

dataCycle 

DatenHub und Knowledge Graph im E-Tourismus

Warum modernes Datenmanagement
ein Schlüssel für den digitalen Erfolg ist!

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powered by
pixelpoint 

Daten sind wertvoll...

Heute verfügt jedes Unternehmen/
jede Organisation über eine Vielzahl
von Daten & Dateien:



... aber nur, wenn man sie rasch findet...

Das Problem:

- An verschiedenen Orten
- In verschiedenen Formaten
- In verschiedenen Systemen
- Unklare Dateninhaber / Rechte
- nicht aktuell

Das mindert den Wert der Daten – denn bei der Suche, Weitergabe etc. wird wertvolle Zeit verschwendet und es entstehen unnötige Kosten.



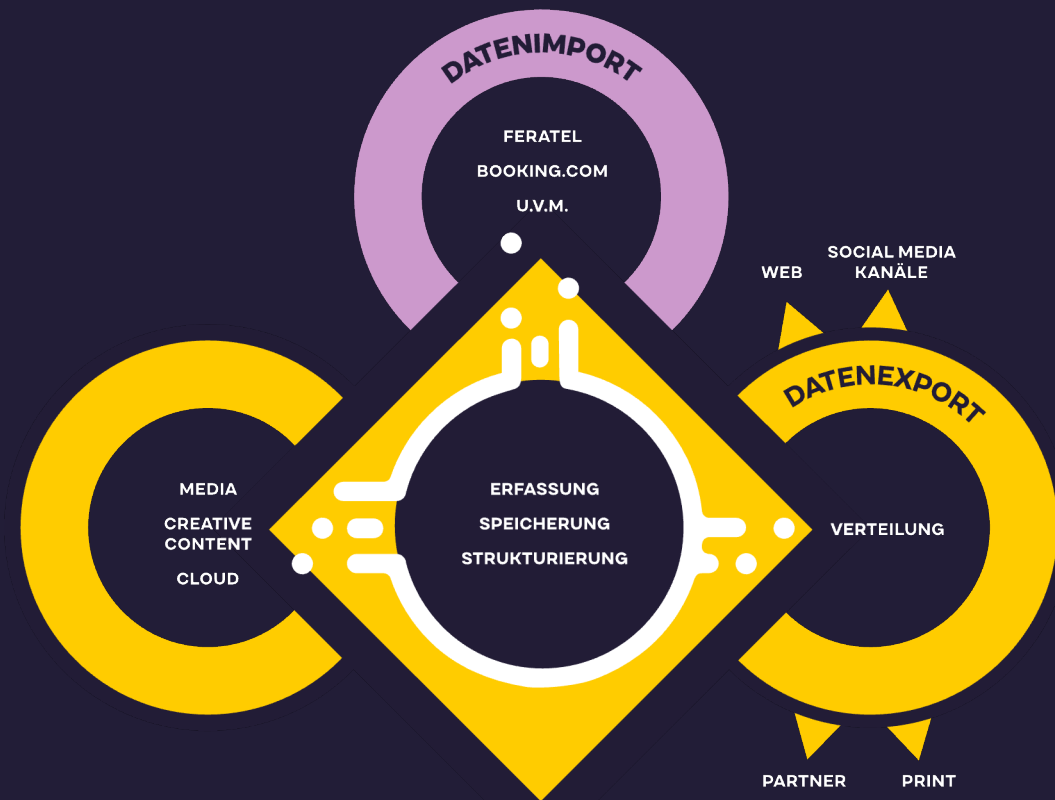
... und effizient nutzen kann.

Die Lösung:

Daten aus verschiedenen Quellsystemen zusammenfassen.

Diese Daten mit einer konsistenten Datenstruktur versehen.

Die so gespeicherten Daten können nun einfach verwaltet, organisiert und weiterverteilt werden.



Was ist also ein Datenhub?

Die Vorteile:



Zentral

Datenablage in einem System



Ressourcensparend

weniger (Zeit-)Aufwand für Datenpflege, -suche und -bereitstellung



Sicher

kontrolliertes Zugriffsmanagement



Userfreundlich

optimale Datenübersicht



Maschinenlesbar

Inhalte werden semantisch ausgezeichnet

Maschinenlesbar am Beispiel: Job Posting

Schema.org

Schema.org Docs Schemas Validate About

JobPosting

A Schema.org Type

Thing > Intangible > JobPosting [more...]

