

## Digital Intelligence (DQ)

### Industry Connections Activity Initiation Document (ICAID)

Version: 3.0, 23 August 2021

IC17-014-03 Approved 20 September 2021

#### Instructions

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- **Shaded Text** indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE SA) Industry Connections Committee (ICCom) Administrator at the following address: [industryconnections@ieee.org](mailto:industryconnections@ieee.org).
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

#### 1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

**Name:** Melissa Sassi

**Email Address:** mesassi@ibm.com

**Employer:** IBM

**Affiliation:** MentorNations

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

#### 2. Participation and Voting Model

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Individual-Based (drawing on expertise in the field, although clearly work with and through institutions will strengthen this)

#### 3. Purpose

##### 3.1 Motivation and Goal

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

As more and more of the world's population come online, the need to ensure that everyone has the possibility to develop the skills, knowledge, behaviors, and confidence necessary to realize the potential of digital technologies becomes more pressing. While many will find their way easily in a digital world, many others (and not necessarily only older generations) will find this much harder. In much the same way basic literacy enables people to learn, communicate and create, digital literacy is an enabler of personal and community development. As such, digital literacy has been recognized as a duty of governments, both nationally and internationally to advance individual and community-level prosperity (socially, politically, economically).

The long-term goal of this work is to put in place tools that will help ensure that digital literacy receives the attention and investment it deserves in the context both of domestic and overseas development policies. By establishing a standardized definition and taxonomy, the articulation and coordination of efforts becomes more holistic and coordinated. By identifying best practices and making progress towards metrics, stakeholders and interested parties including governments, schools, the private sector, and other community anchors such as libraries can work to improve the effectiveness of their work in this area. What is the goal? Driving toward a more inclusive internet with people from all corners of the earth having an opportunity to be included in the digital economy

### **3.2 Related Work**

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

There are a number of efforts to establish definitions of digital literacy, not necessarily under this name. Mozilla's 21st Century Skills curriculum focuses not just on skills but the ability to use the Internet effectively. The DQ concept of the DQ Institute in Singapore also looks at higher level abilities. The OECD, in its PISA studies, has looked at web literacy, exploring students' ability to find relevant information online (including studies of how effectively they search). The private sector has also invested strongly, with Microsoft playing a particularly active role across its Philanthropies team, Microsoft 4Afrika, as well as content developed by its Cloud and Enterprise organization that can be found in Lydian or edEx. Cisco is prominent in Europe. Library associations have looked to support digital literacy, notably in the US where the Public Library Association has produced curriculum materials. HP and Microsoft are also working with Digital Promise

In overlapping areas, UNESCO has looked at potential measures of media and information literacy, while there are many tests of pure skills, such as those run by the ITU.

In addition to the private sector and work stemming from international organizations within the United Nations, governments have developed their own programs via their Ministries of Education (K-12 and upper education), as well as other entities within academia and beyond.

This is only a small handful of the vast amount of activities underway around the world – all with similar goals and objectives...digital inclusion of underserved communities.

### **3.3 Previously Published Material**

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

Please see 3.2

### **3.4 Potential Markets Served**

Indicate the main beneficiaries of this work, and what the potential impact might be.

While the final beneficiaries should be individuals and communities, the primary market is the institutions and entities who are both in contact with citizens who may need digital literacy skills and have the possibility to do something about it. A first target; therefore, is governments (and development agencies) and international organizations both with a public interest mission to support growth, and those working specifically on new digital inclusion projects. A second is a business itself, which, when it is focusing on market development, can gain a lot from developing a more digitally literate client base. Finally, it supports individual organizations, such as libraries, schools, or community centers looking for more information on how to improve digital literacy.

This should be an open-source effort where digital literacy is seen as a human right for everyone everywhere, regardless of location and language skill.

### **3.5 How will the activity benefit the IEEE, society, or humanity?**

The work of this Activity led to the development of IEEE P3527.1 Standard for Digital Intelligence (DQ) - Framework for Digital Literacy, Skills and Readiness. The activity will benefit the IEEE by examining further standards development projects that build upon the work of IEEE P3527.1. In addition, the activity will examine the potential for a revenue-generating certification program based on IEEE P3527.1.

