Risk-First Software Development

Rob Moffat

FINOS Technical Architect

FINOS

THE LINUX FOUNDATION

HSBC
Tower Bridge
Dry Cleaners Ltd

https://gmrisk.gis.cm.intranet.db.com/

Favorites | Web Slice Gallery

GMRisk

Page | Safety | Tools

Group Home | Home

GMRisk Intranet

Deutsche Bank

Admin | Applications | Help | MIS3 | Tools

top-level >> MIS3 >> My MIS >>

- MIS3
- My MIS
- Load Filters
- Load Filters Approval
- MIS Reconciliation
- Official Reports
- RMS Missing Books
- Report Maintenance
- Sign-Off Americas
- Sign-Off Asia Pacific
- Sign-Off EMEA
- Static Data Monitoring
- Synergy Mapping
- Trade Reconciliation
- XML Converter

New York SCT

Portfolio

Sign-off Name	MUNIES_BASIS_SO
Portfolio	MUNI_BASIS
Report Server	RS_ln_muni
Database	3D_GRMIS_PROD6
isRollup	Yes

Report Group Manager

View

MIS Configs

Class	Flash	Official	Report Group	Report Server for Flash	Filters
PNL	Smart	☑	CORRELATION_IR_CARS_PNL	☑	View
RISK	Smart	☑	MUNI_RISK	☑	View

Edit | Back

Intranet Certified

Done

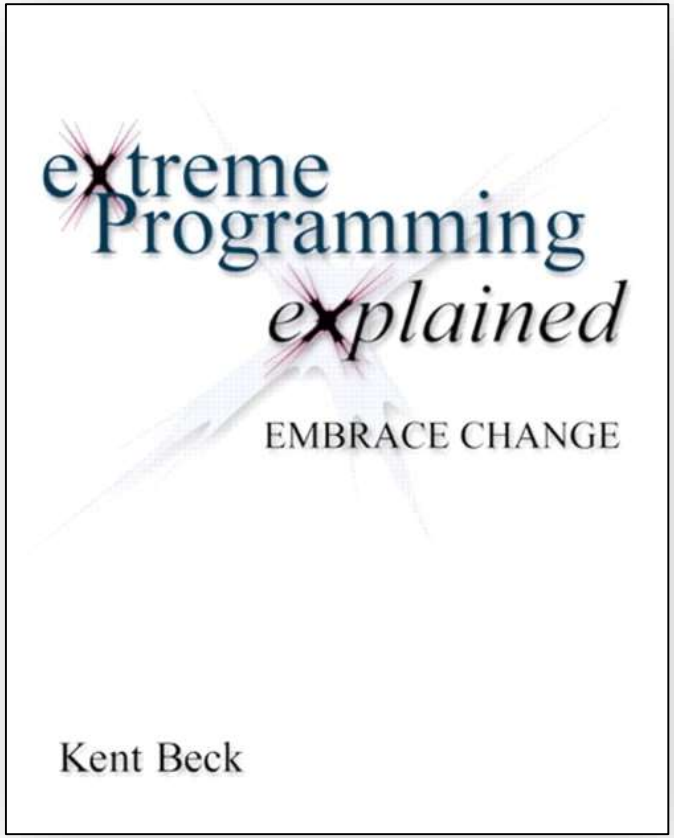
Local intranet | Protected Mode: Off

100%

02:05

Lindy Effect

The Lindy effect is a theorized phenomenon by which the future life expectancy of some non-perishable things, like a technology or an idea, is proportional to their current age.


