

Support for code porting

2025-07-03 Sheffield - Accelerators



Using AI – Access to open source models in house.

**Procurement
Emerging tech – implementation
Sustainability/Cost benefits**

Code optimisation

Network + Accelerator Implementation

Efficient use of GPU's MIG/MPS

Orchestration + GPU's

Which accelerator for which load

Awareness of Emerging Tech

GPU Software Stacks/drivers

Process to move beyond GPU's

Awareness of options

Foundation knowledge of GPU types/Use cases



E&F involvement
Facility level buy in
Funders awareness

AI strategy in Datacentres

Datacentre TRE

accreditation

NetZero Strategy

Water cooling

Limited power envelope

Efficiency linked to energy: priority nodes

Power/Performance balance: dynamic boost

Security access standards - Ethernet HPC

Network security and performance cost

Lifecycle & disposal WEEE/data security

Use RSE's to
stress systems

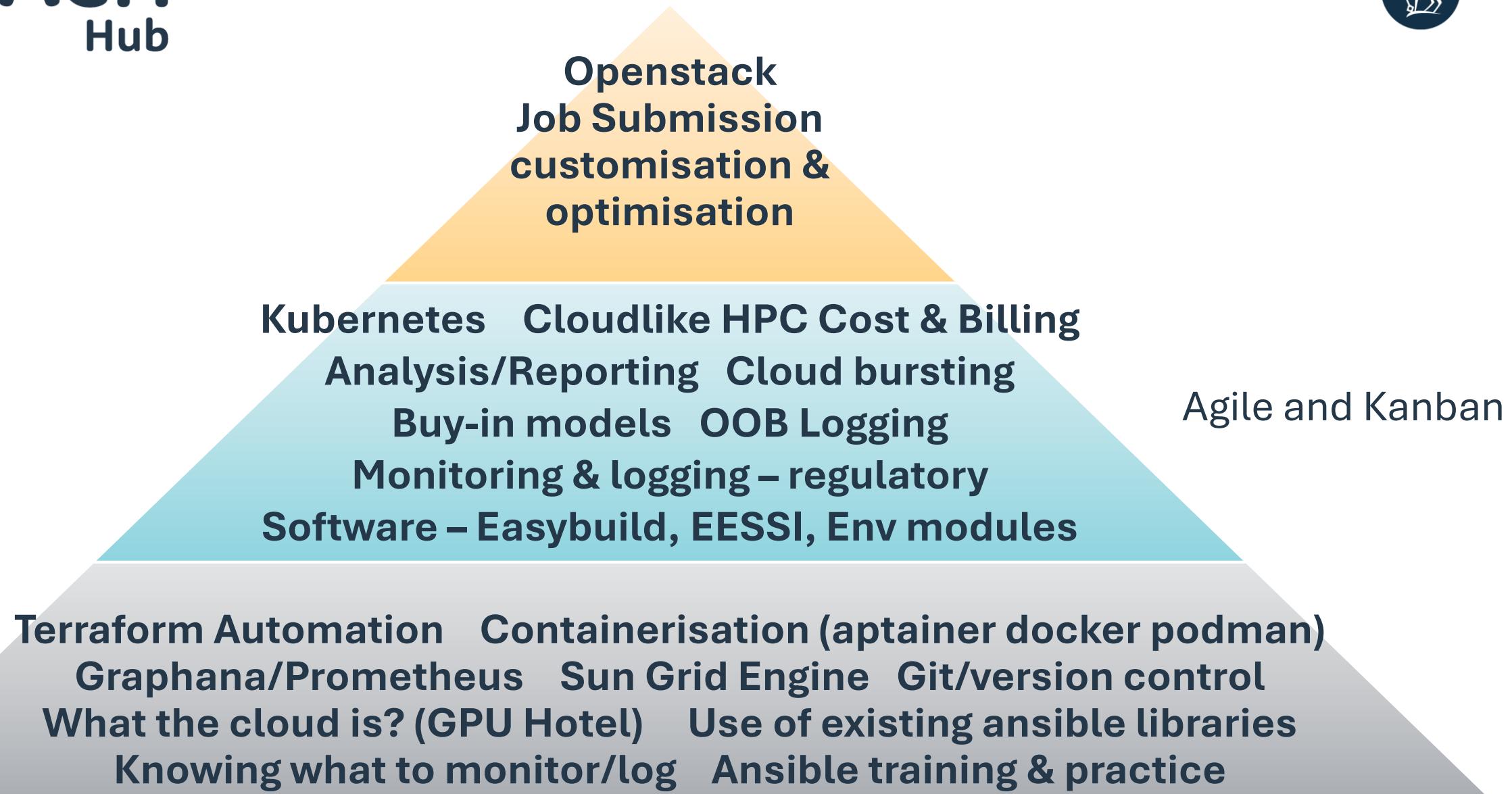
Signposting info for
RSE's Hackathons
with SSI

