by Flavia Cancedda* & Luisa De Biagi* **

CNR – National Research Council, Rome (IT)
Central Library 'G. Marconi'
* *National ISSN Centre** National Centre for Grey Literature*

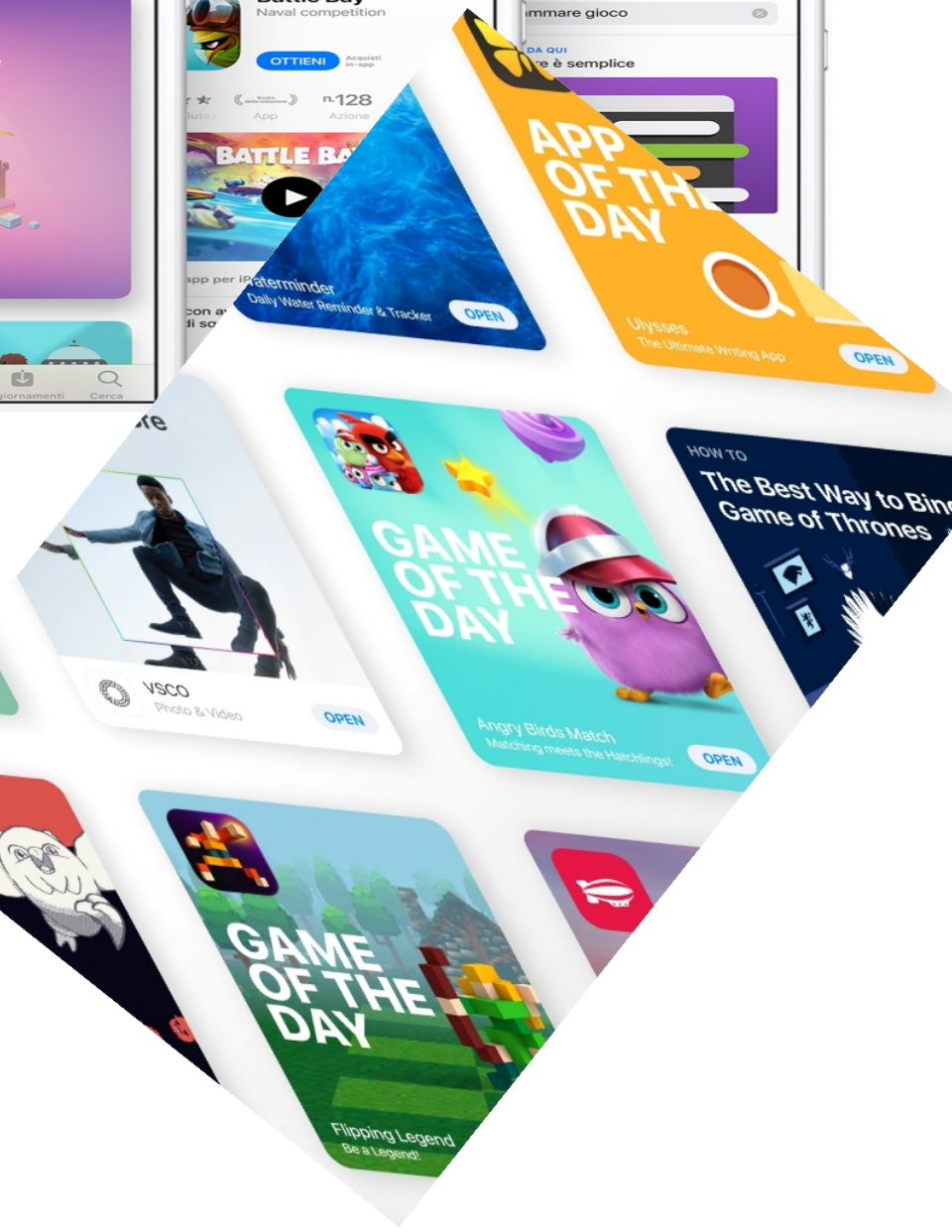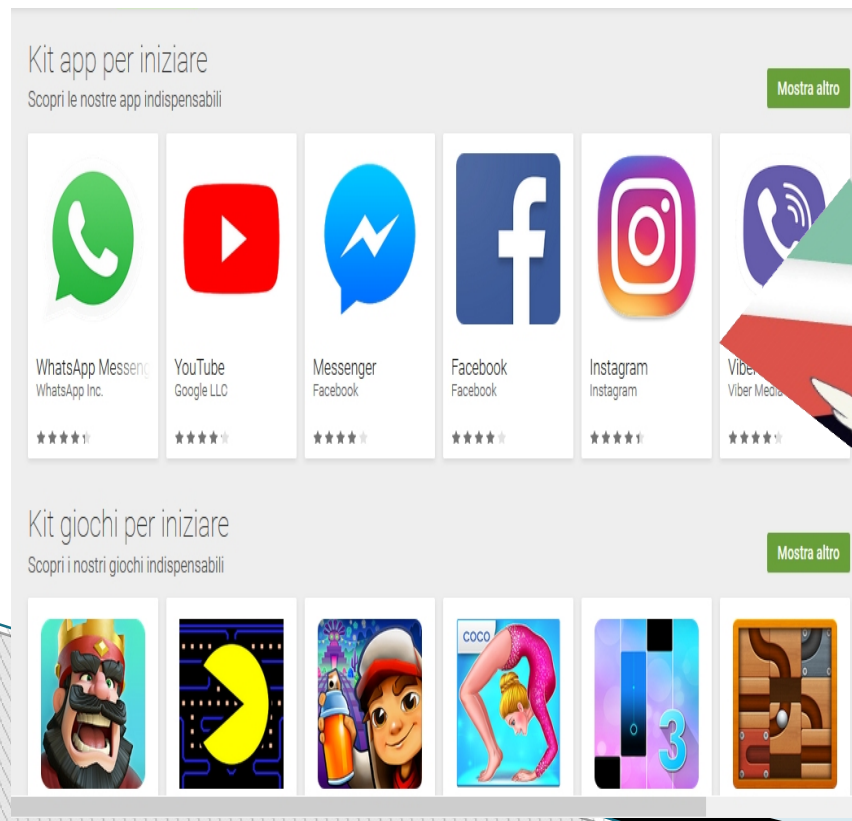Consiglio Nazionale delle Ricerche

