
デザインテンプレートによるMPMeisterコンテンツ生成機能強化

MPMeister Contents Generation and Business Using Design Templates

クリストフ スーリエ*

Christophe SOULIER

要 旨

MPMeisterは会議や講演などのプレゼンテーションを記録し、Webコンテンツを簡単に自動生成できるソフトウェアである。生成されたWebコンテンツでは、動画とPowerPointスライドとが同期して動作する。リコーはこれまでMPMeisterというソフトウェアだけの提供にとどまらず、撮影やコンテンツの作成、配信など、幅広いサービスを提供してきた。コンテンツの作成に関してはこれまで、コンテンツのデザインを自社用にカスタマイズしたいという要望が顧客から多く寄せられている。しかし、コンテンツの修正は時間と手間がかかる作業である。

MPMeisterの最新バージョンでは、コンテンツ生成機能に大きな変更が加えられ、よりリッチで魅力的かつカスタマイズ可能なコンテンツが生成できるようになった。具体的にはコンテンツ生成の際、テンプレートを使用することが可能になった。多くのアプリケーションはテンプレートをデザイン（形や色など）のカスタマイズのために使用するが、MPMeisterにおけるテンプレートはコンテンツ生成オプションの増減など、MPMeister自身の機能をカスタマイズ可能な点がポイントである。顧客の様々な要望や、制作コンテンツの対象となる視聴者に合わせて設計したテンプレートを利用することで、コンテンツのデザインと振る舞いが自由に制御できるようになる。

ABSTRACT

MPMeister is an easy to use tool that records presentations such as meetings or lectures and automatically generate web contents. Those contents present synchronized video and PowerPoint slides. Ricoh also provide a wide range of services to MPMeister customers, such as video recording or contents customization. From the experiences of these services, we realized that customers always wish to customize their contents in a way that is not supported by the software so that we often had to edit contents by hand, which is a timely and costly process.

In the new version of MPMeister a great effort has been made on the contents generation part of the software, which now allows to create more rich, attractive and customized contents. This has been possible by creating a generic content generator that uses design templates to create contents. While many applications use design templates to customize only the design (shapes and colors) of contents, the real key point of the templates used in MPMeister is that they also customize MPMeister itself, allowing different generation options for each template. That way, the whole behavior of the generated contents can be controlled to meet various customer and content viewer targets.

* ソフトウェア研究開発本部 アプリケーション研究所
Application Lab, Software R&D Group

1. Introduction and objectives

MPMeister is an easy to use tool that records presentations such as meetings or lectures and automatically generates web contents, which includes both video or voice and the presentation slides. Those contents are made available on the network so they can be accessed easily at anytime. They are a very convenient way to share information such as executives' vision, company internal rules changes or e-learning courses. In the latest version, a great work has been done to make those contents more attractive and customizable to be able to adapt MPMeister to various business scenes.

In order to do this, the contents generation module of MPMeister has been entirely revisited and now allows generation based on external template files rather than hard-coded functions. Since those templates are external, they are always read during contents generation so they can easily be updated, without having the need of releasing a new version of MPMeister. MPMeister also checks all templates at startup so we can provide new templates to our customers easily, quickly and at low cost.

While most software using templates (office applications for example) only change the design of the contents based on the selected template, MPMeister extends this by being able to totally change the behavior of the contents generation module, allowing different options for each template.

The next following parts will explain in more detail the possibilities of MPMeister templates and the benefits of using them from a technical and commercial viewpoint.

2. What are design templates and layouts?

2-1 Design templates

Design templates basically define the colors, overall size, the features and the language of the contents. By customizing the design template, all of these can be adapted to match customers' requirements and to succeed terminal adaptation.

2-1-1 Matching customers' requirements

After few years of experience in developing, selling and supporting MPMeister, we realized that when it comes to contents, every customer is different. A same application can fit several customer requirements but contents always need to be adapted on a case by case basis. For example, a museum for children wishes to create colorful contents while a hospital might require a special interface for disabled patients.

An even simpler example of contents customization is company logos. Our customers are from various companies and in the past they asked for contents customization (company logo insertion or modification of colors to match their existing website for example). Until now, realizing such requests was hard and required long time. With the use of designs, this can be done much more easily, quickly and relatively cheaply.

