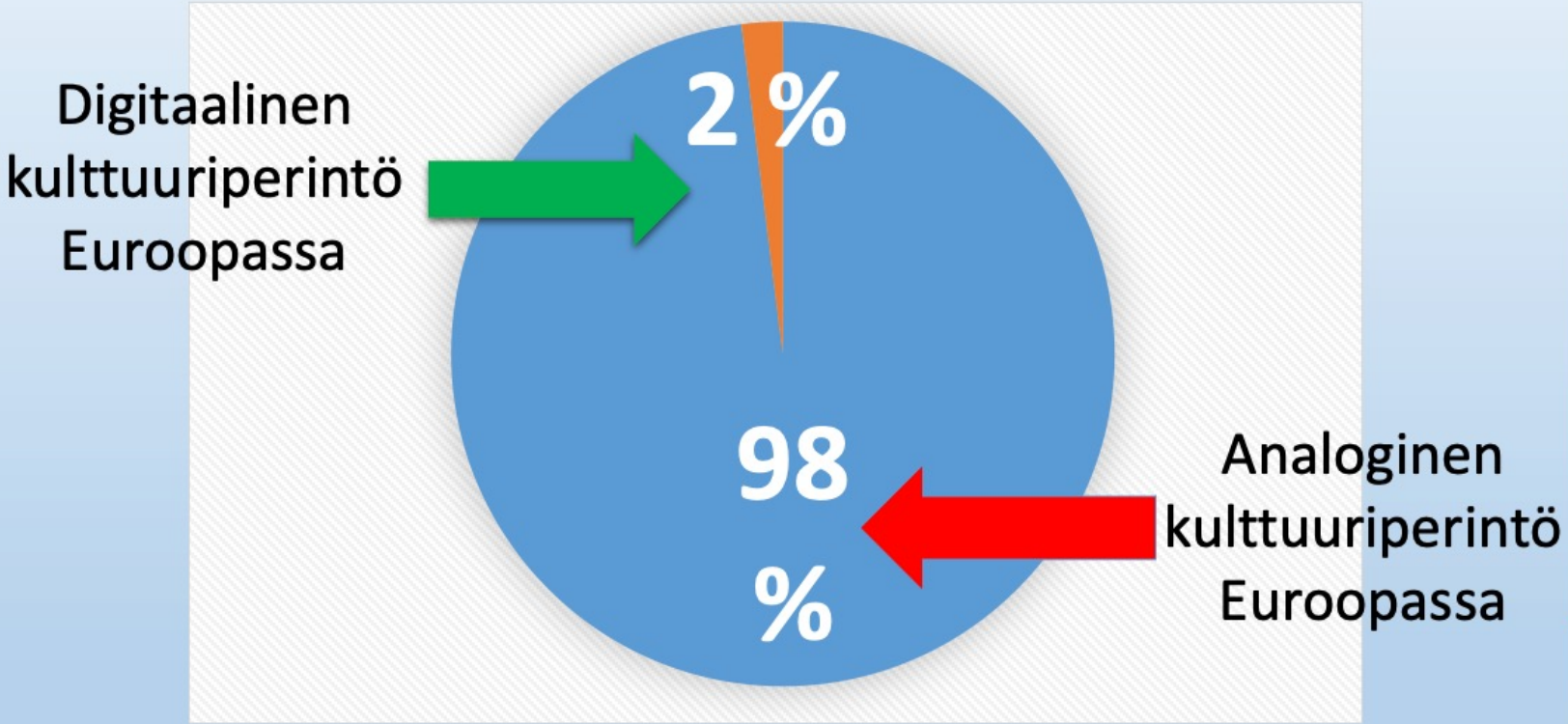
Arkistojen digitalisaatio ja uudet mahdollisuudet

