**Capability - Themes**

**Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project**

**Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project**

1. **Analytics**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

I had been participated an analytic work for PetroChina ERP Application Integration Project with working together IBM business consultants. Its position was standing at a top view of the group, gave a glance at its business line’s competency, its core industrial departments. We use Component Business Modeling methodology to analyze the whole group capability and give the report to the high level leads of PetroChina group. Component Business Modeling ( [CBM](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/CBM) ) is the [process](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/process) of representing an enterprise as a collection of [Business Component](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/Business%20Component) s, where a [Business Component](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/Business%20Component) is defined as a part of an enterprise that has the potential to operate independently - in the extreme as a separate company, or as part of another company. This consultative model splits up a business into its key components, then focusing on improving those with the business' core competencies. Sometimes, this leads to merging of components if the current organizational structure is inefficient, or of outsourcing non-core components, or similar. This is a lead-in from the Business Transformation side of the On Demand Business offerings. Boiling down to a one-page map of an enterprise, the CBM gives unparalleled insight into the structure of an enterprise, setting the stage for its on demand transformation and for our organizing to conduct that transformation.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

Analytic can be consists of many different kinds of stuff in daily work. Here we choose SAP Information Steward (solution package) to conduct the metadata management work for Huaneng Group. Basically there are two levels for this thing: one is how I can know and analyze every detail of its functionality , the other thing is, after I master all the functionality, how can I analyze data source data via information Steward according to customer’s business requirements. The analytics work often goes with customer requirement works, because you need the requirement as an analysis foundation, thus people can do analytics work on customizing need. Hopefully SAP Company always gives out the document, material which are related to their business suite together. This is the great and direct input that I can leverage to manipulate and customize Information Steward’s product. Unfortunately , sometimes the SAP guide is not that detail to cover all the requirements from us. So we have to get some important demo from SAP representatives . Information Steward has four main components: Data Insight, Metadata Management, Metapedia, and Cleansing Pacakge Builder.

Each of them plays a different role for analyze and manage the metadata and source data for Huaneng Group. For instance, the data insight component: Use Data Insight to find data quality issues, validate how relationships comply with standards, and to monitor, measure and improve the quality of the data. When considering the purchase of technology, use Data Insight to show the return on investment and the impact of poor data on the business. Gain a high-level view into the quality of data and drill down to see scores for tables and columns as well as to view a sample of the data that does not pass the rules. Then monitor the trends in data quality over time. You can tell that, such work is going to cost huge resources including human resource, time cost etc. First of all, we have to make a blueprint which means the whole rule mask standardization for every industrial model within Huaneng Group. So far this work is still undergoing, and we are collecting standard business rules from all dimensions in Huaneng Group industrial model. For example, I import sorts of tables from HR system data source from Huaneng Group to Information Steward (IS has repository to store data), then the imported data show up in the Data Insight function of Information Steward. Generally Data insight can analyze these raw data (tables) with no customization. The work’s target is to exam data element value and characteristics, thus gives us useful hints that what and where the irrational data are. More advanced, some of the function in Data Insight can be customized deeply using rule task function. The most benefit of it is that can be custormized by every different industrial model individual (sub-company of Huaneng Group or different industrial block).After analyzing the source data, IS can give some data quality score in different dimensions. In the long term strategy, the administrator can govern the company significantly in even data level. Moreover, the other functionality also serves to manage and cleanse the data in variable ways. Information Steward can be recognized as a tool for the administrators of Huaneng Company to govern their company’s reporting table, and watch the relation between the tables, and can also know the whole linage of the very detail individual table and views. Another thing I am going to mention is the HANA platform which our team is implementing. Here is the definition of HANA platform “The SAP HANA platform is a flexible data source agnostic in-memory data platform that allows customers to analyze large volumes of data in real-time. It is also a development platform, providing an infrastructure and tools for building high-performance applications based on SAP HANA Extended Application Services (SAP HANA XS).”So HANA is not only a software, it is a platform which consists of many useful components or application for different ways of business using. When I take charge of Huaneng HANA platform implementing responsibility and I had no idea about it which made me into a tough situation. PM gave me twenty-seven books that all are related to HANA, and he wanted me to implement HANA while I was learning, I appreciated it much, and thanks to his help. Since “HANA” is the most advanced solution package for in-memory data analyzing platform for enterprises level in the world, there isn’t much best practice globally, not even in China. So the HANA platform work which is the core part of Huaneng data center platform will be IBM’s first best practice in China and will be the first large scale of HANA project in the world class. We know the critical and importance for our customer and IBM itself. We take this work seriously in every detail in process of implementing work. Such significant target required I put a lot of analysis on it. Like to analyze every piece functionality of HANA platform, e.g: building models(attribute view, analysis view, calculation view), procedure, function, trigger, and other administration work like figuring out different users’ privileges. All this stuff needs me to analyze data source data and build logic model and calculate with those source data, transform the raw data into basic data (standard data) that can be reused by other implementers.