A

digital publishing tools...

… and convey intellectual contents for innumerable functionalities. App programs present technical characteristics different from each other, depending on the intellectual content for which they are profiled and made available

In publishing field the maximum innovative potential of apps for continuously updating products

Apps that convey traditional editorial products disclose the maximum of their innovative potential in representing the interface of continuously updating products

such as

newsletters, magazines, newspapers, guides and tourist maps, blogs, open/e-gov/research data systems and related data-bases, clinical trials, forums and websites with specific matter or content, etc.

App

DA RISCOPRIRE
Airbnb
Un'estate tutta da prenotare

Nuove app che adoriamo
TouchRetouch
Rimuovi oggetti facilmente
2,29 €

Giochi

NUOVO GIOCO
Clash of Clans
Un classico della strategia

Nuovi giochi che adoriamo
Zombie Gunship Surv
Tour the apocalypse
OTTIENI · Acquisti in-app

Oggi · Giochi · App · Aggiornamen...

Oggi

PRIMA MONDIALE
L'arte dell'impossibile
Lo straordinario mondo di Monument Valley 2

Oggi · Giochi · App · Aggiornamenti · Cerca

Battle Bay
Naval competition
OTTIENI · Acquisti in-app

★★★★ · n.128
App · Azione

BATTLE BAY

...app per iPad...
...iPatermider...

