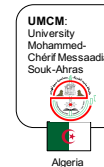




This project is part of the PRIMA
Programme supported by the
European Union

RESILINK



RESILINK

**INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING**

PRESENTED BY

Prof. Congduc Pham
<http://www.univ-pau.fr/~cpham>



PRIMA MID-TERM REVIEW
Online
January 16th, 2025



PRIMA S2 2021 RESILINK

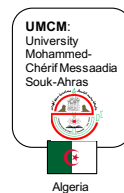
<https://prima-med.org/>

- Partnership for Research and Innovation in the Mediterranean Area
- Focus on optimal usage of natural resources in agriculture/farming
- Call: Section 2 Multitopic 2021**
- Thematic Area 3-Agrofood chain



- Topic 2.3.1 Increasing the resilience of small-scale farms to global challenges and COVID-like crisis by using adapted technologies, smart agri-food supply chain and crisis management tools

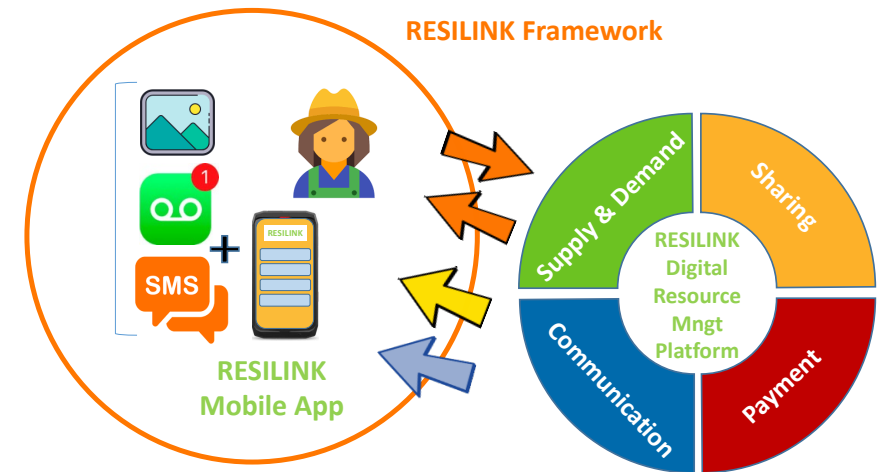
- Implementation: June 1st, 2022 → May 31st, 2026 (4 years)





Motivations & Approach

- Smallholders are the first to be impacted by climate change, unexpected crises. They are very economically fragile!
- RESILINK** aims to increase smallholder's resilience by **providing continuity of access** to both resources and markets in crisis situations
- It promotes localized use of resources with **digital platforms**
 - real-time exchange of information** on territorial resources and supplies & demands
 - connects smallholders to new supply, sharing opportunities and distribution channels**
 - keep them informed of **news/alarms/regulations** from government agencies





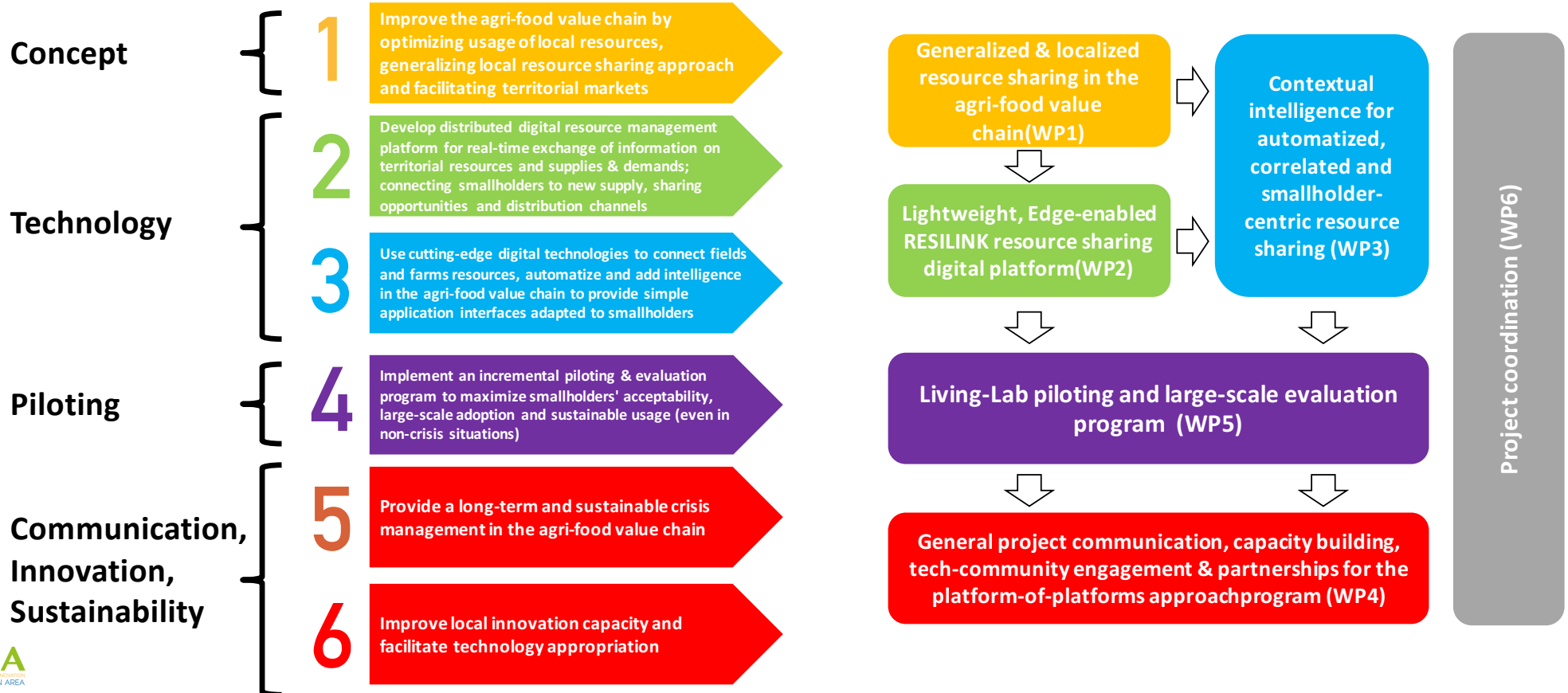
What is a digital platform?

- Very generally, it is a software component to enable services, interactions and possibly transactions among users
- Digital platform = more flexibility than a standalone application
- Many well-known "applications" are actually digital platforms offering key functionalities: user management, database, content storage & management, payment, ...
- Web site or mobile apps are usually "front-end" to the platforms





RESILINK's Main Objectives & WPs

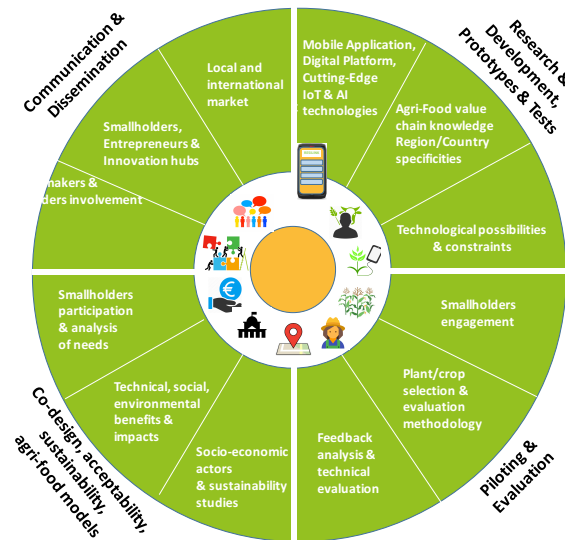




It is NOT ONLY about technology!

