



**GOVERNMENT
SYMPOSIUM**
Presented by Red Hat



redhat.

THE POWER OF OPEN SOURCE INNOVATION

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शून्य



śūnya



nothingness



zero



Crystallised by Brahmagupta (*and variously by ancient
Mayan, Babylonian and Chinese societies*) from between
2000 BCE and 500 CE



If *only* they could have shared this 4,000 years ago, we could be on **Mars** (and beyond) by now!

A photograph taken from the perspective of an astronaut inside a red SpaceX capsule. The astronaut is wearing a white helmet and a white spacesuit with black gloves. The capsule's interior is illuminated with a red glow. In the background, the Earth is visible, showing a blue ocean, white clouds, and brownish-green landmasses. The curvature of the planet is clearly visible against the blackness of space.

SpaceX's Falcon Heavy Launched 6th February 2018



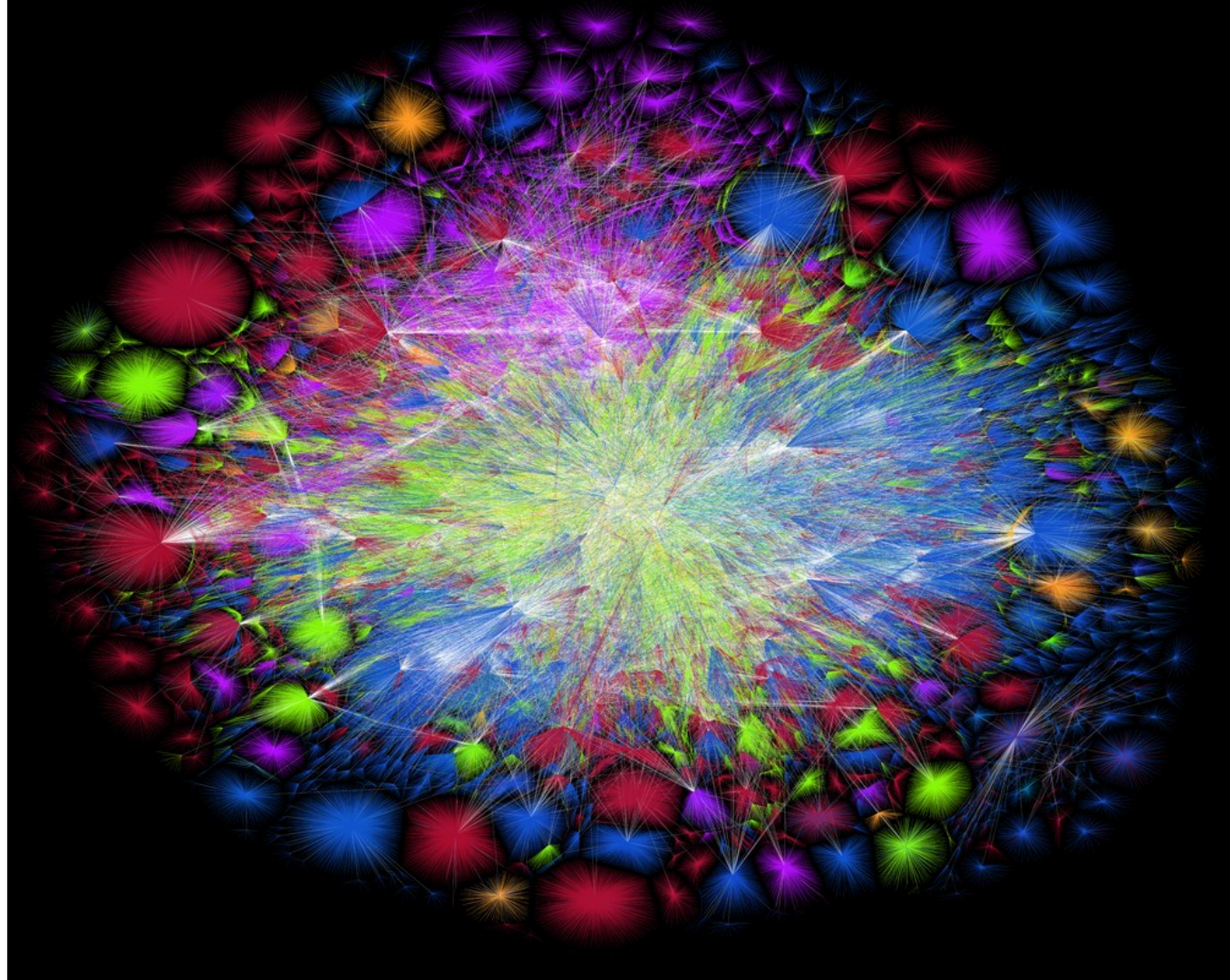
Sharing was possible, but not easy then

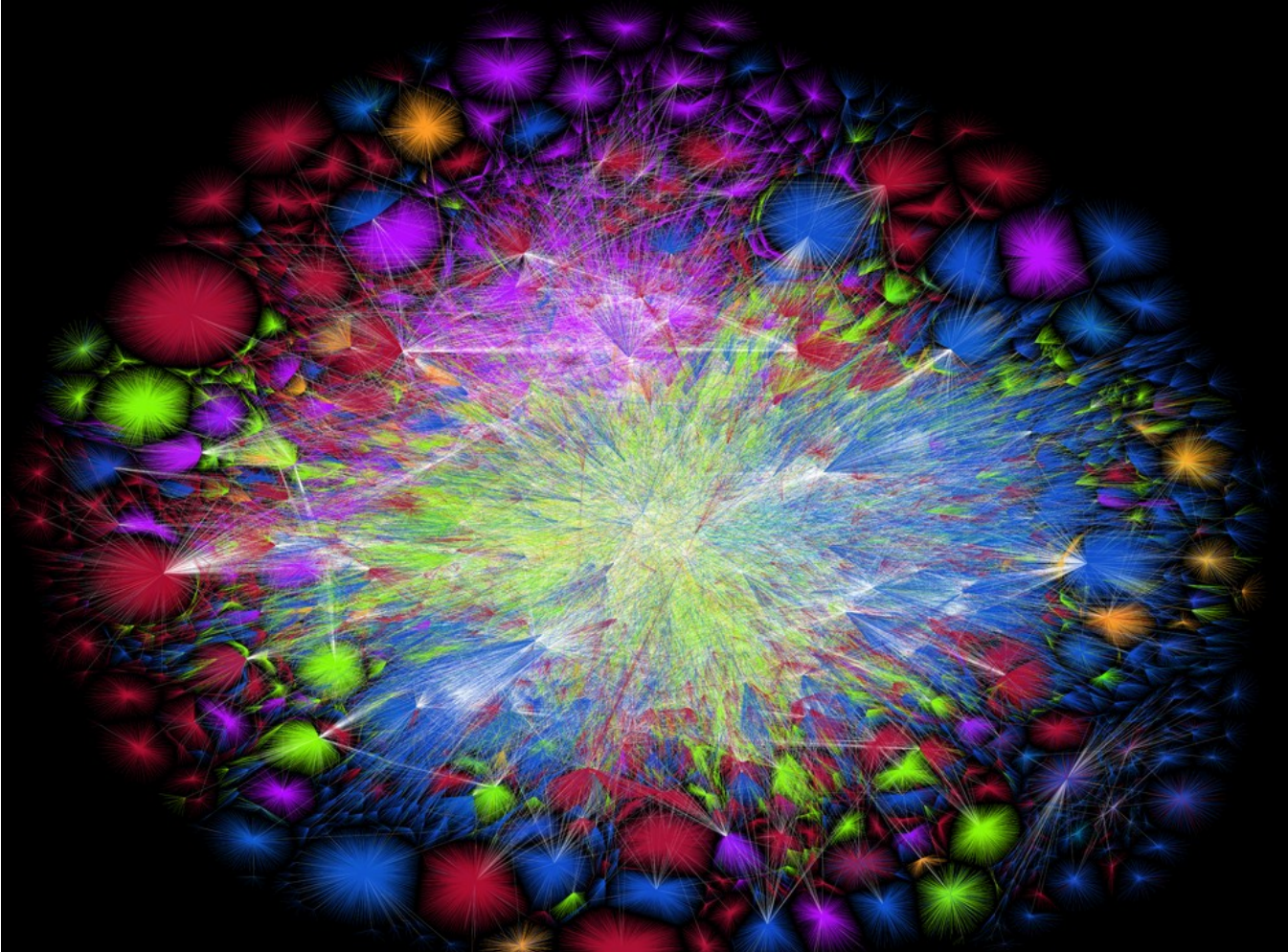


Fast Forward to the 20th century



We solved *the ease of sharing* problem





<http://www.opte.org/the-internet/> in 2015



The Internet



The invention that's on par with
the invention of writing and printing



The Internet is built and run by software and
hardware



where the software is *Free* Software*

*Free as in Freedom



Free* Software -
openly and collaboratively built to
freely available open standard specifications

*Free as in Freedom



Free* Software has deep philosophical, societal,
individual and intellectual grounding of
fundamental human expressions:
to use, to learn, to adapt and to share

*Free as in Freedom



The English language, however, does not help
with the word “free”



The English language, however, does not help
with the word “free”

99% of the time “free==no cost”



20 years ago this month, the marketing term
“open source”¹
was coined by Christine Peterson²
and has gained very wide usage

¹ <https://opensource.org/history>

² https://en.wikipedia.org/wiki/Christine_Peterson



The Free Software/Open Source-based Internet
has driven the global economy for the last
28 years - since 1990



That's almost three decades of rapid innovation
that has brought **over half of humanity online**



As we get into the
Fourth Internet Decade and the
Third Free/Open Source Decade
what's next?



