

# SocioCortex

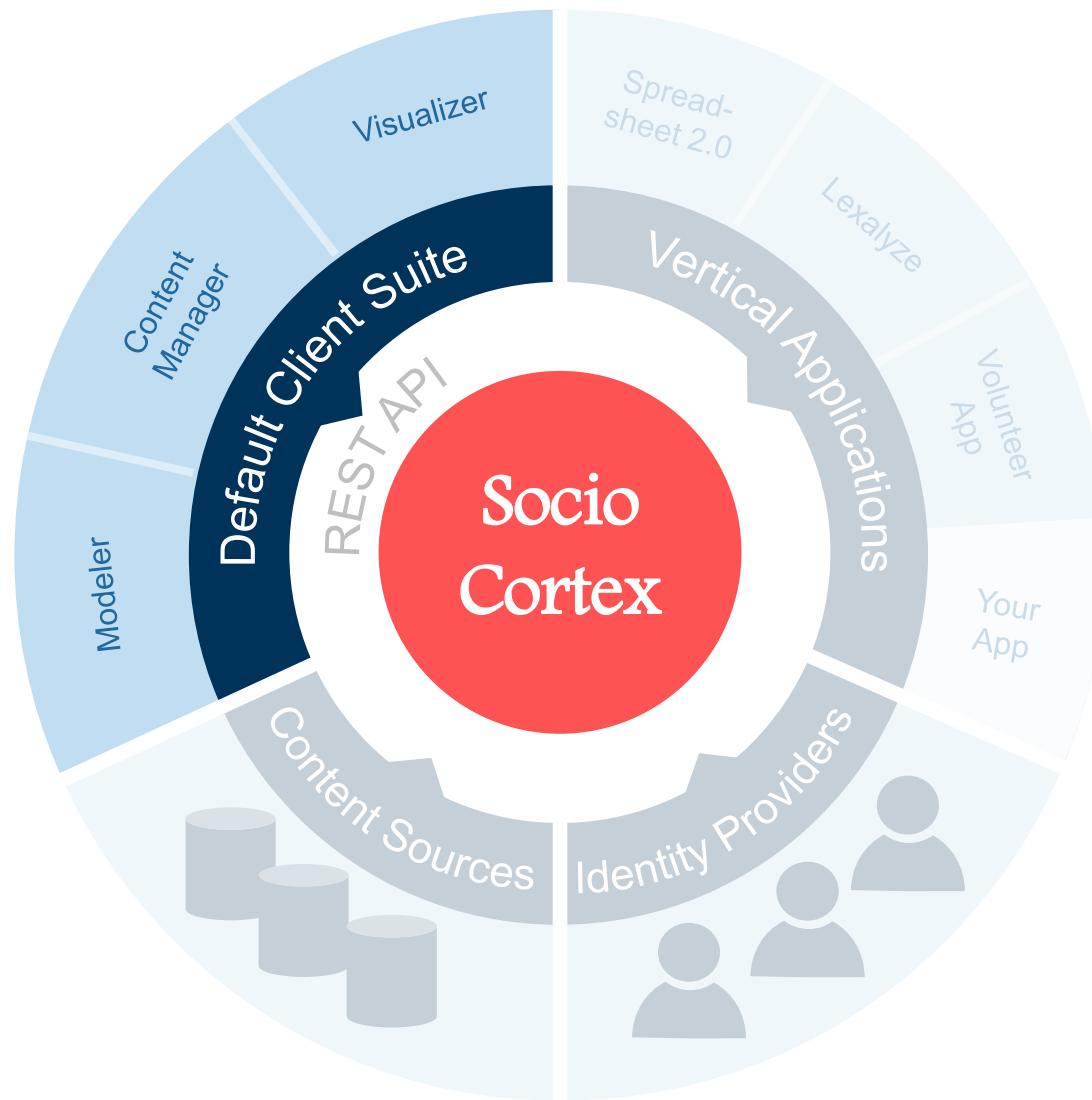
A Social Information Hub

SC

Software Engineering für betriebliche Informationssysteme (sebis)  
Fakultät für Informatik  
Technische Universität München

[wwwmatthes.in.tum.de](http://wwwmatthes.in.tum.de)







- ✓ Default web UI for **casual users**
  - ✓ **No** support for data modelling (outsourced to the SC Modeler)
- ✓ Can serve as a **template** for specific clients
- ✓ Navigating through the data model by **exploration** or **search**
- ✓ Support for knowledge-intensive processes through **data-centric tasks**

This screenshot shows a user profile page for Prof. Dr. Florian Matthes. The top navigation bar includes links for 'Search', 'Sebis Public Website' (which is highlighted in red), 'Student News', 'Research News', 'BEAMS', 'EAM Pattern Catalog', and 'AK Unternehmens-Architektur'. Below the navigation is a search bar and a 'Filter Pages' dropdown. The main content area displays a photo of Prof. Matthes, his name, and a brief summary of his research interests in Software Engineering for Business Information Systems. To the right is a 'Team Member' card showing his attributes: Position (Full Professor), E-Mail (matthes@in.tum.de), Phone (+49 89 289 17132), Fax (+49 89 289 17136), Room (01.12.054), Secretary (Aline Schmidt), LinkedIn (http://de.linkedin.com/...), Xing (https://www.xing.com/...), Skype (@matthes), and Twitter (@matthes). A 'View' button is at the bottom.

This screenshot shows a search results page for a 'Project set'. The top navigation bar is identical to the first screenshot. The main content area shows a search bar and a 'Filter' section. Below is a list of search results, with the first item being 'Project Setup' (last modified April 30th by Kym Shumalev). The result details a 'Kickoff Presentation.pdf' file, its modification history, and download links. To the right is a 'Student Project' card showing tasks: 'Sign Copyright Agreement' (status: pending), 'Initial Presentation' (status: completed), and 'Hand in Final Thesis' (status: pending). A 'Show All' button is at the bottom.

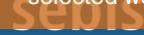
# SocioCortex > Default Client Suite > Content Manager

## Navigation Structure

sebis

### I. Workspace

shows the current selected workspace



Fakultät für Informatik  
Technische Universität München

Search



Sebis Public Website

Student News

Research News

BEAMS

EAM Pattern Catalog

AK Unternehmens-Architektur



Filter Pages

Team

Prof. Dr. Florian Matthes

Tabular CV Florian Matthes

Personal Information about Florian Matthes

Lebenslauf Prof. Dr. Florian Matthes

Aline Schmidt

Jian Kong

Jörg Landthaler

Pouya Aleatratı Khosroshahi

Matheus Hauder

Manoj Mahabaleshwar

Adrian Hernandez-Mendez

Felix Michel

Thomas Reschenhofer

Alexander W. Schneider

Klym Shumaiev

Alexander Waldmann

### II. Page Explorer

Florian Matthes holds the chair Software Engineering for Business Information Systems at the Technische Universität München. The current focus of his research is on the digital transformation of enterprises and societies. He is involved in enterprise architecture management, social content and model management, and semantic modeling of legal texts (LexAlyze). As head of the software architecture working group of the Gesellschaft für Informatik, member of the advisory board of the Ernst Denert-Stiftung für Software Engineering and organizer of several workshops and conferences in the area of enterprise architecture he puts special emphasis on the cooperation between practitioners and scientists in informatics and information systems.

Since 2014 he is extending this theory-based and practice-oriented cooperative work to also include scientists and practitioners from the legal domain to foster a better shared understanding of the interaction between informatic, economic and legal models of an increasingly digital society. He is co-founder and chairman of CoreMedia (1996) and infoAsset (1999), co-founder of further small software and service university spin-off, and scientific advisor of UnternehmerTUM, the center of innovation and business creation at TU München. Earlier stations of his academic career are the Goethe-University Frankfurt (Diploma 1988) the University of Hamburg (PhD 1992), the Digital Systems Research Center (now HP SRC Classic) in Palo Alto, USA (Researcher 1992-1993), and the Technical University Hamburg-Harburg (Associate Professor 1997-2002). Until 2010 he served as dean of studies at the Faculty for Informatics and member of the teaching board of TU München.

### III. Page Title

shows the title of the page



Chair Informatics 19  
Software Engineering for Business Information Systems  
Institut für Informatik  
TU München  
Boltzmannstrasse 3  
D-85748 Garching bei München  
How to get to Garching  
Room: 1.12.054 (click for campus maps)

### V. Attributes

Team Member	
Attributes	
Position	Full Professor
E-Mail	matthes [at] in.tum.de
Phone	+49 89 289 17132
Fax	+49 89 289 17136
Room	01.12.054
Secretary	Aline Schmidt
LinkedIn	<a href="http://de.linkedin.com/">http://de.linkedin.com/...</a>
Xing	<a href="https://www.xing.com/">https://www.xing.com/...</a>
Skype	f1matthes
Twitter	@matthes
Attribute name	Attribute value

IV. Entity Type  
depending on the entity type the page has predefined attributes

## Prof. Dr. Florian Matthes

sebis staff curriculum vitae



Chair Informatics 19  
Software Engineering for Business Information Systems  
Institut für Informatik  
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How to get to Garching  
Room: 1.12.54 (click for campus maps)

Florian Matthes holds the chair Software Engineering for Business Information Systems at Technische Universität München. The current focus of his research is on technologies driving the digital transformation of enterprises and societies: Enterprise architecture management, social content and model management, and semantic modeling of legal texts (LexAlyze). As head of the software architecture working group of the Gesellschaft für Informatik, member of the advisory board of the Ernst Denert-Stiftung für Software Engineering and organizer of several international conferences in the area of enterprise architecture he puts special emphasis on the cooperation between practitioners and scientists in informatics and information systems.

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**Add Attributes**

Team Member	
Attributes	
Position	Full Professor
E-Mail	matthes [at] in.tum.de
Phone	+49 89 289 17132
Fax	+49 89 289 17136
Room	01.12.054
Secretary	Aline Schmidt
LinkedIn	<a href="http://de.linkedin.com/">http://de.linkedin.com/...</a>
Xing	<a href="https://www.xing.com/">https://www.xing.com/...</a>
Skype	f1matthes
Twitter	@matthes
Attribute name	Attribute value

**Page Entity Type**  
depending on the type the page has predefined attributes

**Attribute Name**

**Attribute Value**  
depending on the entity type definition a attribute value can have one or multiple values of defined types. E.g. a simple string, date or link to a person, custom type, etc.

## Tasks: Basics

**Page State** expresses the current state of a page (avg. of all assigned tasks)

**Master's Thesis Felix Michel**

21 guided research hauder organic data

## A Structured Task-Centered Framework for Online Collaboration

### Abstract

Today's scientific research collaborations are often multidisciplinary across organizational borders and time zones. Communication that is based on emails or teleconferences is task name. Below all task areas many approaches have focused on building and maintaining communities. Other approaches focus on managing effort such as organizing work as tasks. Collaboratively working teams can potentially increase their efficiency by combining the task centered approach. However, no existing approach combines an on-line community platform and a task centered approach to provide an open collaboration process.

This thesis presents the Organic Data Science approach which enables an open task centered on-line collaboration process. Key principles to address challenges of the task-centered collaboration approach are 1.) the self-organization of the community through task decomposition, 2.) an on-line community support based on social design principles and best practices and 3.) an open science process to enable unanticipated contributions.