5

Provide a long-term and sustainable crisis management in the agri-food value chain



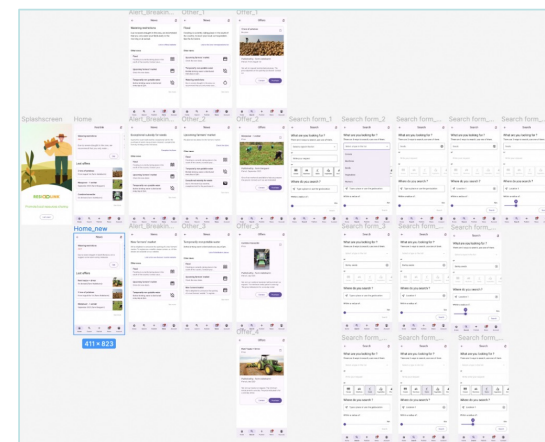
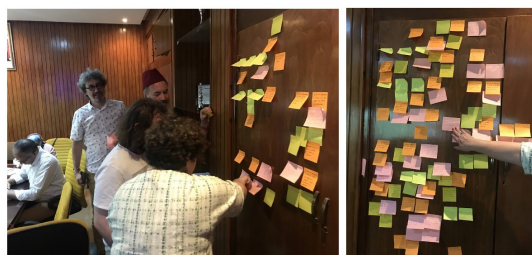
6

Improve local innovation capacity and facilitate technology appropriation



Ensure/Increase acceptability!

- Digital platforms are a **key element** of digital transformation for smallholders and the whole agri-food value chain
- BUT, it is important to **identify where & how** contributions can be made
- For smallholder farmers communities with less digital technology experience, it is crucial to **address the real needs** of users





Project Gantt diagram

Concept

Technology

Piloting, Communication, Innovation, Sustainability

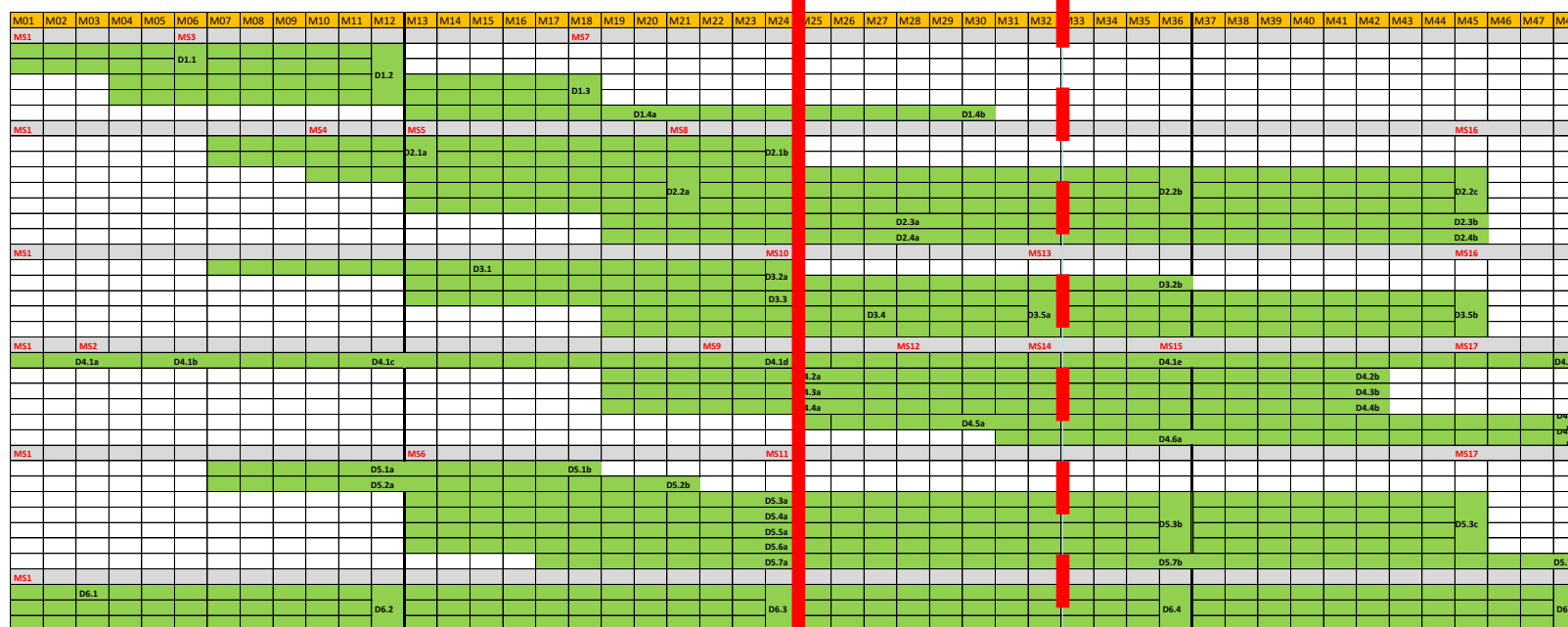
WP1

WP2

WP3

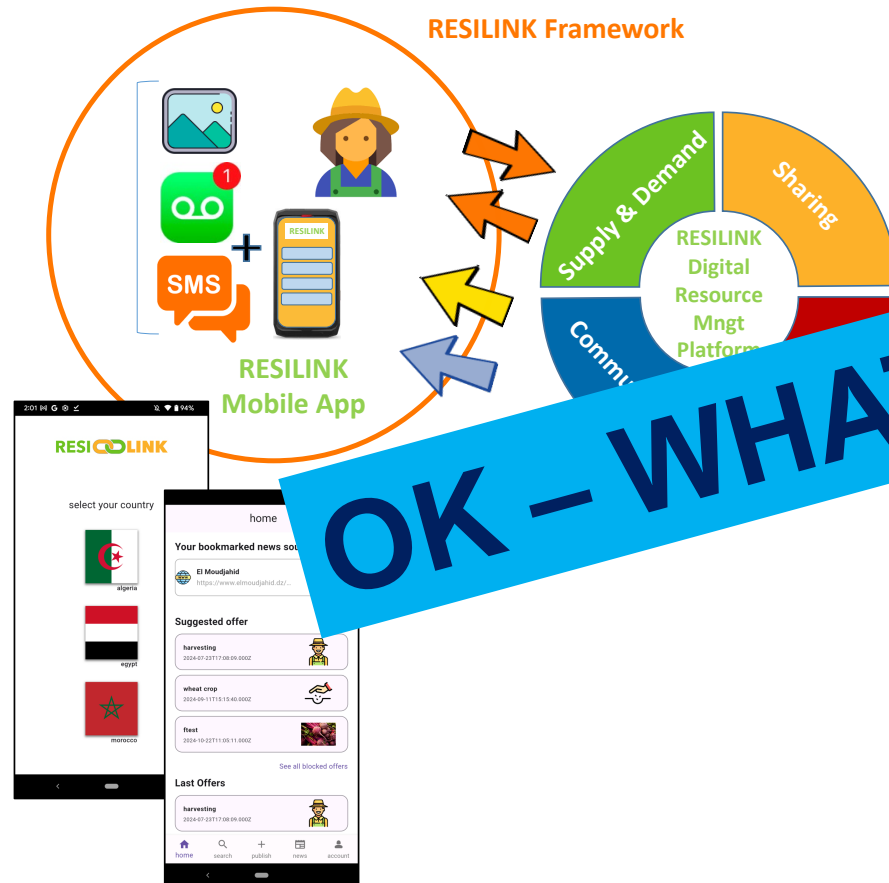
WP4

WP5





The RESILINK Framework



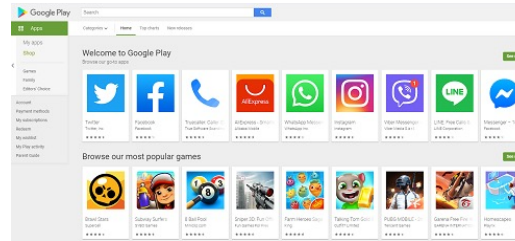
- real-time exchange of information on territorial resources and supplies & demand
- connecting producers to new supply, marketing opportunities and distribution channels
- keep them informed of news/alarms/regulations from government agencies

OK – WHAT'S NEW?