1. **Business requirements/business case**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

According to our due diligence for PetroChina customers, we put their business requirements (ERP application integration) in variable documents and separate them in these parts: web portal (improve customer experience), BI (improve business intelligence analytics ability), application integration (improve process collaborate ability, work efficiency, realizing business process end to end monitor) and functional improvement (improve business application support level, expand system functionality for business and improve system capability, maintain system running). We assign these parts of task for four team responsibilities, and each team has a leader. Our customer wants us to help them implementing whole new system integration including those parts to improve the company’s IT capability to drive business capability. IBM is like a beacon to inspire our customer for the future business and IT trend, lead them the way to success. IBM takes charge of all the planning and implementing work and coordinating working with external, internal consultants. Basically we follow the customer wish to select the certain product for the implementation, sometimes we gave the advice better for never. We negotiate with product manufacturers, arrange the meeting for our customer, the consultants will discuss and choose the most suitable product for our project. Most time we are represent of our customer to question and challenge the product manufactures representatives, to confirm if their product and solution will satisfy our goal, if it is in the best cost efficiency. Normally this whole process we call it “POC”.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

Our project is not a standing alone project, we cannot implement it with no other team’s input and relationship. IT technology is a method (I will mention this in the 6th part) to support the business requirements which summarized from our customer. The business unit or the business process management of the enterprise is a parallel way of work with IT solution. Here is the definition of Business process management and shows the importance why we take so much focus on it: “It promotes business effectiveness and efficiency while striving for innovation, flexibility, and integration with technology.BPM attempts to improve processes continuously. It can therefore be described as a "process optimization process." It is argued that BPM enables organizations to be more efficient, more effective and more capable of change than a functionally focused, traditional hierarchical management approach. These processes are critical to any organization, as they can generate revenue and often represent a significant proportion of costs. As a managerial approach, BPM sees processes as strategic assets of an organization that must be understood, managed, and improved to deliver value-added products and services to clients.”Some members of our team’s target is to help our customer to summarize all the standard index of the business in Huaneng Group. Every single index indicates a single number calculated from an array of prices and quantities. It reflects the business situation or quality. In HANA we often leverage those models working together to generate a reporting that includes the fact index and the dimensions which supports the index. All these data are input from source system data, the source systems can be variable, and the instance can be multiple. But no matter the number of different systems are, the source data will be gathered into HANA database ultimately. The models will analyze these data according to what and how we customized them following to customer’s business requirements. HANA is good at analyzing real time reporting and presenting it to BI platform or mobile devices for the end user viewing. Our customer required a specific business case in MM industrial model for us to implement as a pilot. Once the MM model session is done, we will reuse these method and model building function to other business unit like FI, PM, PS, RL, YX. Although customer asked many requirements, some of them will not be reasonable because of the difference between technical level and business level. For instance, customer wants all the source data in HANA is in real time running status, but in technical level, if there are more than one hundred and fifty tables in HANA that is in real time connected, it will let the source system especially in CPU burden, fall into huge loading insufficiency, in another words, this issue lets source system runs slowly thus reduce the operation efficiency of whole Huaneng company. Thus we have to separate and figure out what tables need SLT, what tables don’t need. The tables don’t need SLT, we put them in Data service software which can ETL data asynchronously. Using this method we extract the most core part of tables that need real time analysis. Then after negotiating with our customer, we both agree on the method we use.