The task-centered Organic Data Science framework approach is implemented based on the Semantic MediaWiki platform. The prototype implementation of the Organic Data Science framework is evaluated through a research project focused on the science question of modeling the age of water in an ecosystem. This project requires expertise in different research areas from multiple organizations within different time-zones. Different collaboration dimensions are evaluated such as how many different users access a task, how many different users are assigned to a task, how many different users edit the task metadata and how many different users contribute content. The findings show that the framework supports the collaboration process. In general the Organic Data Science framework is designed for helping scientists to collaborate to solve complex scientific research questions. The use of the Organic Data Science framework is not limited to scientific purpose, it helps to support complex knowledge intensive collaborative processes.

**Attributes Tab** lists all attributes of the page (see attributes explanation)

**Tasks Tab** shows the selected current selected workspace

Attributes	Tasks
Sign Copyright Agreement	Copyright agreement publication allowed
	Copyright agreement notification email
	Copyright agreement notification required
	Copyright agreement required
Initial Presentation	Kickoff presentation slides
Hand in Final Thesis	Final presentation slides
	Thesis PDF
New Task	Show All

**Add New Task** a new task can be added

The screenshot shows the Sebis Content Manager interface. On the left, there is a sidebar with various navigation links: Team, Research, Publications, Teaching, Thesis & Guided Research, Events, Sponsors & Partners, Career Opportunities, Contact, and Datenschutzerklärung. The main content area displays a master's thesis titled "Master's Thesis Felix Michel". The thesis title is "A Structured Task-Centered Framework for Online Collaboration". Below the title is an abstract. A callout bubble highlights the section "Tasks Metadata" in the abstract. To the right of the abstract is a "Student Project" panel. This panel has two tabs: "Attributes" and "Tasks". The "Tasks" tab is selected and shows a table with the following data:

	Sign Copyright Agreement	...
Progress:	0%	...
Start Date:	15.07.2015	...
End Date:	22.07.2015	...
Owner:	Felix Michel	...
Expertise:	Management, Liability	...
Copyright agreement publication allowed		
Copyright agreement notification email		
Copyright agreement notification required		
Attribute name		Attribute value
Initial Presentation	...	...
Kickoff presentation slides		

## Tasks: Gant Chart

Search



Sebis Public Website

Student News

Research News

BEAMS

EAM Pattern Catalog

AK Unternehmens-Architektur



Filter Pages

Team



Research



Publications



Teaching



Thesis &amp; Guided Research



Events



Sponsors &amp; Partners



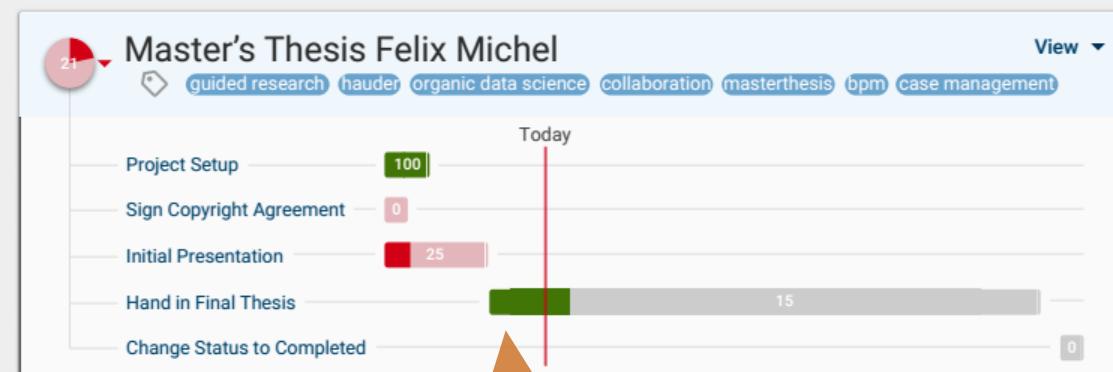
Career Opportunities



Contact



Datenschutzerklärung



## A Structured Task-Centered Framework for Online Collaboration

### Abstract

Today's scientific research collaborations are often multidisciplinary across organizational borders and time-zones. Communication that is based on emails or teleconferences is time consuming. In recent years many approaches have focused on building and establishing on-line communities. Other approaches focus on managing effort such as organizing work as tasks. Collaboratively working teams could potentially increase their efficiency by combining the task centered approach with the community approach. However, no existing approach combines an on-line community platform and a task centered approach to provide an open collaboration process.

This thesis presents the Organic Data Science approach which enables an open task centered on-line collaboration process. Key principles to address challenges of the task-centered collaboration approach are 1.) the self-organization of the community through task decomposition, 2.) an on-line community support based on social design principles and best practices and 3.) an open science process to enable unanticipated contributions.

The task-centered Organic Data Science framework approach is implemented based on the Semantic MediaWiki platform. The prototype implementation of

### Task Gant Chart

All tasks of the page are visualized depending on their start- and end date and progress.

Student Project	
Attributes	Tasks
<b>Current Tasks</b>	
Sign Copyright Agreement	...
Copyright agreement publication allowed	...
Copyright agreement notification email	...
Copyright agreement notification required	...
Copyright agreement required	...
Initial Presentation	...

## Tasks: Notifications

Filter Pages

- Team**
- Research**
- Publications**
- Teaching**
- Thesis & Guided Research**
- Events**
- Sponsors & Partners**
- Career Opportunities**
- Contact**
- Datenschutzerklärung**

Search

Sebis Public Website Student News Research

Task Nonfictions user with overdue tasks will be notified.

Software Engineering for Business

Our Research

**Enterprise Architecture Management**  
We are discovering how to advance the enterprise as a whole by scientific engineering.

**Vertical Social Software Engineering**  
We are discovering how to enhance software development by collaboration.

**Social Content & Model Management**  
We are developing a wiki-like content management with high emphasis on user collaboration.

**Modeling & Management of Legal Norms**  
We are unveiling the complexity in legal texts driven by automatic analysis.

May 29th: Paper on a Task-Centred Framework for Science Collaboration at e-Science accepted

May 20th: LexAlyze - Interdisciplinary Research Program, see [www.lexalyze.de](http://www.lexalyze.de)

May 6th: Paper on Software Support of Knowledge-Intensive Processes accepted

Apr 30th: Paper on a virtual crowdsourcing community for open collaboration in science published

[View All Research News](#)

Featured Projects

EAM Pattern Catalog V2.0: A Collection to establish an EA Management Function

Spreadsheet 2.0: User-Oriented Tools for Analyzing complex linked Data

[View All Projects](#)

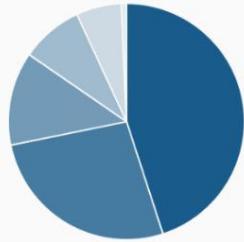
Our Team





Name: Florian Katenbrink  
Email: f.katenbrink@gmail.com  
Last Login: 1 minute ago

### Expertise



■ Collaboration: 45%  
■ Computer Science: 26.8%  
■ Software Engineering: 12.8%  
■ Literatur Research: 8.5%  
■ Soft Skills: 6.2%  
■ Others: 0.7%

### User Expertise

a user earns expertise by accomplishing tasks. The expertise which is assigned to the task is then earned by the user

**Florian Katenbrink**

**Username**

#### Current Tasks

<b>Complete Exercise 1</b> Chair > Teaching > Global Software Engineering > Exercise 1	Due: 3 days ago
<b>Create four mockups for the use cases</b> Chair > Teaching > Web Application Engineering > Project 3	Due: in 10 days
<b>Complete Exercise 2</b> Chair > Teaching > Global Software Engineering > Exercise 2	Due: in 10 days

#### Future Tasks

<b>Develop the SSSP Algorithm</b> Chair > Teaching > Algorithms 1 > Exercise 1	Starts: in 5 days
---	-------------------

#### Completed Tasks

<b>Create two use-case diagrams</b> Chair > Teaching > Web Application Engineering > Project 2	Completed: 5 days ago
<b>Complete Hello World Exercise</b> Chair > Teaching > Web Application Engineering > Project 1	Completed: 7 days ago

**Current Tasks**  
tasks which are not completed yet

**Future Tasks**  
tasks which are defined for the future

**Completed Tasks**  
tasks that have been completed in the past

Fakultät für Informatik  
Technische Universität München**Filters**

the filters allow to filter the content based on different types

**Filter** Discussion: Task: Created Updated Completed Delegated Skipped Data: Created Updated Deleted

Workspace:

&lt;All&gt;

Time Span:

Last week

Filter User

 Hide my own activities Show watched activities only

Search



Sebis Public Website

Student News

Research News

BEAMS

EAM Pattern Catalog

AK Unternehmens-Architektur

**Activity Feed**

Post new Discussion

Jun 15  
Fri

Matheus Hauder

Updated task "Asses results" to 75%.

Sebis Public Website &gt; Software Engineering Lecture &gt; Exercise 1



(5) Comment (1)



Matheus Hauder

We already started the assessment of the first two exercises and you will get the results within the next few days. In case you have any questions regarding your performance, please contact your individual advisor.

June 18th, 2015 at 11:57

Jun 13  
Wed

Matheus Hauder

Dear students! Thank you for the submissions of the second exercise. All exercises have been submitted in time and completed. Within the next few days we will complete our tasks for the assessment of the exercises. After we are finished the progress for the first two exercises will be 100%.



(0) Comment (0)



Stefan Schmidt





## Filter

Sort by:

Relevance ▾

Content Type:

&lt;None&gt; ▾

Workspace:

&lt;None&gt; ▾

Type:

&lt;None&gt; ▾

System Attribute:

&lt;None&gt; ▾

Special:

&lt;None&gt; ▾

Filters

## Search

Results 1 - 10 of 37 for: Project set

Search Results

## Project Setup

Task (last modified April 30th by Klym Shumaiev)

Used in 5 Pages: 2 Completed 1 In Progress 1 Overdue 1 Not started

## Kickoff Presentation.pdf

File in Sebis Public Website &gt; Master's Thesis Philip Achenbach (last modified November 26th, 2012 by Philip Achenbach)

File /Sebis Public Website/\_/Master's Thesis Philip Achenbach/Kickoff Presentation.pdf Kickoff Implementation Master's Thesis Kickoff Presentation Philip Achenbach philip.achenbach@tum.de Administrative /\_/\_/Master's Thesis Philip Achenbach/Kickoff Presentation.pdf File Philip Achenbach Fakultät für : Concepts and Implementation Master's Thesis Kickoff Presentation Philip Achenbach philip.achenbach@tum.de

## geroe\_kickoff.pdf

File in Sebis Public Website &gt; Bachelorarbeit Andreas Gerö (last modified May 27th, 2014 by Andreas Gerö)

File /Sebis Public Website/\_/Bachelorarbeit Andreas Gerö/geroe\_kickoff.pdf geroe\_kickoff.pdf Not /geroe\_kickoff.pdf File Andreas Gerö Software Engineering für betriebliche Informationssysteme

## 20140603\_KickOff\_Presentation.pdf

File in Sebis Public Website &gt; Guided Research Daniel Schosser (last modified December 1st, 2014 by Klym Shumaiev)

File /Sebis Public Website/\_/Guided Research Daniel Schosser/20140603\_KickOff\_Presentation.pdf 20140603\_KickOff\_Presentation.pdf Not template related 1nyocx5n8dl5q Klym Shumaiev Software

## MT Reschenhofer kickoff.pdf

File in Sebis Public Website &gt; Master's Thesis Thomas Reschenhofer (last modified June 13th, 2014 by Thomas Reschenhofer)



- Web UI for **designing** the data, process, and functional **model**
  - Definition of entity types, attribute definitions, task definitions, functions, etc.
  - Support for data and model consolidation

The screenshot displays the SocioCortex Modeler web interface. At the top, a header bar shows "IME > Northwind (Workspace)". On the right, a user profile for "Prof. Matthes Florian" is visible. The main area is divided into several sections:

- DASHBOARD:** A chart titled "Most used types" showing the frequency of nine entity types: Type 1 through Type 9.
- FUNCTIONS:** A UML Diagram section showing relationships between entities:
  - "Team member" is connected to "Courses" via a "contact" relationship.
  - "Team member" is connected to "Student project" via a "supervisor" relationship.
  - "Student project" is connected to "Research project" via an "embedded in" relationship.
- SETTINGS:** A detailed view of an "Account" entity type, including fields for "Name", "Default Value", "Any Number Value", "Description", and a "Read Only" switch.