Digital Platforms: going the right way?

- There are already a lot of digital platforms, they are already **key element of the digital transformation**



- BUT, usually, **each new digital platform or solutions will try to create its own community!**
- Sharing between communities is usually not proposed in traditional platforms. Rather, the main objective is competition and isolation to other communities



No "one app fits all"

- Competition → isolation → fragmented ecosystems



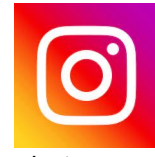
LinkedIn



Facebook



AirBnB



Instagram



WhatsApp



YouTube

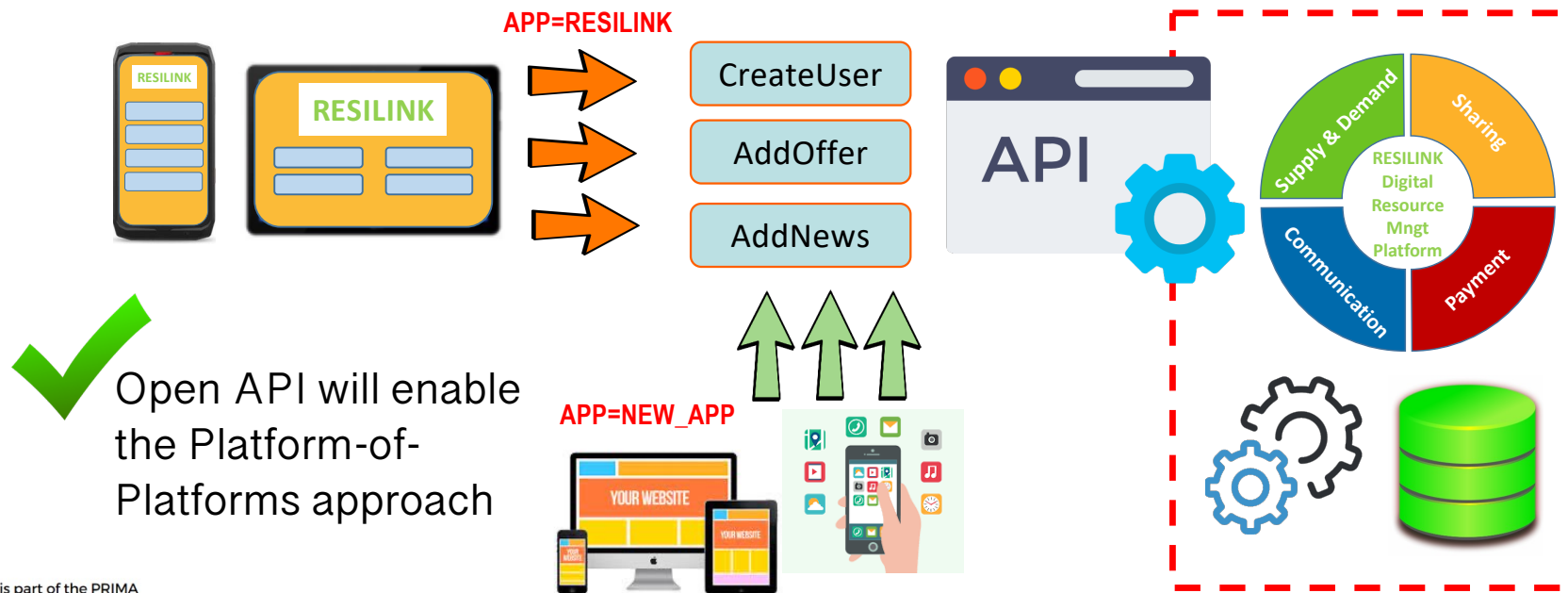


- Platform-of-Platforms!
- Enabling a platform-of-platforms approach will promote a much wider and appealing ecosystem
- Specialized platforms to better manage specific agricultural sectors
- Discover resources/services from other platforms → no isolation



API: key to larger adoption!

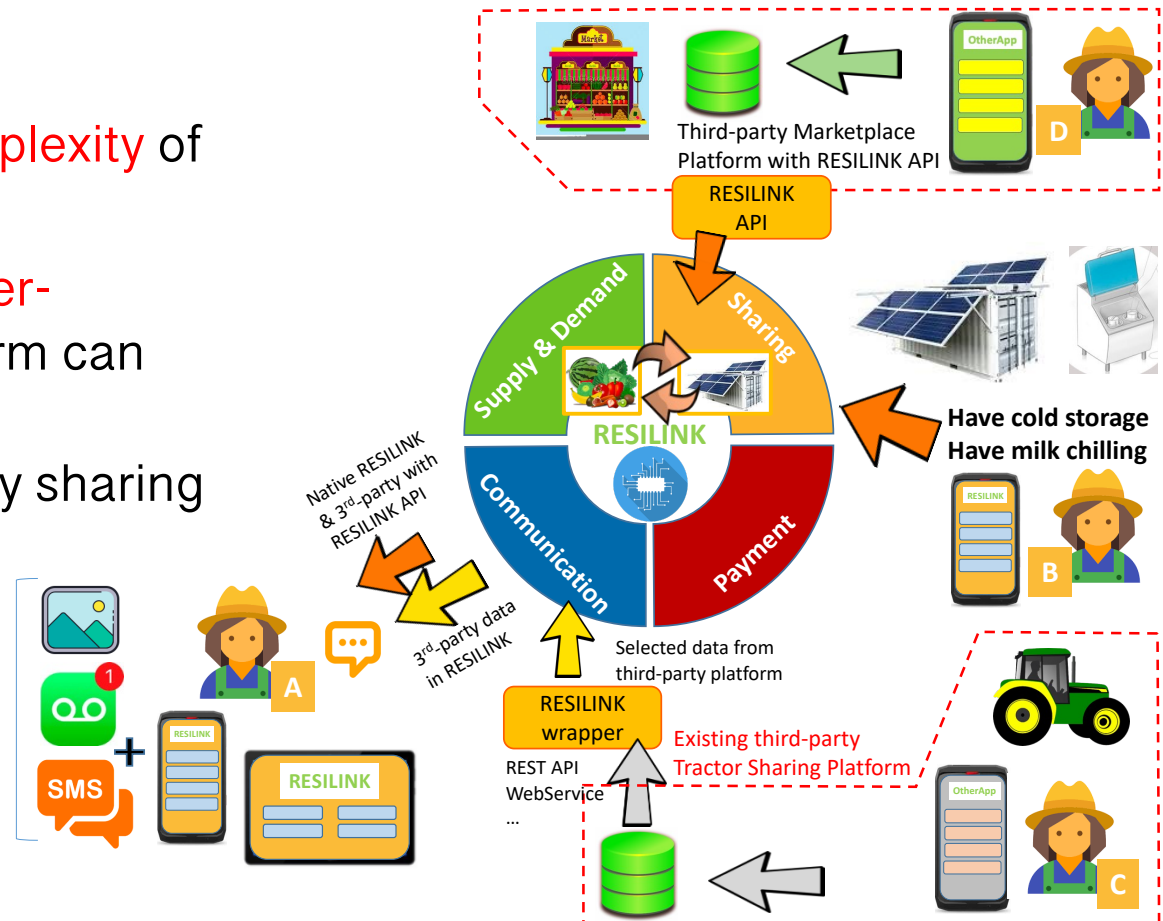
- API: **Application Programming Interface**
- Digital platforms better than Applications thanks to API-oriented design
- All functionalities/actions are accessible through an API call





