline.

At the completion of a project, the BA

- reports to the business leader on the success of the project – how well the delivered solution meets the business objectives.
- communicates project success to the University community -how improvements in the business unit benefit the University as well as how the IT team executed the technology/knowledge solution.

In all activities, the BA

- performs work of moderate complexity, independently supporting the collaborative work of a team.
- handles most activities individually or under a general supervision of senior program/project manager, and, in some cases, balance dual reporting to both business and IT supervisors.

Deploying Business Analysts
The value of the Business Analyst accrues from productive engagement with business clients.

- Successful deployment is highly influenced by a broad understanding of the role and the BA deliverables.
- The reporting relationship is less important and can suit current organizational culture.
- Major risks to successful BA deployment include
    - Limited, constraining, acceptance of the BA role by perceptions from organizational silos and cross-unit hidden agendas. (Gartner).
    - As noted at some institutions, a narrow definition of the role, such as being limited to deployment activities only, limits the opportunity to add enterprise value.

Within the Project Management Framework, the BA must be seen as working for the business client.

- The BA should be "close" to the business unit so they can observe and build relationships with those involved in the business processes.
- Often the BA will first engage a business leader in a consulting role, analyzing business processes and making recommendations directly to the business leader, not CCS, on how to initiate improvements.
- The BA should not be the Project Manager or a technical specialist, especially in the projects they are associated with.
- In major projects the BA would logically be part of the client unit. However, the planning role needs to carefully defined and monitored so it does not evolve to another "IT Admin" position operationally supporting local applications and resources.
- For most projects, full time effort is not required. If the business unit has confidence in the BA role, staff with this skill set could be managed centrally and seconded to business units as projects require.
- To create a perception of separation of roles, the BA should report to the Office of the CIO, perhaps associated with the PMO.

- o For major enterprise projects, the CIO is involved early in discussions and could assign BA activities prior to a formal project definition.
- o For academic unit and research activities, the CIO can have a major positive influence linking relating numerous small projects across academic units using business analysis assessments to frame the enterprise value of these projects.
- o As major service units, CCS and the Library serve and understand components of many client units. As the role and output of the BA grows, the CIO can gain a broader enterprise perspective of business processes and institutional information, their core values, inefficiencies, and opportunities. This can enhance the perceived value of the Business Analyst and extend the business analysis framework to an enterprise perspective.

Properly executed projects involving BAs will allow the role of the BA in business units to grow over time, but at different speeds in different business units.

- The role of the BA in any project will be varied, adjusting to local business culture.
- The role of the BA will be most effective in supporting activities related to administrative units of the University. The BA will be
    - o valuable on Web Solutions projects developing business process automation.
    - o somewhat valuable on Enterprise Applications projects. (Solutions are already constrained by ERP technology choices).
    - o helpful in defining institutional policy and process in the development of Identity/Access Management and similar enterprise technology and knowledge infrastructure solutions.
- While the BA may play a minor role in projects defined and directed locally in academic units, and in research projects, the BA can be a valuable resource in guiding these projects to use enterprise standards and services and in promoting collaboration across related projects.
    - o The close relationship with the PMO may be valuable to the goals of both the PMO and the BA. In keeping track of these locally managed projects, the BA can report to the CIO on opportunities to link and support these projects to grow into more widely valued projects *(e.g. such as the event registration system)*.

Value of Business Analysis

> *"In a high performing organization, there are no IT projects … only Business projects".* (Gartner Inc. consultant)

Engaging CCS clients in a business analysis process is of strategic and tactical value to CCS and the University.
- Projects are defined with a stronger business-oriented goal and more focused objectives.
- Solution alternatives broader than IT-only projects can be identified, resulting in the valuable combination of business process change and more productive IT systems.
- Success of such projects builds business manager confidence in business analysis.
- BA retention of the knowledge of functional business processes across projects and across units will permit CCS to have a better understanding of the University's business processes.

- Increasingly, enterprise level business productivity will become the focus of projects. Alignment of the IT strategy with business strategy will become more automatic.