**Modeler**

**Breadcrumb**  
shows the current location and path

 Users

 Groups

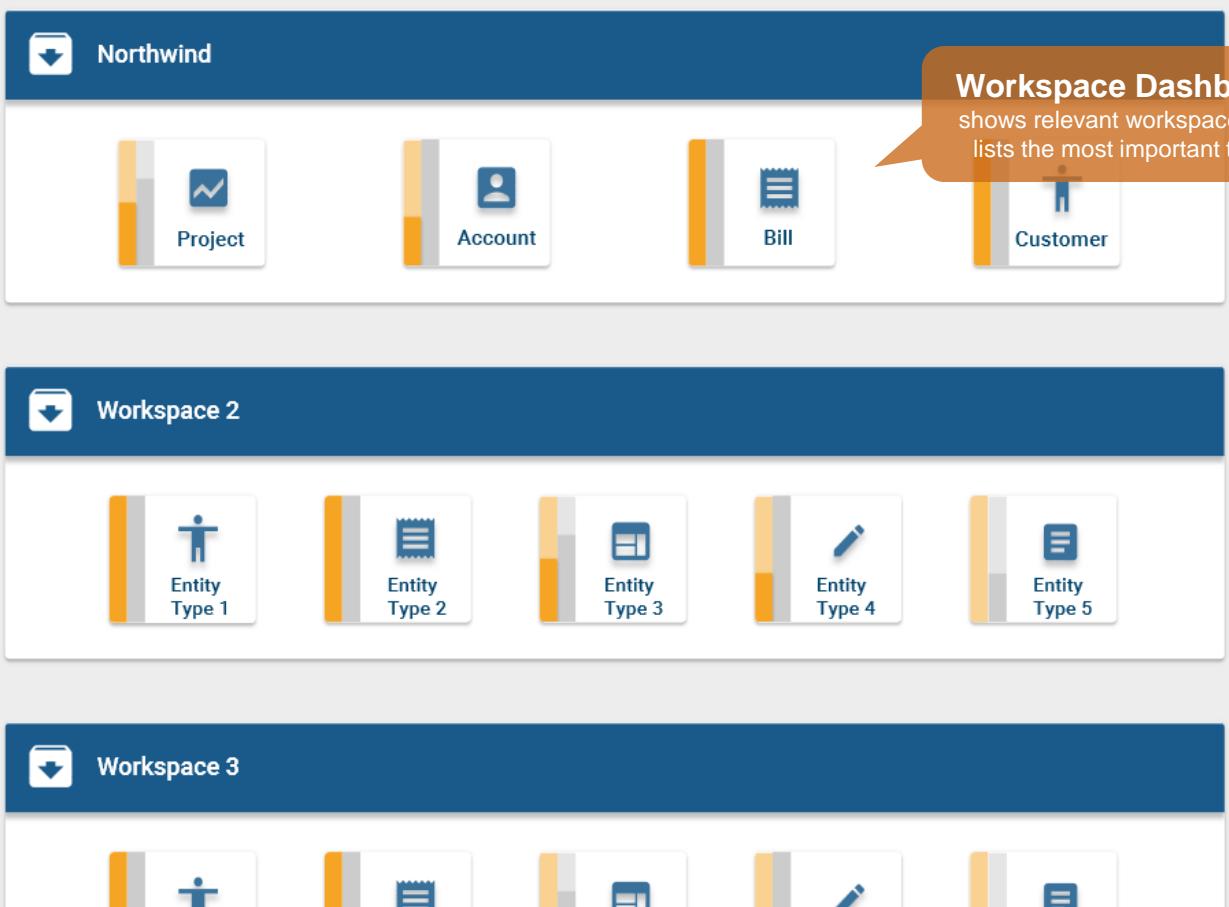
 Workspaces ▾

★ Northwind

★ Workspace 2

★ Workspace 3

**Navigation Bar**  
currently the root navigation options are shown



The screenshot shows the SocioCortex Modeler interface. On the left is a navigation bar with icons for users, groups, workspaces (with dropdown for Northwind, Workspace 2, and Workspace 3), and a navigation bar itself. The main area contains three workspace dashboards. The first dashboard, 'Northwind', shows four entity types: Project (blue line chart icon), Account (person icon), Bill (receipt icon), and Customer (person icon). The second dashboard, 'Workspace 2', shows five entity types: Entity Type 1 (person icon), Entity Type 2 (receipt icon), Entity Type 3 (document icon), Entity Type 4 (pencil icon), and Entity Type 5 (list icon). The third dashboard, 'Workspace 3', shows five entity types with partially visible icons. A blue header bar at the top has the 'Modeler' title and a user profile for 'Prof. Matthes Florian'. A yellow banner at the bottom right says 'sebis'.

# SocioCortex > Default Client Suite > Modeler

## Workspace: Northwind Workspace Dashboard

**Breadcrumb**  
shows the workspace name and below the item type

**Dashboard**  
show the dashboard of the Northwind workspace

**Navigation Bar**  
shows all custom entity types of the workspace Northwind

**Model**  
show the relations between the entity types

The screenshot shows the SocioCortex Modeler interface for the Northwind workspace. The top navigation bar includes a search bar for entity types, a breadcrumb trail ('Modeler > Northwind'), and a user profile for 'Prof. Matthes Florian'. The main content area has tabs for 'DASHBOARD', 'FUNCTIONS', and 'SETTINGS', with 'DASHBOARD' selected. A sidebar on the left lists custom entity types: Project, Account, Bill, and Customer. The central part of the screen displays two panels: 'Most used Entity Types' (a bar chart with six categories) and 'UML Diagram' (showing relationships between Account, Project, Bill, and Customer entities). At the bottom, there's a section for 'Entity Types to be consolidated' with icons for Project, Account, Bill, and Customer.

DASHBOARD    FUNCTIONS    SETTINGS

Entity Types

- Project
- Account
- Bill
- Customer

Most used Entity Types

Entity Type	Count
Entity Type 1	100
Entity Type 2	80
Entity Type 3	70
Entity Type 4	60
Entity Type 5	50
Entity Type 6	40

UML Diagram

```
classDiagram Account "*" -- "1" Project : project
classDiagram Account "*" -- "1" Customer : account
classDiagram Bill "*" -- "1" Customer : customer
```

Entity Types to be consolidated

- Project
- Account
- Bill
- Customer

☰ Modeler > Northwind  
Workspace

Search Entity Types 

Entity Types

-  Project
-  Account
-  Bill
-  Customer

DASHBOARD    **FUNCTIONS**    SETTINGS

**Functions**  
calculate results based on entities of the workspace

	Name	Number
 Function	Entropy	

Description  
Calculates the Shannon Entropy for the given list 100/200

Parametars  
list: Sequence

Expression  
0/200

 Click here to add a Function

Modeler > Northwind > Customer  
Workspace Entity Type

Prof. Matthes Florian

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

Selected Entity Type

ATTRIBUTE DEFINITIONS    TASK DEFINITIONS    SETTINGS    DERIVED ATTRIBUTE DEFINITIONS

Attribute Definitions (see next slides)

Task Definitions (see next slides)

Derived Attribute Definitions (see next slides)

Icon	Type	Value	More
User icon	Account	Any Number Value	⋮
Enumeration icon	Enumeration	Any Number Value	⋮

Add Attribute Definition

Click here to add an Attribute Definition

Modeler > Northwind > Customer

Entity Type

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

Possible types of Attribute Definitions shows a list of custom types and basic types which can be used for attribute definitions

ATTRIBUTE DEFINITIONS

Text

Name: Last name

Multiplicity: Any Number Value

Read Only

Custom Types: Project, Account, Bill, Customer

Basic Types: Date, Image, Long Text, Enumeration, Rich Text

M. M.

100/200

0/200

Account Any Number Value

Enumeration Any Number Value

Attribute Definitions

Task Definitions

Settings

Derived Attribute Definitions

## Entity Type: Reorder Attribute Definitions

ATTRIBUTE DEFINITIONS    TASK DEFINITIONS    SETTINGS    DERIVED ATTRIBUTE DEFINITIONS

	Account	Any Number Value	
	Last name	Any Number Value	
	Enumeration	Any Number Value	

Click here to add an Attribute Definition

ATTRIBUTE DEFINITIONS    TASK DEFINITIONS    SETTINGS    DERIVED ATTRIBUTE DEFINITIONS

	Account	Any Number Value	
	Last name	Any Number Value	
	Enumeration	Any Number Value	

Click here to add an Attribute Definition

The screenshot shows the SocioCortex Modeler interface with the following details:

- Header:** Modeler > Northwind > Customer
- Entity Type:** Customer
- Toolbar:** Search Entity Types, Entity Types (Project, Account, Bill, Customer), ATTRIBUTE DEFINITIONS, TASK DEFINITIONS (highlighted), SETTINGS, DERIVED ATTRIBUTE DEFINITIONS.
- Customer Entity Types List:** Project, Account, Bill, Customer (Customer is selected).
- Task Definitions Section:**
  - Existing Task Definition:** Signed contract agreement (Task Name).
  - Task Attributes:** Existing Task Attributes (at least one, most one), Add new Task Attributes, Recommended Task Attributes.
  - Add Task Definition:** Click here to add a Task Definition.
- Recommended Task Definition:** Recommended Task Definition (Title (de) Text, Title (en) Text).

Annotations with orange callouts highlight specific features:

- Existing Task Definition:** Points to the existing task definition "Signed contract agreement".
- Existing Task Attributes:** Points to the "Existing Task Attributes" section.
- Add new Task Definition:** Points to the "Add Task Definition" button.
- Add Recommended Task Definition:** Points to the "Recommended Task Definition" section.