A listing that describes a job opening in a certain organization.

Property	Expected Type	Description
Properties from JobPosting		
applicantLocationRequirements	AdministrativeArea	The location(s) applicants can apply from. This is usually used for telecommuting jobs where the applicant does not need to be in a physical office. Note: This should not be used for citizenship or work visa requirements.
applicationContact	ContactPoint	Contact details for further information relevant to this job posting.
baseSalary	MonetaryAmount or Number or PriceSpecification	The base salary of the job or of an employee in an EmployeeRole.
datePosted	Date or DateTime	Publication date of an online listing.
directApply	Boolean	Indicates whether an url that is associated with a JobPosting enables direct application for the job, via the posting website. A job posting is considered to have directApply of True if an application process for the specified job can be directly initiated via the url(s) given (noting that e.g. multiple internet domains might nevertheless be involved at an implementation level). A value of false is appropriate if there is no clear path to applying directly online for the specified job, navigating directly from the JobPosting url(s) supplied.
educationRequirements	EducationalOccupationalCredential or Text	Educational background needed for the position or Occupation.
eligibilityToWorkRequirement	Text	The legal requirements such as citizenship, visa and other documentation required for an applicant to this job.
employerOverview	Text	A description of the employer, career opportunities and work environment for this position.
employmentType	Text	Type of employment (e.g. full-time, part-time, contract, temporary, seasonal, internship).
employmentUnit	Organization	Indicates the department, unit and/or facility where the employee reports and/or in which the job is to be performed.
estimatedSalary	MonetaryAmount or MonetaryAmountDistribution or Number	An estimated salary for a job posting or occupation, based on a variety of variables including, but not limited to industry, job title, and location. Estimated salaries are often computed by outside organizations rather than the hiring organization, who may not have committed to the estimated value.
experienceInPlaceOfEducation	Boolean	Indicates whether a JobPosting will accept experience (as indicated by OccupationalExperienceRequirements) in place of its formal educational qualifications (as indicated by educationRequirements). If true, indicates that satisfying one of these requirements is sufficient.
experienceRequirements	OccupationalExperienceRequirements or Text	Description of skills and experience needed for the position or Occupation.
hiringOrganization	Organization or Person	Organization or Person offering the job position.
incentiveCompensation	Text	Description of bonus and commission compensation aspects of the job. Supersedes incentives.
industry	DefinedTerm or Text	The industry associated with the job position.
jobBenefits	Text	Description of benefits associated with the job. Supersedes benefits.
jobImmediateStart	Boolean	An indicator as to whether a position is available for an immediate start.
jobLocation	Place	A (typically single) geographic location associated with the job position.
jobLocationType	Text	A description of the job location (e.g. TELECOMMUTE for telecommute jobs).
jobStartDate	Date or Text	The date on which a successful applicant for this job would be expected to start work. Choose a specific date in the future or use the jobImmediateStart property to indicate the position is to be filled as soon as possible.