Business Analysis Critical for Cloud Services

The University will increase its use of SaaS applications and cloud-based IT resources over the next few years. The management challenge will evolve from oversight of centrally-controlled IT resources to decentralized tactical decisions and management of contracted services which are evolving independently. A broad understanding of university business information management and workflow processing will be important in defining and managing cloud-based resources and for improving integration across applications. The business analysis process is necessary to build the knowledgebase for such enterprise decision making.

Implementing the Business Analysis Process

> *CIOs need to develop their ability to optimize alignment (in general) and timing (in particular) to strengthen and demonstrate the value of the IT department to the core business of the institution.* (from Gartner HypeCycle for Education, 2009*)*

The primary question is not how to deploy Business Analysts but how to create a process of <u>business analysis</u> that provides the knowledge base to develop "aligned" plans and to focus change projects on business goals and objectives.

Alignment of IT resources to the business functions of the organization is seen as the key strategy for the success of an IT unit. The challenge is that the alignment process requires a healthy understanding of the business processes – enterprise information flows and workflows and in the culture that defines functions and influences change. Although an IT unit has a broad perspective, it almost never has the depth of understanding, especially in large, decentralized organizations (Gartner). Many IT organizations compensate for lack of this lack of knowledge by emphasizing technical systems that might fit.

Business Analysis involves a cultural change that goes well beyond the IT unit. It takes time, a deliberate effort, and an evolutionary path. Leading this cultural change requires adoption of an evolving business analysis framework, demonstrating application of the methodology in smaller easy-win programs and projects, and the engagement of business leader "champions" willing to risk change to realize the value of applying business analysis in their units.

Business Analysis is a powerful way to build a knowledgebase for senior level planning. Especially with the deployment of *SaaS* applications and *Cloud* resources, the enterprise management of an integrated, effective, and productive business environment in a distributed organization will be much harder without clear understanding of business information management and business practices. *<u>This is Integrated Planning turned upside down!</u>*

Proposed CCS Strategy

Role
From the elements in this report CCS should develop a clear statement of the role of the Business Analyst that supports building business leader partnerships. This role will involve investment and risk to provide competent Business Analysts that work with and report directly to business leaders to gain their trust and insight into their business practices and productivity improvement objectives.

During project development, the Business Analyst should assigned as a key resource in the project proposal and definition stage for all large projects as well as for projects that could have demands on enterprise infrastructure. Projects involving new relationships (partnerships) with departments should be assessed by a Business Analyst.

The objective is to build a deeper understanding of the current state of the functional unit and to develop the business leader partnership.

Deployment
The best workable solution would be to manage the BA role centrally (CCS or CIO/PMO). Engagement with local units would be arranged through the CIO. A BA could handle more than one concurrent project. Additional value would accrue with a BA handling closely related projects.

The CIO would BA place early in the project cycle, permitting the BA to develop the partnership with the client, conduct initial assessments, and then participate as a bridge between the CCS project team and the client group.

A specifically defined, non-project, role of the BA would be to document and retain an understanding of business processes and information requirements of engaged business units. Aggregation of this information would support the PMO and improve the knowledge base the BA brings to future projects.

Business Analysis Framework
The value of the Business Analyst accrues from "doing business analysis". Like project management, the formalization of a common vision, a tuned methodology, and a common set of tools reduces risk, controls cost, and improves successful outcomes.

A first step (similar to the PMF development) is to build a vision about how business analysis could work in CCS and with supportive clients.

This business analysis framework will clarify a methodology for limited set of projects initially. The opportunity to build a partnership with certain business leaders will influence the early use of the framework.

Like PMF, this framework should be proven within CCS, then extended as an enterprise framework facilitating business resource planning within and across business units.

There are many business analysis methodologies, driven by different expectations and suited for different cultures. More investigation is required to choose a starting point. A good consultant would help us understand our situation and assist using developing an appropriate methodology.

