

Executive Summary

Chapter I.: Content Management Problems & Challenges

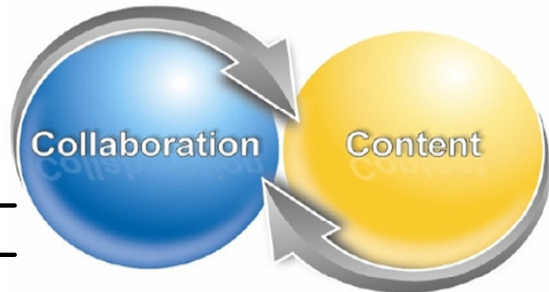
Understand the content management problems and challenges in modern enterprise

Chapter II.: CMS: Concept and Technology Developments

An overview on CMS concepts and technologies to define our own ideas of “Content”, “Management” and “System”

Chapter III.: CMS: “Collaborative Function Model”

Identify CMS conceptualization in the communication research field and propose a systematic evaluation prototype that combines “content”, “management” and “communication” perspectives/concerns, not only conceptually but also technically



Make
Decision

Chapter IV.: Why CMS? Analysis from Business Management Perspectives

Evaluate CMS from practical business management perspectives/concerns (Utility &. Value Analysis)

Dimension	Content Production		Content Delivery	
ATTRIBUTES The sub-attributes are the function oriented mechanisms that we think most essential for improving the interactive effectiveness and the business value achievements of a CMS platform	Role Management	(5.2.01)	Page Generation	(5.2.10)
	User Interfaces	(5.2.02)	Searching	(5.2.11)
	Author System	(5.2.03)	Personalizing	(5.2.12)
	Integration	(5.2.04)	Privileging	(5.2.13)
	Metadata	(5.2.05)	Caching	(5.2.14)
	Workflow	(5.2.06)	Syndication	(5.2.15)
	Templating	(5.2.07)	Cross Media Publishing	(5.2.16)
	Versioning	(5.2.08)		
	Globalizing	(5.2.09)		

Chapter V.: How CMS? (5.1) The CMS “PROJECT”

The design and implementation of a CMS “Project” (Step-by-Step project procedures)

Chapter V.: How CMS? (5.1) The CMS “SYSTEM”

The design and implementation of a CMS “System” (based on the “Collaborative Function Model”)

Chapter VI.: Conclusion: What a CMS Product Wont Do?!

Eradicate the over-exaggerations of CMS vendors and the myths that enterprise tend to have for CMS, also, some suggestions to researchers and software developers who are attempt to improve the concepts and systems of CMS

Appendix A:
CMS
Glossary

Appendix B:
CMS
Resources

Appendix C:
Sponsorship
DAAD

Appendix D:
Authorization
Infopark AG

Appendix E:
Contract
Infopark/CNSL

Appendix F:
Contract
Sturktur/CNSL

(Chart) The Concept Structure of the Dissertation and the “Collaborative Function Model”

The title of this dissertation is “**Content, Management, System - The Construction of a CMS Evaluation Prototype from Communicative Perspectives**” Under this title, we divide CMS into three separated elements because it’s our belief that these three words are not ordered just by literally order, but also by conceptually order.

Only when we understand that “Content” is in the essence of “the result of the internal/external interaction/communication processes”, and only when we understand that “the meanings and roles of the Content in the related Management purposes and processes“, can we talk about the designing and planning of such “Systems”. The whole structure of the dissertation is also organized in the same logic.

In this dissertation, we try to do the following FIVE things:

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- A.) Understand the content management problems and challenges in modern enterprise;**
- B.) Make an review and overview on the CMS related concepts and technologies to define our own ideas of “Content”, “Management” and “System”;**
- C.) Identify the CMS conceptualization in the communication research field and propose a systematic evaluation prototype that could combine “content”, “management” and “communication” perspectives/concerns, both conceptually and technically;**
- D.) Evaluate CMS from business management perspectives/concerns and it’s solutions;**
- E.) Record our CMS experiment, both conceptually and technically, to propose a CMS project procedures and system features for future researches**

For the above mentioned targets, **in Chapter I**, we describe the critical challenges and trends that enterprises face today, especially focusing on the problems of Content, Management and (IT) Systems.