## **4. Estimated Timeframe**

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

**Expected Completion Date:** 09/2023

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the responsible committee of the IEEE SA Board of Governors. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

## **5. Proposed Deliverables**

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

The work of this group led to the development of IEEE P3527.1 Standard for Digital Intelligence (DQ) -- Framework for Digital Literacy, Skills and Readiness. Moving forward, the group intends to build on this project by achieving the following deliverables:

1. Determine future standards project to build on P3527.1 (March 2020)
2. Evaluate the potential for certification program based on P3527.1 (March 2020)
3. Development of white paper based on the ongoing work (TBD)

The work of this group led to the development of IEEE P3527.1 Standard for Digital Intelligence (DQ) -- Framework for Digital Literacy, Skills and Readiness. Moving forward, the group intends to build on this project by achieving the following deliverables:

## 5.1 Open Source Software Development

*Indicate whether this IC Activity will develop or incorporate open source software in the deliverables. All contributions of open source software for use in Industry Connections activities shall be accompanied by an approved IEEE Contributor License Agreement (CLA) appropriate for the open source license under which the Work Product will be made available. CLAs, once accepted, are irrevocable. Industry Connections Activities shall comply with the IEEE SA open source policies and procedures and use the IEEE SA open source platform for development of open source software. Information on IEEE SA Open can be found at <https://saopen.ieee.org/>.*

Will the activity develop or incorporate open source software (either normatively or informatively) in the deliverables?: Yes

## 6. Funding Requirements

*Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICom.*

Travel funding to be paid for by individual participants (unless grant funding available, for example, for developing country participants). Remote meetings to be used where possible. Looking for grant funds to be allocated toward creating a mobile application that leverages the digital skills described in the IEEE Standard for Digital Skills & Readiness.

## 7. Management and Procedures

### 7.1 Activity Oversight Committee

*Indicate whether an IEEE Standards Committee or Standards Development Working Group has agreed to oversee this activity and its procedures.*

Has an IEEE Standards Committee or Standards Development Working Group agreed to oversee this activity?: No

*If yes, indicate the IEEE committee's name and its chair's contact information.*

IEEE Committee Name: Committee Name

Chair's Name: Full Name

Chair's Email Address: who@where

Additional IEEE committee information, if any. Please indicate if you are including a letter of support from the IEEE Committee that will oversee this activity.

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

### 7.2 Activity Management

*If no Activity Oversight Committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).*

Alongside regular meetings of those individuals involved in the project, regular calls between IEEE and co-proposers.

**7.3 Procedures**

Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline *Industry Connections Activity Policies and Procedures*, (b) Standards Committee policies and procedures accepted by the IEEE SA Standards

Board, or (c) Working Group policies and procedures accepted by the Working Group's Standards Committee. If option (a) is chosen, then ICCom review and approval of the P&P is required. If option (b) or (c) is chosen, then ICCom approval of the use of the P&P is required.

The team will leverage baseline IEEE Industry Connections P&Ps.

**8. Participants**

**8.1 Stakeholder Communities**

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

- Melissa Sassi, IBM
- Yuhyun Park, DQ Institute
- Meher Bnoui, InstaDeep/IEEE Young Professionals Tunisia
- Mei Lin Fun, People Centered Internet
- Mohamed Zied Sherif
- Dhia Guedri
- Kari Godin
- UNESCO ITU
- Public Library Association/World Bank

**8.2 Expected Number of Participants**

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

10-15

**8.3 Initial Participants**

Provide a number of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity:

Entity	Primary Contact	Additional Representatives
Entity Name	Contact Name	Name

Use the following table for an individual-based activity:

Individual	Employer	Affiliation
Melissa Sassi	IBM	
Mohamed Zied Cherif	eskills	
Yuhyun Park	DQ Institute	
John Garrity	US State	
Meher Bnoui	InstaDeep/IEEE Young Professionals Tunisia	
Dhia Guedri	eskills	

**8.4 Activity Supporter/Partner**

Indicate whether an IEEE committee (including IEEE Societies and Technical Councils) has agreed to participate or support this activity. Support may include, but is not limited to, financial support, marketing support and other ways to help the Activity complete its deliverables.

**Has an IEEE Committee agreed to support this activity?:** No

If yes, indicate the IEEE committee’s name and its chair’s contact information.

**IEEE Committee Name:** Committee Name

**Chair’s Name:** Full Name

**Chair’s Email Address:** who@where

Please indicate if you are including a letter of support from the IEEE Committee.