

Table of Contents

Data Architecture	3
<i>Architecture Articles</i>	9

Architecture

Data Architecture

Models, policies, rules or standards that govern which data is collected, and how it is stored, arranged, integrated, and put to use in data systems and in organizations

What is Data Architecture?

Data architecture refers to the overall design and organization of data in an organization. It includes the various components and systems that manage, store, process, and analyze data.

Data architecture defines the standards, rules, and models that guide the collection, integration, transformation, and maintenance of data throughout its lifecycle. It encompasses various aspects of data, including data governance, data modeling, data integration, data storage, data security, and data quality.

An effective data architecture is essential for organizations to derive insights, make informed decisions, and achieve their business goals. It helps to ensure that data is accurate, consistent, and accessible to the right people at the right time.

Some of the key benefits of data architecture include:

- Improved data quality and accuracy
- Increased efficiency and productivity in data management
- Enhanced data security and privacy
- Better decision-making through data analysis and insights
- Reduced data redundancy and inconsistency

Snippet from [Wikipedia](#): **Data architecture**

Data architecture consist of models, policies, rules, and standards that govern which data is collected and how it is stored, arranged, integrated, and put to use in data systems and in organizations. Data is usually one of several architecture domains that form the pillars of an enterprise architecture or solution architecture.

[Creative Commons Attribution-Share Alike 4.0](#)

Related:

- [8D \(Eight Disciplines\) Problem Solving Template](#)

[problem](#), [quality](#), [improvement](#), [methodology](#), [failure](#), [analysis](#), [process](#), [control](#), [software](#), [development](#), [healthcare](#), [manufacturing](#), [efficiency](#), [reliability](#), [goals](#), [objectives](#), [scope](#), [data](#), [evaluation](#), [solution](#), [plan](#), [implementation](#), [training](#), [equipment](#), [tracking](#), [kpi](#), [obstacles](#), [adjustment](#), [documentation](#), [lessons](#), [learned](#), [best](#), [practices](#), [sharing](#)

- [AI Business Impact Assessment Template](#) template, ai, business, finance, risk, management, monitoring, evaluation, metrics, success, improvement, data, insights, decision, making, adaptation, pivot, startup, templates, assessment, framework, structure, approach, methodology, model, process, roadmap, strategy, planning, resource, allocation, budget, people, technology, acrion, plan, compliance, regulatory, bias, security, efficiency, performance, measurement, analysis, impact, study, benefits, identification, costs, savings, optimization, customer, experience, human, resources, operations, marketing
- [AI Compliance & Regulatory Template](#) template, release, ai, compliance, regulatory, governance, risk, management, data, privacy, cybersecurity, audit, trails, logging, model, maintenance, acronyms, gdpr, ccpa, hipaa, nist, aml, kyc
- [AI Experimentation & Prototyping Template](#) template, ai, experimentation, prototyping, ml, development, data, science, startup, templates
- [AI hub in Microsoft Purview](#) ai, hub, data, management, governance, automation, integration, security, collaboration, monitoring, cost, documentation
- [AI Implementation Strategy Template](#) template, release, ai, implementation, strategy, involves, organization, planning, execution, and, monitoring, solutions, across, departments, functions, including, governance, infrastructure, data, skills, talent, acquisition, change, management, project, evaluation
- [AI Integration Workflow Template](#) template, ai, integration, workflow, data, ingestion, model, training, deployment, monitoring, streamlined, processes, increased, efficiency, improved, accuracy, better, decision, making
- [AI Readiness Assessment Template](#) template, release, ai, readiness, assessment, can, be, categorized, into, the, following, topic, areas, organizational, culture, and, talent, leadership, strategy, data, analytics, infrastructure, technology, process, governance, change, management, risk, mitigation, benefits, of
- [AI ROI Calculator Template](#) template, release, ai, roi, calculator, costs, benefits, kpi, npv, irr, simple, complex, customized, identification, data, kpis, calculation, sensitivity, analysis, improved, decision, making, enhanced, transparency, increased, efficiency, driven, insights
- [AI-Driven Customer Insights Template](#) template, data, analytics, ml, ai, crm
- [AI-Powered Analytics Dashboard Template](#) template, ai, ml, data, visualization, dashboard, templates, startup, business, intelligence, marketing, analytics, operations, optimization, risk, management, scalability, automation, efficiency
- [ALM Metrics Dashboard Template](#) template, agile, alm, metrics, dashboard, ai, startup, templates, data, visualization, tools, project, management, best, practices
- [Artificial Neural Network \(ANN\) Development](#) ai, ml, nlp, dl, convnn, rnn, feedforward, recurrent, convolutional, deep, learning, tensorflow, pytorch, keras, neural, networks, problem, definition, data, collection, model, design, training, validation, testing, deployment, monitoring
- [Augmented Analytics Development](#) augmented, analytics, development, involves, ai, nlp, visualization, ui, security, data, management, model, integration
- [Backup and Recovery Software](#) backup, recovery, storage, cloud, encryption, data, acs, reporting, monitoring, disaster, scalability, accessibility, protection, automation, continuity, downtime, software, solutions, critical, organizations, risk, loss, corruption
- [Big Data Development](#) big, data, analytics, infrastructure, scalability, security, cost, efficiency, integration

