{BnF Artificial Intelligence

Roadmap 2021-2026

At the crossroads of expertises, the National Library of France regards itself as a privileged observatory, as well as a demanding institution and a catalyst, regarding evolutions made possible by artificial intelligence. A 5-year perspective is presented by the BnF's roadmap, closely related to its current projects and achievements. Much more than the conclusion of a thourough investigation and study, this roadmap sets in motion a whole institution and its ecosystem bound to evolve in the coming years.

Actions

1 Making AI challenges and projects a part of the Institution's **global strategy**

2 Improving **R&D** organisation and implementation at the BnF
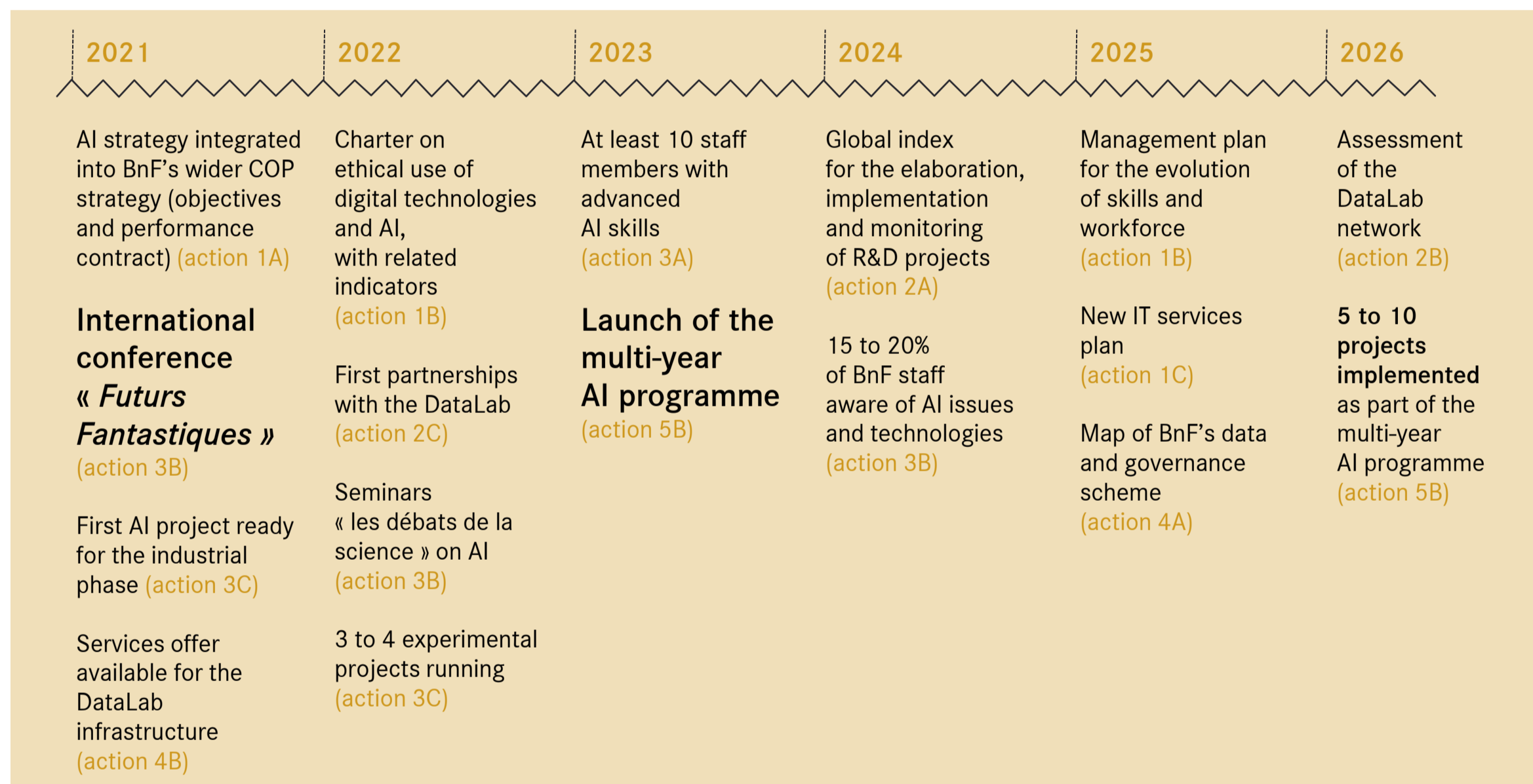
3 Developing **new skills**

4 Adapting **infrastructure** and **data management**

5 Designing a **multi-year programme** with other stakeholders

Milestones

2021
AI strategy integrated into BnF's wider COP strategy (objectives and performance contract) (action 1A)

International conference « *Futurs Fantastiques* » (action 3B)

First AI project ready for the industrial phase (action 3C)

Services offer available for the DataLab infrastructure (action 4B)

2022
Charter on ethical use of digital technologies and AI, with related indicators (action 1B)

First partnerships with the DataLab (action 2C)

Seminars « les débats de la science » on AI (action 3B)

3 to 4 experimental projects running (action 3C)

2023
At least 10 staff members with advanced AI skills (action 3A)

Launch of the multi-year AI programme (action 5B)

2024
Global index for the elaboration, implementation and monitoring of R&D projects (action 2A)

15 to 20% of BnF staff aware of AI issues and technologies (action 3B)

2025
Management plan for the evolution of skills and workforce (action 1B)

New IT services plan (action 1C)

Map of BnF's data and governance scheme (action 4A)

2026
Assessment of the DataLab network (action 2B)

5 to 10 projects implemented as part of the multi-year AI programme (action 5B)

Projects from the multi-year programme

These projects fall under 5 fields:

1. Support to cataloguing activities

2. Collections management

3. Searching, analysing content and improving access to content

4. User engagement, putting content in perspective

5. Decision-making and governance

Maturity of the project at the BnF

Industrialisation

Pre-industrialisation

R&D (internal and external)

Experimenting

Industrialisation phase

Image mining in Gallica (field 3)

Enriching the retrospective catalogue

Automatic data model conversion

Cataloguing (field 1)

Works and expressions clustering

Data extraction to support daily cataloguing

Automatic support for indexing documents' subjects and headings (RAMEAU)

Data extraction to support daily cataloguing (audio supports)

R&D projects

Monitoring tools for the preservation and management of collections (field 2)

Hand-written text recognition (HTR) to be integrated into Gallica (field 3)

Personalised content recommendation with an ethical perspective (field 4)

Identifying autonomus documents in web archives (field 1)

Potential projects to be integrated into the DataLab

2. Quality check for audio supports (Ircam Amplify)
4. Experimenting with live chatbots at specific events (ex. Lille-Bot)
4. Vectorisation of old city maps
1. Texts automatic classification (JADIS)
2. Improving quality checks for digitisation
3. Speech to text in Gallica
5. Documents structure analysis
5. Analysing consultation and use cases date
4. Mapping BnF's data
4. Collaborative image mining
4. Collaborative approach for HTR crowdsourcing
1. Metadata generation based on web archives
2. Improving the collect of web archives
2. Tools for the temporary collect of web archives in order to free some storing space
3. Identifying identical versions of a digitised document
3. Analysing themes in a web corpus
4. Chatbot Gallica
4. Chatbot on the institutional website
4. Dynamic generation of documents
5. AI for HR
5. Daily-decision making support tool

Launching year of projects
2022   2023   2024   2025

Contact
emmanuelle.bermes@bnf.fr

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