extreme
Programming
explained
EMBRACE CHANGE
Kent Beck

Shoreditch
Liverpool St.
Broadgate
White's Row
Redwell House

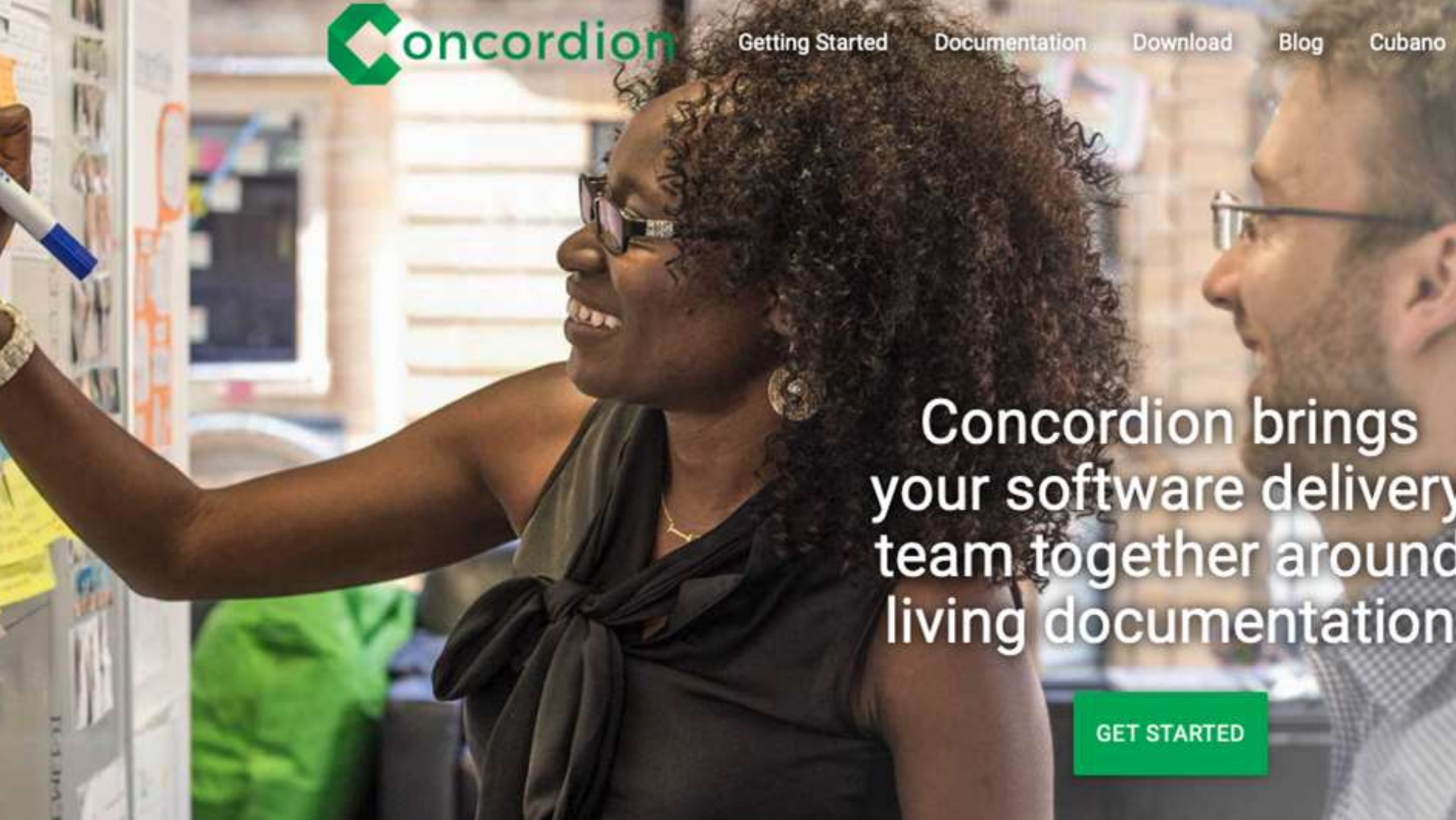
Basel II

Market Risk

Credit Risk

Operational Risk

alamy
alamy


Concordion
Getting Started
Documentation
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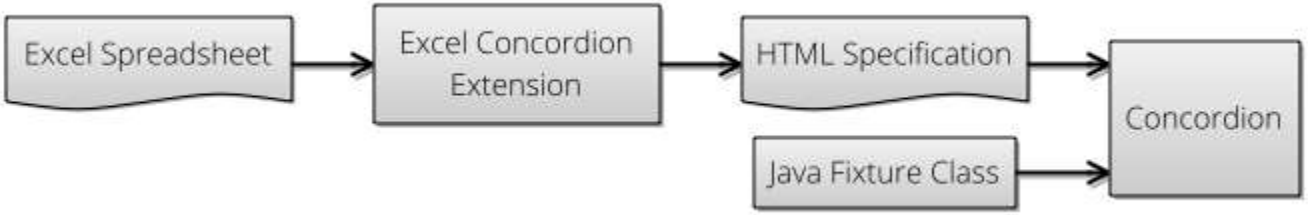
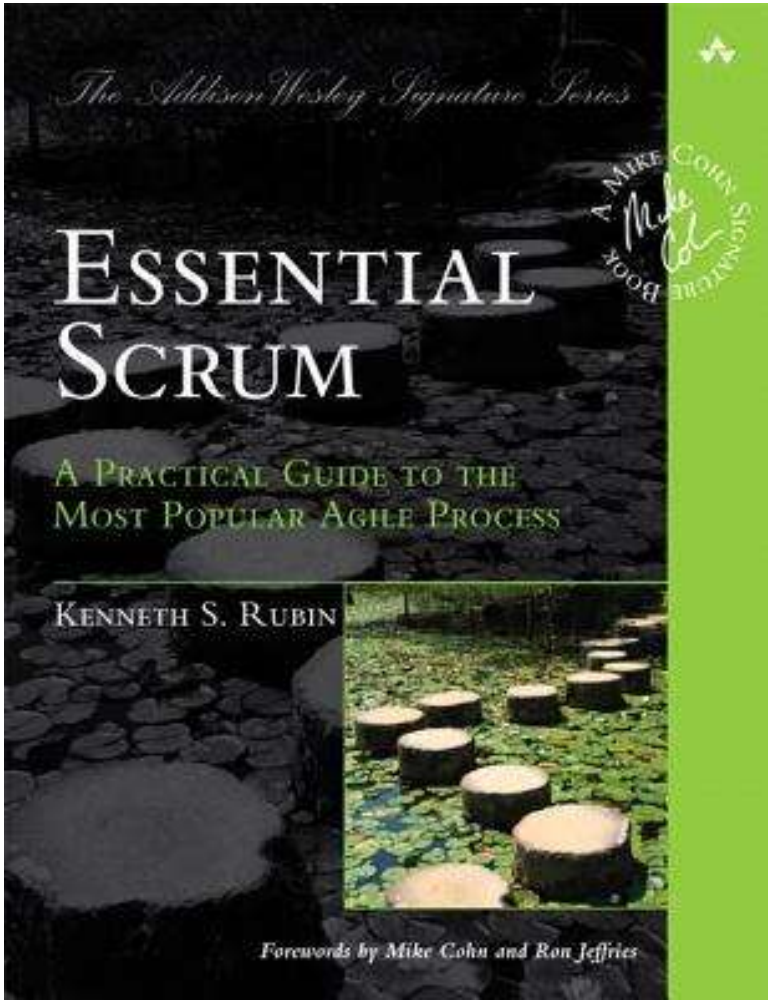
Cubano
Concordion brings your software delivery team together around living documentation
GET STARTED


Excel Spreadsheet
Excel Concordion Extension
HTML Specification
Java Fixture Class
Concordion


The Addison-Wesley Signature Series
A Mike Cohn Signature Book
Essential Scrum
A Practical Guide to the Most Popular Agile Process
Kenneth S. Rubin
Forewords by Mike Cohn and Ron Jeffries

JUnit 5

JUnit 4

The new major version of the programmer-friendly testing framework for Java

User Guide | Javadoc | Code & Issues

Q & A | Support JUnit

Without Unit Tests	With Unit Tests
More Manual Testing	More Complex Codebase
Risk of Regressions	Takes Time to Write Them

Design Patterns

Elements of Reusable Object-Oriented Software

Erich Gamma
Richard Helm
Ralph Johnson
John Vlissides

Foreword by Grady Booch

ADDISON-WESLEY PROFESSIONAL COMPUTING SERIES

“Sometimes, at the end of a ‘Dream Sequence’ or an ‘All Just a Dream’ episode, after the character in question has woken up and demonstrated any ‘[lesson]’ that the dream might have been communicating, there’s some small hint that it wasn’t a dream after all, even though it quite obviously was… right?.”

- Or Was It a Dream?, TVTropes.org

“Debbie needs to visit the client to get them to choose the logo to use on the product, otherwise we can’t size the screen areas exactly.”

“Debbie needs to visit the client to get them to choose the logo to use on the product, otherwise we can’t size the screen areas exactly.”