- Blade Servers
here, are, the, topic, categories, in, one, sentence, with, a, space, between, each, and, lowercase, cloud, computing, data, center, emc, hp, lenovo, networking, poweredge, proliant, servers, storage, thinksystem, ucs, b, series, xseries
- Business Intelligence (BI)
kb, acronym, business, intelligence, technologies, applications, data, analysis, decisions, stakeholders, optimization, performance, visualization, reporting, warehousing, mining
- Business Intelligence (BI) Development
data, analytics, reporting, visualization, modeling, optimization
- Business Process Automation (BPA) Development
ai, bpm, data, workflow, automation
- Clinical Trial Management Software Development
software, development, automation, compliance, data, quality, recruitment, management
- Cloud strategy
cloud, strategy, has, the, following, topic, areas, azure, iaas, paas, saas, it, governance, risk, management, cost, security, compliance, monitoring, training, analytics, innovation, collaboration, scalability, efficiency, data, communication, performance, optimization, education, policy, controls, architecture, testing, budgeting, forecasting, migration, assessment, compatibility, scalable, high, availability, gravity, secure, confidential, integrity, available
- Common Data Model (CDM)
data, acronym
- Content Creation and Management Software Development
cms, ai, ml, crm, workflow, analytics, security, accessibility, templates, collaboration, publishing, distribution, user, interface, design, data, compliance, inclusivity
- Content Types
sharepoint, content, types, columns, workflow, templates, policies, attributes, metadata, consistency, data, management, organization, compliance
- Continuous Improvement
quality, innovation, process, improvement, ci, data, analysis, efficiency, customer, satisfaction, acronyms, system, change, management, organizational, culture, effectiveness, productivity, competitiveness, outcomes, loyalty, industry, edge
- Copy Data Management
data, management, backup, compliance, cloud, governance, security, retention, accuracy, synchronization, redundancy, consistency
- Cost Estimation Plan Template
cost, estimation, project, management, budgeting, finance, risk, assessment, contingency, planning, scope, statement, assumptions, dependencies, labor, materials, equipment, travel, miscellaneous, expenses, parametric, top, down, bottom, up, statistical, relationships, historical, data, similar, projects, monitoring, control, lifecycle
- Cyber Security
cybersecurity, it, infrastructure, network, security, data, protection, threat, response, compliance, integrity, availability, confidentiality, cia, ransomware, malware, phishing, social, engineering, doa, ddoa, ids, ips, encryption, authentication, authorization, patch, management, incident, secure, coding, segmentation
- Data Analytics
data, analytics, ai, it, healthcare, finance, marketing, bi
- Data Architecture
skill, data
- Data Management
method, architecture, data

- [Data Replication](#) data, replication, types, backup, storage, database, cloud, acs,
- [Data Science and Analytics Development](#) data, science, ai, analytics, machine, learning, statistics, visualization, computing
- [Data Storage for Kubernetes](#) kubernetes, storage, volume, persistent, data, database, file, system, object, csi
- [Data Strategy for AI Template](#) template, release, business, objectives, data, governance, ai, strategy, architecture, ingestion, security, compliance
- [Data Structures](#) list, taxonomy, datastruct, data
- [Data Visualization Software Development](#) data, visualization, software, development, analytics, management, user, experience, accessibility, scalability, performance, optimization, collaboration, security
- [Database](#) kb, architecture, dev-db, data
- [Database Administrator](#) role, dev-db, data
- [Database Automation](#) method, data, devopsrelease, maintenance, ci, release, dev-db, automation
- [Database Development](#) data, storage, integrity, scalability, security, normalization, constraints
- [Dataverse](#) o365, lowcode, nocode, powerplatform, database, data, dev-db
- [Density Optimized Servers](#) cloud, computing, servers, data, center, efficiency, scalability, optimization, power, cooling, design, innovation, infrastructure, environment, business, demands
- [Digital Intelligence \(DQ\)](#) intelligence, machine, human, digital, data, literacy, skills, cybersecurity, adaptability, creativity, competitiveness, analytics, innovation, technology, collaboration
- [Digital Rights](#) digital, rights, , privacy, data, freedom, anonymity, surveillance, education, association
- [Disaster Recovery \(DR\) Software](#) here, are, the, topic, areas, in, one, sentence, with, a, space, between, each, and, lowercase, backup, recovery, scalability, flexibility, ease, integration, cost, reporting, analytics, disaster, protection, business, continuity, data, deduplication, automated, failover, monitoring, alerting
- [Disaster Recovery Services](#) disaster, recovery, services, backup, data, bcpl, cloud, draas, managed, msp
- [DMAIC \(Define, Measure, Analyze, Improve, Control\) Template](#) problem, six, sigma, methodology, dmaic, define, measure, analyze, improve, control, quality, improvement, process, project, management, solving, analytics, data, analysis, statistical, methods, optimization, performance, metrics, kpi, key, indicators, decision, making, implementation, plan, sustainability, continuous
- [Electronic Health Record \(EHR\) Development](#) ehr, development, involves, healthcare, it, infrastructure, data, collection, database, management, software, integration, security, testing, deployment, training, continuous, improvement
- [Electronic Medical Record \(EMR\) Development](#) emr, development, stages, requirements, gathering, design, testing, deployment, maintenance, , support, data, migration, interoperability, compliance
- [Energy Management Software Development](#) here, are, the, topic, areas, energy, management, software, development, sustainability, data, analysis, user, interface, design, integration, reporting, alerts, customization, scalability, mobile, accessibility, training, support, updates, maintenance
- [Enterprise GPU](#) ai, ml, gpu, data, analytics, cloud, computing, hpc