Stimulating local innovation!

- The open API will **reduce development time & complexity** of new platforms
- All platforms **can fully inter-operate** and a new platform can benefit from all the other platforms' communities by sharing users & contents
- RESILINK develops a consistent API to **enable fast development and deployment** platforms





RESILINK

INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

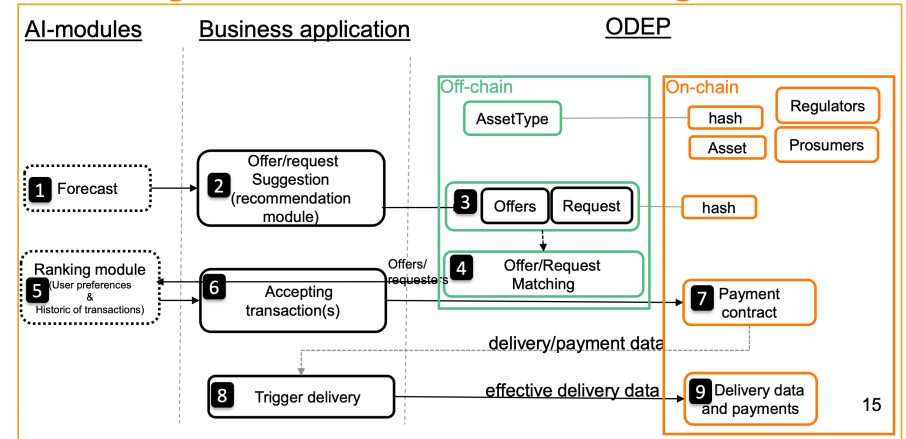
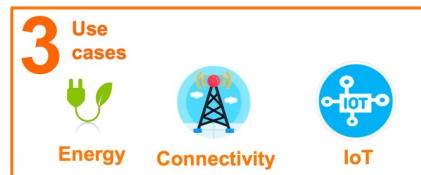
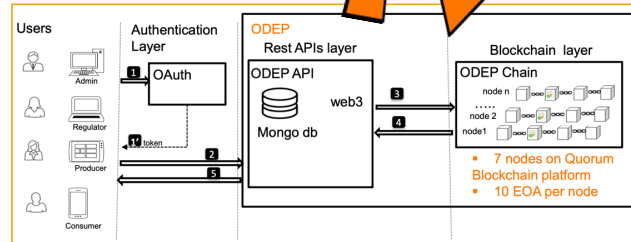
RESILINK DIGITAL RESOURCE
MANAGEMENT PLATFORM

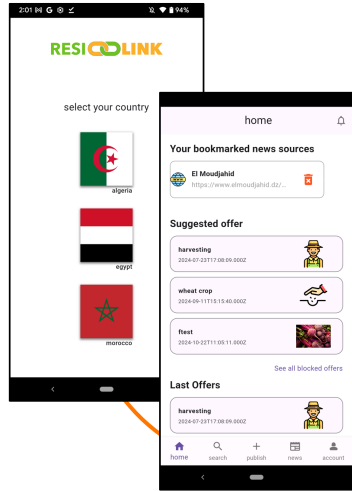


RESILINK Framework



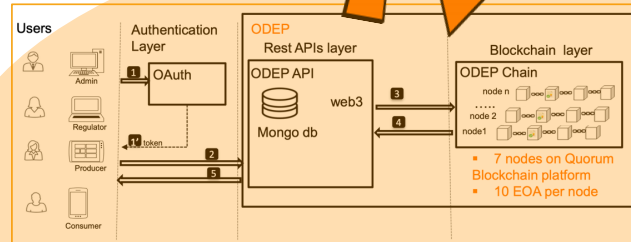
Orange Decentralized Exchange Place



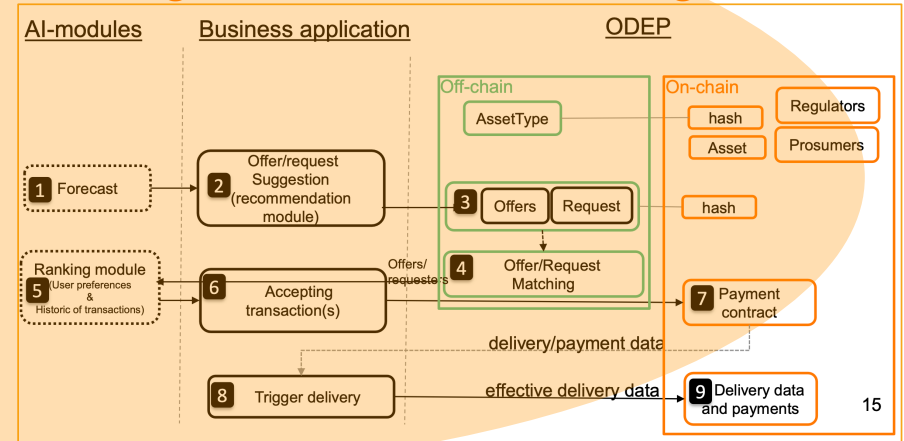


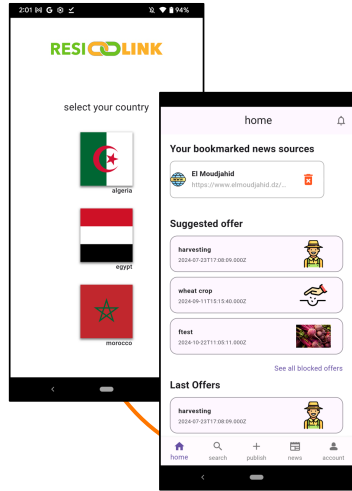
RESILINK Framework

THE ODEP PLATFORM IMPLEMENTS THE LOW-LEVEL RESOURCE MANAGEMENT FUNCTIONALITIES TO ENSURE CONSISTENCY, SECURITY, TRACEABILITY OF TRANSACTIONS WITH BLOCKCHAIN TECHNOLOGY