National Risk Register

2020 edition

HM Government

Environmental Hazards

12. Coastal flooding
13. River flooding
14. Surface water flooding
15. Storms
16. Low temperatures
17. Heatwaves
18. Droughts
19. Severe space weather
20. Volcanic eruptions
21. Poor air quality
22. Earthquakes
23. Environmental disasters overseas
24. Wildfires

Malicious Attacks

1. Attacks on publicly accessible locations
2. Attacks on infrastructure
3. Attacks on transport
4. Cyber attacks
5. Smaller scale CBRN attacks
6. Medium scale CBRN attacks
7. Larger scale CBRN attacks
8. Undermining the democratic process*

Major Accidents

29. Widespread electricity failures
30. Major transport accidents
31. System failures
32. Commercial failures*
33. Systematic financial crisis*
34. Industrial accidents – nuclear*
35. Industrial accidents - non nuclear*
36. Major fires*

C

- **Economic impacts:** £100 million to £1 billion.
- **Fatalities in the UK:** circa 41 to 200.
- **Evacuation and shelter:** 5 thousand people evacuated over 3 days.
- **Public perception:** moderate impact owing to hundreds of thousands of UK citizens feeling more vulnerable.

Search or jump to... / Pull requests Issues Marketplace Explore

finos / symphony-java-toolkit Public

Unwatch 7

Code | Issues 29 | Pull requests 2 | Discussions | Actions | Projects 1 | Wiki | Security | Insights

Teams Implementation

Updated on 21 Oct 2021

Filter cards

9 To do

- **@Work annotation**
  #220 opened by robmoffat
  chat-workflow
- **@ChatResponseBody should allow addressing**
  #231 opened by robmoffat
  chat-workflow
- **Bean Validation**
  #252 opened by robmoffat
  chat-workflow
- **Unit Testing Framework**
  #251 opened by robmoffat

6 In progress

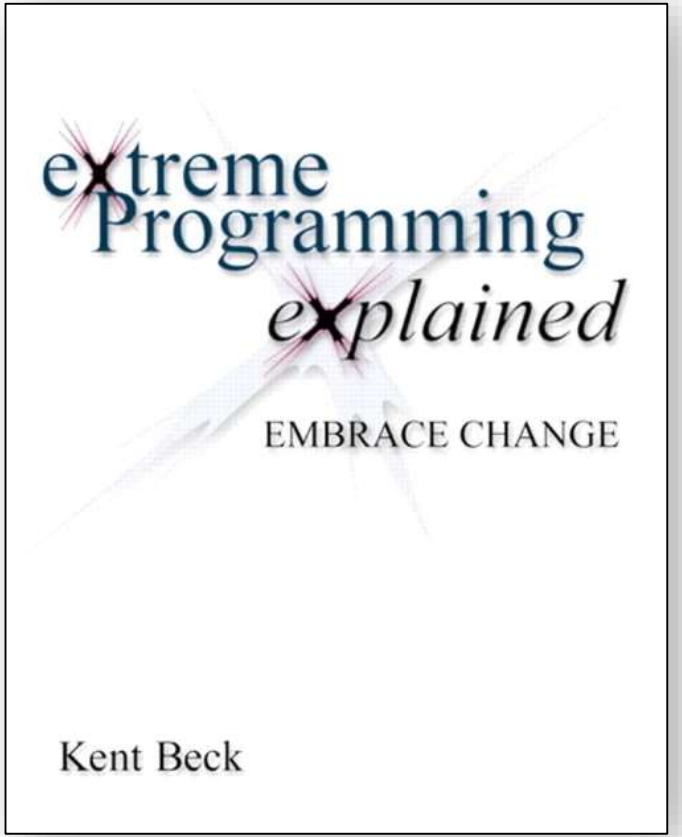
- **Template Generation Should Follow Jackson Conventions**
  #230 opened by robmoffat
  chat-workflow
- **Add MessageMLWriter Implementation for Tags, Images, Links**
  #219 opened by robmoffat
  chat-workflow
- **Fix `User` WorkflowResolver**
  #246 opened by robmoffat
  chat-workflow
- **Microsoft Teams Support**

1 Done

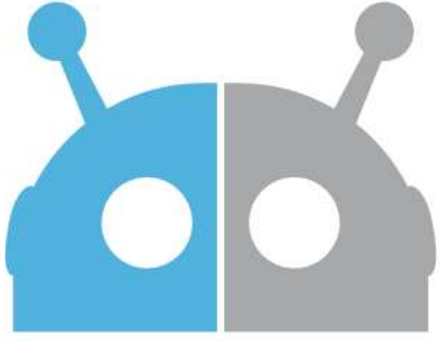
- **Tutorial For Teams**
  #253 opened by robmoffat
  documentation