1. **Client relationship management**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

PetraChina is a large group which holds millions of staff, and the organization structure is incredible in large scale and complex. Its business framework is consists of production, chemical, instrument, engineering technical, engineering construction, global business, and its internal business units. Our ERP application integration project comes across all those business lines, project goal is to leverage single IBM enterprise structure methodology to guide general structure design, adopt consolidating work method system, to realize the efficient link between PetroChina business strategy and ERP application integration project implementing. As you can imagine, except the implementing work itself, the communication cost between consultant and customers, customers and customers, consultant and consultants will be a significant part of cost. Before I was dispatched to SAP basis team, I was in the headquarter group which lead and coordinate sub groups’ work (business line). The work related to coordinate with customer themselves is the most difficult part due to different customer’s background, knowledge level and characteristic. Here is an example which influenced me much that I can remember clearly for now since half year ago. The general manager told to make a contact list which includes external consultants(PetroChina party-equals customer), internal consultants and person in charges. The external consultants are consists of IBM party and Dell party, internal consultants come from different companies but all belonging to PetroChina. The person in charges is selected by the general leaders that include each person come from external and internal. Basically I made this contact list for IBM party, so the person who I am consider be in the list is after discussing with IBM leaders. Somehow, after I submitted and email it to the person take in charge of the teams, there was a consultant who whose identity is as internal consultant challenge why I didn’t put her team in my list. I told her this is just a IBM internal contact list use only, and I didn’t consider on which team should be all in this list well. The woman told me that such internal use only contact list will reflects big problem, especially something related to political sensitivity. Here is my solution to deal with it, I informed IBM general manager, the manager convene stakeholder and make a formal apology to that external consultant, and let me put the right person in the list, edit and review the contact list carefully.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

Client relationship management can be the profiling, persistency, profitability, prospecting, product etc. As I said before, Huaneng is a large group, so I collect all related customers profile as much as possible to support our team’s work in the future. Our project is for Huaneng data center platform, thus the related customers have been targeted. I portfolio them by analyzing their position in the organization chart even their habit (some customer like green laser point pen instead of red one). When in the meeting I arrange the seating position so that the right position can talk to each other in the same lane for the leaders of IBM and Huaneng. The persistency can also be called customer loyalty, which means the customer’s trusts on our consultants and the solution we bring to them. Because the package of SAP information steward and HANA are all brand new project in Great China Group, so I have to find more advanced best practice in global that implementing by SAP or IBM. I took a lots work on collect and make the material for giving the customer presentation. And let them know how such thing operated in foreign and what the benefit it will bring for them (like profitability, future trend). I also well prepared the software functionality demo for them to be presented too. The outcome is satisfied.

1. **Communication**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

It is important to communicate to colleagues with positive and sincere attitude. As I come from the SAP ABAP team, the other team members were from SAP Basis team with a different work style, we have a little barrier in work and communication at first. And I came to the project team as a trainee, which made the team members have a certain degree of suspicion about my ability and experience. What I should do at that time is to demonstrate my ability and positive attitude to build mutual trust. Communication became more and more important for me to build the trust immediately. I positively communicated to them: I quickly through myself into the project and tried to discuss with them about the project actively; I learnt the basic knowledge from them and talked the industry business problem positively. Fortunately, I was quickly accepted and integrated into the team work. It used about one week for me to get familiar to each other to the team, while learned the project problems from colleagues. At the very beginning of my work, the team did not assign me any important work. For example, I could only do some modification of PPT, record the meeting minutes. When we began trust to each other, I was assigned some important work. Then the SAP basis manager let me co-work with the basis team and meanwhile I was doing my previous work continuously. SAP Basis is a very general concept for the IT system structure design and construct, for example, ESB (Enterprise service bus), BPM (Business process management), Web Portal. The manager wants me to discover which field I am interested in, and let me be the project assistant role in the whole project. Project assistant means I have to coordinate every team work smoothly: collect every team’s leader weekly report and edit them, then submit to the general manager of Sap basis team manager. The communication in my opinion is not just the daily talk to each other, not the meeting report, more than that, it is the opinion exchange and get agreement in our team, thus improve whole team efficiency and correctness. Unless the work is a certain thing hanging there, waiting for us to deal with. The people management stuff is way of difficult. I have to arrange different leader’s delivery simultaneously and ensure to deliver them all together on time at the same time. The lesion taught me that, you got to know every thing’s detail dynamically and don’t ask question until the last time problem occurred. Knowing further/advanced, communicate a lot is my main principle.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

The concept “communication” could be the one between colleagues or consultant to their customers. Communication is the way people sharing idea and getting some inspiration from it. Indeed, I truly know the communication method is a useful way to help me to be in a broad field of thinking since I took part in the job for IBM. I’ve never underestimate the power of communication. Whoever said that the pen is mightier than the sword definitely knew what they were talking about. To humans, words are more than a means of communication, they can shape our beliefs, behaviors, feelings and ultimately our actions. Although swords can coerce us, and threaten, nothing is more powerful than a tool which can shape our opinions. When it comes to language and communication, the rule is that it’s not what you say, but what people hear. Words are one of the most powerful tools that we as humans possess; they can ignite revolutions or defuse tension. The problem is that words are underestimated as being central to thought and behavior processing as well as decision making. It’s not what you say, It’s what people hear describes the decision making process and communication based on feeling rather than information. 80 percent of our life is emotion, and only 20 percent is intellect. I am much more interested in how people feel than how people think. I can change how you think, but how you feel is something deeper and stronger, and it's something that's inside you. How you think is on the outside, how you feel is on the inside, so that's what I need to understand.