Arkistot kuuluvat kaikille -seminaari

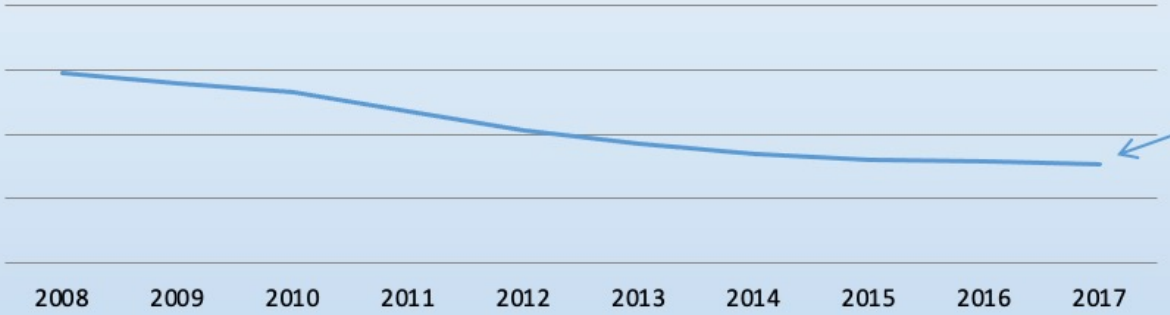
23.5.2022



Time Machine

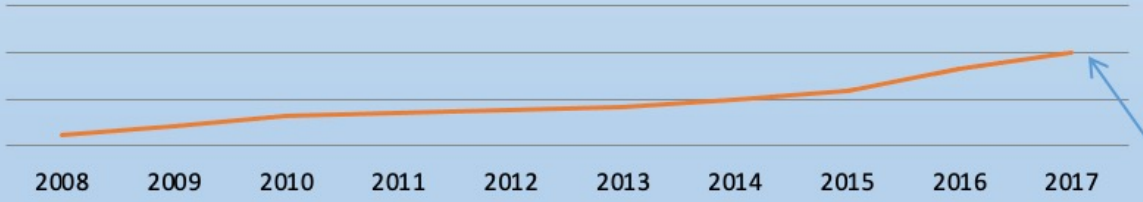
"A large-scale research initiative is needed to drive simultaneous progress on all fronts, creating **synergies** and **multiplying** the effects from different sources of funding."

Fyysiset asiakaskäynnit Kansallisarkistossa 2008-2017



n. 30 000 kpl

Käyntien määrä Digitaaliarkistossa 2008-2017



n. 1 000 000 kpl

Time Machine

"Our focus is on the joint efforts **on Big Data, artificial intelligence, augmented reality and 3D** and the development of European platforms in line with European values."

Noin 95 % asiakirjallisen kulttuuriperinnön käytöstä tapahtuu verkossa

Mutta vain 4 % aineistoista on siellä

Time Machine

"We will develop **novel scanning** technologies to digitise massive amounts of fragile documents and artefacts, through new types of sensors, robots and automated processes. These will provide **rapid scanning solutions** in science, industrial archives, public administration, and potentially in services for consumers."

Mitä siis on tehtävä?

1. Edellytysten luominen kulttuuriperinnön kattavaan digitointiin meidän aikanamme
2. ”Menneisyyden big datan” tuottaminen esim. tekstin- ja hahmontunnistuksen avulla
3. Edellytysten luominen uudenlaiseen datankäsittelyyn ensiluokkaisen tekoälytuotteen avulla
4. Datan pitkäaikaissäilytyksestä huolehtiminen

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Israeli researchers develop effective method to store huge digital data in DNA