- Enterprise Resource Planning (ERP) Development
erp, integration, workflow, data, it, scm, finance, hr, production, supplychain
- Environmental Health and Safety (EHS) Software Development
here, are, the, topic, areas, ehs, risk, audit, compliance, training, incident, hazard, emergency, document, data, mobile
- Evolve Infrastructure
infrastructure, data, center, colocation, cloud, cybersecurity, maintenance, operations, design, build, construction
- File Archiving
here, are, the, topic, areas, data, archiving, preservation, storage, cataloging, access, compliance, cost, savings, disaster, recovery, formats, zip, pdf, tar, iso
- Final Project Presentation Template
research, methods, methodology, data, analysis, results, discussion, conclusion, references, appendices, acknowledgments
- Fraud Detection Software Development
fraud, detection, ai, data, analytics, security, risk, prevention
- Geographic Information System (GIS) Development
gis, development, data, ui, algo, testing, deployment, maintenance
- Geolocation Software Development
geolocation, software, development, involves, creating, applications, that, utilize, geographical, data, to, provide, location-based, services, such, as, navigation, tracking, local, search, results, contextual, advertising, social, networking, gaming
- Healthcare Claims Management Software Development
here, are, the, topic, areas, categorized, into, single, words, healthcare, software, development, automation, regulation, compliance, analytics, integration, reporting, coding, billing, claims, electronic, data, interchange, revenue, cycle, management
- Implementation Plan Template
implementation, plan, template, ipt, project, management, pm, risk, rm, erp, system, es, planning, pp, configuration, sc, data, migration, dm, technical, support, ts, personnel, prsnl, equipment, eqpmnt, materials, mtrl, gantt, chart, gc, mitigation, strategy, ms
- Internet of Things (IoT) Development
iot, development, involves, designing, building, and, deploying, smart, devices, systems, that, collect, data, from, their, environment, process, it, perform, specific, tasks, autonomously, or, provide, valuable, insights, for, decision, making, purposes, integration, testing, user, interface, security, cloud, infrastructure, hardware, software, analytics
- Internet Security
security, access, control, data, encryption, incident, response, network, firewalls, authentication, virus, malware, tls, ssl, antivirus
- Legal Practice Management Software Development
here, are, the, topic, areas, in, one, sentence, with, a, space, between, each, and, lowercase, acms, integration, scalability, data, analytics, compliance, user, experience, security, training, resources, mobile, accessibility
- Machine Learning (ML) Development
machine, learning, ml, model, development, ai, data, analytics, algorithms, optimization, deployment, monitoring, maintenance, documentation, communication
- Mainainance models (ex. PM3)
here, are, the, topic, areas, maintenance, reliability, engineering, acm, cbm, tbm, rtf, pm3, predictive, analytics, machine, learning, sensors, monitoring, systems, condition, usage, patterns, historical, failure, data, environmental, conditions, history, downtime, costs, manufacturing, aviation, energy, healthcare, transportation, industries, organizations, performance