CategoryCode	Text	A category describing the job, preferably using a term from a taxonomy such as BLS D*NET-SOC, ISCO-08 or similar, with the property repeated for each applicable value. Ideally the taxonomy should be identified, and both the textual label and formal code for the category should be provided.
occupationalCategory	Text	Note: for historical reasons, any textual label and formal code provided as a literal may be assumed to be from ONET-SOC. A description of the types of physical activity associated with the job. Defined terms such as those in O*net may be used, but note that there is no way to specify the level of ability as well as its nature when using a defined term.
physicalRequirement	DefinedTerm or Text or URL	Specific qualifications required for this role or Occupation.
qualifications	Text	The Occupation for the JobPosting.
relevantOccupation	Text	Responsibilities associated with this role or Occupation.
responsibilities	Text	The currency (coded using ISO 4217) used for the main salary information in this job posting or for this employee.
salaryCurrency	Text	A description of any security clearance requirements of the job.
securityClearanceRequirement	Text or URL	A description of any sensory requirements and levels necessary to function on the job, including hearing and vision. Defined terms such as those in O*net may be used, but note that there is no way to specify the level of ability as well as its nature when using a defined term.
sensoryRequirement	DefinedTerm or Text or URL	A statement of knowledge, skill, ability, task or any other assertion expressing a competency that is desired or required to fulfill this role or to work in this occupation.
skills	Text	Any special commitments associated with this job posting. Valid entries include: VeteranCommit, MilitarySpouseCommitt, etc.
specialCommitments	Text	The number of positions open for this job posting. Use a positive integer. Do not use if the number of positions is unclear or not known.
title	Text	The title of the job.
totalJobOpenings	Integer	The date after when the item is not valid. For example the end of an offer, salary period, or a period of opening hours.
validThrough	Date or DateTime	The typical working hours for this job (e.g. 1st shift, night shift, 8am-5pm).
workHours	Text	
Properties from Thing		
additionalType	URL	An additional type for the item, typically used for adding more specific types from external vocabularies in microdata syntax. This is a relationship between something and a class that the thing is in. In RDFa syntax, it is better to use the native RDFa syntax - the 'typeof' attribute - for multiple types. Schema.org tools may have only weaker understanding of extra types, in particular those defined externally.
alternateName	Text	An alias for the item.
description	Text	A description of the item.
disambiguatingDescription	Text	A sub-property of description. A short description of the item used to disambiguate from other, similar items. Information from other properties (in particular, name) may be necessary for the description to be useful for disambiguation.
identifier	PropertyValue or Text or URL	The identifier property represents any kind of identifier for any kind of Thing, such as ISBNs, GTIN codes, UUIDs etc. Schema.org provides dedicated properties for representing many of these, either as textual strings or as URL (URI) links. See background notes for more details.
image	ImageObject or URL	An image of the item. This can be a URL or a fully described ImageObject.
mainEntityOfPage	CreativeWork or URL	Indicates a page (or other CreativeWork) for which this thing is the main entity being described. See background notes for details. Inverse property: mainEntity.
name	Text	The name of the item.
potentialAction	Action	Indicates a potential Action, which describes an idealized action in which this thing would play an object role.
schemas	URL	URL of a reference Web page that unambiguously indicates the item's identity. E.g. the URL of the item's Wikipedia page, Wikidata entry, or official website.
subjectOf	CreativeWork or Event	A CreativeWork or Event about this Thing. Inverse property: about.
url	URL	URL of the item.
Examples		