...ammare gioco

DA QUI
...re è semplice

Daily Water Reminder & Tracker
OPEN

APP OF THE DAY
Ulysses
The Ultimate Writing App
OPEN

VSCO
Photo & Video
OPEN

GAME OF THE DAY
Angry Birds Match
Matching meets the Hatchlings!
OPEN

HOW TO
The Best Way to Bin...
Game of Thrones

GAME OF THE DAY
Flipping Legend
Be a Legend!

Kit app per iniziare
Scopri le nostre app indispensabili
Mostra altro

WhatsApp Messeng	YouTube	Messenger	Facebook	Instagram	Vibe...
WhatsApp Inc.	Google LLC	Facebook	Facebook	Instagram	Viber Media...
★★★★★	★★★★☆	★★★★☆	★★★★☆	★★★★★	★★★★☆

Kit giochi per iniziare
Scopri i nostri giochi indispensabili
Mostra altro

COCO

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App magazine, ISSN 2384-1443, Korea
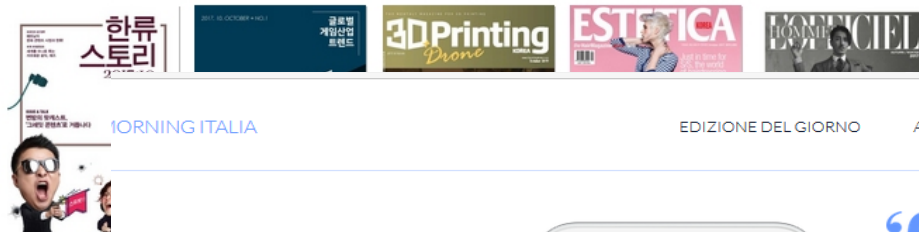
Good morning Italia, ISSN 2532-1927, Italy

Question:

If apps are the interface software – thus, the communication interface - of publishing products, could it be possible to make them identifiable (and manageable) through the same bibliographic codes used for the corresponding traditional publishing products (e.g.: ISBN, ISSN, DOI …)?

and positive answer:

We think that when apps show and preserve the essential bibliographic identifying data, the answer could be no less than positive.

positive answers from ISBN/ISSN world

In ISBN Manual, par. 6.1/6.2: *Where a publication is available electronically (e.g., an e-book, e-book app, CD-ROM, or publication available on the Internet), it will qualify for an ISBN provided that it contains text and is made available to the public … An ISBN may be used to identify a specific software product that is intended for educational and/or instructional purposes, such as a computer-based training product, provided that it is neither customizable nor requires data in order to function*"

ISSN ISO standard (3297:2007): ISSN can be assigned for ongoing integrating resource: *"continuing resource that is added to or changed by means of updates that do not remain discrete and are integrated into the whole"*

positive answers also from DOI® world

DOI® is applicable to any object (= any entity or thing: physical, digital, or abstract; resources, parties, licences, etc.)

- is a digital Identifier of an object = network actionable identifier ("click on it and do something")

- Initial focus on entities was documents/media e.g., articles, data sets; now moving into parties, licenses and other sectors

DOI® provides an *actionable, interoperable, persistent* link

- *Actionable* – through use of identifier syntax and network resolution mechanism (Handle System®)

- *Persistent* – through combination of supporting improved handle infrastructure (registry, proxy, etc.) and social infrastructure (obligations by Registration Agencies)

- *Interoperable* – through use of a data model providing semantic interoperability and grouping mechanisms"

What public usefulness of a bibliographic identification for apps?

1. Bibliographic (as for traditional publishing products: **indexing, searching, individuating** etc.)

2. Informative (for all kind of publishing informational transaction, including **copyright field** and related rights of the owners)

3. Commercial (for **all kind of "financial" publishing transaction**: sales, subscriptions, discounts, fees, duties, royalties, taxes

New traceability skill...