1. **Knowledge sharing**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

In a projectno one can handle all the stuff by himself unless the cooperation of everyone. Because the limitation of knowledge of everyone’s, the project and task need we collaborate, which means to share our knowledge and opinion. Thus we can improve our work efficiency dramatically. For example, in PetroChina ERP Application Integration project, I had understood a lot with knowledge sharing with our group members. In our basis group, many consultants have their own industrial focus and professional ability, usually we came across hard problem need people works together to deal with it, it requires many different professional background knowledge to give the answer or solution. We separate the problem into small pieces at filed level, and our team manager give out the assignments for us. After we considered own question well, we shared and exchanged our idea in the meeting. Once everybody got agreement on it, we had the solution or the answer. Different knowledge which we get from other’s will definitely inspired us and gives us the whole new view on the old thing we look at. Basically it is a very efficient way to get the knowledge from experienced people. Despite in the project work, small detail will enhance our work efficiency well too, for example, when some colleague need some information like people contacts, email address, phone numbers etc, other colleague know could help him and let him finish it very fast, thus when the problem got solved, he would have plenty time on the project working. It is a kind of saving time for each other, and get a double win.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

When I joined the project at the beginning, I was not familiar with SAP HANA in spite of I am in the major of computer science as a graduate student. I was worried about the new solution and techniques for my fearing of the IT technology, especially on programming. It was the colleague and PM who taught me with selfless and help me overcame the difficulty and my scare. Although this colleague just onboard for a few days and this was his first project in IBM, he has solid SQL skills and experience. He not only taught me the basic knowledge about modeling and SAP operational skills, but also took the initiative to help me learn HANA SQLSCRIPT programing development skills. He really helped me a lot, and I tried to help him for making progress together. Maybe I have to learn from him both the knowledge and skills, but I own my advantage which could help him. For being a new IBMer, he was lack of knowledge about the policy and process about the company. Being a trainee of CbD, I have taken part in the onboarding training systemically. I shared him the polices and basic process of being an qualified IBMer, such as labor claiming, T&L expense policy, e-learning and source acquiring portal, and so on. One of my personal values is as an accent going says “Present rose to others, with remaining fragrance at hand”. I would always try to share my knowledge with other, especially the person who gives me great support. In our team, PM always say we have good team-work spirit, we worked together very well. We all work hard to help each other, in order to unite together to make our team better combat.

1. **Methods**

*Example 1:中国石油ERP应用集成项目 PetroChina ERP Application Integration Project*

Description:

I’ve learned a lot from the colleagues from project management office, because the method they use to control the project’s time, personnel and cost so specific and efficiency. They assigned different person to take charge of each part. They have recorded all the information in documents format like microsoft excel, microsoft word. And they updated the document in certain period and keep it reusable. Here I want to share my method to manage hundreds of thousands documents and schedules. In windows7 system there is a library function to manage files including media, document and picture. I created a new selection named “Project” to store and catalog the project documents. Project stands at the most top hierarchy, the second hierarchy there we can create different file folder group by different project. In each project we can customize the things within it like module, industrial line, different departments etc. Such thing brings a huge benefit that we can see all the documents in forms that stored in PC disk as an object. From this method I indeed managed documents well and improve work efficiency. We use Component Business Modeling methodology to analyze the whole group capability and give the report to the high level leads of PetroChina group. Component Business Modeling ( [CBM](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/CBM) ) is the [process](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/process) of representing an enterprise as a collection of [Business Component](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/Business%20Component) s, where a [Business Component](https://w3-connections.ibm.com/wikis/home/wiki/W761a7cd6952b_43ff_920f_b412cd0157f4/page/Business%20Component) is defined as a part of an enterprise that has the potential to operate independently - in the extreme as a separate company, or as part of another company. This consultative model splits up a business into its key components, then focusing on improving those with the business' core competencies. Sometimes, this leads to merging of components if the current organizational structure is inefficient, or of outsourcing non-core components, or similar. This is a lead-in from the Business Transformation side of the On Demand Business offerings. Boiling down to a one-page map of an enterprise, the CBM gives unparalleled insight into the structure of an enterprise, setting the stage for its on demand transformation and for our organizing to conduct that transformation.

