
Common Sense Is All You Need

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_____ is all you need

Attention is all you need

Scaling ...

Pruning ...

Minimal GPT ...

Sparse BERT ...

Reward is enough

... enough to generate unintended consequences

0 to 6G in 30 seconds



0G



1G

Add voice

1011001

2G

Go Digital



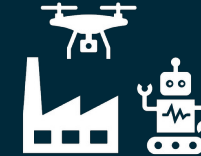
3G

Go Wide



4G

Go Packet



5G

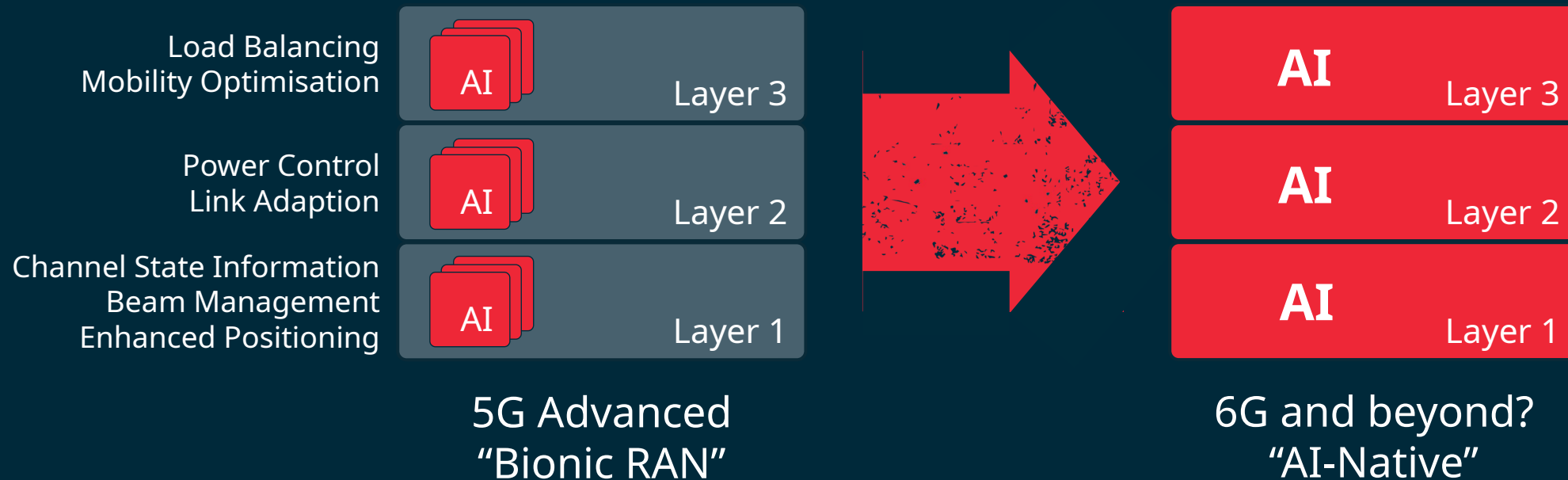
Go Diverse



6G

"Intelligent"?