As people get empowered by the Internet
and Free/Open Source Software,
we are now experiencing a *Cambrian* explosion
of innovation in every sphere of human activity



I would like to do a thought experiment.



What if I stopped the Internet now?
No wifi, no mobile data, *śūnya*.



I predict there will be
lots of very unhappy people



Every economic sector is
reaping the benefits:
transport, finance, education, mining,
communications, manufacturing,
entertainment, agriculture



And yes, even government.



Government/public sector is a special case



Governments, unlike businesses, do not have
the option of choosing their customers –
they have to serve all



How could Governments serve all,
and do it well enough to meet (exceed) the
expectations of the populace?



This is where Free/Open Source becomes the
foundational, bedrock framework

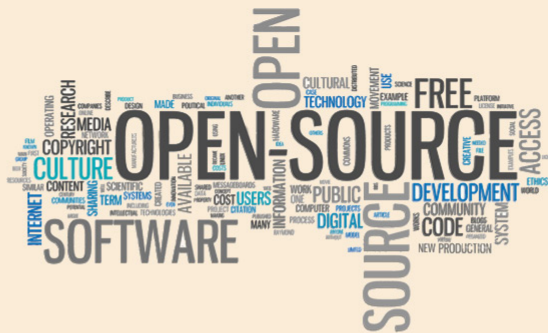


The Digital India initiative has clear targets on wide range of e-government services.

*For this initiative to see Cambrian growth,
Open Source is the only way forward*



Government of India's platform for open collaborative software development of e-Governance applications.



Who can use OpenForge

-  OpenSource Developers
-  Governments
-  Startups
-  Academia/Students
-  Corporations
-  Industries
-  Scientific Institutions

View Trending Projects or Browse all OpenForge Projects

Latest Projects

- > **247Buddy**
Talk to someone and pour your heart out or listen to someone who wants to be heard anonymously....
- > **Pulkit Agarwal**

Most Popular Projects

- > **Unified Payment Interface**
Discuss platform level issues / Ideas of Unified Payment Interface...
- > **Flower-RoadReady**



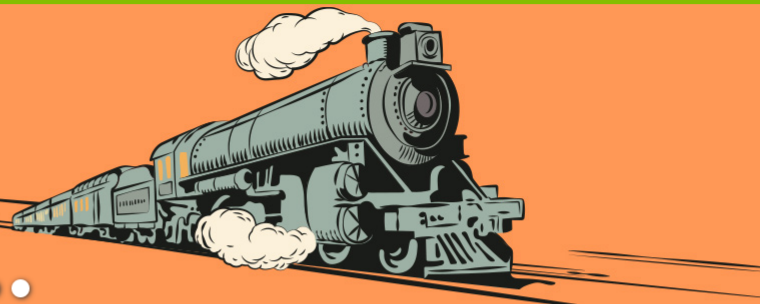
It is extremely heartening to see
openforge.gov.in.



Type search keyword



INDIAN RAILWAYS TRAIN TIME TABLE



ANALYTICS

- 157,635 RESOURCES
- 4,273 CATALOGS
- 109 DEPARTMENTS
- 14.94 M TIMES VIEWED
- 5.49 M TIMES DOWNLOADED
- 115 CHIEF DATA OFFICERS
- 3,598 APIs
- 1,312 VISUALIZATIONS

CATALOG

Health Management Information System

[Share](#) [Next](#)

HIGH VALUE DATASETS

TRANSPORT TIMETABLES	GOVERNMENT BUDGET	COMPANY REGISTER
NATIONAL STATISTICS	LEGISLATION	ENVIRONMENT
AGRICULTURE	HEALTH PERFORMANCE	MORE

VISUALIZATION GALLERY

SECTORS

SUGGEST A DATASET

Your Name

Your E-mail Address *

Suggest the Dataset or App *



data.gov.in and openforge.gov.in,
the ying and the yang, is crucial in a 3-prong
stage to set the open source collaboration on
fire!



So what would the third prong be?



The Third Prong

- 1) No vendor lock-in (tax-payer funded, remains open to all)
- 2) The right to change and distribute inside or outside the government
- 3) Security (and reproducibility)
- 4) Participate in the developer, user, enthusiast communities
- 5) Clear licenses (opensource.org compliant) – no Contributor Licensing Agreements
- 6) Insurance that the project/products exists and is being developed
- 7) **Commercially supportable/accountable**



In summary, open data, open collaboration,
clear rules, are critical building blocks for
reaping the benefits of open source innovation



Thank you.

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