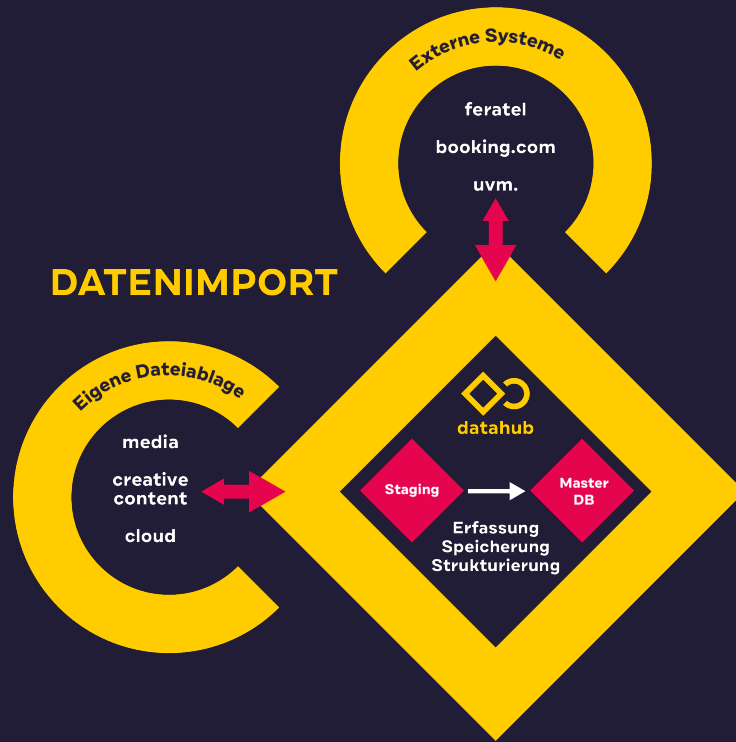
Example 1

No Markup Microdata RDFa JSON-LD Structure

Example notes or example HTML, without markup

```
<div>
  <h2>Software Engineer</h2>
  <p><strong>Location</strong>
    Kirkland WA</p>
  <p><strong>Industry</strong> Computer Software
  <br><strong>Occupational Category</strong> 15-1132.00 Software Developers, Application
  <br><strong>Hours</strong> Full-time, 40 hours per week
  <br><strong>Salary</strong> USD 100000
</p>
<p>
  <strong>Description</strong> ABC Company Inc.
  seeks a full-time mid-level software engineer to develop in-house tools.
</p>
<p><strong>Responsibilities</strong></p>
<ul>
  <li>Design and write specifications for tools for in-house customers</li>
  <li>Build tools according to specifications</li>
</ul>
<p><strong>Educational requirements</strong></p>
<ul>
  <li>Bachelor's Degree in Computer Science, Information Systems or related fields of study.</li>
</ul>
<p><strong>Experience requirements</strong></p>
<ul>
  <li>Minimum 3 years experience as a software engineer</li>
</ul>
<p><strong>Desired Skills</strong></p>
<ul>
  <li>Web application development using Java/J2EE</li>
  <li>Web application development using Python or familiarity with dynamic programming langua
</ul>
<p><strong>Qualifications</strong></p>
<ul>
  <li>Ability to work in a team environment with members of varying skill levels.</li>
  <li>Highly motivated.</li>
  <li>Learn quickly.</li>
</ul>
<p><strong>Benefits</strong></p>
<ul>
  <li>ABC Corp provides top-tier employee compensation benefits and a relaxed, team-orient
</ul>
<p><strong>Incentives</strong></p>
<ul>
  <li>Performance-based annual bonus plan, project-completion bonuses</li>
</ul>
<p><strong>Date Posted</strong> 2011-10-31</p>
</div>
```

DATENIMPORT



Und was ist ein Knowledge Graph?

Die Vorteile:



Vernetzte Daten

Verknüpfung von Datensätzen



Mehrdimensional

Zugehörigkeiten über Themengrenzen hinweg



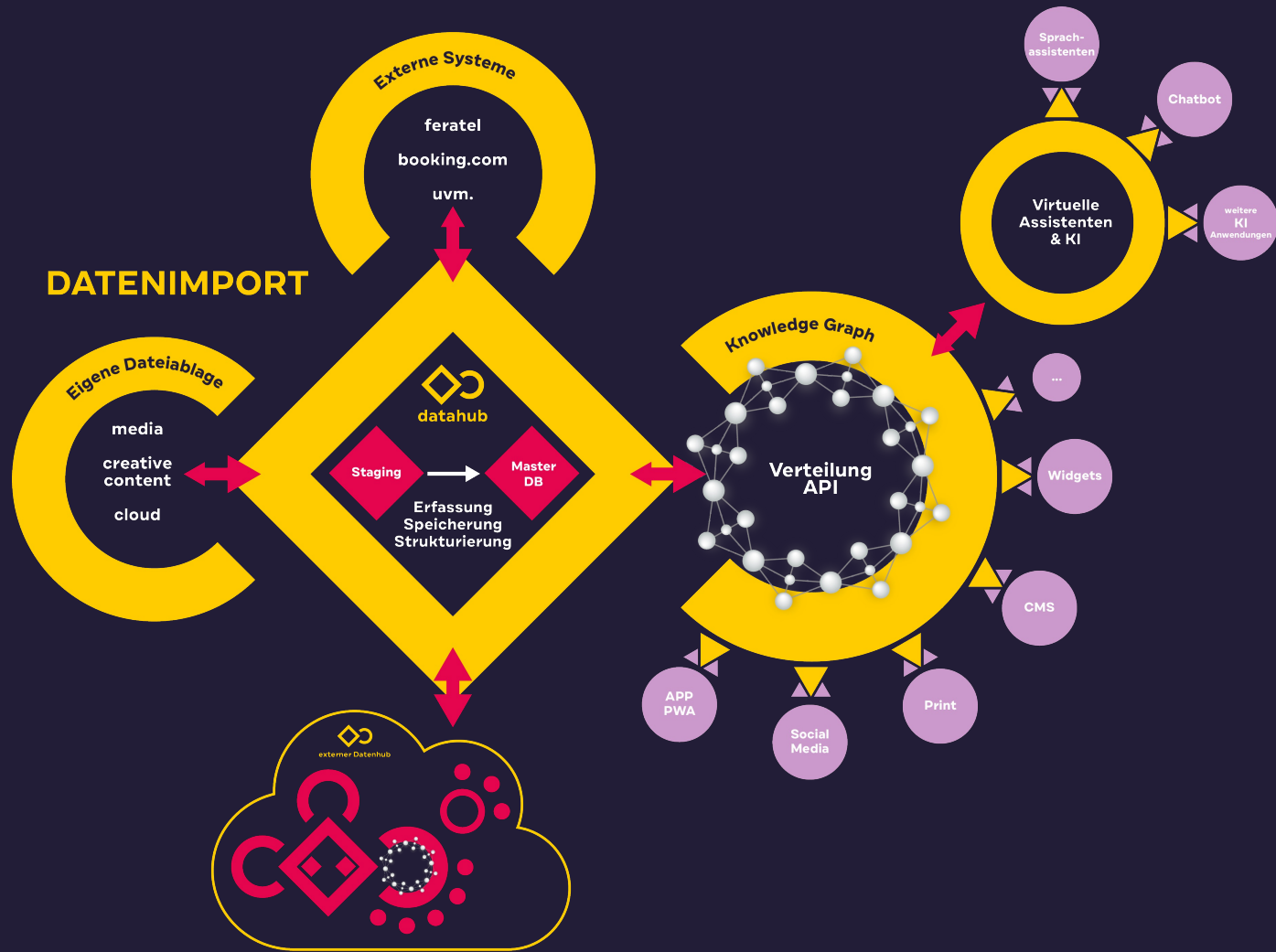
Nutzenstiftend

Ermöglicht globalere Informationsdarstellung



Maschinenlesbar

KI kann Zusammenhänge besser verstehen



**Der Blick in den
„DATENSPIEGEL“
erfordert MUT!**



So funktioniert das smarte Datenmanagement



Start:

Gemeinsam wird definiert, welche Daten/Dateien (Mediendaten, POIs, Auslastungsdaten etc.), die in unterschiedlichen Systemen abgelegt sind, in dataCycle integriert werden sollen.



Datenimport in ein System

Die gewünschten Daten werden über Schnittstellen in dataCycle importiert: **Mehrere, unabhängige Datenbestände werden so in einem zentralen System zusammengeführt.**

So funktioniert das smarte Datenmanagement



Verbesserung & Bereinigung von Daten

Mit dataCycle werden Daten auch bereinigt: **Duplikate** – also Daten, die in mehreren Systemen abgelegt wurden – **werden bereinigt**. Natürlich können Inhalte auch direkt in dataCycle erstellt werden. Und: Es steht eine spezielle Mechanik zur **Korrektur von fehlerhaften Inhalten** zur Verfügung.



Einfache Pflege

Die Datenhoheit bleibt immer in dem System, in welchem die Daten ursprünglich erfasst wurden: Das bedeutet, werden Daten dort geändert, werden diese Änderungen automatisch in dataCycle übernommen. **Die mehrfache Änderung von Daten entfällt somit.**

So funktioniert das smarte Datenmanagement



Einheitlich & maschinenlesbar

Um die Integration für verschiedene Anwendungsgebiete und/oder Zielsysteme sicherzustellen, setzt dataCycle auf etablierte Standards (z.B. schema.org, SKOS, JSON-LD, GeoJSON, WebDAV, MVT) – dadurch werden Daten vereinheitlicht und sind maschinenlesbar für Alexa, Siri & Co (womit ganz nebenbei ein besseres Google Ranking erreicht werden kann).



Flexibel & unabhängig

Installiert wird das System genau dort, wo es gewünscht ist, z.B. im eigenen Rechenzentrum oder über eines der dataCycle Hosting-Pakete. Das bringt maximale Unabhängigkeit und uneingeschränkten Zugriff auf die eigenen Daten.

