IdeaSquare Open Doors

Some insights from interactive events I have helped to organise over the last decade

My background

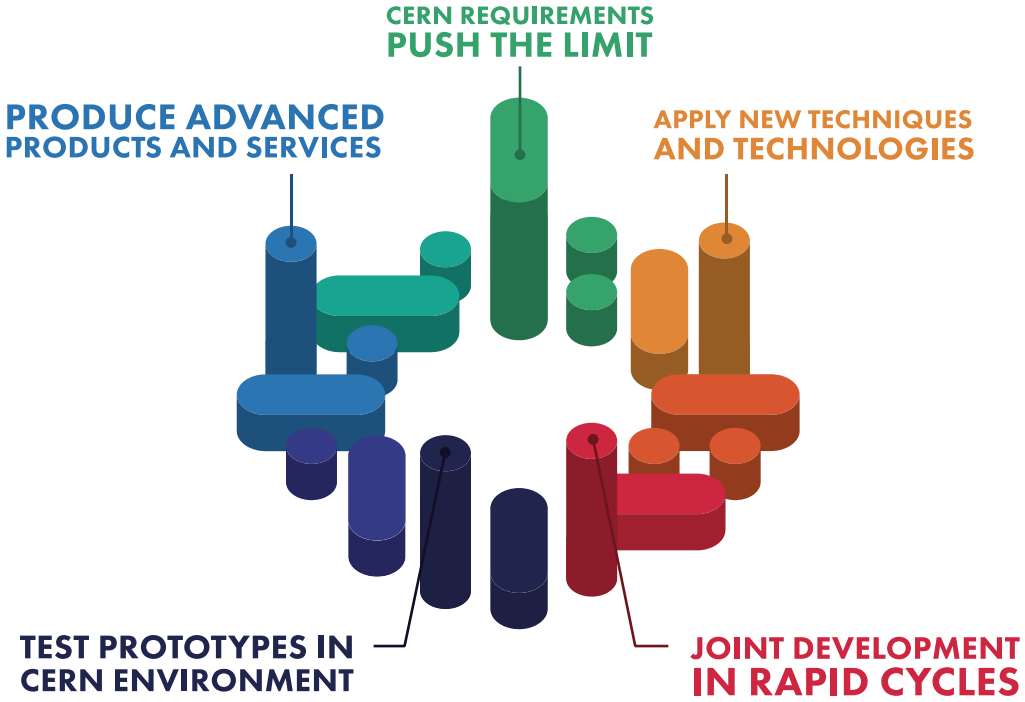
Science communicator

- 2016-2023: Leading CERN openlab comms office
- 2015-2016: Editor of *Science Node*
- 2012-2015: Editor-in-Chief of *International Science Grid This Week*
- 2012-2014: Work package leader for EC-funded *E-Science Talk* project.
- 2011-2012: Journalist on news desk at *New Scientist* magazine.
- 2010-2011: Freelance science journalist (Climate Action, Gizmodo, SciDev, UK Medical Research Council, and others).

