

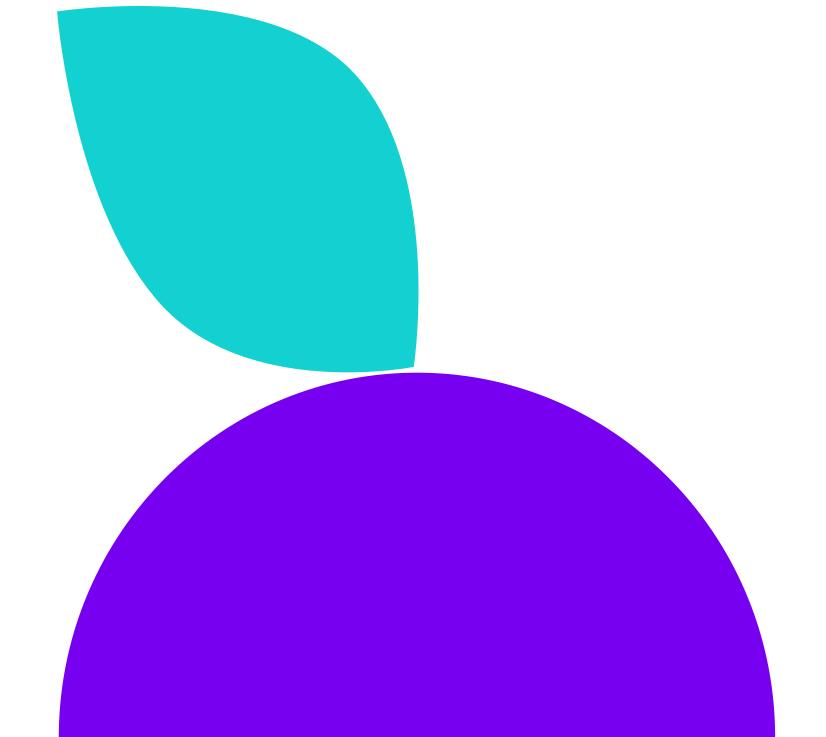
State of Drupal

Platform and ecosystem in 2022

EXOVE

Contents

| 7 | Introduction | 3 |
|---|--|----|
| 2 | Drupal in Brief | 4 |
| 3 | Drupal Business Survey | 5 |
| 4 | Driesnote Explores the Future of Drupal | 10 |
| 5 | Imre Gmelig Meijling: Drupal Accelerates Innovation | 15 |
| 6 | Technical Improvements | 16 |
| 7 | DrupalCamp Baltics 2022 | 17 |
| 8 | Summary | 18 |
| 9 | About Exove | 19 |



1 Introduction

Drupal is one of the world's most popular publishing systems and is widely used in Europe and globally. Drupal develops rapidly both as a system and as an ecosystem that has grown around the platform.

This document describes the state of Drupal in 2022. It is written both for current Drupal users and for those planning to renew their site and are pondering on the technical platform selection.

The sources of the document are the annual global Drupal Business Survey conducted by Exove from Finland and iO from Belgium, Dries Buytaert's Keynote held at DrupalCon Prague, and the panel discussion of Drupal core administrators held at the same event.

The most important criteria for choosing Drupal are open source code, past Drupal experience, and flexibility

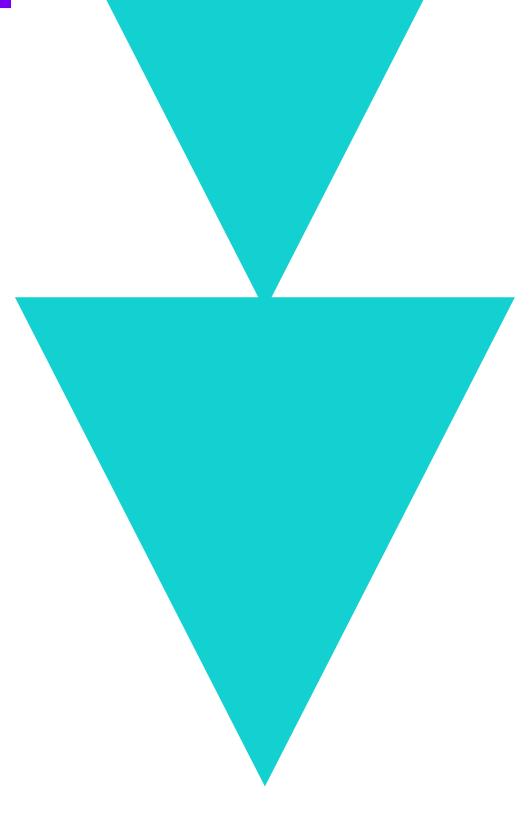
2 Drupal in Brief

Drupal is an open-source publishing system (CMS), specifically designed for implementing ambitious, versatile, and extensive sites.