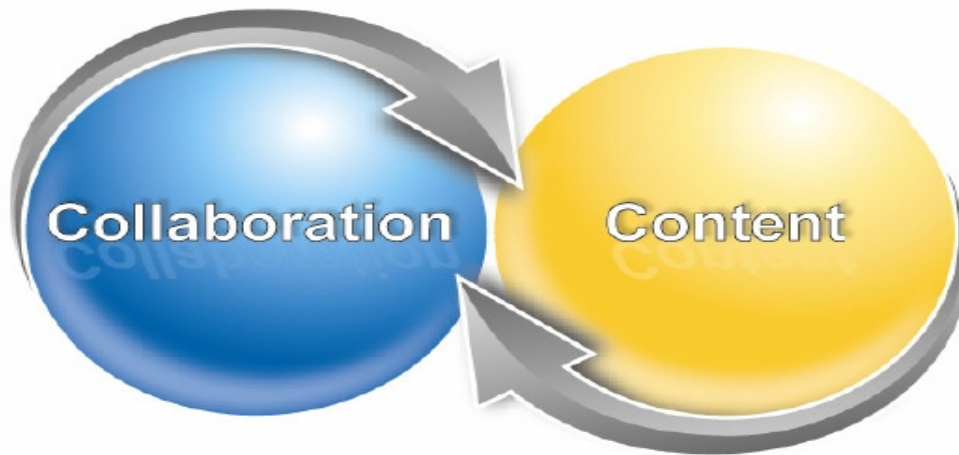
Then, in **Chapter II** of this dissertation, we start from a simple discussion on the definitions of Content Management System (CMS) and then, using this definition as a compass, to take an overview on the **Landscape of CMS related concepts and technologies**. These include:

- Enterprise Content Management and CMS
- Imaging
- Document Management (DM)
- Software Configuration Management (SCM)
- Knowledge Management (KM)
- Collaboration
- Digital Asset Management (DAM)
- Records Management (RM)
- Learning Management (LM)
- Product Data Management (PDM)

- Digital Rights Management (DRM)
- Web Content Management (WCMS/CMS)

In **Chapter III**, we start our discussions from *the meanings of a study on CMS from communicative perspectives*. Then we define CMS as a “place” but not a “device” of series of communications and interactions. Most important of all, we also define the key word “content”, explain our thoughts to make “content” to be related with “collaboration”, which represents the process of series of communications and interactions.

Based on Nakano theory for designing a collaborative web site (Nakano 2002), we established a function oriented model on our own as the critical consideration and judgment criteria to design and implement a CMS based web site for our international cooperation web site. We call it “**Collaborative Function Model**” of CMS, ‘cause it stresses the importance of understanding the internal/external communication needs and processes in any CMS Designing Project.



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(Chart 3.05) The Structure and Attributes of the “Collaborative Function Model”

Each of the attributes mentioned will be discussed in details, both technically and practically in chapter V. These discussions will help us to get clear on the latest technological developments and the factors that we must think about if your web site has the needs in the attribute related criterion. And, therefore, *the “Collaborative Function Model”, which is both IT-and communication- oriented (“Function” and “Collaboration”), is especially useful for the CMS project managers and IT related staffs to evaluate and to design their own CMS based web site and project.*

In **Chapter IV**, we use the “functional” and “business value” perspectives to make utility analysis on CMS. The former approach “**functional perspective**” is for IT decision makers to understand the advantages by implementing CMS in their information structures. That is, **how can CMS help you solve your current troubles or how can it release you from the annoying burdens**. These include six main concerns:

- Enable Faster, Less Expensive Content Updates
- Increase Content Accuracy, Quality, and Value
- Decrease Information Retrieval Time
- Centrally Manage Site Usability and Branding
- Centrally Manage Site Development and Deployment
- Facilitate New Opportunities for Innovation

On the other hand, the latter approach “**business value perspective**” is for entrepreneurs or all the NON-IT guys to understand the benefits of CMS. The discussions here are further divided in two viewpoints: “Quantitative” and “Qualitative”

By “**Quantitative**”, we focus on the “short/mid- term” Cost & Revenue analysis. This is, of course, the central concerns of all the CFOs (Chief Financial Officers) and business owners. We introduce the possibilities to cut down the costs by implementing CMS and, of course, the potential increase of sale by applying CMS for marketing activities.