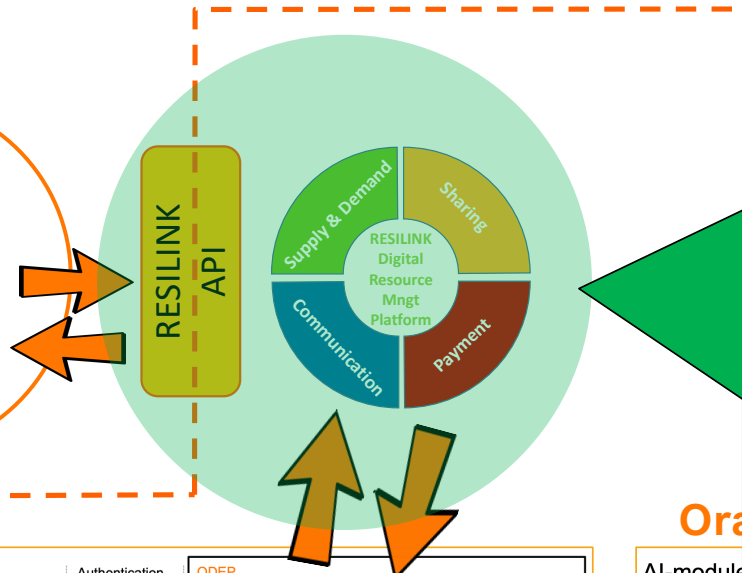


Orange Decentralized Exchange Place



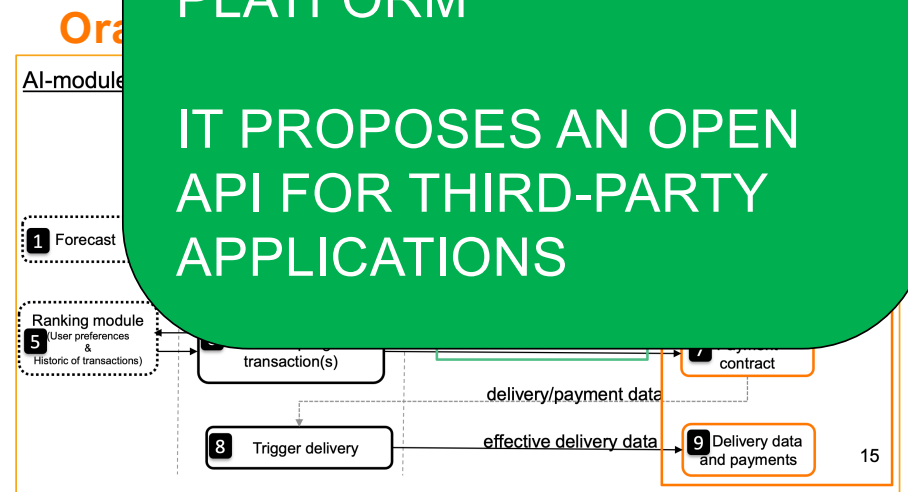
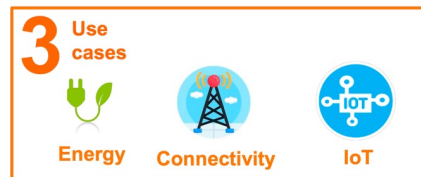
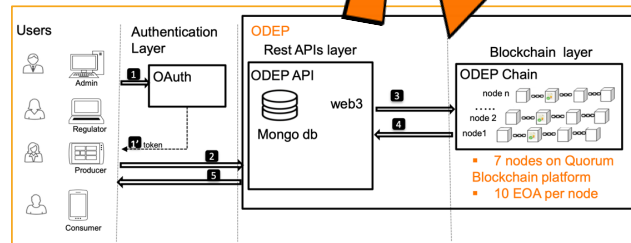


RESILINK Framework



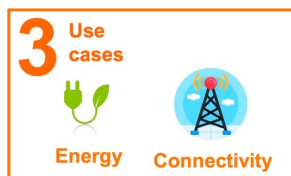
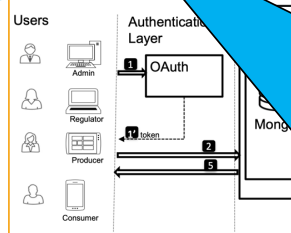
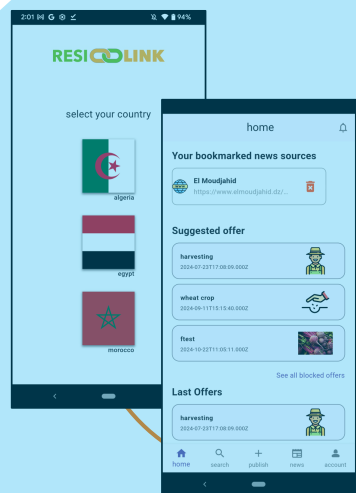
THE RESILINK PLATFORM IMPLEMENTS ADDITIONAL FUNCTIONALTIES TO BUILD AN EFFICIENT RESOURCE SHARING PLATFORM

IT PROPOSES AN OPEN API FOR THIRD-PARTY APPLICATIONS





RESILINK Framework



THE RESILINK MOBILE APP IS THE MAIN INTERFACE TO THE RESILINK PLATFORM, SEEN BY END-USERS

IT USES THE OPEN API EXPOSED BY THE RESILINK PLATFORM

A vibrant landscape of a cornfield under a bright sun with a lens flare effect. The sun is in the upper right corner, casting a warm glow over the scene. The corn plants are in the foreground, and the field extends into the distance towards rolling hills and a line of trees.

RESILINK

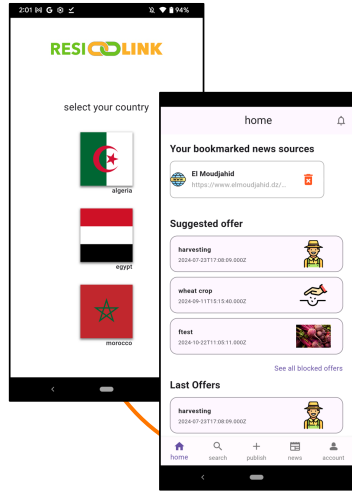
INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

RESILINK DIGITAL RESOURCE
MANAGEMENT PLATFORM

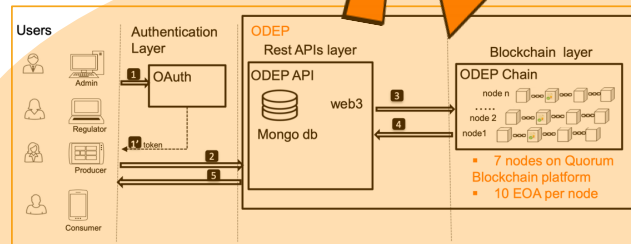
1 – ODEP platform



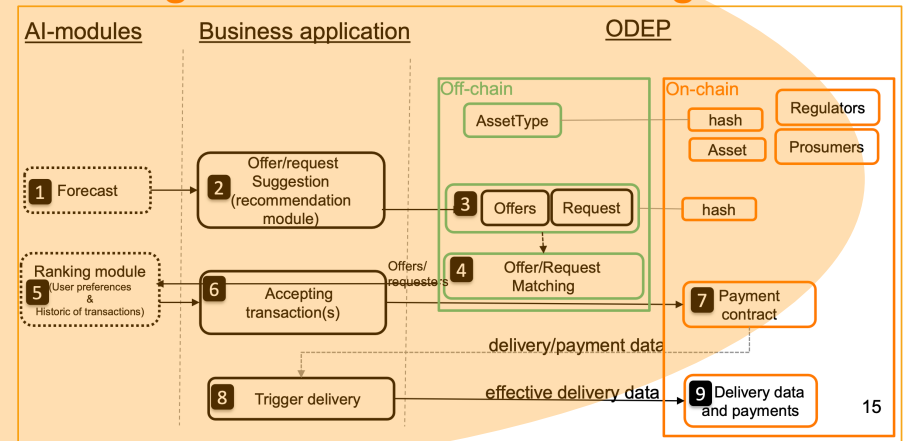
ODEP Platform



THE ODEP PLATFORM IMPLEMENTS THE LOW-LEVEL RESOURCE MANAGEMENT FUNCTIONALITIES TO ENSURE **CONSISTENCY, SECURITY, TRACEABILITY** OF TRANSACTIONS WITH BLOCKCHAIN TECHNOLOGY