Drupal is developed by the world's largest open source community, consisting of developers and other experts from around the world. The development work is coordinated by the Drupal Association and the project's founder Dries Buytaert together with the leaders of various development projects. Anyone can participate in development work and the Drupal community puts a lot of effort into the onboarding process for new developers.

Drupal has been developed since January 2001 and the current version is the ninth major version. Drupal 10 will be released in December of this year.

Drupal's strength is a very large ecosystem that provides a wide selection of modules that can be used to extend Drupal's features and integrate it easily into various backend systems. There are tens of thousands of modules and thousands of ready-made themes, so there is plenty to choose from.



Audience waiting for the start of Driesnote in DrupalCon Prague. Image: Petr Illek, <u>flickr.com/photos/illek/52372336184/</u>

More Information

You can find more information about Drupal from **Drupal.org**



3 Drupal Business Survey

Exove from Finland and OneShoe from the Netherlands – now part of iO – have been researching Drupal agencies and the industry around Drupal from 2016 onwards. The Drupal Business Survey investigates the agencies' experiences from the past year and future prospects for the next 12 months.

Responses to the survey are received from all continents, but the main focus is on Europe and North America.

The Drupal Association, which is responsible for development platforms and guidance of the Drupal project, has estimated the global value of the annual Drupal business to be around three billion euros.



Drupal CEO Dinner in Prague, organised by Exove. Image: Exove



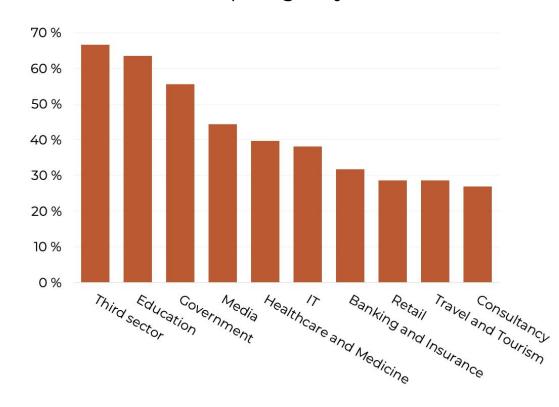
The respondents of the Drupal Business Survey expect the business to continue developing in an excellent direction. The platform enables serving both small and large customers.

3.1 Industries

Drupal is used among all major industries. According to the survey, Drupal agencies have clients in all industries. Drupal is especially popular in industries that significantly improve the quality of life of people, such as education, public administration, the third sector and the pharmaceutical industry. In addition, there is significant use in the media sector, banks and insurance institutions, the tourism sector and IT.

The three most significant sectors – the third sector, education and public administration – have been at the top since the first survey in 2016. In his DrupalCon Prague keynote, Estonia's first CIO Taavi Kotka stated that all Estonian government websites are Drupal. Similarly, in Finland, the majority of universities and the largest cities use Drupal. The number has grown every year.

Distribution of Drupal agency clients



Miguel Ferreira from Amazon Web Services explains how to use Drupal in AWS cloud in DrupalCamp Baltics held in Tallinn. Notice the EU reference on the slides. Image: Marek Metslaid





3.2 Growth Expectations

The Drupal agencies see Drupal's current situation and near future very bright. Both the amount and value of Drupal projects increased in 67% of companies, compared to the previous year. There was a significant increase in 24% of the companies. Only 12% of the companies reported that their situation had worsened. Correspondingly, the average size of projects also increased in 67% of the companies and decreased only in 10%.

Over the next twelve months, the vast majority (70%) of the surveyed companies expect the value of Drupal projects to increase and only 15% expect it to decrease. In the market, there are some signs of companies dividing into winners and losers. On the other hand, events like the war in Ukraine and energy crisis in Europe cause system-level shocks for Ukrainian Drupal companies.

The survey also asked what Drupal agencies are most excited about right now. The answers emphasize Drupal's suitability for implementing large-scale solutions, such as "digitalization of public and private services, where Drupal is 100% fit" or "Drupal is perfectly suited for enterprise-level customers, the needs of our customers continue to grow".

Drupal's solid technology base and the ease of updates from version 8 onwards also received several mentions.

3.3 Selection Criteria

According to the survey, the most important criteria for selecting Drupal are open source code (76% of respondents), used Drupal before (71%) and flexibility (52%). In addition, for four out of ten, the recommendation from the supplier, Drupal's reputation, and information security are important selection criteria.