The screenshot shows the SocioCortex Modeler application interface. The top navigation bar indicates the path: Modeler > Northwind > Customer. The workspace is set to Entity Type. On the right, there is a user profile for Prof. Matthes Florian. The main content area has tabs for ATTRIBUTE DEFINITIONS, TASK DEFINITIONS, SETTINGS, and DERIVED ATTRIBUTE DEFINITIONS, with the last one being active. On the left, a sidebar lists Entity Types: Project, Account, Bill, and Customer, with Customer selected. A callout bubble labeled "Existing Derived Attribute Definition" points to a row for "MxL Derived Att. Definition". This row contains fields for Name (Age), Description (Calculate age), Expression (Today - 'Birth date'), and a visibility toggle switch labeled "Visible". Below this row, another callout bubble labeled "Add new Derived Attribute Definition" points to a button labeled "Add Derived Att. Definition". A dashed box highlights the "Click here to add a Derived Attribute Definition" text.

Modeler > Northwind > Customer

Workspace Entity Type

Prof. Matthes Florian

Search Entity Types

Entity Types

- Project
- Account
- Bill
- Customer

Existing Derived Attribute Definition

MxL  
Derived Att. Definition

Name: Age

Description: Calculate age

Expression: Today - 'Birth date'

Visible

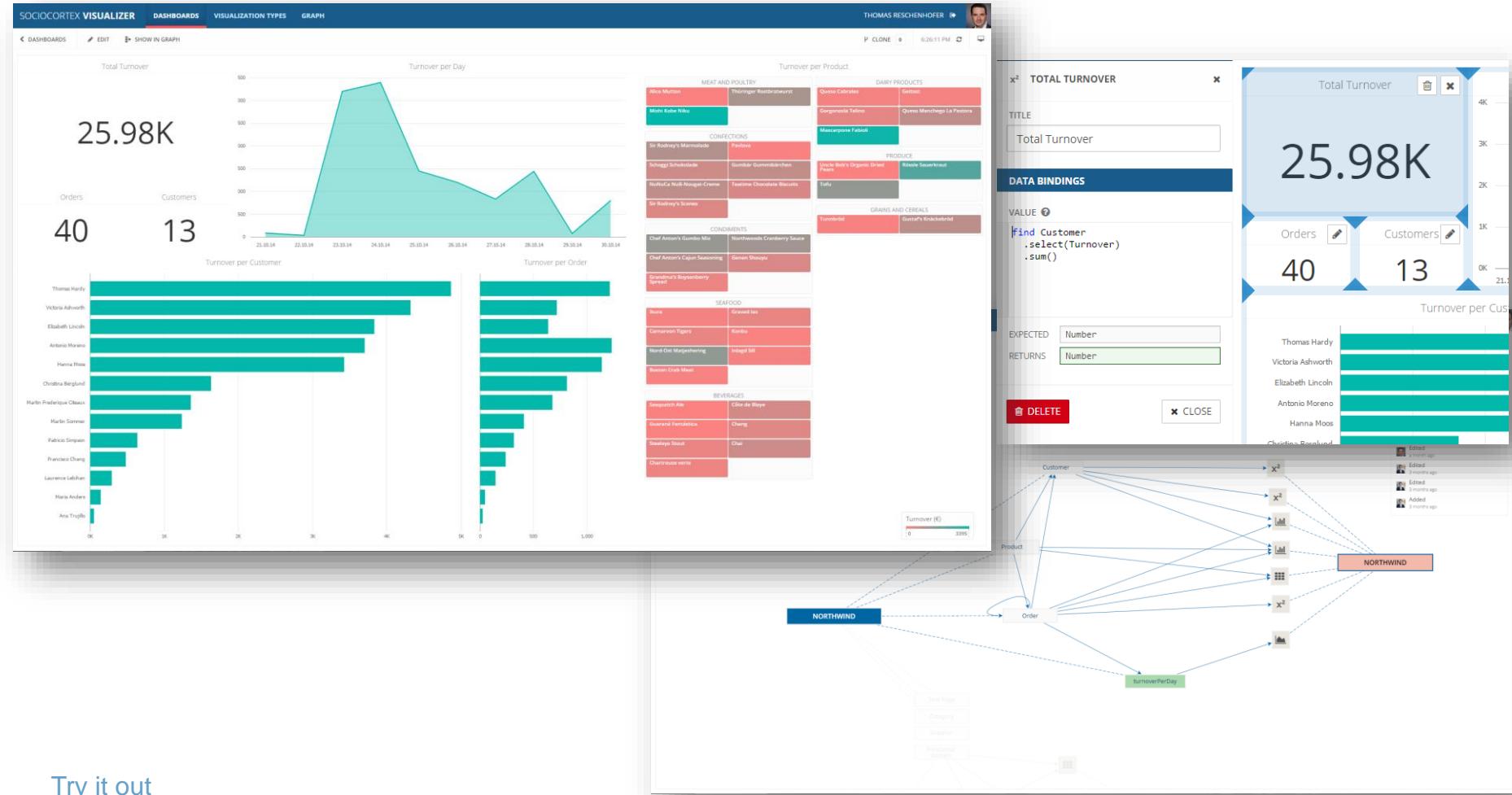
Add new Derived Attribute Definition

Add Derived Att. Definition

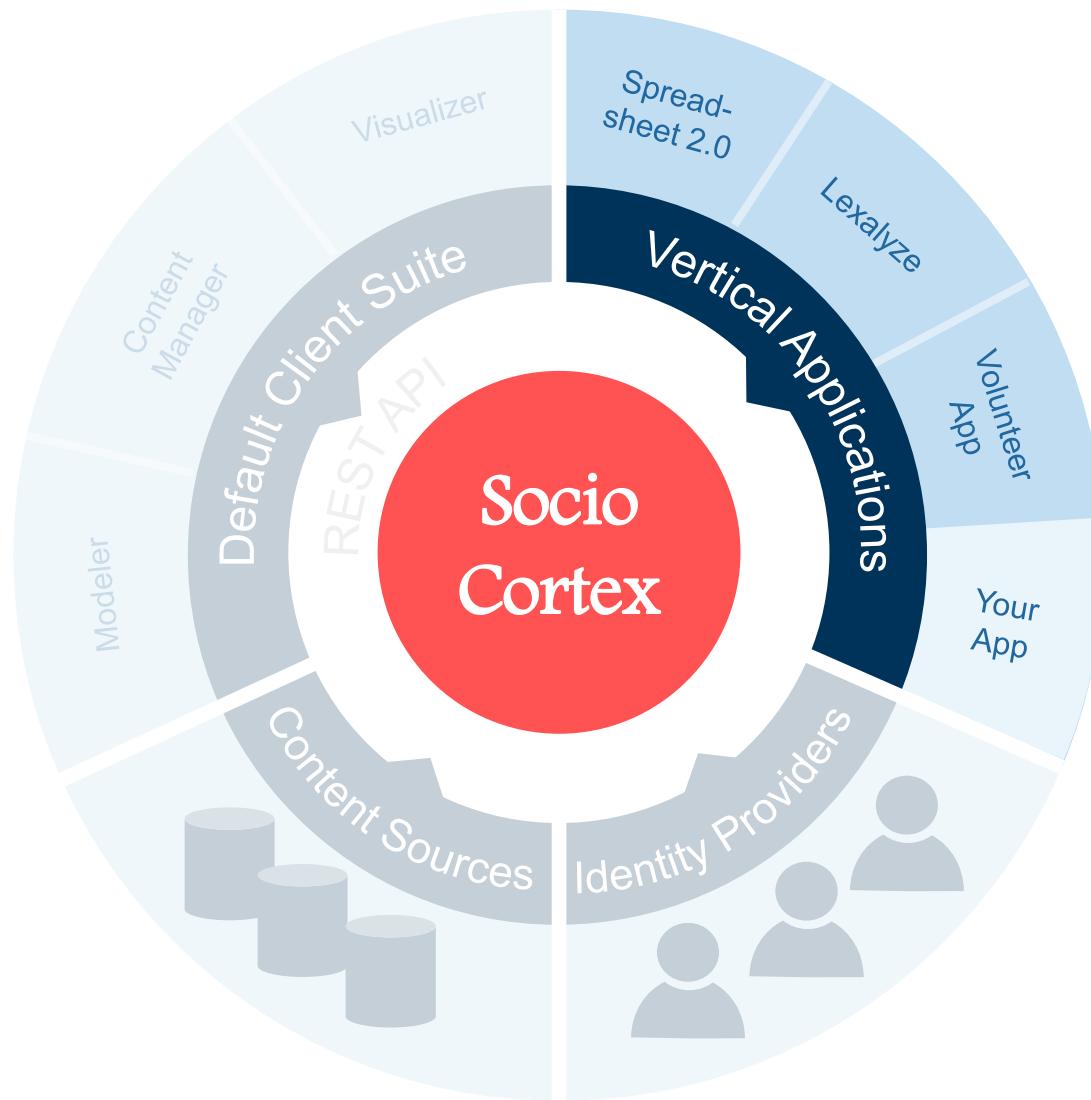
Click here to add a Derived Attribute Definition



- **Customizable** dashboards consisting of multiple visualizations
- **Analyzability** to foster transparency of information flow



[Try it out](#)





# SocioCortex > Default Client Suite > Spreadsheet 2.0 Visualizer

## Customizing and Configuring a Dashboard and its Visualizations



**SPREADSHEET2.0 VISUALIZER** DASHBOARDS VISUALIZATION TYPES GRAPH

BACK SAVE REVERT DELETE

VERSION 3

**TITLE**  
Turnover per Product

**DATA BINDINGS**

**TITLES**  
find Product .select(Name)

**CATEGORIES** OPTIONAL  
find Product .select(Category.Name)

**COLOR COEFFICIENTS** OPTIONAL  
find Product .select(Turnover)

**VISUAL SETTINGS**  
MIN COLOR #FB8281

**Total Turnover**  
25.98K

**Turnover per Day**

**Turnover per Product**

**BEVERAGES**

Guaraná Fantástica	Chang
Côte de Blaye	Chai
Chartreuse verte	Steeleye Stout
Sasquatch Ale	

**DAIRY PRODUCTS**

Geitost	Queso Cabrales
Gorgonzola Telino	Queso Manchego La Pastor
Mascarpone Fabioli	

**CONDIMENTS**

Northwoods Cranberry Sauce	Chef Anton's Cajun Seasoning
Chef Anton's Gumbo Mix	Genen Shouyu
Grandma's Boysenberry Spread	

**PRODUCE**

Uncle Bob's Organic Dried Pears	Tofu
Rössle Sauerkraut	

**SEAFOOD**

Nord-Ost Matjeshering	Konbu
Carnarvon Tigers	Gravad lax
Ikura	Inlægd Sill
Boston Crab Meat	

**MEAT AND POULTRY**

Thüringer Rostbratwurst	Mishi Kobe Niku
Alice Mutton	

**CONFECTIONERY**

Sir Rodney's Marmalade	Gummibärchen
Teatime Chocolate Biscuits	NuNuCa NuB-Nougat-Creme
Schoggi Schokolade	Pavlova
Sir Rodney's Scones	

**GRAINS AND CEREALS**

Tunnbröd	Gustaf's Knäckebrot
----------	---------------------

Turnover (€) 0 3395

Orders: 40 Customers: 13

Turnover per Customer

Turnover per Order



## Simple example: Automated part-of-speech tagging

**SECTIONS**

Show Close

**ANNOTATIONS**

Part-Of-Speech

- Adjective
- Adverb
- Article
- Noun
- Preposition
- Verb

All None

Comments Legal Information

**Aktiengesetz**

**§ 1 Wesen der Aktiengesellschaft**

Die Aktiengesellschaft ist eine Gesellschaft mit eigener Rechtspersönlichkeit. Für die Verbindlichkeiten der Gesellschaft haftet den Gläubigern nur das Gesellschaftsvermögen. Die Aktiengesellschaft hat ein in Aktien zerlegtes Grundkapital.