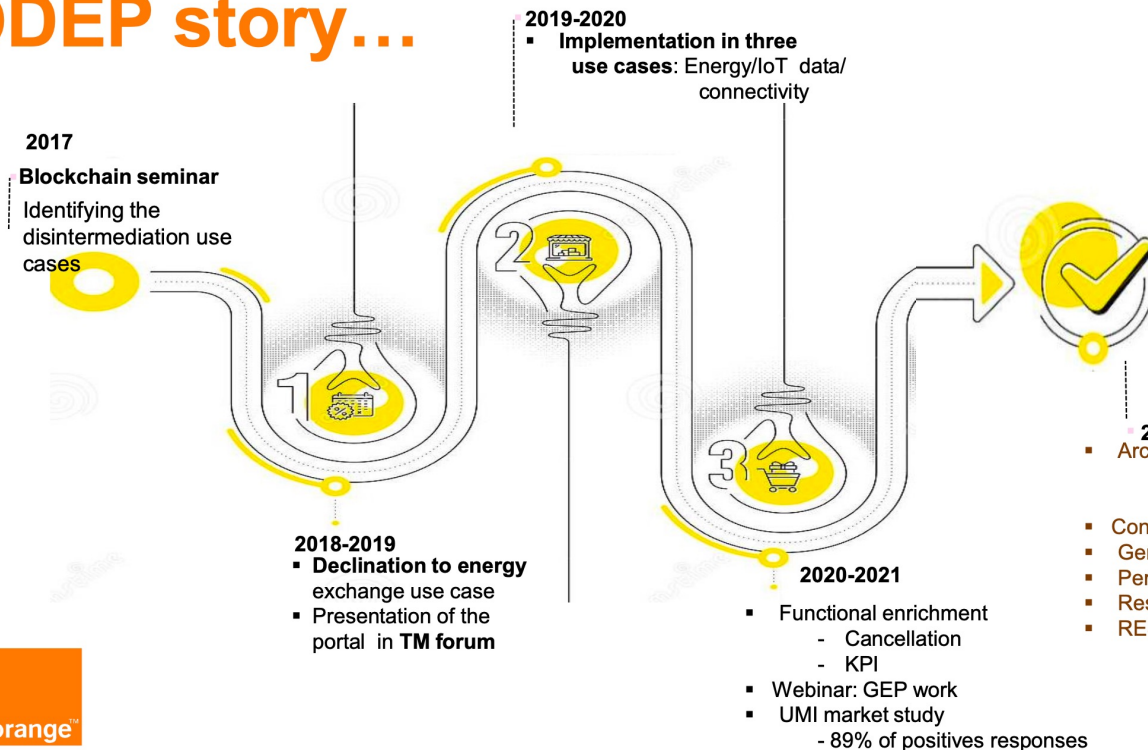
Orange Decentralized Exchange Place





How it started?

ODEP story...



- ODEP can be considered as an independent module, providing facilities to manage transactions between various actors
- RESILINK is the first international collaborative project where ODEP is tested on a large scale!



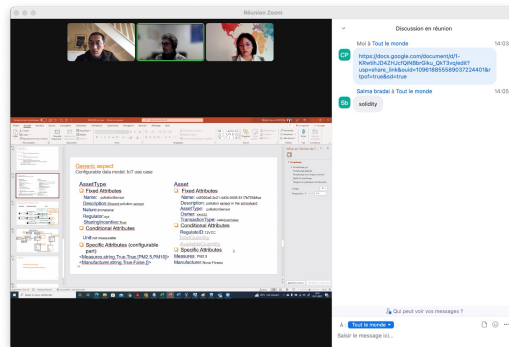
Integration into RESILINK framework

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

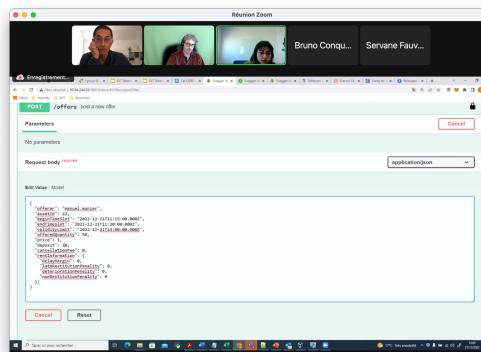
WP2

- Meetings & presentations: determine how ODEP can manage the low-level resource management functionalities in RESILINK
- Tight collaboration with ODEP development team lead by Salma Bradai made possible such integration, with also many improvements to ODEP
- A dedicated ODEP instance for RESILINK was created

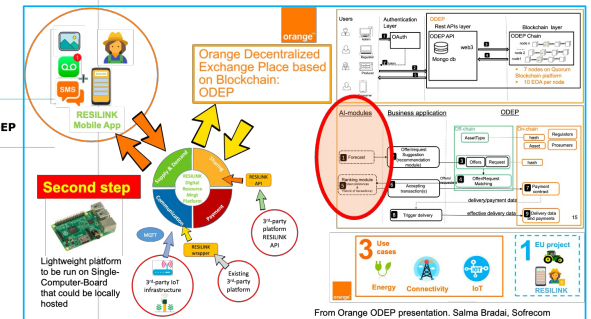
Nov. 18th, 2022



Dec. 21st, 2022



Mar. 13th, 2023





ODEP evolution

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- With feedback from RESILINK, ODEP will be improved to v3, simplifying asset management in order to increase genericity for third-party applications. Increased performance are also expected

Terminology ODEP V2	Terminology 2023 ODEP V3
Material with sale/purchase transaction Multiple asset of one assetType Asset quantity=1	MeasurableByQuantity Multiple assets on one assetType With Asset quantity >=0 if (Asset.subjectOfQuantity=true) Offer/request quantity>0
Immaterial One asset per assetType Asset quantity>=0 Offer/request quantity>0	
ImmaterialNotQuantified One asset per assetType Asset quantity=0 Offer/request quantity >0	
Immaterial with unit not measurable	MeasurableByTime Multiple assets on one assetType Many contracts on the same offer (if Asset. multipleAccess=true) (quantity=1 with rent transaction(Asset. multipleAccess=false))
Multiple assets on one assetType Asset/offer/request Quantity=0 Many contracts on the same offer (multiple access on the asset)	
Material with rent transaction Multiple asset of one assetType Asset/offer/request quantity=1	

createAsset ODEPV2

Input rate	Workers	Max TPS	Average TPS
50	10	20	1.8
100	10	40	6.4
200	10	30	2.8
500	20	22	3.4 (failure TX)
1000	10	46	7.5
1000	100		Test blocked

UpdateAsset ODEPV2 with 5.8 tx/block

Input rate	TPS	Size average
1000	84	3850
3000	103	4182
4000	101	3998
5000	111	4360
6000	109	4229
8000	119	4506

createAsset ODEPV3

Input rate	Workers	Max TPS	Average TPS
1000	100	130	105.6
3000	100	139	111.2
4000	100	145	116.4
5000	100	142	111.1
6000	100	148	116.3
8000	100	151	130