Bereits erfolgreich mit dataCycle arbeiten u.a.:



**ÖSTERREICH
WERBUNG**

FLACHAU

**FLACHAU
TOURISMUS**

KÄRNTEN
Lust am Leben

**KÄRNTEN
WERBUNG**

 **BayernCloud**
Tourismus

**BAYERN
CLOUD**



**BURGENLAND
TOURISMUS**

Rheinland-Pfalz **.Gold**

**RHEINLAND-PFALZ
TOURISMUS GMBH**

MURTAU
STEIER
MARK

**MURTAU
STEIERMARK**

ÖV DAT

**ÖSTERREICHISCHES
INSTITUT FÜR
VERKEHRSDATEN-
INFRASTRUKTUR**

GSTAAD
COME UP SLOW DOWN

GSTAAD



**ÖSTERREICH WEIN
MARKETING GMBH**

**VOR
ARL
BERG**

**VORARLBERGER
TOURISMUS GMBH**

So funktioniert das smarte Datenmanagement

Klare Übersicht & einfach zu bedienen

Suchbegriff

Inhaltstypen

Aktive Filter

Sprache: Deutsch

jetzt suchen

309.528 Inhalte

Inhaltstypen

- Asset (- / 199.268) ▾
- Organisation (52.983 / 52.983) ▾
- Ort (- / 33.079) ▾
- Badeseen (19 / 19) ▾
- freie Scheehöhenmesspunkte (- / -) ▾
- Gastronomischer Betrieb (- / -) ▾
- LocalBusiness (- / -) ▾
- Örtlichkeit (140 / 140) ▾
- POI (21.041 / 21.041) ▾
- Skigebiet (115 / 115) ▾
- Tour (2.397 / 2.397) ▾
- Unterkunft (6.452 / 6.461) ▾
- Pauschalangebot (- / -) ▾
- Person (351 / 351) ▾
- Produkte (- / -) ▾
- Service (- / 1.099) ▾
- Schneehöhe - Messpunkt (159 / 159) ▾
- Service (- / 1.099) ▾
- Skigebiets-Beschreibung (61 / 61) ▾
- Text (- / 1.699) ▾
- Veranstaltung (21.473 / 23.011) ▾
- Veranstaltungsserie (462 / 462) ▾

Inhaltstypen

Aktive Filter: Inhaltstypen: Veranstaltungsserie, Veranstaltungsserie, Verkehrsmittel, Stadt, Feldkirch, Termine (Veranstaltungen) von 01.01.2023, Tags: ENTWICKELT

Sprache: Deutsch

jetzt suchen

195 Inhalte

Standard

Event (de) TaSKino | Everything Everywhere All at Once 01.03.2023 - 06.03.2023 GUK Kino Marktplatz 18 6800 Feldkirch

Event (de) NEUNMALNEU 10.02.2023 - 19.03.2023 Villa Claudia Bahnhofstraße 6 6800 Feldkirch

Event (de) Wochenmarkt | Unser Markt 27.09.2022 - 30.12.2023 Marktgasse Marktgasse 6800 Feldkirch

Event (de) Reparaturcafé Feldkirch 04.03.2023 - 04.03.2023 Hirsingraben 8 6800 Feldkirch

Event (de) Tanja Ghetta: Trotzphase Junior 04.03.2023 - 04.03.2023 Theater am Saumarkt Mühletersplatz 1 6800 Feldkirch

Event (de) Of Horses and Men 04.03.2023 - 04.03.2023 Theater am Saumarkt Mühletersplatz 1 6800 Feldkirch

Event (de) "O schöne Nacht!" 05.03.2023 - 05.03.2023 Pförtnerhaus Feldkirch Reichenfeldgasse 9 6800 Feldkirch

Event (de) "REparieren statt wegwerfen" lautet die Devise im Reparaturcafé. Wenn sie ein defektes Haushaltskleingerät, Kleinmöbel, Spielzeug oder...

Event (de) Der Feldkircher Wochenmarkt in der Marktgasse versorgt die Bevölkerung rund ums Jahr mit regionalen und saisonalen...

Event (de) Der Feldkircher Kalenderblätter 13.11.2022 - 26.03.2023 Schattenturm Burggasse 1 6800 Feldkirch

Event (de) TREFFPUNKT KINO für Senior*innen | À la Cartel 06.03.2023 - 06.03.2023 GUK Kino Marktplatz 18 6800 Feldkirch

Event (de) Das Format „Treffpunkt Kino“ zeigt in Zusammenarbeit mit dem TaS-Kino und dem GUK-Kino monatlich einen Film für die Feldkircher...

Event (de) Die Musiker Herbert Amann, Herbert Röggl, Simon Blum und Bernd Nagel...

Event (de) Der Kammerchor Feldkirch musiziert zusammen mit der Pianistin Anna Adamik. Nachtmusiken der Romantik. Zur Aufführung gelangen Werke von...