“All Work Is Risk Management”

riskfirst.org



“The Basic Problem of Software Development is Risk”



SPRINGBOT

JUXT

FINOS

Fintech
Open Source
Foundation

Open Source

IN FINANCIAL SERVICES

Best Practices

Readiness

Maturity

Excellence

Open Source Readiness
Artifacts
Activities
Measurements
Roles
Regulations
Risks
Codebase Risk
Data Leakage Risk
Dependency Risk
Legal Risk
Operational Risk
Reputational Risk
Staff Risk
Strategic Risk
OSMM
Training
Certifications
Resources

Open Source Risks

This section breaks down the different types of risks that enterprises face by consuming or contributing to open source software.

The Risks

Codebase Risk

Open source software may have hidden costs, such as maintenance, support, security, and compliance. Users and contributors need to be aware of the total cost of ownership and the implications of using different licenses.

Data Leakage Risk

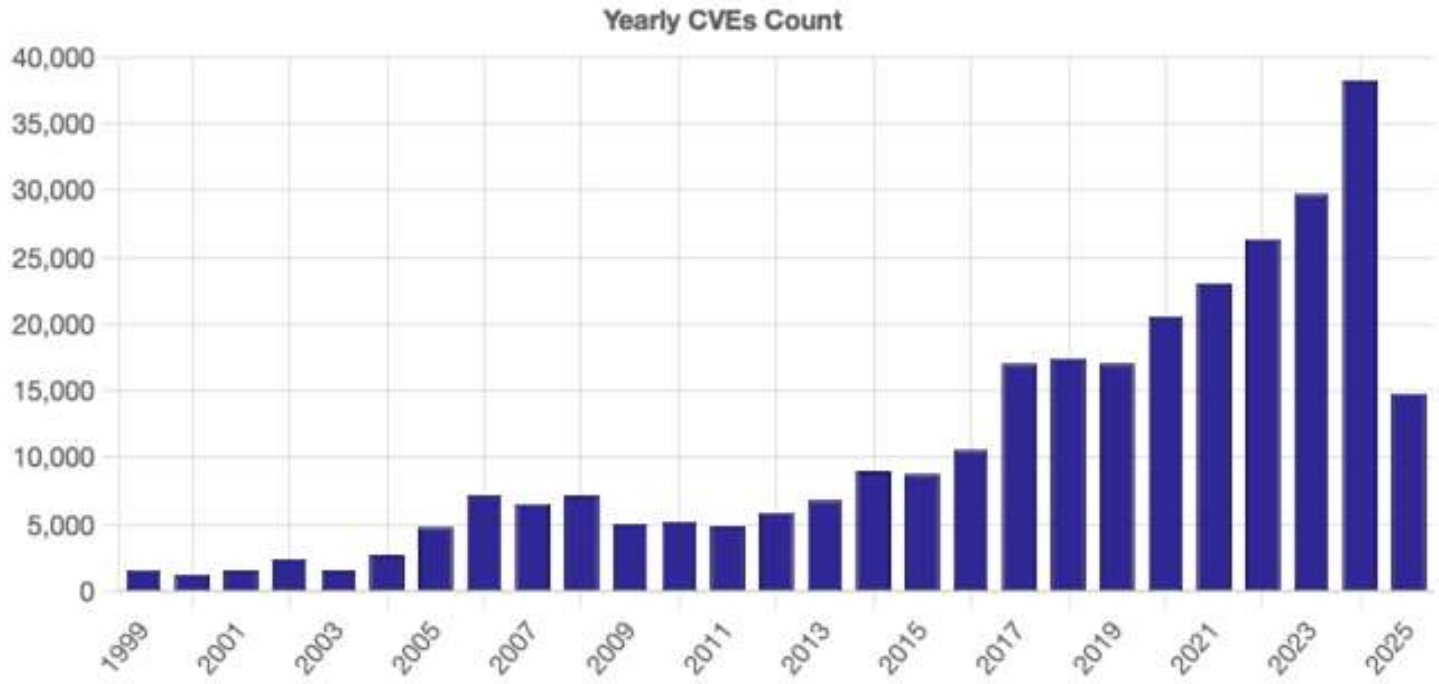
Data leakage risk refers to the potential for sensitive or confidential information to be unintentionally or maliciously disclosed outside of an organization, leading to potential harm to the organization's reputation, finances, or legal standing.