**§ 2 Gründerzahl**

An der Feststellung des Gesellschaftsvertrags (der Satzung) müssen sich eine oder mehrere Personen beteiligen, welche die Aktien gegen Einlagen übernehmen.

**§ 3 Formkaufmann. Börsennotierung**

Die Aktiengesellschaft gilt als Handelsgesellschaft, auch wenn der Gegenstand des Unternehmens nicht im Betrieb eines Handelsgewerbes besteht. Börsennotiert im Sinne dieses Gesetzes sind Gesellschaften, deren Aktien zu einem Markt zugelassen sind, der von staatlich anerkannten Stellen geregelt und überwacht wird, regelmäßig stattfindet und für das Publikum mittelbar oder unmittelbar zugänglich ist.

**§ 4 Firma**

Die Firma der Aktiengesellschaft muß, auch wenn sie nach § 22 des Handelsgesetzbuchs oder nach anderen gesetzlichen Vorschriften fortgeführt wird, die Bezeichnung 'Aktiengesellschaft' oder eine allgemein verständliche Abkürzung dieser Bezeichnung enthalten.

**§ 5 Sitz**

Sitz der Gesellschaft ist der Ort im Inland, den die Satzung bestimmt.

**§ 6 Grundkapital**

Das Grundkapital muß auf einen Nennbetrag in Euro lauten.

**§ 7 Mindestnennbetrag des Grundkapitals**

**INFORMATIONS**

- eigener
- zerlegtes
- nur
- Die
- eine
- die
- der
- den
- das
- Die
- ein
- Aktiengesellschaft
- Gesellschaft
- Rechtspersönlichkeit
- Für
- Verbindlichkeiten
- Gesellschaft
- Gläubigern
- Gesellschaftsvermögen

## Complex example: Detection of Legal Definitions

**SECTIONS**

Show Close

**ANNOTATIONS**

Linguistic

Comments

Legal Information

LegalDefIdentifier

LegalDefinedEntity

LegalDefinition

LegalEntity

All None

**QUANTIFICATION**

Indeterminate Words	29
LaesbarhedsIndex	59
Sentence Count	46
Vocabulary Variety	361
Flesch-Reading-Ease	40
Structural Depth	1
Wiener Sachtextformel	14
Paragraph Count	19
Word Count	1401

**INFORMATION**

Produkt im Sinne dieses Gesetzes ist jede bewegliche Sache, auch wenn sie einen Teil einer anderen beweglichen Sache oder einer unbeweglichen Sache bildet, sowie Elektrizität.

**Gesetz über die Haftung für fehlerhafte Produkte**

**§ 1 Haftung**

**§ 2 Produkt**

(1) Hersteller im Sinne dieses Gesetzes ist, wer das Endprodukt, einen Grundstoff oder ein Teilprodukt hergestellt hat. Als Hersteller gilt auch jeder, der sich durch das Anbringen seines Namens, seiner Marke oder eines anderen unterscheidungskräftigen Kennzeichens als Hersteller ausgibt.

(2) Als Hersteller gilt ferner, wer ein Produkt zum Zweck des Verkaufs, der Vermietung, des Mietkaufs oder einer anderen Form des Vertriebs mit wirtschaftlichem Zweck im Rahmen seiner geschäftlichen Tätigkeit in den Geltungsbereich des Abkommens über den Europäischen Wirtschaftsraum einführt oder ver bringt.

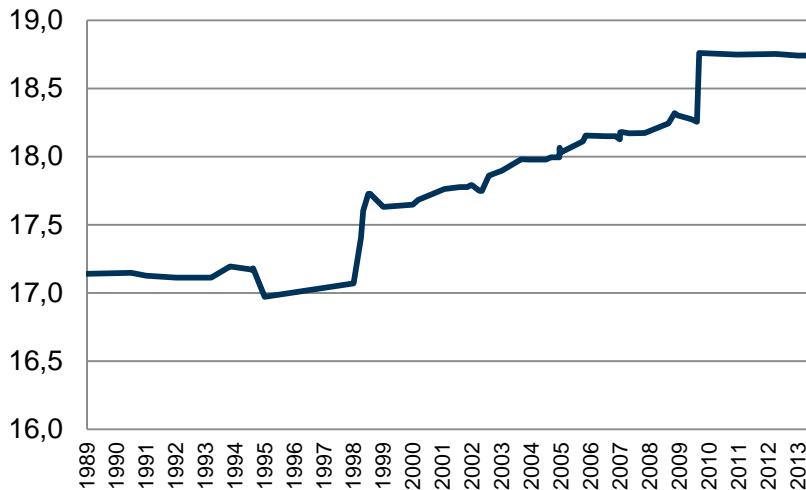
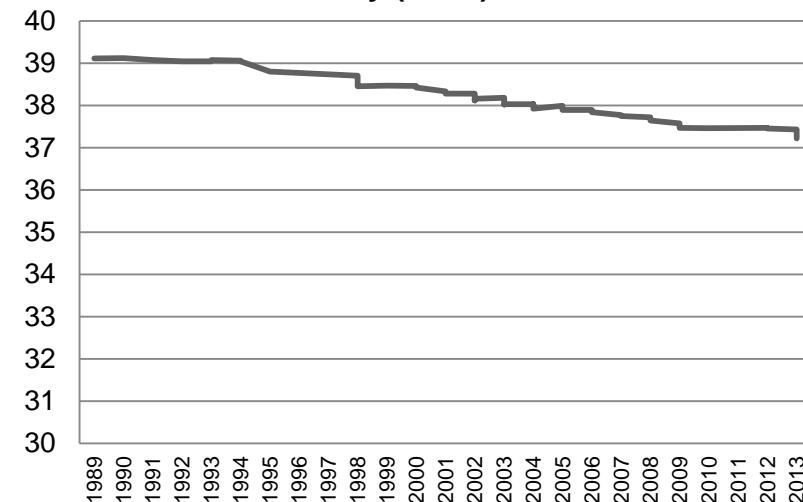
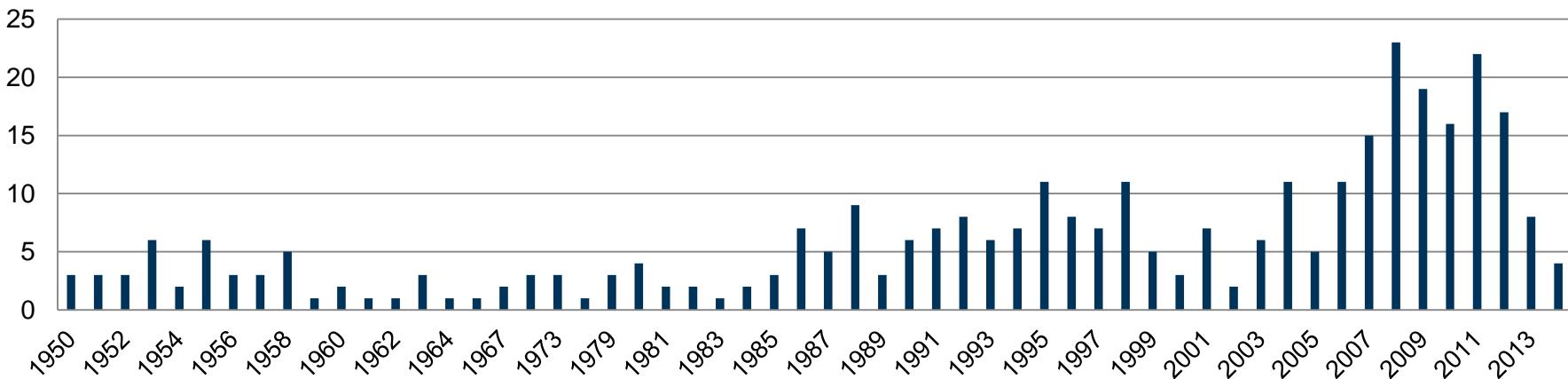
(3) Kann der Hersteller des Produkts nicht festgestellt werden, so gilt jeder Lieferant als dessen Hersteller, es sei denn, daß er dem Geschädigten innerhalb eines Monats, nachdem ihm dessen diesbezügliche Aufforderung zugegangen ist, den Hersteller oder diejenige Person benennt, die ihm das Produkt geliefert hat. Dies gilt auch für ein eingeführtes Produkt, wenn sich bei diesem die in Absatz 2 genannte Person nicht feststellen lässt, selbst wenn der Name des Herstellers bekannt ist.

**§ 3 Fehler**

**§ 4 Hersteller**

**§ 5 Mehrere Ersatzpflichtige**

Sind für denselben Schaden mehrere Hersteller nebeneinander zum Schadensersatz verpflichtet, so haften sie als Gesamtschuldner. Im Verhältnis der Ersatzpflichtigen zueinander hängt, soweit nichts anderes bestimmt ist, die Verpflichtung zum Ersatz sowie der Umfang des zu leistenden Ersatzes von den Umständen, insbesondere davon ab, inwieweit der Schaden vorwiegend von dem einen oder dem anderen Teil verursacht worden ist; im übrigen gelten die

**Indeterminacy (AktG) since 1989****Readability (AktG) since 1989****Federal Court of Justice Judgments (AktG) since 1950**





Eva Hummel  
user2@tum.de

-  Eventkalender
-  Personalverwaltung
-  Einrichtungsverwaltung
- Mein Bereich
-  Meine Events
-  Meine Daten
-  Logout