The main arguments against Drupal are the cost of implementation and the perceived complexity, which is understandable on the one hand – after all, the system is designed to implement large websites. According to a report made by Finnish procurement consulting company North Patrol, Drupal is suitable for the implementation of extensive and customized web services and according to their review is the market leader in this sector.

"Drupal is typically used to implement relatively extensive online services, which often also include some customization needs. Drupal is particularly well suited to content-driven services, where the structure of the content is important and the content classification plays a significant role."

North Patrol: Publishing systems and e-commerce platforms in Finland Read more (in Finnish)

3.4 The Lack of Developers Is the Main Challenge

Due to the growth in demand for Drupal and the general shortage of developers, the biggest growth challenge for Drupal agencies is the difficulty of hiring expert programmers. Drupal developers are practically all already working for a Drupal agency, so the growth must come from outside the current developers.

Since Drupal is not specifically taught in educational institutions in numbers, companies have built their own programs to train Drupal developers. Exove has acted as a pioneer in this, we have been acquiring experts with our Trainee program for ten years. This year we got ten new experts from the program.



Janne Kalliola from Exove and Ivo Nellis from AMD discuss about the solutions for developer shortage in DrupalCamp Baltics. There are examples of Finnish Drupal trainee programs at the background.

Image: Marek Metslaid

3.5 The Benefits of Open Source

The survey revealed that open source software – such as Drupal – has maintained its popularity, which will not come as a surprise to those following the industry. One of the most significant advantages of open source compared to similar SaaS solutions is the flexibility and manageability of pricing.

Organizations can easily adapt their use of Drupal to changing circumstances, such as a pandemic or an energy crisis, and they can use Drupal without large license fees. One of the most important measures of a successful open source project is the amount of contributions produced by the community. The survey clearly showed that Drupal agencies have invested in this – more than 95% of the companies say that they are participating in the development of Drupal.

The most common investments are writing documentation and developing the platform – both are offered by more than 80% of the surveyed companies. These numbers are in line with the survey results from the previous years and they show a strong commitment to develop the platform and ensure its future.

Exove contributes both by coding and organising events.

The survey also explored the reasons for companies' great enthusiasm to invest in the project. Almost everyone has an altruistic reason to give back to a community from which they have benefited so greatly. In some companies, the reasons are related to respecting the wishes of the staff and in some to the improved brand value.

Exove participates in the community both with supplying code and organising events. This year, for example, in addition to the Drupal Business Survey, we have organized the Drupal CEO Dinner in Prague and participated to the arrangements of DrupalCamp Baltics held in Tallinn on October 14th.

4 Driesnote Explores the Future of Drupal

The most anticipated speech at Drupalcons is the keynote by the founder of the Drupal project, Dries Buytaert, known in the community as Driesnote. The twice a year held session looks at both the past and the future. Usually, the achievements in the project are discussed and key people are highlighted. More important, however, is a look at the future, usually at the project's next milestones.



4.1 Building and Owning an Identity Online

At this autumn's Driesnote in DrupalCon Prague, Dries – he is referred to in this document by his first name, in accordance with the practice of the Drupal community – opened the event by telling how the design choices of ready-made platforms limit the creativity of people and companies and, as a result, their ability to stand out in a rather crowded market.

A brand's identity is created from details and uniqueness, which can be difficult or downright impossible to implement in solutions built on ready-made platforms.

The founder of Drupal project Dries Buytaert in his keynote session in DrupalCon Prague.

Image: DrupalCon Europe,

flickr.com/photos/196117872@N02/52389814437/

Dries is an active amateur photographer and his site has accumulated around ten thousand pictures over the years. He used his images as an example of business models of ready-made services, which are not necessarily in line with the business objectives of the content owners.

By sharing photos, for example, on Instagram, the photos also end up in Meta's ownership.

Ownership and control of data are important for all actors online. Further, the importance is constantly growing, and the EU has also woken up to this and started to regulate Internet giants more rigorously.

Using your own solutions also gives you the freedom to focus on the things you consider important. For example, accessibility is important to Dries and he wants his own website to be completely accessible in technical matters. This cannot be done on top of ready-made solutions, because not all problems can then be fixed by yourself, as they are part of the platform.

In general, accessibility has been a rising positive trend in the last couple of years. We at Exove have paid special attention to the accessibility of our customers' sites, because we see accessibility as an integral part of responsible business practices.