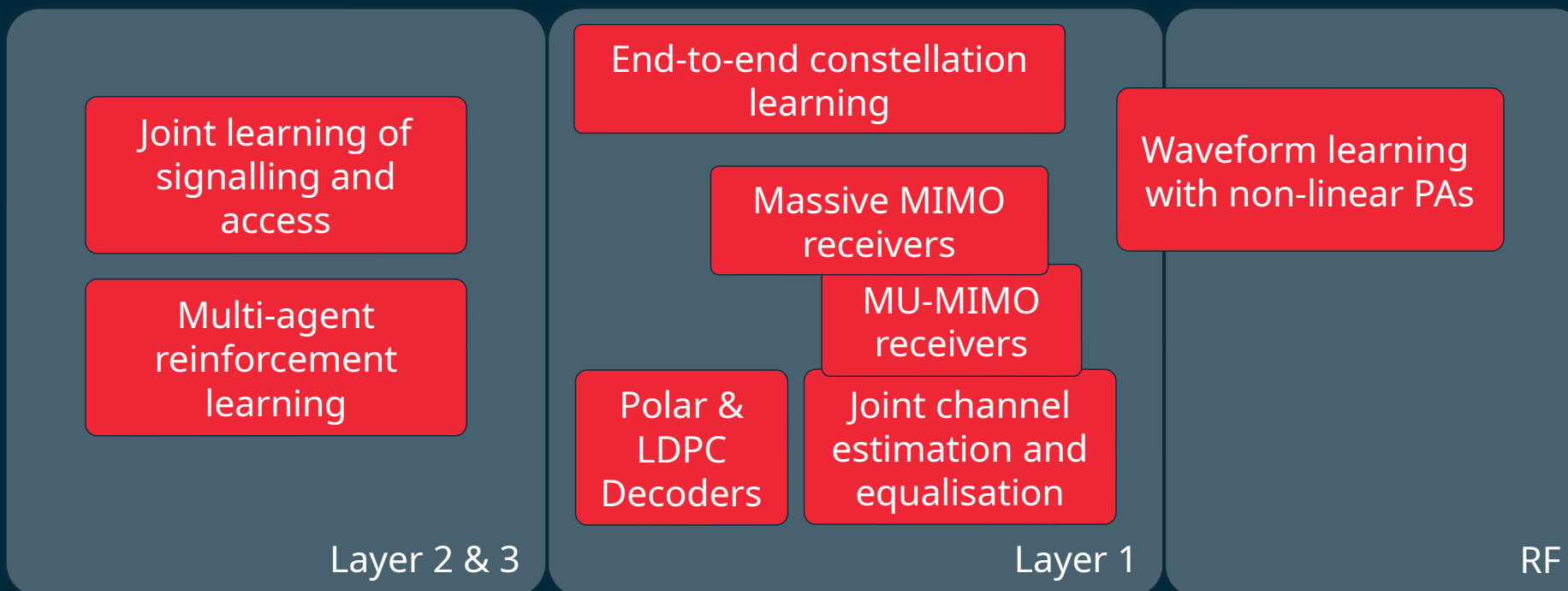
AI-Ingress to AI-Native





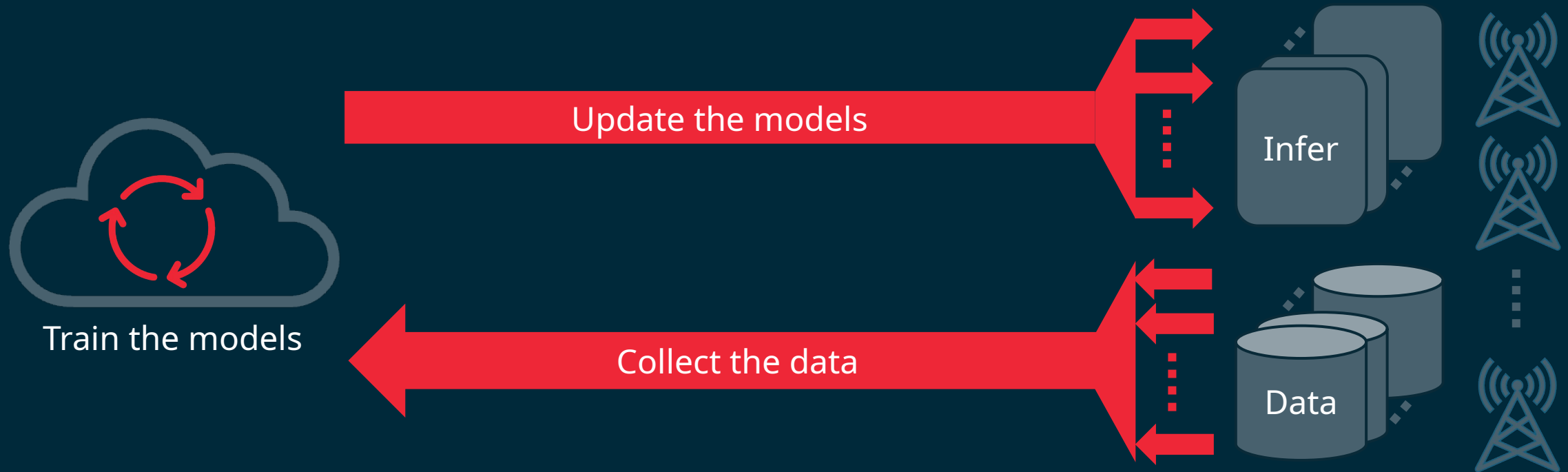
An extinction-level event for Digital Signal Processing?

AI in Baseband: the story so far



AI-model life-cycle management

Or “Life-support system” - a problem statement



And then there's the monitoring, the debugging etc etc

Profit & Loss





Standards should be flexible and future proof

They should avoid a repeat of “the 3G Problem”

3GPP: Specification release every 12-18 months

AI Progress:

Five major “Text-2-X” models in a 6-month period in 2022

Exponential growth in AI papers published per month^[1]

[1] Krenn, M., Buffoni, L., Coutinho, B. et al. Forecasting the future of artificial intelligence with machine learning-based link prediction in an exponentially growing knowledge network. Nat Mach Intell 5, 1326–1335 (2023). <https://doi.org/10.1038/s42256-023-00735-0>

So what?

AI in the RAN has got momentum

AI “life support” - aren’t networks complicated enough already?

Can the planet and network operators afford the energy bill?

There’s a timescale mismatch between AI progress and wireless standards

But AI is good at dealing with complexity and uncertainty – lean on it

There just might be another way...



Our World.
Squared.

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