UpdateAsset ODEPV3 with 5.9 tx/block

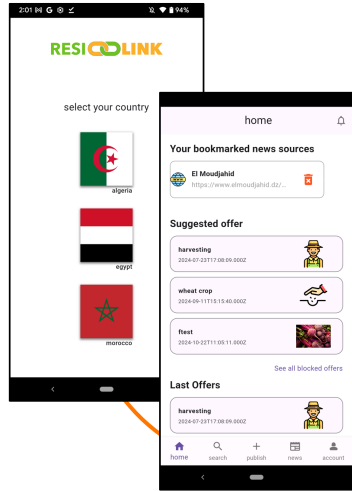
Input rate	TPS	Size average
1000	77.9	2999
3000	104.5	3271
4000	104.8	3229
5000	112.1	3398
6000	115	3408
8000	119.9	3499



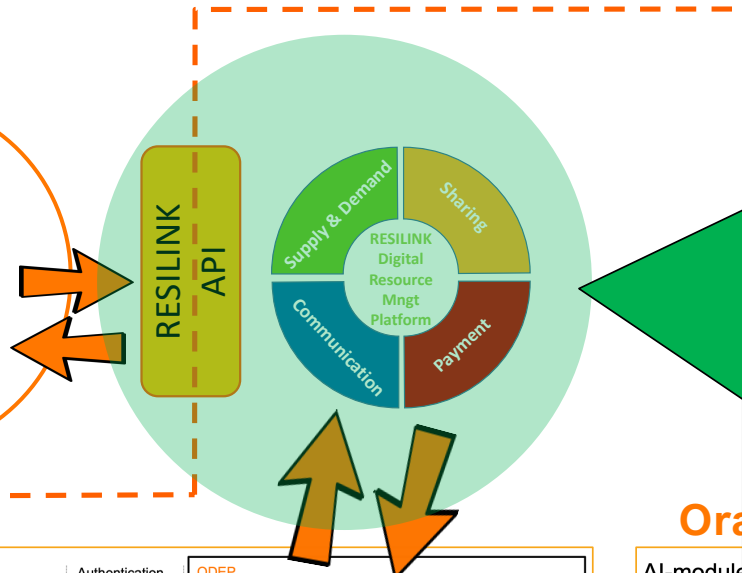
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LINKING LOCALIZED RESOURCE SHARING

RESILINK DIGITAL RESOURCE
MANAGEMENT PLATFORM
2 – RESILINK platform

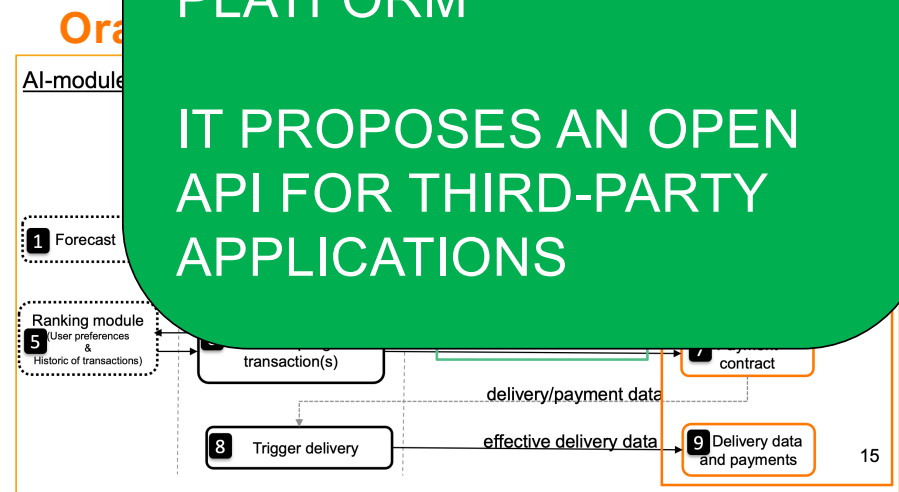
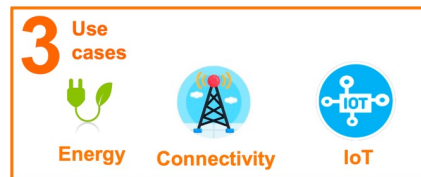
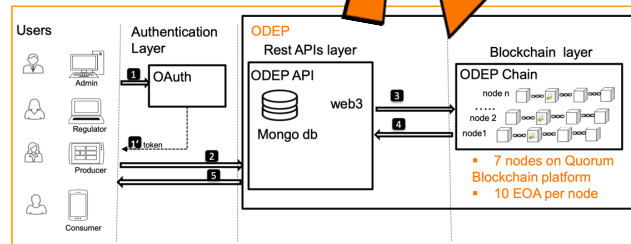


RESILINK Framework



THE RESILINK PLATFORM IMPLEMENTS ADDITIONAL FUNCTIONALTIES TO BUILD AN EFFICIENT RESOURCE SHARING PLATFORM

IT PROPOSES AN OPEN API FOR THIRD-PARTY APPLICATIONS





Preliminary studies

Generalized & localized resource sharing in the agri-food value chain

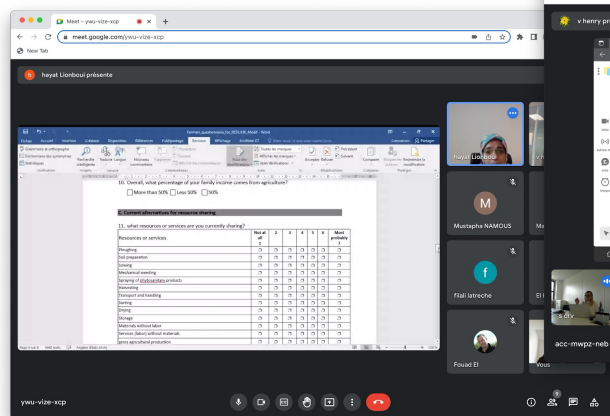
WP1

Lightweight, Edge-enabled RESILINK resource sharing digital platform

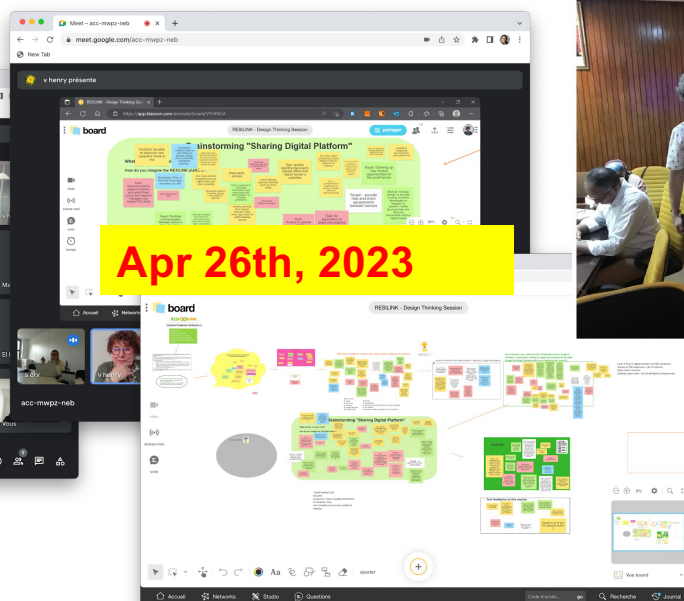
WP2

- Meetings & design thinking sessions have been organized to define surveys & interviews framework, produce survey forms and study how technology is perceived by farmers

Nov-Dec, 2022



Apr 26th, 2023



May 26th, 2023



Jul 5th, 2023





How is technology perceived? Use cases, user profiles, scenarios,...