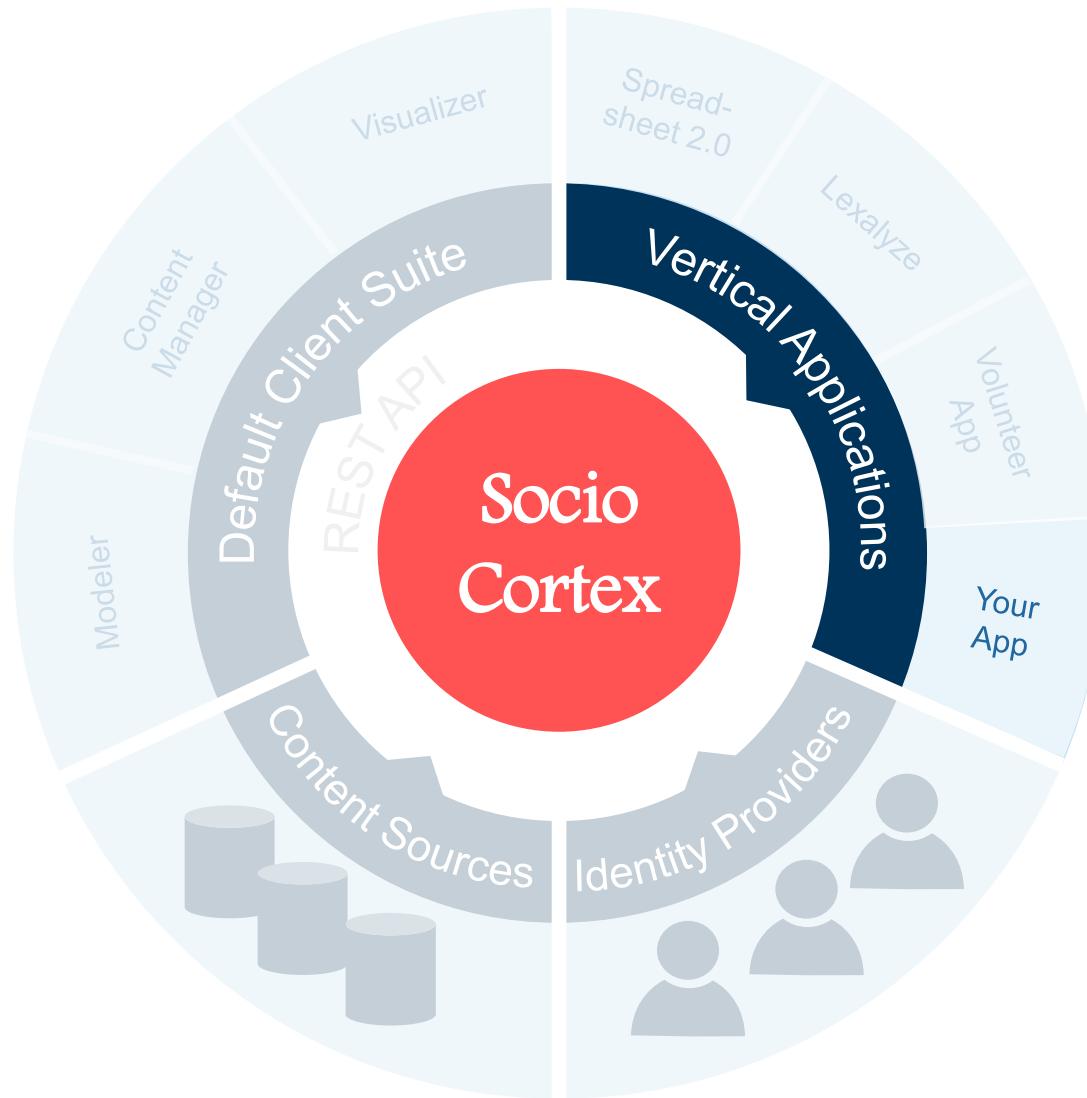
## Eventverwaltung

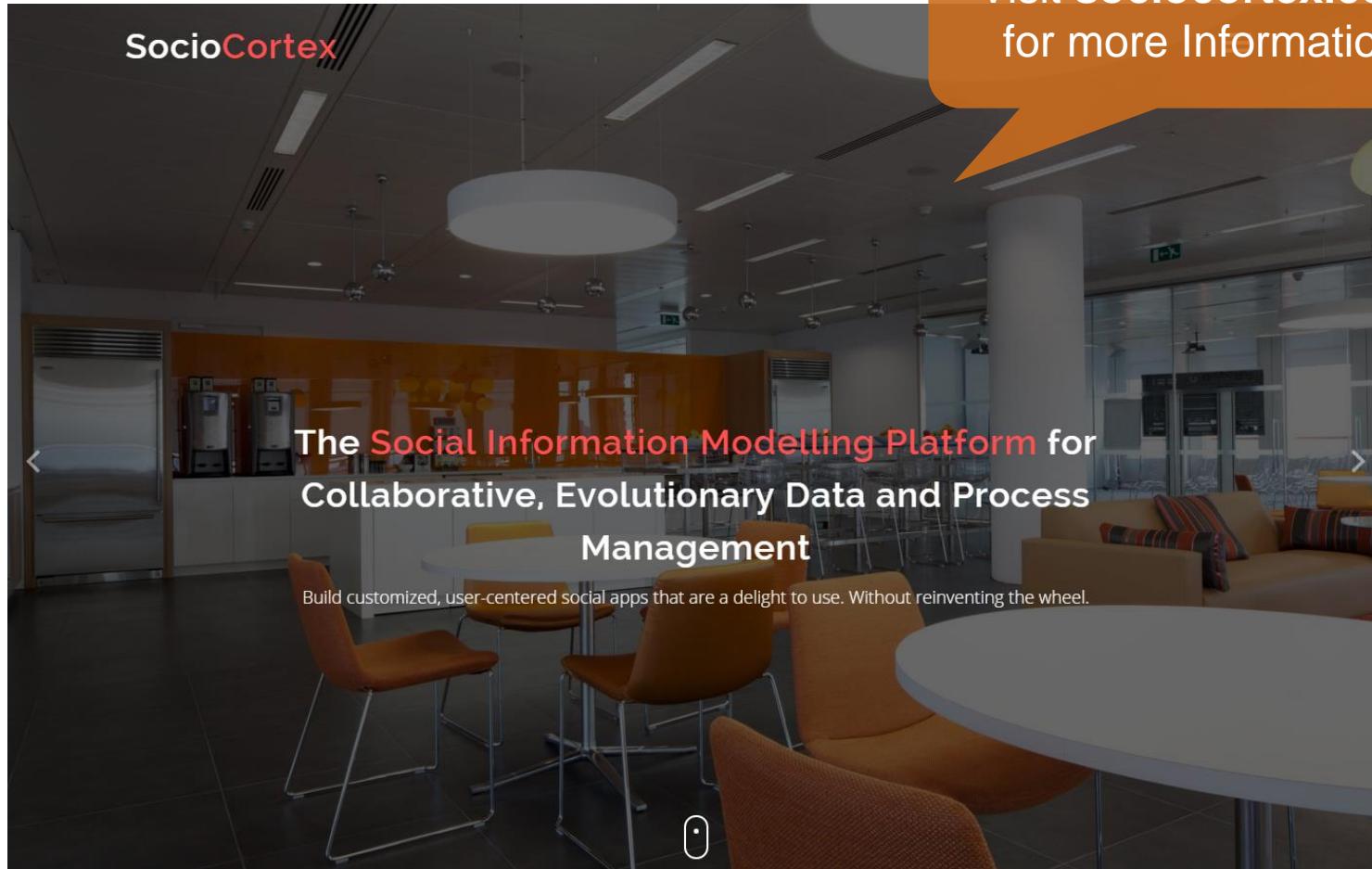
« February 2016 »

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2 Kinoabend Ice Age 2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	1	2	3	4	5

Help to organize volunteers for events with refugees in Munich. E.g. visiting the cinema.







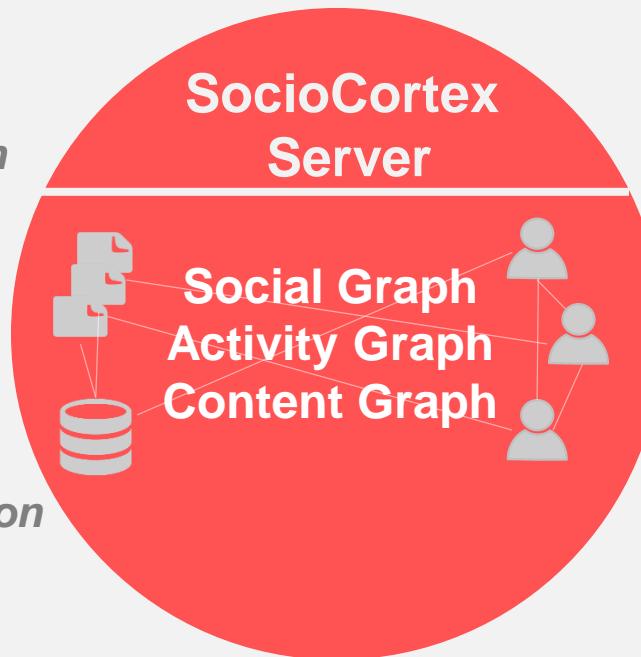
Visit [sociocortex.com](http://sociocortex.com)  
for more Information