Source: Xinhua | 2019-09-10 22:57:27 | Editor: yan

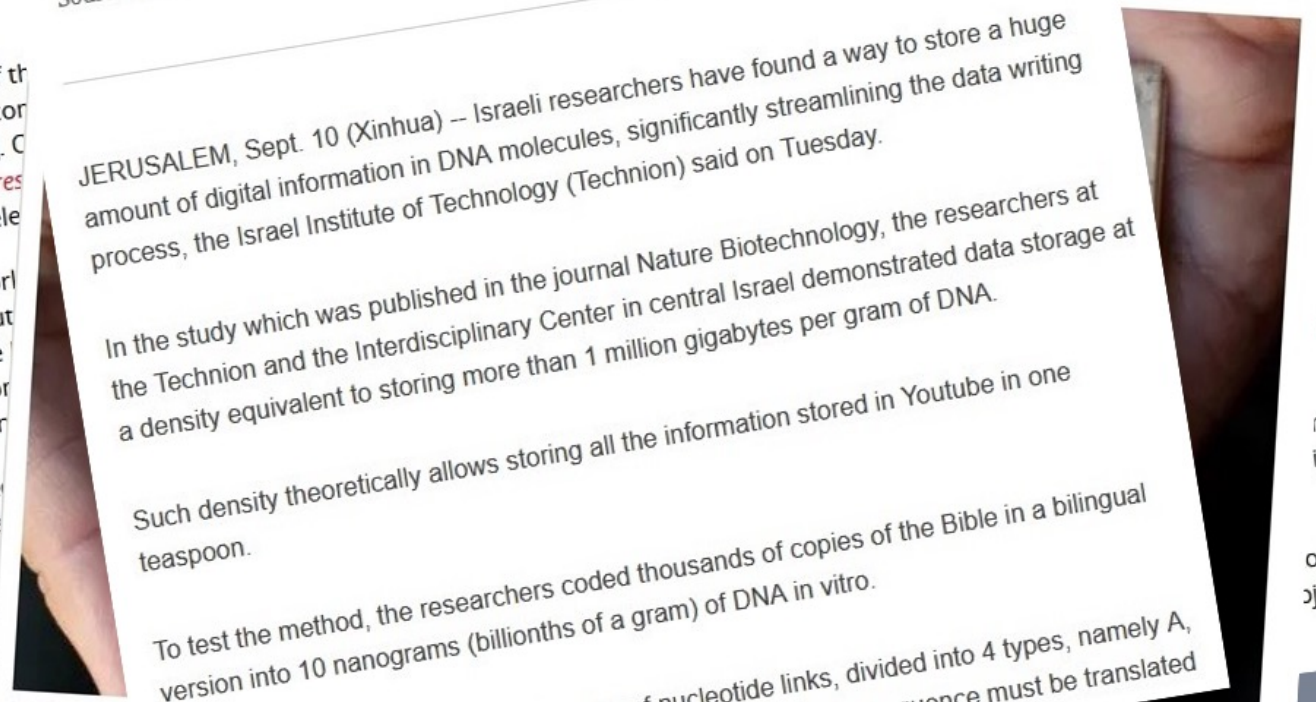
JERUSALEM, Sept. 10 (Xinhua) -- Israeli researchers have found a way to store a huge amount of digital information in DNA molecules, significantly streamlining the data writing process, the Israel Institute of Technology (Technion) said on Tuesday.

In the study which was published in the journal Nature Biotechnology, the researchers at the Technion and the Interdisciplinary Center in central Israel demonstrated data storage at a density equivalent to storing more than 1 million gigabytes per gram of DNA.

Such density theoretically allows storing all the information stored in Youtube in one teaspoon.

To test the method, the researchers coded thousands of copies of the Bible in a bilingual version into 10 nanograms (billionths of a gram) of DNA in vitro.

The DNA molecule is a chain consisting of nucleotide links, divided into 4 types, namely A, C, G and T. In order to store information in DNA, each binary sequence must be translated



▲ An unope
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Le Pers, virtually unfolded and read for the
Group archive

In a worl
the study of historic documents, an unopened letter
written in 1697 has been read by researchers without breaking the seal.

government entities could be integrated, and eventually the government will provide
Open Data Portal. Digital public records