2-1-2 Succeed terminal adaptation

The same contents, whether it is view on a PC, a PDA or a cell phone must have different designs to match the screen size and the user interface. MPMeister succeed to do these adaptations by using templates with different sizes and controls to generate contents.

2-2 Layouts

2-2-1 Introduction to layouts

Layouts are used to define the spatial position inside the contents of each part composing them (it is also possible to hide any of those parts). For MPMeister, the parts composing contents are the slide, the video, the table of contents and the title. For example, some users like to see big video while others are more interested by the slides, so MPMeister now provides a way to select the size of those parts.

2-2-2 Using layouts

The layout selection can be made by the content provider (during contents generation) and also by the viewer (during content playback). Optionally, the content provider can forbid viewers to change the layout during playback.

2-3 Design templates and layouts combinations

2-3-1 Expanding possibilities

If, for the same contents, there are two different design templates, and two different layouts, the contents can be viewed in 4 different ways. Current MPMeister designs templates and layouts allow many combinations, resulting in numerous ways to view contents, as shown the following table.

Table 1 design templates and layout combinations in various MPMeister versions.

MPMeister version	Design templates	Layouts	Combinations
V1.X	28	0	28
V2.0	29	4	32
V2.1, V2.2	30	12	120

2-3-2 Examples

Few examples of design templates and layouts combinations will help to understand the concept.



Fig.1 Layouts and designs combinations.

As you can see on the examples, the materials (image, video, text) are the same. Only the design and layout of the contents change, resulting in 4 different combinations.

In conclusion, with the same materials, many different contents types can be created to fit better to their purpose or environment.

For example, with default option web contents will look like this :



Fig.2 MPMeister contents using default generation settings.

After changing the design and the layout, the contents can look different while presenting the same materials :



Fig.3 Same presentation using different designs and layouts.

3. Enhanced features of MPMeister design templates

3-1 Contents generation dynamic options

While most applications using designs templates only modify the contents appearance, MPMeister goes much further by customizing the contents generation module's behavior. Dynamic options are available (or not) depending on the design template. For example, some customers want to forbid users to print out contents for security reasons. In MPMeister, one of the design templates provides such a feature : if someone tries to print out some contents created with this design template, the printed page will be blank (actually, it will only contain a message explaining that printing is not allowed). There are numerous examples and possibilities of using these contents behavior options.

The last paragraph gave a simple example of a dynamic option that can be really useful for companies where information security is vital. But if another company wants to use the exact same template (same colors and size), but does not need the option to forbid

printing, that option should not be available in order to keep the settings simple to configure.

Because this option comes from the design template itself and not from MPMeister, it is very easy to not include it to the template provided to the second company. This way we can really match customer needs, no less but also no more, in order to keep MPMeister easy to use.

3-2 Localization

MPMeister design templates also support localization. The same contents can be generated using different languages. The language definitions (translations of the words) are stored inside the design template so here again; each design template can support different languages. If a customer asks for the same design in a new language it is also possible to modify the template to add the needed language.

4. A new way of doing contents research and development

4-1 Classic research and development

Using a classic research and development schema, a product is created step by step using the following phases : requirements definition, specifications definition, design, development, testing, quality assurance and finally release.

Those phases are always needed to provide good products, and in the case of a product such as MPMeister these tasks are both long and expensive to carry, which makes it difficult to be reactive to upcoming requirements or technologies.

4-2 Research and development using design templates and layouts

Basically the same typical phases are needed, but since design templates are used dynamically by

MPMeister, the contents research and development can be done separately from the MPMeister research and development. Practically, it means that we can research and develop new contents without changing MPMeister. This is a very important both technical and commercial point since it cut costs for Ricoh (and thus for customers), and it allows much quicker responsiveness to new requirements and technologies. As for MPMeister application, by saving contents research and development time and cost, we can concentrate on other aspects of the software, such as the ease of recording and editing, or the inclusion of other media than video and slides.

5. Business opportunities

Since designs templates can be added to MPMeister to create more customized contents, we can now offer new designs templates as needed by customers as new additional products. This service is not only technical but also includes consulting about contents quality (ease of access and view).