*Social Integration*

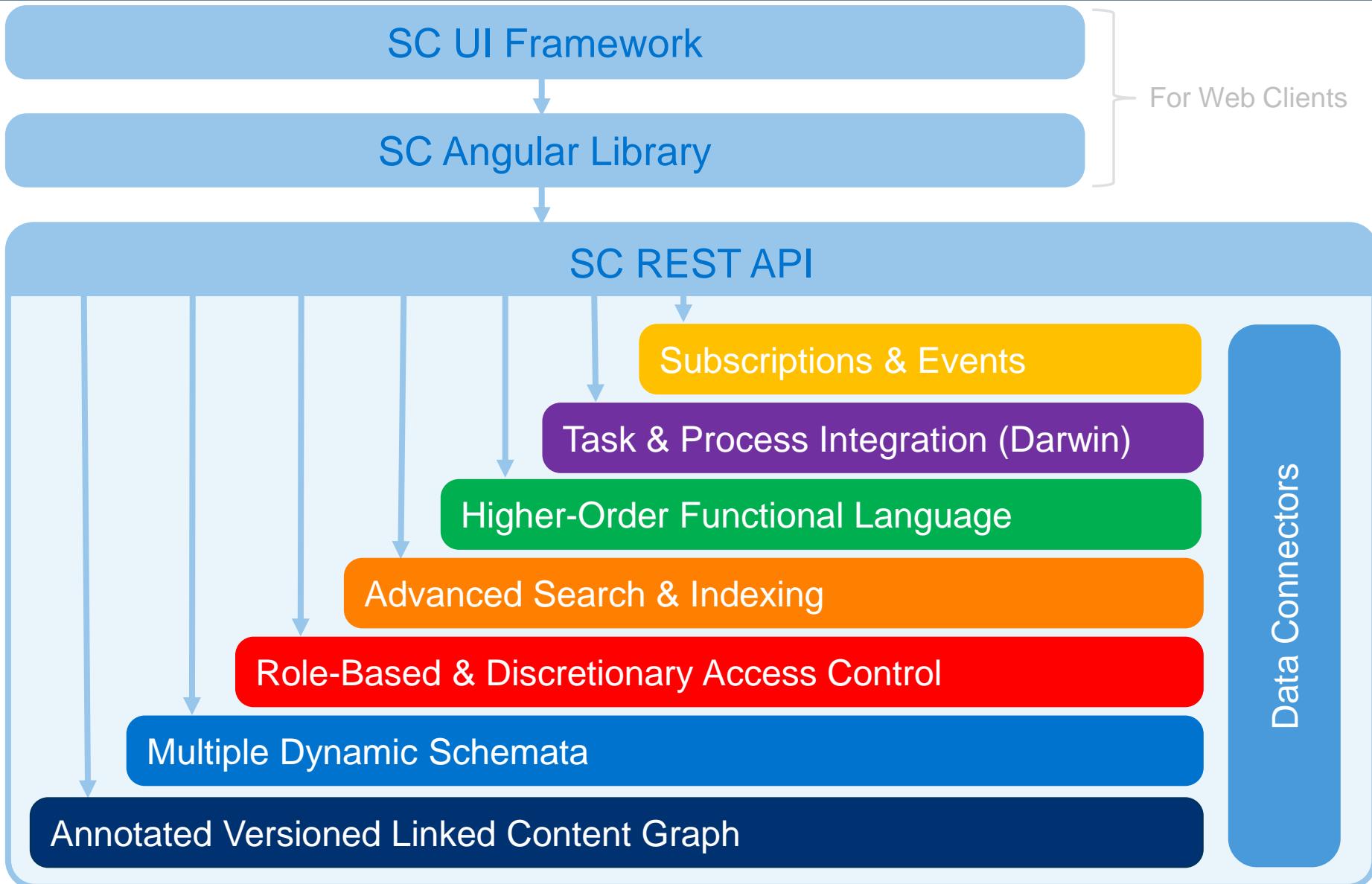
*Semantic  
Integration*

*Content Integration*



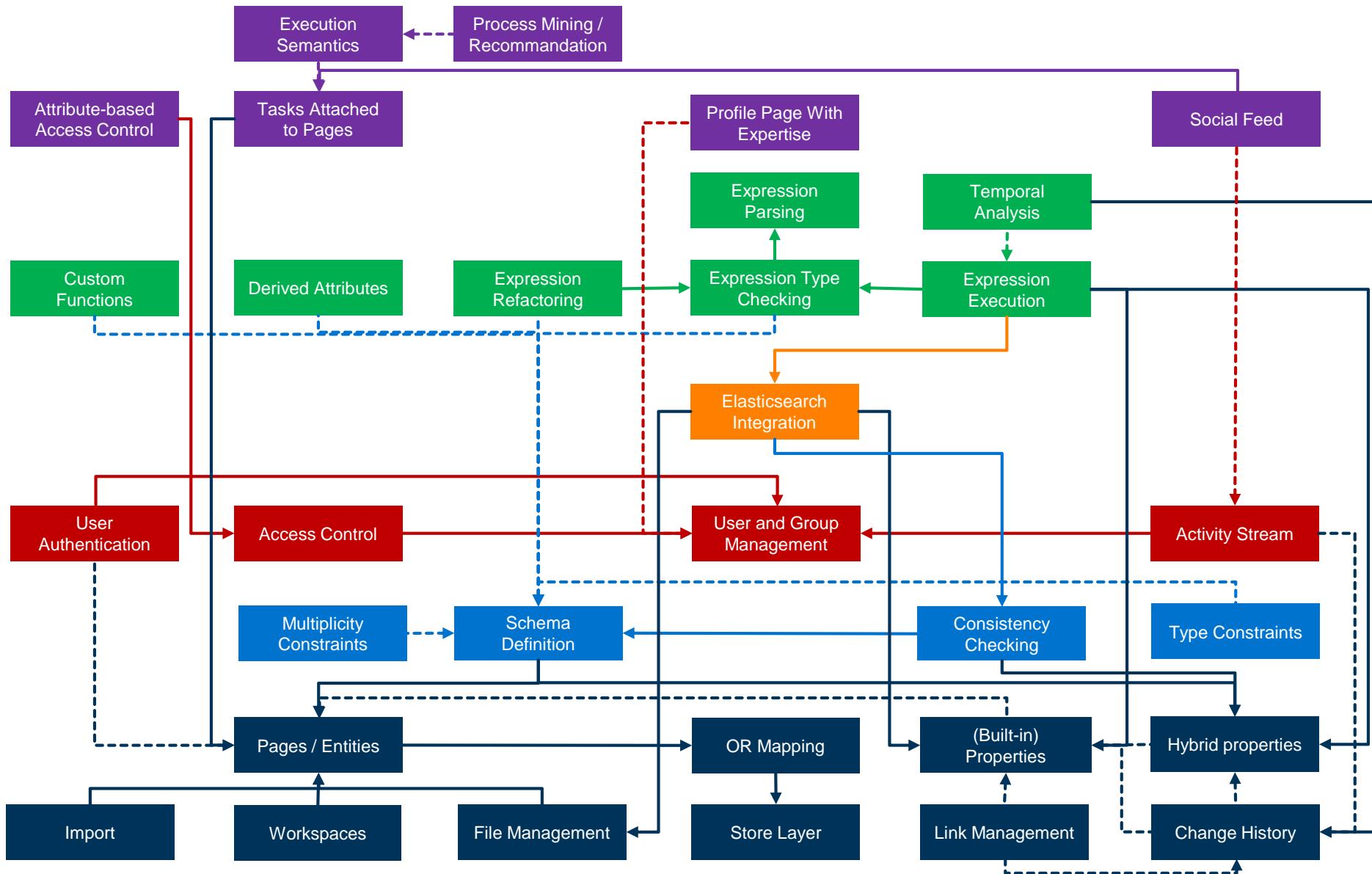
*Collaborative Activities*

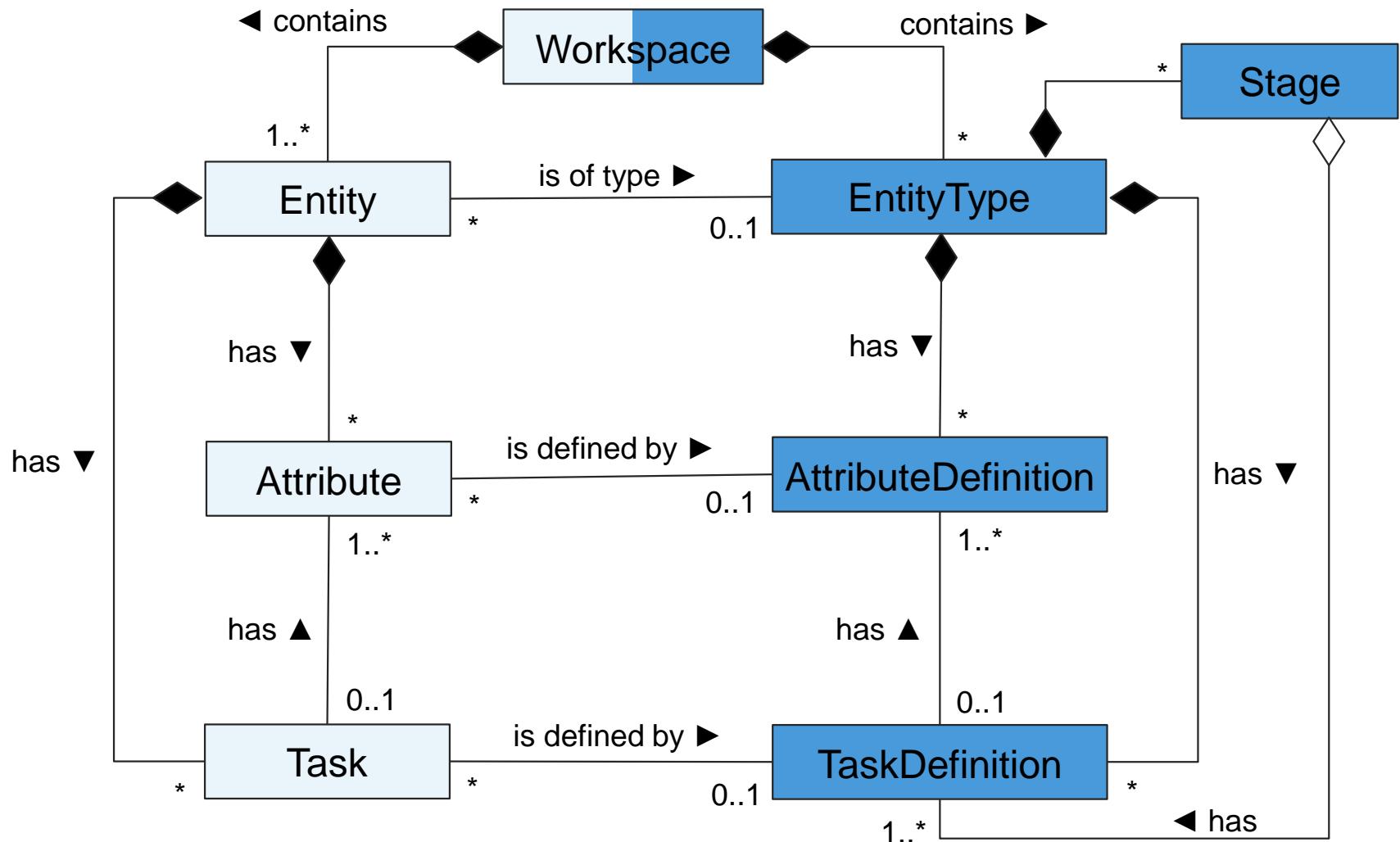
- ✓ Coordination
- ✓ Negotiation
- ✓ Reasoning
- ✓ Assessment
- ✓ Modelling