By “**Qualitative**”, the emphasis falls on the “mid/long- term” benefits of implementing CMS in your company. This viewpoint could help CEOs (Chief Executive Officer), CSOs (Chief Strategic Officer) or CIOs to consider CMS as a tool to enhance the competitive advantages of their companies, such as to strengthen customer relationship management, to improve internal communication mechanism and collaboration with business partner, etc..

If your company is considering or decides to deploy a CMS, then **Chapter V** will be a must-read for you. As a matter of fact, this chapter is proposed based on **our REAL experiences by implementing a CMS based web site for international business collaboration and the design and launch of the first CMS Knowledge Portal in the Chinese speaking areas**. The whole Chapter is designed for the purpose to discuss two BIG questions:

- 1. How should I implement a CMS in my company?**
- 2. How should I design a CMS in my company?**

Based on the lessons learned and the experiences that we had by realizing our business cooperation, in the second section of chapter V (**5.1**), we list **13 steps that you should follow by initializing or running a CMS Business Project** in your company. They are:

1. Identify Stakeholders
2. Build and Prioritize Your Initial Requirements
3. Develop Use Cases or Scenarios
4. Solidify Your Business Case
5. Design the Outlines of the System
6. Review Technology Alternatives

7. Perform Due Diligence
8. Download Trial Packages When Possible
9. Evaluate Security Implications
10. Consider Requiring a Proof-of-Concept
11. Choose a Platform
12. Prototype as Early as Possible
13. Recognize When you Need Help and Seek Outside Assistance

Then, for the people who already decided for a CMS deployment and are about to evaluate their requirements, to select proper (or the most suitable) CMS packages and vendors, to design the CMS in accordance to enterprise’s strategic objectives, the second section of chapter V (5.2) will definitely enlighten your minds.

Besides, we also make an “**Author’s Checklist**” at the end of each attribute discussion. This “Author’s Checklist” is both a review to the discussion and the additional remarks to the related discussion. ***It is a questionnaire that aimed to help you focus on your own analysis for planning the appropriate CMS platform for your unique needs.***

The following is the list of our discussion topics:

- **Role Management:** **The Groundwork of Your CMS**
- **User Interfaces:** **The Usability of Your CMS**
- **Author System:** **The Core Function of Your CMS**
- **Content Integration:** **The Puzzling Game of Your CMS**
- **Metadata:** **The Value-Adds of Your CMS**
- **Workflow:** **The Gate-Setting of Your CMS**
- **Templating:** **The Cinderella’s Dresses of Your CMS**
- **Versioning:** **The Reliability of Your CMS**
- **Globalizing:** **The Multi-nationality of Your CMS**
- **Page Generation:** **The Dynamics of Your CMS**
- **Searching:** **The Readability of Your CMS**
- **Personalizing:** **The Uniqueness of Your CMS**
- **Privileging:** **The Access of Your CMS**
- **Caching:** **The Speed of Your CMS**
- **Syndication:** **The Sharing of Your CMS**
- **Cross Media Publishing:** **The Variety-Show of Your CMS**

This dissertation offers a very good compass for people who are interested in CMS, especially for enterprises who attempt to deploy a CMS in their own companies. However, just like the old saying goes: “There is no royal way to success!” CMS is not an all-can solution! In the last **Chapter VI “Conclusion”**, we pointed out “***WHAT CMS WON’T DO?!***” to eradicate the over-exaggerations of CMS vendors and the myths that enterprise tend to have for CMS. These are also valuable suggestions for the continued researches and developments of CMS!