A solution to digita

New digitisation hub for National Archives of Australia

Monday, 29 November 2021

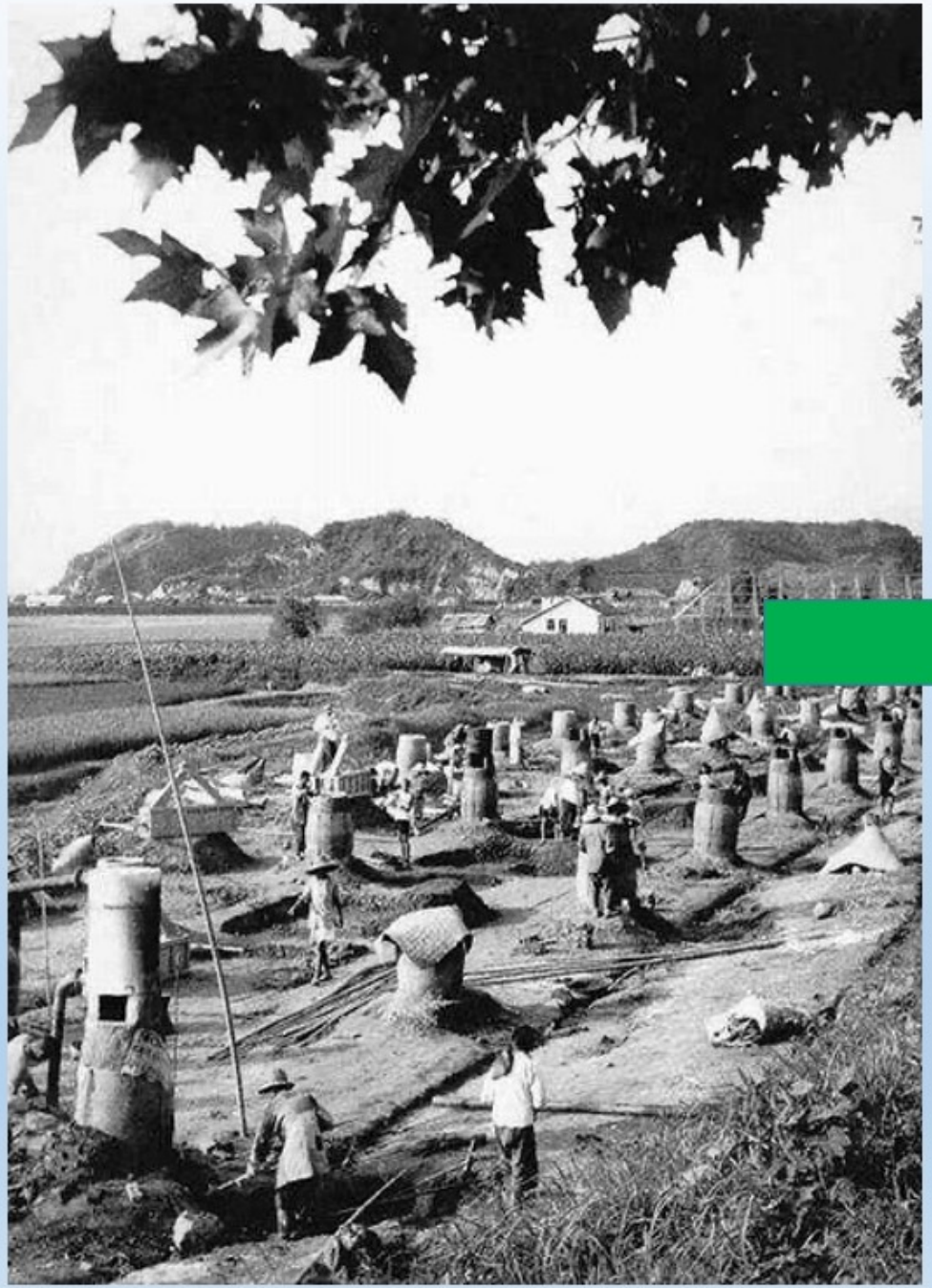
National Archives' efforts to increase online access to its vast collection have been given a major boost with the signing of a contract with commercial digitisation provider Micro Image to operate from the Archives' new industrial scale digitisation hub.

Under the partnership Micro Image, based at the new digitisation hub in the National Archives' repository on Sandford Street in the Canberra suburb of Mitchell, will undertake large-scale digitisation of at-risk items from the national archival collection.

…uly this year the Australian Government announced an extra $67.7 million over four years to fund the National Archives' *Defend the Past, Protect the Future* Program. This Program will see the digital preservation of critical at-risk collection material, including audiovisual content, before

”Puolusta menneisyyttä, suojele tulevaisuutta”

Time Machine



Kirjallinen kysymys ministerille (KK 152/2022 vp)

”Hallituksella ei ole tällä hetkellä erillisen kansallisen digitointikeskuksen perustamiseksi toimen-piteitä valmisteilla.”

”Digitointia tehdään eri puolilla Suomea kulttuuriperintölaitosten tiloissa tai hankkimalla digitointia siihen erikoistuneilta yrityksiltä.”

Ehdotus kulttuuriperintöstrategiaksi

”Digitaalisia palveluja ja sisältöjä kehittämällä voidaan parantaa kulttuuriperintötiedon ja palveluiden saatavuutta.”

”Tekoälyn avulla voidaan tarkastella, tutkia ja hyödyntää kulttuuriperintötietoa eri aloilla uusin tavoin.”

”Laajamittaisella digitoinnilla voidaan tukea jokaisen oikeutta päästä oman kulttuuriperintönsä äärelle.”

”Kriittistä on digitaalisen pitkäaikaissäilytyksen turvaaminen, sillä pitkällä aikajänteellä digitaalinen aineisto voi olla ainoa ilmenemismuoto.”

Time Machine

“We will develop **novel scanning** technologies to digitise massive amounts of fragile documents and artefacts, through new types of sensors, robots and automated processes. These will provide **rapid scanning solutions** in science, industrial archives, public administration, and potentially in services for consumers."

Time Machine

Tomi Ahoranta
Time Machine -lähettiläs
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"We want to **innovate access** to cultural heritage by creating participatory platforms, allowing for a '**polyvocal history**', that also includes citizens' perspectives on the places and information that is relevant for them and their lives."

http://www.arkisto.fi/tm

timemachine.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 820323.

@TimeMachineEU

timemachine.eu/trailer