# SocioCortex > Core Feature Map

sebis



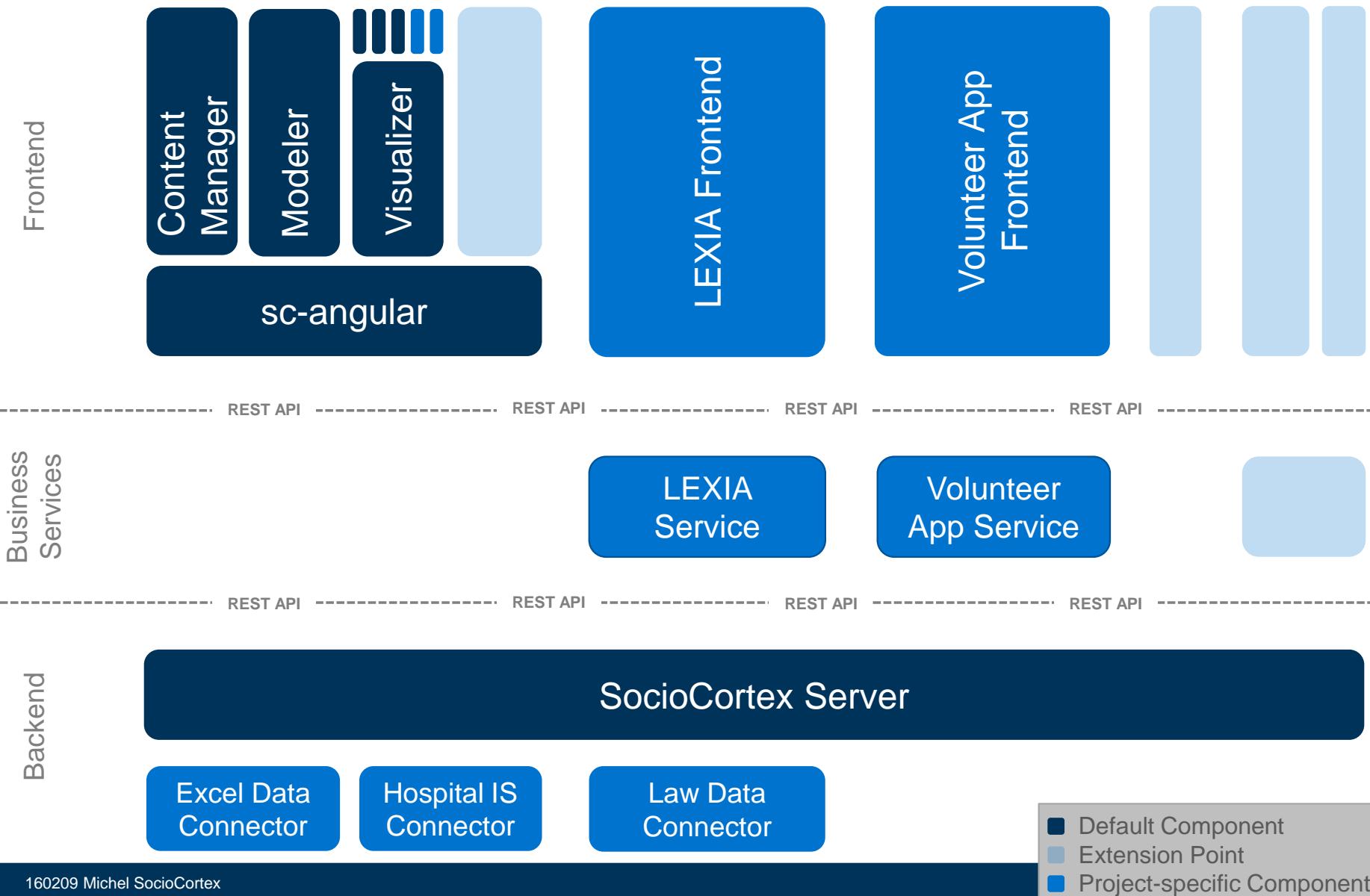


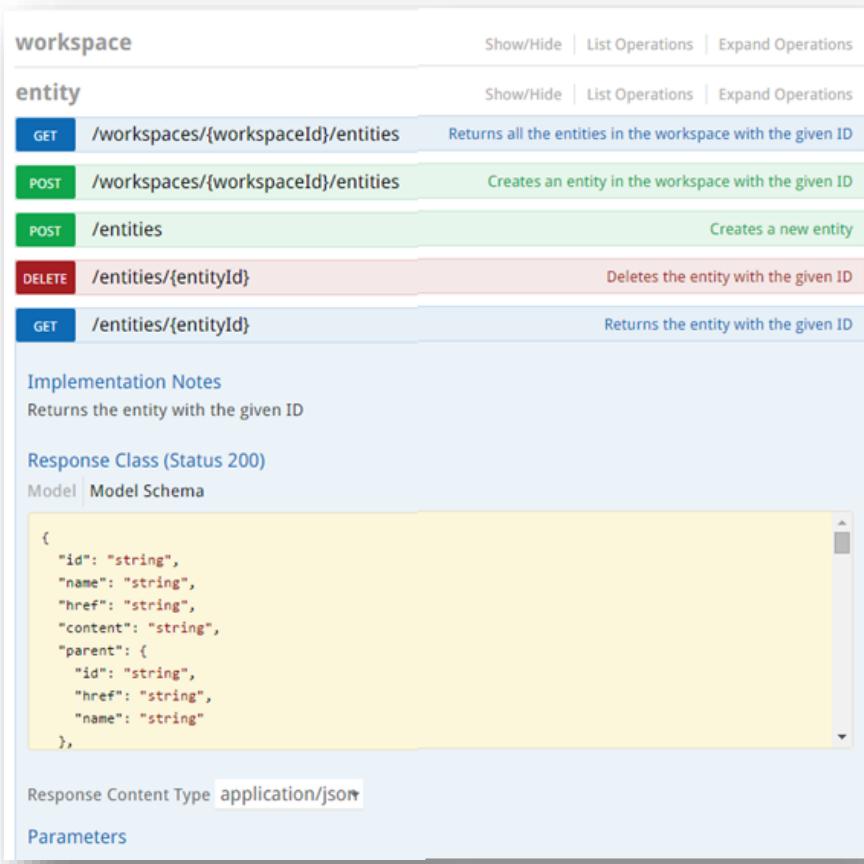
Instances

Model

# SocioCortex > Core Eco-System Architecture

sebis





The screenshot shows the SocioCortex REST API documentation interface. It has two main sections: 'workspace' and 'entity'. The 'workspace' section contains a table of operations:

Method	URL	Description
GET	/workspaces/{workspaceId}/entities	Returns all the entities in the workspace with the given ID
POST	/workspaces/{workspaceId}/entities	Creates an entity in the workspace with the given ID
POST	/entities	Creates a new entity
DELETE	/entities/{entityId}	Deletes the entity with the given ID
GET	/entities/{entityId}	Returns the entity with the given ID

Below the table, there is an 'Implementation Notes' section stating 'Returns the entity with the given ID'. Under the 'entity' section, there is a 'Response Class (Status 200)' section with tabs for 'Model' and 'Model Schema'. The 'Model Schema' tab is selected, showing the following JSON schema:

```
{  
  "id": "string",  
  "name": "string",  
  "href": "string",  
  "content": "string",  
  "parent": {  
    "id": "string",  
    "href": "string",  
    "name": "string"  
  },  
}
```

The 'Response Content Type' is listed as 'application/json'. There is also a 'Parameters' section at the bottom.

## Resources types for

- ✓ **Instances** (entities, attributes, tasks)
- ✓ **Model elements** (entity types, attribute definitions, task definitions, stages)
- ✓ **Meta information** (Users and access rights, version)
- ✓ **Analysis entities** (Metrics and Queries)

## CRUD operations for all resources types

- ✓ GET, POST, PUT, DELETE

The **documentation** of the SC REST API is accessible via <http://www.sociocortex.com/documentation/>

### SocioCortex Web Clients



#### sc-angular



##### scData

Access to

- Workspaces
- Entities
- attributes

##### scModel

Access to

- Entity types
- Attribute definitions
- Task definitions
- Stages

##### scAuth

Handles

- User authentication
- (Client-based) sessions

##### scPrincipal

Handles

- User authentication
- (Client-based) sessions

##### scMxL

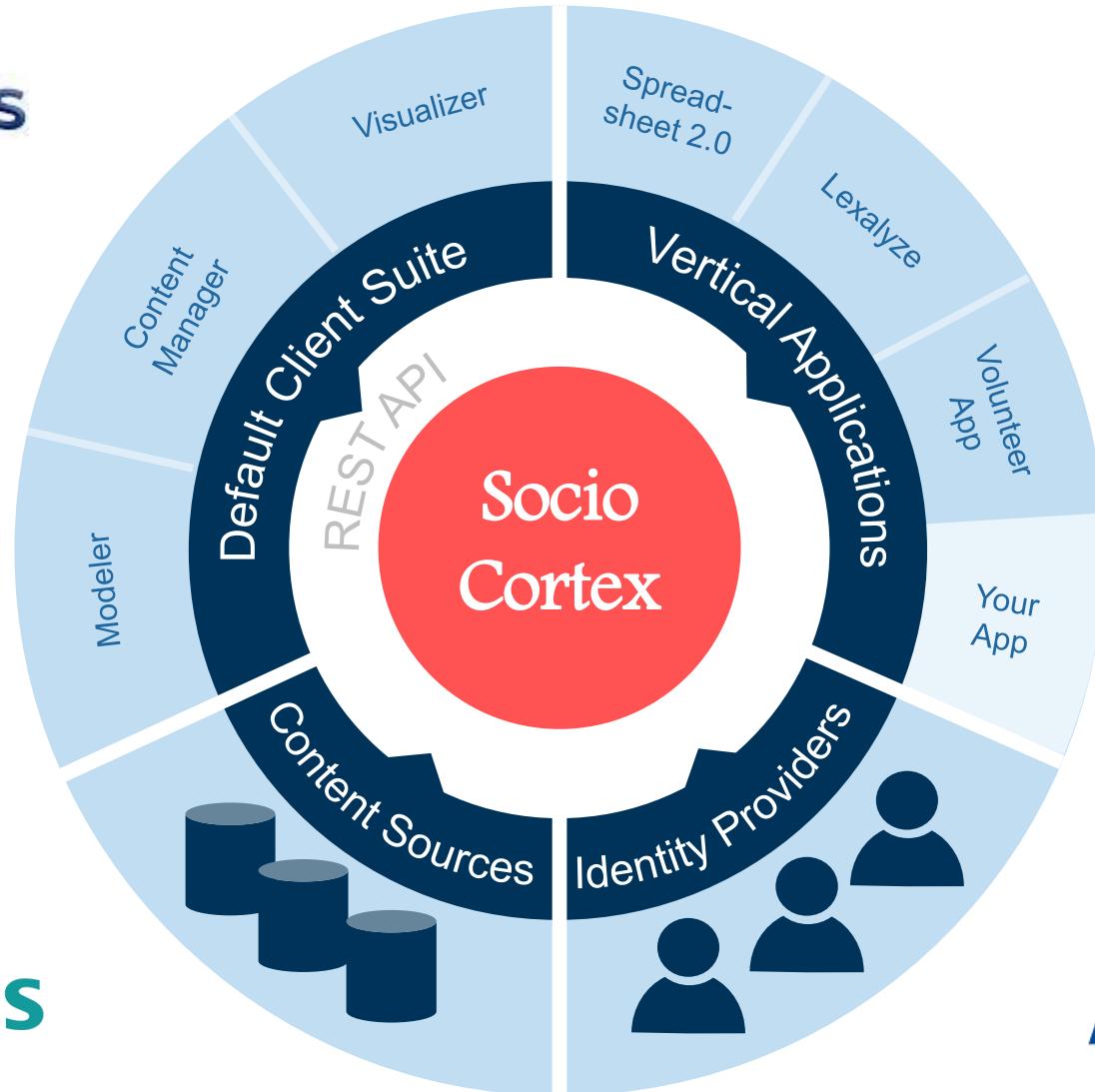
Provides methods to

- Perform queries based on MxL
- Define derived attributes



### SocioCortex REST API

Available at <https://github.com/sebischair/sc-angular>



# SocioCortex Projects and Partners

## Software for Knowledge-Intensive Team Work



Domain	Project Management	Research Consortia	Health Care	Software Engineering	Enterprise Architecture Management	Legal Tech	Startups	Aviation	Urban Mobility	NGOs
Projects	Tricia	Smart Nets	Connecare	Amelie	Agile & Pattern-Based EAM	LexAlyze Compliance Management	InCoBate	PIANO SoS Modeling for CPS	TUM Living Lab Connected Mobility	Volunteer Broker
PhDs currently working on that topic	0	0	2	2	2	1	1	0,2	5	0,2
Industry Partners	Telekom infoAsset	FP7 Smart Nets	Horizon2020	Siemens	msg systems KVB	Allianz (Deloitte)	Strascheg Center for Entrepreneurship	Airbus	BMW, Siemens HERE	Volunteer App



**SIEMENS**



**here**



# The SocioCortex Eco-System



Clients and frameworks  
are **Open Source** and  
available on GitHub

Core will be **Open  
Source soon**



For more Information please visit  
**sociocortex.com**



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