Infiniband is Plug+play

AI usage in Datacentres

Awareness of network & Datacentre teams

Hands on time with hardware – old kit to “play” with for training
“intuition checklist” network troubleshooting - monitoring stats



2025-07-03 Sheffield – Storage & Data



Avoiding vendor lock-in & Migration
between providers | Applying
policies retrospectively
varied policy landscape –
uni/funder/industry

Review Processes

Data Cataloguing: starfish | On Prem vs Cloud | Apps for
data management | Security | Data sharing platforms |
Globus | Governance | Sensitive Data | Data Destruction
| air gaps | Parallel FS | Data appropriate storage envs &
techs | Storage Tiers (hot, warm, cold) & auto/manual |
Data Staging

How to configure, build, operate, maintain | connect to networks | File Systems vs
Object Stores | Hardware (Disc, solid state, tape) | Bottlenecks | Data
formats/standardisation | Transfer technologies (globus, MPI file utils) | data growth
| RDM best practice | data audit | Data classification | Data retention policy



What's Working?

Local Knowledge of Process & Systems

Trainee roles with training

Work life balance

New hires – start at lower level with defined path

What could work better?

Lack of official promotion track
cross sector rationalisation

Training for snr management about paths

Formal training Money

Pathways -> management

want fixed training periods -> promotions

What Opportunities?

Easy to move roles – broad experience

Access to latest tech

Tap into final year students

Broad experience – touch all areas

Access to SMEs

Technician's commitment for RIE's RSEs

What are the barriers?

Workload/time management

Lack of courses in this domain

HR policies – interviews and workstreams

Role creep IT Policy

Client facing roles don't exist



Barriers

Not having the right contacts. Too new

Institutional culture Not feeling ready to mentor

Not knowing where to start Social anxiety

Institutional support Security and Risk (Root
passwords!!!)

Training Not enough time/too much work

Operational admin and complexity of managing a
secondment

How to make it more attractive?

Less formal – natural A secondment that aligns
with my career interests, Cross industry Part
of appraisal objectives Pathway to permanent
employment Secondment to a range of different
places shadowing supported mentor scheme
promote the story – reputational boost
matchmaking process short-term covering a
crunch put it on employment record sabbatical
type arrangement PhD's at the end of a project –
mutually beneficial.

What do you want to gain?

How to communicate my skills and achievement Information Exchange and insights stakeholder
management advice communication advice for technical to non-technical Broad exposure to
different jobs/environments different industries/government/UKRI Mentor more experienced than
myself Mentored by someone from my org Long lasting relationship Networking Share
experiences and common ground New perspectives for the host bringing in a new skillset
something for my CV cross training



I valued

Chartered institute of management
Presentation skills
Mental health and work life balance
EDI training
Export Control training
Multimedia training
Train the trainer

Please no

Duplicating existing external content
Mandatory training
Generic HR training

I Want

Focus on tech skills
Corporate Negotiation skills
Effective decision making
Planning for failure of systems
Technical and non-tech communications
Best practices Signposting to external courses
UKRI/DSIT understanding
Budgeting/Purchasing
The research process/ research lifecycle/ what
researchers do! Training Juniors – Experience
Creating documentation
Tech focussed soft skills
Change management not ITIL



What learning formats work well?

Chosen courses – not mandatory

Bespoke formats relevant use cases

Enabling multiple types of learners in the same room | Live systems

Content available in advance

Captions for language needs

CPD days, BOF, knowledge exchange days, Peer learning, away from work,

CPD Week – like academic writing weeks

Mission Driven – hackathon, guest logins for locals to avoid distractions

Signposting to existing training

Access to VM's after the course

Video: + pause/rewind transcript examples

Video: - Too long, don't get on with teaching style shadowing | Record of working examples

Exercises build on examples Vendor specific

How have you learnt your skills?

Reactive – manuals, examples, online tutorials.

Learning by doing On-the-job

When the expert is away

Mandatory courses 😞

Mission driven = necessity

Formal quals in networking

PhD Peer Learning

Unofficial Mentorships Being present, showing an interest, Good environments, In the room with collaborative peers

Official documents (if up to date!)

Lectures, practical training, hands-on desktops