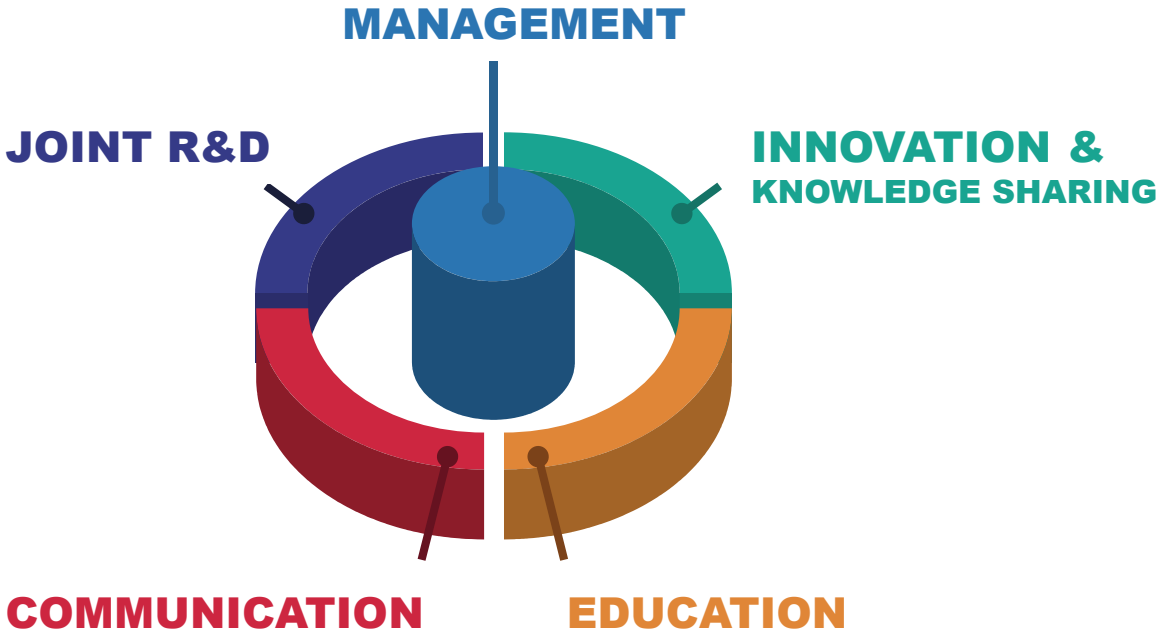
CERN openlab

- Public-private partnership.
- Working with leading tech companies to accelerate innovation in computing technologies.
- In service of CERN’s research community.
- 28 R&D projects, spread across the laboratory.
- “You make it, we break it.”

Supporting CERN’s research community since 2001



CERN openlab's missions



PARTNERS	CONTRIBUTORS	ASSOCIATES	RESEARCH
intel	bevys research	open systems	INFN Istituto Nazionale di Fisica Nucleare
ORACLE	IBM	COMTRADE	Fermilab
SIEMENS	E4 COMPUTER ENGINEERING	CQC Cambridge Quantum Computing	TU/e Technische Universiteit Eindhoven University of Technology
Micron			KING'S College LONDON
Google			Newcastle University
			SAMARA UNIVERSITY
			gluoNNet knowledge exchange for smart decisions
			ODTÜ METU

Tackling tomorrow’s computing challenges today

Exascale technologies

A comprehensive investigation of HPC and Cloud infrastructures, frameworks, tools to support key scientific workloads and applications

Artificial intelligence

Analysis and development of algorithms, optimisation for new architectures, interpretability, synergies between Physics and other sciences

Quantum computing

Assess the potential impact of quantum computing in HEP and other sciences, investigate quantum machine learning algorithms and areas of potential quantum advantage, set up a collaborative quantum computing (simulation) platform

Multi-science collaborations

Share the expertise and knowledge generated across all activities with other sciences, work with CERN KT to explore novel applications of CERN computing systems and ideas, create collaborations and contribute to common solutions

Events

The events discussed in the next slides are examples which I think illustrate well some of the different challenges faced.

My level of involvement in organising these events varies: led on some, but was only a contributor for others.

In all cases, the learning listed for each event is my personal opinion.

CERN openlab Open Day

- **When:** Two-day events in 2015, 2016 and 2017.
- **My role:** Led organisation of these events.
- **Format:** In-person event at CERN.
- **Stakeholders:** Members of CERN personnel, tech companies.
- **Goals:** Promote the CERN openlab mechanism for addressing challenges faced; matchmaking with industry.
- **Learning:**
  - Frequent changeover of personnel at large organisations necessitates continuous and repeated communication of high-level messages; cannot assume much prior knowledge.
  - Managing company expectations can be tricky (no marketing talks).
  - There is a lot to be said for being located next to R1 at lunchtime and having a reports, stickers, etc. to giveaway (particularly when your meeting is in the Main Auditorium and you have posters just outside.
  - Similar learning from our QT4HEP workshops (2018 and 2022).

CERN openlab summer student programme

- **When:** Runs for nine weeks each summer.
- **My role:** Support organisation (and promote).
- **Format:** Lectures, visits, workshops, “lightning talks”, etc.
- **Stakeholders:** Students.
- **Goals:** Train the next generation of IT specialists.
- **Learning:**
  - Important not to overestimate students’ understanding of CERN and its mission (the students are primarily computing specialists, not physicists).
  - Students come from diverse range of backgrounds (programme is open to all in both member and non-member states). Must be taken into account for comms and when planning events.
  - Huge interest in programme (we received over 2000 applications this year for 35-40 places) means that we are trying to promote lectures online. Some have been viewed over 1000 times. We could do more though.