Legal Risk

FINOS
COMMON
CLOUD
CONTROLS

MITRE
ATT&CK™

CVEs Statistics



▲ 209.52%
195
LAST 24 HOURS

▲ 68.21%
910
LAST 7 DAYS

epository explainer video
k Repository explainer video
Share

MIT AI Risk Repository

The AI Risk **Repository**

Preprint

56 AI Risk Frameworks

Living database of 1000+ risks

Website

2 Taxonomies

Watch on YouTube

D-Pr

Process Risk

Loss of human control

AI systems operating autonomously with minimal human oversight can lead to scenarios where we cannot override or re-align them with human values.

S

Security Risk

Superintelligence with malicious intent

An advanced AI could actively act against human interests, whether intentionally programmed that way or as an emergent behavior.

Cx

Complexity Risk

Unintended Cascading Failures

AI interacting with critical systems (finance, infrastructure, etc.) may trigger global-scale unintended consequences.

F-F

Feature Fit Risk

Emergent, Unhelpful Behaviour

AI develops unforeseen behaviors, capabilities, or self-replication that could lead to unpredictable consequences.

L

Lock-In Risk

Loss of Diversity

A single AI system dominates globally, leading to catastrophic consequences if it fails, suppresses freedoms, or entrenches inequalities, consolidating power in few hands.

Cr

Coordination Risk

Synthetic Intelligence Rivalry

Rival AI entities could emerge with conflicting goals, leading to competition with humanity akin to geopolitical conflicts. (AI Colonialism)

Co

Communication Risk

AI Social Manipulation

AI could predict and shape human behavior on an unprecedented scale.

Risk-First

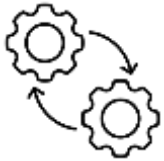
2E

Pragmatic Bookshelf

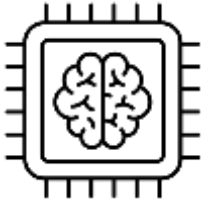
We're
doomed

AI
Nirvana

AI
Winter

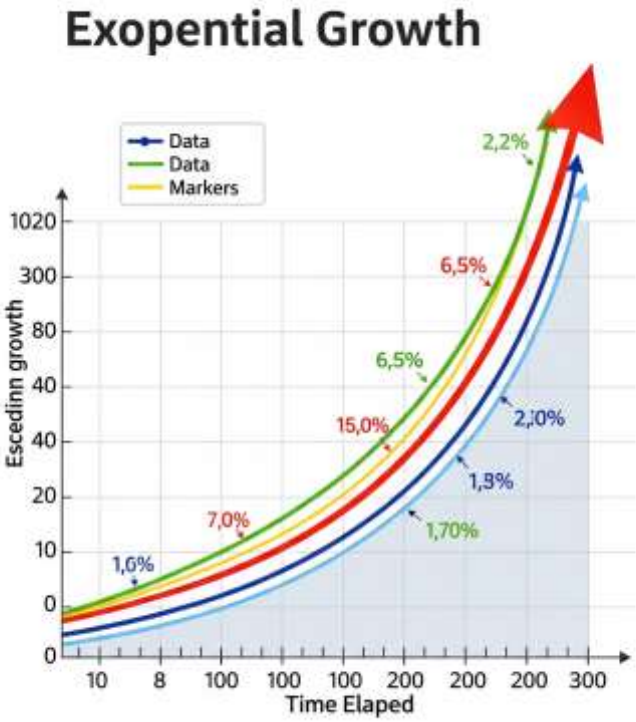


Not AI



AI

?



Exponential Growth Chart

- Chart shows exponential growth over time.
- Sharp upward curve illustrates rapid increase.
- Growth rate accelerates significantly as time passes.
- Visualizes data with consistently increasing rates.

(thanks, Gemini)

“We’ve survived 200,000 years as humans. Don’t you think there’s a reason why we survived? We’re good at risk management.”

- NN Taleb

Rob Moffat He/Him

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London Area, United Kingdom · Contact info

5,319 followers · 500+ connections

FINOS

University of Warwick - Warwick Business School