Over the course of over 20 years, Drupal has developed from a content management system into a versatile and modular internet platform

4.2. Drupal as an Enabler

Drupal offers a good platform for building solutions that support and further develop your own online identity. It does not contain any trackers – of course these can be installed according to your own business needs – and accessibility is good, and can be improved according to the needs of users when needed.

Today, the web is a pervasive technology in our lives, our entire lives – memories, health information, friendships – depend on the web. For this reason, web technology should not be managed by private companies or even rely on solutions produced by them, but the important matters should be kept in your own hands. This is why open source systems are in a very important position to keep you in control and still get solutions implemented with a reasonable cost.

Over the course of over 20 years, Drupal has developed from a publishing system into a versatile and modular internet platform. It has a modular architecture, the possibility to implement solutions in no-code/low-code manner, a decoupled user interface for implementing headless solutions, and package management for managing the solution's features.

Driesnote highlighted how Drupal serves a wide and well-known group of customers, such as Nasa, AMD, Beatles, Japan Airlines, Oxfam and the British royal house. The Drupal Association will increase marketing around Drupal to increase its awareness and relevance.

4.3 Drupal Evolves and Flourishes

Together with Drupal Association CTO
Timothy Lehnen, Dries briefly went through
several improvements that make the
development of Drupal core and modules
easier. The goal is to shorten the turnaround
time for changes with the help of
automation. The time largely consists of
waiting for comments and evaluations from
other developers.

The Drupal Association wants the turnaround time for simple bugs and improvements to be only a few days. The open source developers are used to such time frames in other, usually significantly smaller, projects. For end users, this should be seen as an acceleration of Drupal's continuous development.

Drupal 10 includes several internal improvements, many of which have been completed over the past few months. It has been scheduled for release in December 2022. After the initial release, there are more improvements in the pipeline, such as automatic updates and a project browser, which will facilitate the technical maintenance and development of the site.

1,500 people and 500 organizations have participated in the development of the latest Drupal version so far.

After the release of Drupal 10, the focus of the Drupal project is to increase innovation – more investments in headless, internal data model, better React integration, etc. Several of these improvements are already underway within the community and are bundled under a few larger development projects called initiatives.

Each initiative is promoted and overseen by a designated development coordinator. We at Exove are happy to see a fellow Finn, Lauri Eskola, responsible for the development of Drupal's internal text editor.



Lauri Eskola from Acquia presents the features of the new CK5 text editor in DrupalCamp Baltics.
Image: Marek Metslaid

Starting with Drupal 8, Drupal has offered excellent interfaces for content management also programmatically. Drupal can be used in three ways:

- Traditional content management
 system pages are rendered on the
 server and served to end user devices.
- Content storage / headless only the content of the pages is delivered to the end user device, where they are converted into user viewable pages using JavaScript and, for example, React.
- Hybrid pages produced on the server are enriched with JavaScript components that can independently retrieve content in a similar way as in the content storage / headless model above.

4.4 The Update Window for Drupal 10 is Eleven Months

Drupal 9 users have about eleven months to update their site before the support for Drupal 9 ends and critical security updates are no longer available without a separate agreement with a Drupal long term support company. The end of support is determined by the end of life of the third-party components included in Drupal.

Now it is a good time to include the Drupal update to the 2023 budget, and if there are bigger changes in the horizon, coordinate the update with this project's scope.

Drupal's update model changed between Drupal 8 and 9, and it made the update process more straightforward. Before Drupal 8, the site had to be rebuilt when the Drupal version changed.

Drupal 10 will be the same system as Drupal 9, except the deprecated components have been replaced with new code and the deprecated code is removed.

The most important step of the update is to ensure that no part of the system relies on the deprecated components and, if necessary, to make the necessary changes to the parts using deprecated code. In addition, the site must be tested carefully to ensure that no harmful side effects are caused by the update.

Dries promised that the Drupal 10 upgrade will be the easiest upgrade in Drupal history. Right now, more than a thousand modules are ready for Drupal 10, which is three times more compared to Drupal 9 release.

We at Exove cannot wait for the new version. The previous upgrade from Drupal 8 to Drupal 9 was quick and straightforward for a large number of our customers, and we don't expect the Drupal 10 upgrade to be any different.

4.5 Summary

Driesnote's theme was the protection of the open web against the pressure of big internet giants. Open source code is the best medicine for managing your own data, growing a unique identity, and collecting data about users' behaviour.

The future of Drupal looks good and the features of the new version help content creators and developers to be more efficient in their work. We are in excellent position to drive and develop the platform and our business.

Dries' own comments about Driesnote and a recording of the presentation can be found here.