- **Manage Infrastructure** infrastructure, hardware, software, network, data, security, monitoring, configuration, troubleshooting, capacity, planning
- **Master data** kb, architecture, projects, devopsplan, data
- **Master data management** method, architecture, data
- **Metadata** kb, architecture, devopspackaging, data, release
- **Monte Carlo Simulation Template** monte, carbon, analysis, simulation, data
- **OData** kb, architecture, programming, data, api, rest, protocol
business, manufacturing, it, healthcare, workflow, process, data, quality, performance, supply, chain, analytics, visualization, assurance, control, compliance, optimization, efficiency, productivity, customer, satisfaction, reduction, regulation, standards, re-engineering, measurement, monitoring, goal, achievement
- **Output Management**
problem, quality, improvement, analytics, six, sigma, solving, data, analysis, decision, making, prioritization, manufacturing, defect, rate, optimization, efficiency, effectiveness, resource, allocation, efforts, control, graphical, representation, pareto, chart, staircase, graph, frequency, impact, importance, axis, diagonal, line, metrics, rates, cycle, times, customer, feedback, collection, plot, results, analyze, prioritize, improvements, vital, few, factors, critical, areas, machine, malfunctions, operator, errors, material, defects, inspection, low, high, moderate, very, focus, improve, process, product
- **Pareto Analysis Template** problem, id, issues, quality, compliance, innovation, customer, operations, data, feedback, analysis, engagement
- **Problem Identification** here, are, the, topic, areas, in, one, sentence, with, a, space, between, each, public, safety, software, development, psd, incident, management, im, resource, allocation, ra, data, dm, training, simulation, ts, cybersecurity, cs, integration, int, scalability, scal
- **Public Safety Software Development** research, methods, data, analysis, reproducibility, transparency, collaboration, accuracy, scalability
- **Scalable Results Template** sharepoint, site, columns, metadata, consistency, libraries, content, types, attributes, data, management, uniform, structure, organization, settings, tracking
- **Site Columns** here, are, some, topic, areas, cloud, computing, linux, systems, administration, scalability, reliability, maintenance, operations, devops, cd, pipelines, problem-solving, communication, teamwork, data, structures, algorithms, software, design, patterns, networking, distributed, aws, gcp, azure, prometheus, grafana, python, java, c
- **Site Reliability Engineering** storage, data, network, infrastructure, virtualization, automation, scalability, multi, tenancy, manageability, flexibility, cost, savings, cloud, computing, centers, virtualized, environments, iot, edge
- **Software Defined Storage (SDS)** solution, development, involves, business, analysis, it, consulting, project, management, data, analytics, software, strategic, planning, process, improvements, driven, solutions
- **Solution Development** storage, management, categories, nas, san, backup, data, retention, vm, tiering, analytics, deduplication, compression
- **Storage Management**

- **Tree Diagram Template** problem, data, analysis, solving, decision, making, communication, organization, taxonomy, concept, mapping, trees
lean, manufacturing, business, process, improvement, vsm, template, workflow, acronyms, value, stream, mapping, waste, elimination, productivity, efficiency, quality, control, lead, time,
- **Value Stream Mapping Template** takt, cycle, information, flow, material, production, scheduling, inventory, management, defects, overproduction, transportation, idle, manual, data, entry, raw, materials, cutting, machining, assembly, packaging, shipping, order, receipt, tracking, finished, product
- **Venn Diagram Template** problem, statistics, data, analysis, math, acs, sets, circles, intersections
yaml, data, serialization, format, programming, languages, configuration, files, human-readable, indentation, syntax, markup, language, xml, json, debugging, editing, comments, punctuation, blocks, hierarchical, structures, types, numbers, strings, lists, mappings, nested, scalar, values, collections, tags, anchors, aliases, default, value, document, comment, version, author, settings, theme, font, size, notifications, enabled, boolean
- **YAML**

External links:

- <https://blog.panoply.io/data-architecture-people-process-and-technology>
- **Data Governance: Key Components for Organizational Success** —*cmswire.com*
 - Boost your organization's potential with comprehensive data governance, from C-suite support to data quality assurance, retention rules and more.

ToDo

-  **Fix Me!**
 - Databases
 - Data Governance
 - Conceptual / business data model
 - Logical/system model
 - Physical/technology data model

Architecture Articles

A

- [Agile Architecture](#)
- [Application Architecture](#)
- [Architectural Runway](#)
- [Architecture Lifecycle](#)

B

- [Business Architecture](#)

C

- [Cloud Architecture](#)

C cont.

- [Composable Architecture](#)

D

- [Data Architecture](#)
- [Digital architecture](#)

E

- [Enterprise Architecture](#)
- [Event-Driven Architecture](#)

I

- [Information Architecture](#)

I cont.

- [Integration Architecture](#)

S

- [Security Architecture](#)
- [Software Architecture](#)
- [Solution Architecture](#)
- [System Architecture](#)

T

- [Technology Architecture](#)

[skill, data](#)

From:

<https://almbok.com/> - **ALMBoK.com**

Permanent link:

<https://almbok.com/architecture/data>

Last update: **2024/07/27 22:15**