*Example 2: 中国华能数据中心平台项目 China Huaneng Group Data Center Platform Project*

Description:

The method here is specific for the Project, which a whole process that can be used to give the customer the total solution. Method can be the way you learn, solving problem process and the practice for our customer. First let me talk about the way I’m learning, developing a schedule: I always keep a schedule of meeting, implementing time, customer time and other key dates. As part of that schedule, they should set aside specific time for learning and project work. That way, they're less likely to find themselves scrambling to complete a project at the last minute or cramming the night before a big test. In fact, the more comprehensive the schedule, the more efficient most college will be in completing their project. There will be ton of emails cram your email-box every day, and there will be some important message that works for me sometimes, for example, the community training session. This gives me such a huge opportunity to discover new things in which the field I am conducting and interesting on. Lots of professionals will gather and give a meeting to share us the most cutting edge knowledge which they have already done successfully. You learn there and may quest a lot. A talent will never compete to a group of people who cooperate, helping each other. I remember a saying said: you don’t have to be so smart in this world, the world who constructs it, just the people who are normal around us. Usually , the knowledge in IT field is updating dramatically every day. I have to keep going learning and to catch up the rhythm with knowledge updating, moreover, you have to master them and surpass the customer and other competitors, thus you will be a valuable consultant of IBM, and a professional that let customer admire you. When I face to ton of books, I choose the books which are most related to my current work, to my current project. Project manager will give me some advance what are important for me for now and I also read the other books in off-work time. So the method I can master the several books knowledge in just a few weeks, is to read them in the morning or in the evening, when I am in the clear mind situation I am reading them. I will get the structure, the outline of one book, typically I am reading it very fast and roughly in the first time. Then I will practice the examples of the books on my project, if the problem is still unsolved, I will excavate the books deeply. When I finish reading the whole book, I will review it for the second and third time to consolidate my knowledge. I always [start with the work that is hardest to me.](http://www.wikihow.com/Deal-With-Tons-of-Homework)  For example, every day there will be some difficult problem left for me, it’s often the particular business requirement requested from customer, and you have to model it, test it, calculate it and present it. If you start with the hardest subject, your brain will be fresh. But here is the advice, don’t take so much time on it, you will blow your mind easily, the method is just to take 20% of you time to finish the 80% of work, if you start with a hard problem after a while you cannot figure it out, just leave it aside and do the other work parallel, when you clear the other work, then you come back and rethink it, you definitely will think it out. The importance of the problem is not itself, it’s the way you have to try several different approaches, don’t jump in the loop of a fixed way of thinking, the importance is not you smart enough, it’s the way you think of it. I believe most of people especially Chinese, their mind calculation skill is so good. If you feel you spent too much time on it and you still cannot find a answer, you come across a dead corner. Try to change different methodology and bring your concern to other college, you will be good. The way I discuss them is to develop a study group for some specific problem we encountered before. We collect them and brain storming them. This way I can challenge each other and learn things from each other. For the HANA implementing, our team leverage some sort of method on it. Naming rule, hierarchy rule, modeling logic etc, as I know there are two main parts in the HANA panel: Catalog and Content. Catalog is the “place” I partition schemas (users), different data source (server). We partition the catalog in three parts: data source server, business subject, and Huaneng Public. The reason we partition different data source server is Huaneng is consists of Huaneng Group and Huaneng Share Company, the data we will import from two different tunnel. Huaneng is a large group consists of a variable business lines, all these business lines have its own database to store the data. And business subject contains the different source data, and these data are all associated to serve a general reporting for a specific business subject. Huaneng public is a schema to save public functionalities which can be reused for the users across business lines, and it is better efficient way to do so. All these partition method is according to the Huaneng organization structure, and their business need. The content part of HANA is for the modelers to create attribute view, analysis view and calculation view. All these views (model) serve for data analyzing and computing. The views contain logic that can be simple or complex, the way we script the logic is according to our customer’s specific business requirements. It is so important to customizing the need for customers. Once you have business need, you will have the logic, and then you have to think of how to realize it via facilitating the coding and modeling methods which provided by HANA technical guide.