CERN Webfest

- **When:** One weekend each summer (local).
- **My role:** Led organisation from 2017 to 2021.
- **Format:** In-person, except for 2020 and 2021 (due to COVID-19).
- **Stakeholders:** CERN summer students (plus tech enthusiasts for online iterations).
- **Goals:** Promote the use of open web technologies to tackle societal challenges and communicate science.
- **Learning:**
  - Ensuring follow-up and securing long-term impact is hard (particularly for online version).
  - Getting registrations is easy; securing sustained engagement is harder.
  - Important to work with others experienced with hackathons at CERN (e.g. fantastic work from GluoNNet team when we went online in 2020).
  - Timing of events is important:
    - Can be difficult to secure engagement at senior level during summer.
    - Weather plays a role in attendance for in-person events: hot, sunny weekends mean fewer students show up for full weekend.
    - For online events, important to strike a balance between time zones and record so as to avoid excluding some people.

CERN Alumni Second Collisions

- **When:** 1-3 October 2021.
- **My role:** Member of the organising committee and presenter.
- **Format:** Online event due to COVID-19 pandemic.
- **Stakeholders:** Former CERN members of personnel.
- **Goals:** To engage alumni with the latest work of the Organization and strengthen ambassadorship for the Organization and its goals.
- **Learning:**
  - Planning started almost a year in advance: all this time was needed.
  - There will be periods where committee members can contribute with more or less of their time – that's normal and should be planned for.
  - Identifying risks and establishing back-up plans is important (COVID-19 pandemic).
  - As with the Webfest, it can be challenging to maintain engagement over a whole weekend (despite people being very keen to join for at least part of the event).
  - Important to create a special experience, so that participants feel valued.

GridCafé

- **When:** 2011-2014
- **My role:** Contributed through E-Science Talk.
- **Format:** Virtual online world.
- **Stakeholders:** Sci/tech-curious public, students, scientists.
- **Goals:** Promote awareness and use of grid- and cloud-computing technologies.
- **Learning:**
  - Bar for engaging too high.
  - Respect for different people learning/engaging in different ways. Nevertheless, sometimes simplest solutions can be best.
  - Not always necessary to jump on latest tech “bandwagon”.

CERN Open Days

- **When:** Weekends in September in 2013 and 2019.
- **My role:** Contributed to special IT-dept visit points.
- **Format:** Weekend-long events attended by tens of thousands.
- **Stakeholders:** Public (especially people in local region).
- **Goals:** Promote the important role played by computing in underpinning the groundbreaking research conducted at CERN.
- **Learning:**
  - Important to cater for people with a wide range of understanding of our work.
  - Take people on a journey (important not to miss out on crucial early steps).
  - Vital to avoid overestimating people's subject-specific knowledge.

Advice

Promotion / SciComm / Interactivity / Impact / Online

Promotion

- Communicate early
  - Only once there is a concrete action though.
  - Good to have plans for event visible (even if only indicative).
  - Be open about the goals for your event.
- Communicate often
  - Striking a balance between too little and too much is hard.
- Target key stakeholders, based on desired impact.
  - Select channels accordingly.
- Monitor success of communications and adapt accordingly.
- Identify similar events and ask if you can pitch your event there.
- Identify ambassadors from previous events you may have run and ask for their help in promoting.

Science communication

- Don’t overestimate people’s knowledge about your specific project.
- Don’t underestimate their intelligence though.
- Take them on a journey with you.
- Be clear about who the event is for up front.
- Make any expected knowledge/skills clear up front.
  - Where possible, provide opportunities to fill gaps in knowledge/skills, so that people can still contribute.

Interactivity

- Clear communication of desired outcomes/impact engenders harmony and helps participants work towards common goals.
- Be clear at the outset about opportunities for interactivity – set accurate expectations.
- *Demonstrate* that input is valued (don't just tell people it is).
- When working in teams, think carefully about balancing skills.
- Identify people with experience and empower them to be facilitators and/or mentors.

Impact

- Shape your event around your desired impact.
  - Do not shape your desired impact around the kind of event you'd like to run!
- Establish at the outset how you're going to measure the impact.
  - A successful event does not simply mean one that was attended by lots of people.
- Decide (and communicate) up front how you will use outputs from the event.
- Have plans in place for next steps.
  - E.g. how you will take this forward if the event is a success and how you will mitigate if not.
- Before you start any planning, do an inventory of the resources, time, skills, etc. you have in your team that is preparing the event.
  - Make alternative plans for different scenarios.

Online events

- Don’t just attempt to transfer offline experience to online.
  - Don’t be afraid to completely reimagine your event if you’re doing it online for the first time.
- Embrace the advantages of running events online, but acknowledge the drawbacks.
  - Put strategies in place to mitigate drawbacks.
- Think even more carefully than usual about timing.
- Plan for participants being less engaged throughout the event.
  - Ensure online events are not unnecessarily long.
- If running an event in a hybrid format, it’s important to ensure that online participants aren’t treated as second-class citizens.

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