5 Drupal Accelerates Innovation

Drupal Association board member Imre Gmelig Meijling wrote his own observations in his Drupal.org blog article.

With Imre's permission, we have compiled his most important findings here.

- 1. Drupal's vision is based on an open, flexible and easy-to-use platform that enables owning your own data. The importance of this only increases in a world where Big Tech companies own people's data.
- 2. Drupal's cornerstones are scalability, accessibility and reliability. Drupal 10 continues these traditions, the release is in December 2022.

3. Drupal professionals around the world are doing important work in developing a common platform, and Dries emphasized the significance of this work in his presentation. The Drupal Association works actively to reduce the delays in development work and rebuilds the existing infrastructure of the project.

The entire article can be found **here.**



Dries Buytaert speaks about the future initiatives of the Drupal project in DrupalCon Prague.

Kuva: Bram Driesen, flickr.com/photos/189707971@N04/

6 Technical Improvements

DrupalCon was opened by a keynote presentation by the leaders of the development initiatives. The current status of the initiatives and the resulting technical improvements were reviewed. Here is a brief summary of the most important observations:

- 1. Drupal's internal editor will be updated to a new version, which further eases the content producers' work. The project is ready for publication.
- The Drupal automatic update system has taken big steps forward and will soon move from the beta into a release.
 Currently, Drupal's core can be updated completely automatically, and the automatic update of themes and modules is under development.
- 3. Finding the right modules from a collection of several thousand modules is tedious, and the Module Browser has been created to make this easier. The solution, which is currently in the beta phase, speeds up the work of developers and also enables site administrators to implement new features without separate development work.

Drupal is moving into several directions at the same time. The common denominator is making the work of content producers and developers easier and thus increasing efficiency.

- 4. Automation has been significantly added to the background of the module browser, to ensure the compatibility of the modules automatically.
- 5. Drupal.org, the hub of the community and the platform for Drupal's technical development, is being renewed. Its functionalities are being transferred step by step to ready-made development platforms such as GitLab. The work eases and speeds up the work of core and module developers.
- 6. Drupal's distribution model, which can be used to package different solutions for more specific needs, is being renewed and simplified. There are currently a few viable distributions, such as Open Social or GovCMS, but the simplification of the model aims to increase the number and importance of the distributions.

In addition to distribution, the community is working on recipes that can be used to automate the creation of Drupal websites. As the name suggests, a recipe is a list of instructions with which Drupal configures itself. This solution is still under development.

7 DrupalCamp Baltics

DrupalCamp Baltics organised in October in Tallinn, Estonia gathered more than hundred people from the Baltic countries and Finland to see sessions by the members of the local Drupal communities. The event was the first of its kind since the pandemic. The event will again start touring between all capitals in the Baltic countries.

The participants appreciated the international nature of the event and the high quality of the sessions.



Janne Kalliola from Exove presents keynote in DrupalCamp Baltics. Image: Marek Metslaid

Janne Kalliola, the Chief Growth Officer of Exove, had the honour of opening the event with a keynote presentation on the Drupal Business Survey observations made over the years. Janne discussed Drupal's good growth prospects, the contribution of companies to the development of Drupal, and the labour shortage.

His message was in a nutshell: Drupal has excellent market traction and the system is in great shape. There are challenges especially with the availability of labour and expansion into new industries – but they can all be solved. So now it's time to roll up your sleeves and make cool things with Drupal.

Several excellent presentations were given at the event, for example about Drupal's information security through a business case, the environmental effects of digitalization, and several technical features of Drupal.

The feedback from the participants of the event was almost entirely positive, which indicates both the need of such an event and also the high level of Drupal expertise of the regional speakers.

Drupal has excellent market traction and the system is in great shape.

8 Summary

Drupal is flourishing and developing – Drupal agencies' expectations for the future are positive and the solution itself offers excellent opportunities to implement ambitious solutions.

With Drupal 10, customers have an even better system that makes it easy to maintain diverse and extensive sites.

The advantages of open source platforms are cost efficiency and more precise control over the solution's features.

The Drupal community is strong and the first post-pandemic events have shown strong faith in the future.

Thinking about Taking Drupal into Use?

- 1. Get in touch with us
- 2. Let's assess your needs together
- 3. We'll design the service
- 4. And we'll implement the solution

Let's be in touch

business@exove.com

9 Exove

- Founded in 2006
- 100 people in four different countries
- Offices in Helsinki, Tampere and Oulu in Finland, and Tallinn in Estonia

Read about our <u>clients'</u>
<u>success stories</u>