Recommendations

1. **… that, to ensure value is perceived appropriately, the BA role be full-time rather than just an activity of IT staff with project management or IT specialist responsibilities.**

    Developing true partnerships with campus business leaders is a strategic investment that includes the opportunity to communicate and demonstrate the value of the BA. Managing the vision of the role of the BA is important and should not be confused by combination of several roles in one individual. *However, as the acceptance of the role develops, availability of the BA function is important requiring more than one individual. This growth can be potentially accommodated by adding BA responsibilities to other competent staff.*

2. **… that Business Analysts role report to the Office of the CIO, be seconded to business units early in project formulation, and remain part of the project team to completion.**

    As Gartner notes, one of the major risks impacting the effectiveness of the BA is the perception that this is another IT attempt to control business. Separation of the role from the perceived role of CCS may be very important in building some partnerships.

    The relationship between the BA role and that is the PMO is synergetic. The BA can gather project information during their business engagements and the PMO can maintain and aggregate the business process and information maps developed by the BA.

    The evolution of the Library and its services, especially online ones, may also benefit from business partnerships developed by employing the methodologies of a BA.

3. **… that CCS, with the office of the CIO, develop a common vision of the place of business analysis in CCS and in the University, documented as a reference framework.**

    The development of a vision for business analysis will support the deployment of Business Analysts and will provide the focus for communicating the value of the BA. Unlike project management, business analysis is not as well understood in CCS. Therefore, the effort to develop the framework will be more involved and take several iterations. However, that process will be valuable in building the concepts into the culture as the framework takes shape.

4. **… that the Office of the CIO invest in a consultant to guide the development of this business analysis strategy.**

    Like PMF, the reference framework is key to understanding resource deployment. Agreement on the reporting relationships of the BA will also flow from the vision. *Therefore achieving this strategic management vision quickly is of great value and the investment in expert guidance is warranted.*

Appendices

Appendix 1 -   The Goal of Business Analysis

Descriptions of "successful and productive" Business Analyst activity come from organizations with some sort of business analysis framework or methodology.

Most modern business analysis methodologies agree on a viewpoint.

> *IT is a tool to serve business. Productivity improvements must come from changes to business processes. Analysis of business information and business processes is the starting point.*
> *IT systems are then designed to support those business processes.*

In higher education, EDUCAUSE literature notes US examples of the business analysis methodology being developed in two ways.

- Some institutions with business oriented leadership have adopted well-known business analysis strategies, especially for administration, led by the executive level. A strong business school seems to be a pre-requisite! In some cases, the academic community is reluctant to adopt business methodologies.
- A few institutions have adopted a business analysis under CIO leadership. Extending formal IT analysis and design principles to business information and processes is a slow process. Most universities that have had some success with this have adopted some version of an Enterprise Architecture methodology.

In Canada, BCIT is the only higher education institution to implement a formal process (Enterprise Architecture) with broader executive buy-in. Several community colleges have elements of a business analysis process. At few universities (e.g. McGill, Alberta, UBC), the CIO's have started to develop tools and resources for business analysis.

Higher Education Business Analysis Approaches

Higher Education organizations are diverse in their approach to Business Analysis.

- Ad hoc - Operational   Several institutions have a very limited analysis methodology scoped within IT projects. Adapting to the culture of the local business unit culture, business analysis and solution is often limited to the business change required by an IT project. The outcome of a business analysis engagement achieves the goal of the local business unit but is more operational in its scope.

- Low-visibility Enterprise - Tactical   Some institutions, with the leadership of the CIO and support of middle management, are successful at leveraging the IT unit knowledge of university systems to conduct a broader functional analysis and recommend solutions that may go beyond initial project scope to improve cross-unit functions. These projects result in tactical enterprise improvements but don't seem to lead to strategic decision making.

- Core Enterprise – Strategic   A smaller number of institutions have successfully implemented a business analysis methodology championed by senior executives. This type of business analysis occurs across projects creating a vision and processes that permit business managers to define consistent projects working to common goals. Business productivity improvements are defined strategically.