A new traceability skill could be established for apps containing permanent references, traditionally considered necessary for the identification of editorial objects (title, publisher, year, updating mode or frequency, etc.);... by identifying codes

traceability through numerical codes (as ISBN, ISSN, DOI or others) would allow also easier dissemination, marketing, indexing processes by search engines, portals and sales store, up to make indexing tools for bibliographic services and librarians more specific and professional

Best practices and DOI applications/trends

- **QR Code Generator by Cross Ref :**
- **https://www.crossref.org/labs/qr-code-generator/**

  : The US DOI Agency is experimenting a new qr-encoded Crossref DOI, inspired by Google recent promotion of QR codes: you could generate a QR Code for any given Crossref DOI, even postcards or media gadget

ISBN and ISBN Scan

▸ Surely app can't be indentifyied with ISBN standard but it's equally possible to identify an educational and didactic software with its user manual and technical instructions if the manual is fundamental for making the software work

▸ Development→ ISBN Scan(ning) with OCR: (APP Android on Google Play)

ISBN Scan

- An ISBN reader application: not only reads the bar-code, but the ISBN number itself by the OCR (Optical Character Recognition) powered functions.
- no need to press the shutter when reading: an app reading live images reflected in the camera just by simply waving your device. It reads the ISBN at high accuracy with super-fast speed→→ BEST Reading result/performance!)

added value: possibility of viewing and sharing detailed informations by Social Network Services or e-mail.

Best practices and DOI trends: Github and Zenodo: codes citables

▸ [Special need: making codes and software citable](#)

▸ <u>Digital Object Identifiers</u> (DOI) are fundamental in academic references and metrics system. For software open developpers: Githubs →https://github.com/open-sources, an open source platform for writing, sharing and creating software citable by archiving on GitHub repositories and assigning a DOI with the data archiving tool Zenodo https://zenodo.org/

MAIN Mission;

- **For Open Science, it is important to cite the software used in research study.**
- **should cite any software making a significant impact on my work**
- **Preserving and cite software in a sustainable, identifiable and simple way. This is how digital repositories like Zenodo can help.**

- <u>Best practice for citing a digital resource</u> like code is to refer to a digital object identifier (DOI) for it whenever possible. This is because DOIs are persistent identifiers that can be obtained only by an agency that commits to the obligation to maintain a reliable level of consistency in and preservation of the resource. As a digital repository, Zenodo registers DOIs for all submissions through DataCite and preserves these submissions using the safe and trusted foundation of CERN's data centre, and the biggest scientific dataset in the world, the <u>LHC's</u> Big Data store. code preserved in Zenodo will be accessible for years to come, and the DOIs will function as perpetual links to the resources. DOI based citations against URL or even protocol changes.

Best practices and DOI trends: Github and Zenodo

- [Zenodo](#) https://zenodo.org/
- Name inspired by Zenodoto, 1st director of Alessandria Library
- Zenodo integrates with [GitHub](#) "to make code hosted in GitHub citable"
- ZENODO is a European Open-data set multisciplinary repository by CERN and OpenAIRE European Project
- DOI assigned to every data-set
- ZENODO interacts also with Mendeley (recently by acquired by Elsevier), ORCID and ResearchID

References

- ISO 2108:2005, International standard book number (ISBN)
- ISO 3297:2007, International standard serial number (ISSN)
- ISO 26324:2012, Digital object identifier system [DOI]
- ISO 17316:2015, International standard link identifier (ISLI)

Other past Internet standards:

- RFC 1630 (1994), https://tools.ietf.org/html/rfc1630
- RFC 2141 (1997), https://tools.ietf.org/html/rfc2141
- RFC 3986 (2005), https://tools.ietf.org/html/rfc3986
- RFC 3987 (2005), https://tools.ietf.org/html/rfc3987
- Making Your Code Citable, Github guides
  https://guides.github.com/activities/citable-code/

THANK YOU...!=)(&%$!768945

By Baylant Sebastien