Weiter Ergebnisse

dataCycle

Vorarlberg Tourismus GmbH | Anfragen/Info | Datenschutz | Impressum

dataCycle Dashboard

So funktioniert das smarte Datenmanagement

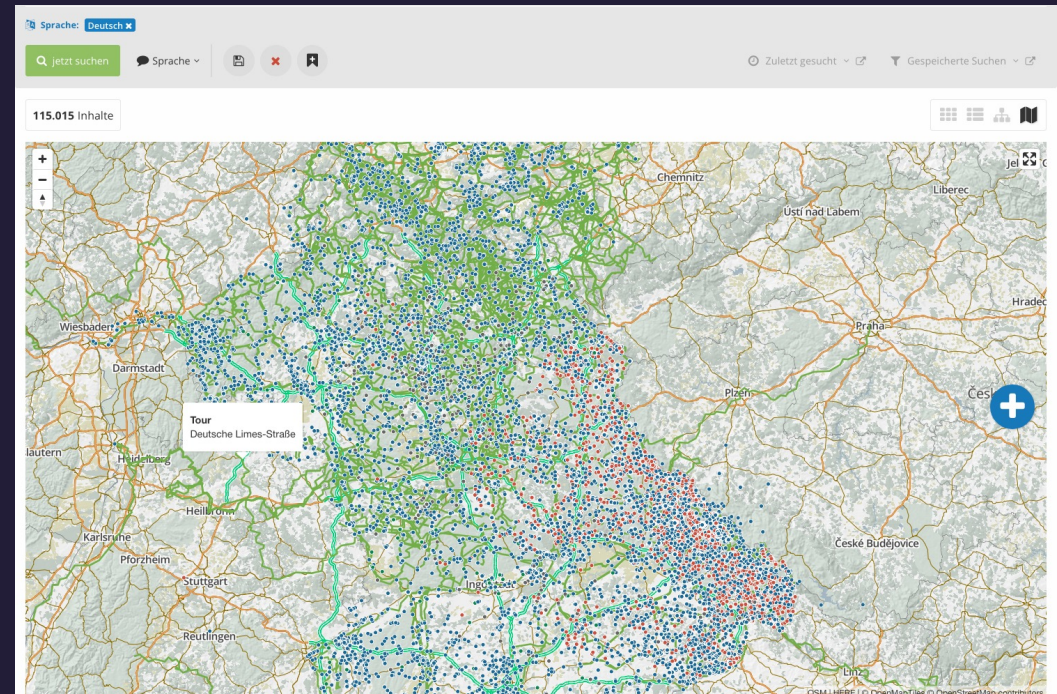
Effiziente Nutzung & Verwaltung
Wer sucht, der filtert und findet:

The screenshot displays a search results page for events. At the top, there is a search bar with the text "jetzt suchen" and a language dropdown set to "Deutsch". Below the search bar, there are several filter options: "Aktive Filter" (Active Filters) which includes "Inhaltstypen: Veranstaltung", "Veranstaltungsserie", "Verknüpfter Ort: Stadt Feldkirch", "Termine (Veranstaltungen) von in 0 Tag", and "Tags: ENTWURF". The main content area shows a grid of five event cards. Each card includes the event title, date, location, and a brief description. The first card is "TaSKino | Everything Everywhere All at Once" at "GUK Kino" on "01.03.2023 - 06.03.2023". The second card is "NEUNMALNEU" by "Villa Claudia" at "Bahnhofstraße 6" on "10.02.2023 - 19.03.2023". The third card is "Wochenmarkt | Unser Markt" at "Marktgasse" on "27.09.2022 - 30.12.2023". The fourth card is "Reparaturcafé Feldkirch" at "Hirschgraben 8" on "04.03.2023 - 04.03.2023". The fifth card is "Tanja Ghetta: Trotzphase Junior" at "Theater am Saumarkt" on "04.03.2023 - 04.03.2023". At the bottom of the page, there is a "Weitere Ergebnisse" button and the "dataCycle" logo.

Filtermöglichkeiten

So funktioniert das smarte Datenmanagement

Unkomplizierte Bereitstellung &
Weitergabe



Resümee:

**Ärmel hochkrempeln,
Anpacken!
Los starten!**

(vom Abwarten wird's nicht besser!)

Call! to Action

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