Appendix 2 - Business Analyst Job Description

Business Analyst Job Accountabilities
- Meets with customer groups to determine IT business requirements.
- Elicits requirements using interviews, document analysis, workshops, surveys, site visits, business process descriptions, use cases, scenarios, business analysis, and task and workflow analysis.
- Provides timely reports on institutional business requirements gathering.
- Analyzes and critically evaluates information gathered from multiple sources, reconciles conflicts and decomposes high-level information into details. Abstracts up from low-level information to a general understanding. Distinguishes user requests from the underlying true needs.
- Serves as the conduit between the customer community (internal and external customers) and the software development or business process re-engineering team through which requirements flow.
- Develops requirements specifications according to standard templates, using natural language.
- Collaborates with developers and subject matter experts (SMEs) to establish the technical vision and analyze tradeoffs between usability and performance needs.
- Participates in project meetings to review project deliverables and timelines.
- Works with quality assurance personnel to ensure product adequately meets all functional needs defined in scope of project.
- Participates in testing developed software or new process flow.
- Performs other related duties as assigned or requested.

Business Analysis Deliverables
In general, the role will include the creation/revision of the following analysis artifacts and deliverables:
- Process Maps
- Business Requirements
- Business Rules
- User Stories
- User Flows
- Acceptance Tests

Business Analyst Competencies

Project Competencies
- Analysis and Solution Definition
  - Quickly understands the business issues and data challenges of client's organization and industry.
  - Identifies client organization's strengths and weaknesses and suggests areas of improvement.
  - Reviews and edits requirements, specifications, business processes and recommendations related to proposed solution.
  - Develops functional specifications and system design specifications for client engagements.

- Technical Recommendation and Testing
  - Leads testing efforts.
  - Ensures issues are identified, tracked, reported on and resolved in a timely manner.
  - Works with client personnel to identify required changes.
  - Communicates needed changes to development team.

- Project Execution
  - Assists in successfully meeting project deadlines and schedules.
  - Takes input from supervisor and team; appropriately and accurately applies comments/feedback.
  - Communicates and applies project standards.
  - Manages resources in accordance with project schedule.
  - Consistently delivers high-quality services to clients.
  - Understands the components of running a fiscally successful project.

Organizational Responsibilities
- Innovator Development
  - Conducts effective progress evaluations in a timely manner.
  - Mentors those with less experience through informal channels.
  - Seeks and participates in development opportunities above and beyond training required by us.
  - Trains other innovators through both formal and informal training programs.
- Internal Operations
  - Suggests areas for improvement in internal processes along with possible solutions.
  - Leads internal teams/task forces.

Core Competencies
- Communication
  - Assists in the facilitation of team and client meetings.
  - Delivers informative, well-organized presentations.
  - Understands how to communicate difficult/sensitive information tactfully.
- Business Understanding
  - Has a solid general understanding of business financial, human resources, and administration.
  - Understands at a functional how core ERP systems support business functions
  - Understands how information consolidation and flows support organizational decision making.
- Technical Understanding
  - Possesses understanding in the areas of application programming, database and system design.
  - Understands Internet, Intranet, Extranet and client/server architectures.
  - Understands how legacy and web-based systems interface with each other.
- Problem Solving
  - Identifies critical issues with ease.
  - Exhibits confidence and an extensive knowledge of emerging industry practices when solving business problems.
  - Pushes creative thinking beyond the boundaries of existing industry practices and client mindsets.

Professional Qualities
- Leadership
  - Generates enthusiasm among team members.
  - Proactively seeks opportunities to serve in leadership roles.
  - Challenges others to develop as leaders while serving as a role model.
  - Manages the process of innovative change.
- Teamwork
  - Facilitates effective team interaction.
  - Acknowledges and appreciates each team member's contributions.
- Client Management
  - Develops relationships with client personnel that foster client ties.
  - Communicates effectively with clients to identify needs and evaluate alternative business solutions with project management.
  - Continually seeks opportunities to increase customer satisfaction and deepen client relationships.
  - Manages client expectations effectively.

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