# EUNIS 2019: The taming of Masaryk University websites

Pavel Budík<sup>1</sup>

<sup>1</sup>Web development center head, Masaryk University, Brno, Czech Republic, <u>budik@ics.muni.cz</u>

#### Keywords

University websites, university webs, web design, content management systems, corporate identity.

#### 1. Summary

Since universities are inherently decentralized, each faculty - or even each department - can have their own way of managing and creating websites. If left without central coordination, this can lead to an appalling online presence in all aspects. At the beginning of the process described in this paper, Masaryk University (MU) was a textbook example of this.

Thanks to many capable and ambitious people, MU always used to be a Czech pioneer in almost all ITrelated areas and was among the first Czech schools to start its website in the early '90s. This however led to a certain degree of complacency, the university online presence was neglected and silently deteriorated.

There was no strategy as to when a website was needed or how to incorporate it with the others and approximately 800 disorganized websites spawned over the years. This caused a broad range of problems in many areas.

Technically, some utilized hostings provided by shared, centralized platforms, some used commercial hosting and a number of them were running on servers hidden under employees' desks. Many had own instances of content management systems and databases. Keeping this volume of infrastructure up to date and operational with the human and financial resources available was close to impossible. Therefore, technically obsolete or hacked webs were rather the rule than the exception. Furthermore, many editors did not have the IT skills necessary to change anything on their webs and relied heavily on IT staff to do that for them.

Another problem was the visual design consistency. Masaryk University did not provide a clear web design manual, and thus almost every new web got its own set of CSS and HTML. The same applied for logos.

Then there was content, the most important property of websites. With missing strategies and a lack of cooperation and coordination, it is no surprise that a lot of it was duplicated, obsolete, boring, complex or too simple.

These issues got some attention somewhere around 2012 when a centrally managed and developed content management platform emerged. However, it was not until 2016 that things started to change significantly. University management invested in a corporate design system with a dedicated CSS framework and began to push this platform. Apart from gaining the trust of the university community, it did not require much since the problems - once brought into attention - were quite apparent. Nowadays, there are about 200 webs hosted in this central platform, 130 of which use the corporate design framework and almost all faculties use it as a primary means to build new websites.

#### 2. Technology

The first sparks of technology unification appeared way before the mentioned date of 2012 when the centralized content management platform emerged. A widely available virtualization platform, a centrally managed LAMP hosting and a shared PHP-capable web server appeared earlier. This however solved only some of the problems since there still had to be an IT professional to set up new webs and take care of each of them.

In the beginning, the centralized content management platform did not have higher ambitions than to serve as an alternative to the mentioned hosting options. This platform emerged rather out of the demand from frustrated IT staff than as a conscious management decision. This however proved to be a good thing. The open source content management system (CMS) Umbraco<sup>1</sup> the platform was based upon was - at that time - somewhat inadequate to handle the whole MU online presence. This changed with a new major version released in 2015 that revolutionized the way of creating content. Namely, it allowed the creation of complex content layouts by non-IT staff, and therefore things could start to scale out.

However, a showstopper obstacle in the form of a missing corporate design remained.

### 3. Visual design

Higher university management perceived the problem of a missing fully-fledged visual identity as well. Although there was a kind of visual identity in place, it was getting obsolete and was too simple for the new requirements. Therefore, works on a refreshment started in 2015. The designers quickly discovered that just a simple refresh would not do since the old design was too rigid and tied up by copyrights. Therefore, university management started to prepare plans for a full redesign. Since such a project takes a long time, the design refreshment carried on and concluded in 2016, including a CSS and HTML design system.

We implemented this into the Umbraco central CMS, and first webs based upon the new unified design started to appear, with the main university website<sup>2</sup> serving as the flagship. This single most crucial website significantly helped to bolster the trust of the university community and Umbraco adoption started quickly<sup>3</sup>.

In 2018, the full redesign landed. Thanks to the possibility to separate design from content, Umbraco allowed us to switch the templates of all of the ca. 130 webs in an instant with almost no extra work.

With the fundamental issues of sustainable technology and visual design solved, for the time being, a less profound but identically painful problem slowly gained attention.

#### 4. Content

With a history of non-cooperation and everyone-on-his-own attitude, it is a long-term task to improve anything about the content. Neither the path ahead is as clear as was with technology and visual design unification.

The steps already taken include a slightly better inter-faculty coordination and a central service of web architecture and content design that we offer along with the central CMS.

#### 5. REFERENCES

Budík, Pavel (2015). *University webs in large*. UNINFOS (2015): Slovenská poľnohospodárska univerzita v Nitre, 6 pages. Retrieved March 10, 2019, from <u>https://muni.cz/go/867831</u>

## 6. AUTHORS' BIOGRAPHIES

Pavel Budík; <a href="https://www.linkedin.com/in/pavel-budík-16a31b47/">https://www.linkedin.com/in/pavel-budík-16a31b47/</a>; <a href="https://muni.cz/go/0fe8a5">https://muni.cz/go/0fe8a5</a>

<sup>&</sup>lt;sup>1</sup> <u>https://umbraco.com/</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.muni.cz/</u>

<sup>&</sup>lt;sup>3</sup> https://webcentrum.muni.cz/en/reference