Generalized & localized
resource sharing in the
agri-food value chain

WP1

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- ◉ We began by engaging with farmers, agricultural decision-makers & stakeholders
- ◉ Analysis of agricultural organization, resource requirements, distribution channels, available sharing platforms
- ◉ Identify the challenges & opportunities facing farmers in each country
- ◉ <https://drive.google.com/file/d/1eOQup3U8eLKDawwjXw-cgdJz7IBVVTwB/view>

A. Personal information

1. Gender: Male ☐ Female ☐

2. Which category below includes your age?

17 or younger	<input type="checkbox"/>
18-20	<input type="checkbox"/>
21-29	<input type="checkbox"/>
30-39	<input type="checkbox"/>
40-49	<input type="checkbox"/>
50-59	<input type="checkbox"/>
60 or older	<input type="checkbox"/>

3. Education: No formal education ☐ Graduate of Primary School ☐ High school ☐ University / Technological institute ☐

4. What percentage of your total income was the product of agriculture?

<50% ☐ 50% - 80% ☐ 80% - 100% ☐ >100% ☐

5. Are you a member of an agricultural cooperative or a professional association? Yes ☐ No ☐

6. Do you participate in another local association or network? Yes ☐ No ☐

B. Farm information

1. Size of farm:

Less than 2ha	<input type="checkbox"/>
2-5 ha	<input type="checkbox"/>
6-10 ha	<input type="checkbox"/>
More than 10 ha	<input type="checkbox"/>

2. How many years have you been involved in agriculture?

Less than 5 years	<input type="checkbox"/>
6-10 years	<input type="checkbox"/>
11-15 years	<input type="checkbox"/>
16-20 years	<input type="checkbox"/>
More than 20 years	<input type="checkbox"/>

B. Describe the typical end-users (personas) 1/3

Age: 40
Principale source d'activité: "Élevage bovin" et autres animaux
Famille: 1 femme, 1 enfant, grand-père et grand-mère, l'enfant aide le père et la femme à un autre travail. Le grand-père aide de temps en temps quand sa santé le permet.
Éducation: J'ai eu le lycée.
Motivations: court sa famille et maintenir/agrandir sa ferme. Aime l'innovation si ça lui permet de vivre plus simplement. C'est son fils qui lui a appris à utiliser un smartphone même s'il avait les bases d'un téléphone. En possède un moyen de gagner et ça lui fait plaisir d'en utiliser un. Ne possède ni neophyte, il l'utilise uniquement pour passer des appels, envoyer des messages ou avoir des informations qui sont sur le web.
Aimerait avoir une situation où il est auto-suffisant ou dépendre moins des autres en terme de foins ou d'eau. Ne possède pas une grosse exploitation mais vit sans réellement manquer de choses (nourriture, eau, famille, situation correcte hors événement imprévu).
Angoisse: son bétail tombe malade ou qu'il ne se reproduise plus suffisamment. Être en manque de réapprovisionnement de certaines ressources comme l'eau, de l'énergie fraîche ou du foin. Demande à ses voisins pour louer et utiliser des machines pour pouvoir traiter le lait ou obtenir de la nourriture pour son bétail en cas de sécheresse.

Prénom: Mohamed
J'ai 50 ans
Je suis un homme
J'utilise le smartphone
Ma famille: affaires et 4 journaliers.
J'ai un animal: un chameau
J'ai un animal: un chameau
J'ai un animal: un chameau

B. Synthesis of end-users (personas)

Abdelaziz
35 - 50 years old, semi-literate, family farm (agriculture + cattle), young ones help during holidays
Cover just the basic needs, would like to improve production / benefit, and quality of life
Just-in-time production: not a lot of leeway scope in case of crisis
ICT: Smartphone but not at ease, need assistance of children
Transportation of crops / cattle is a challenge. Lack of information to sell properly.
Needs to borrow machines to neighbors for harvest
Worries about consequences of frequent drought

Younes
25-35 years old, took over the family farm
Wants to transform and modernize
At ease with ICT, but the plots are not well covered by the network
Part of the family live in the city
Would like to use more technology to manage his time in a better way and improve incomes
Involved in associations and sharing activities with other farmers
Has invested in machines, wants to rent them regularly

Young startup or public institution
Needs to collect information and to share with farmers
Provides help and counsel or sell services

To be continued



Interviews on resource sharing

Generalized & localized
resource sharing in the
agri-food value chain

WP1

- With questionnaires produced since Dec. 2022, several surveys & interviews started in March 2023, taking advantages of exhibitions/fairs and other events when possible

March 2023 to Oct. 2023 in Algeria, Egypt and Morocco



**IT IS IMPORTANT TO CATCH SOCIOLOGICAL ASPECTS
AND UNDERSTAND THE FARMER'S EXPECTATIONS**



Related Deliverables & Publications

Generalized & localized
resource sharing in the
agri-food value chain

WP1

- **D1.1** "Smallholders' resource requirements and distribution channels in a local & territorial agri-food chain"
- **D1.2b** "Final report on Framework for a generalized resource sharing for increased resilience of smallholder considering a local & territorial agri-food chain"

The Challenges and Opportunities of Adopting Digital Platforms for localized resources sharing in agriculture: Issues, Perceptions, and Influential Factors

Hayat Lionboui¹, Congduc Pham², Fouad Elame¹, Seham El Gamal³, Elhaj El Maadoudi¹, Véronique Henry⁴ and Tarik Benabdelouahab¹

1 National Institute of Agricultural Research (INRA), Morocco

2 University of Pau (UPPA) – (LIUPPA), France

3 Agricultural Research Center (ARC), Egypt

4 Orange Innovation, France

To appear in Intl. Journal of Sustainable Agricultural Management and Informatics, InderScience Publishing

Smallholder's Readiness to Adopt Platforms Linking Local Resource-Sharing in Egypt

Congduc Pham¹, Tamer Gamal Ibrahim Mansour^{2*}, Hayat Lionboui³, Zakaria Fouad Fawzy⁴, Souad A. Shairra⁵, Nahla A. Awad⁶, Seham Mohamed Abd El Hameed El-Gamal⁷

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<https://ecohumanism.co.uk/joe/ecohumanism>

DOI: <https://doi.org/10.62754/joe.v3i8.5702>

Journal of Ecohumanism, Vol. 3, No. 8, 2024
Creative Publishing House

<https://doi.org/10.62754/joe.v3i8.5702>



Related Deliverables & Publications

Generalized & localized
resource sharing in the
agri-food value chain

WP1

Article Notes → A New Vision for Enhancing the Resilience of Small Farmers in North Africa in Accessing Resources and Markets During Crises: The RESILINK Platform as a Model

International Conference of the Patent Contact Office in the Field of Agriculture and Food Security, Oct. 29-30, 2024. T. Mansour, S. El-Gamal, C. Pham, N. Awad, S. Shairra

Article Notes → Egyptian Digital Agricultural Platforms: Are We Heading in the Right Direction?

18th Scientific Association for Agricultural Guidance Conference, Nov. 18-19, 2024. T. Mansour, S. El-Gamal, C. Pham



Early Proof-of-Concept

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

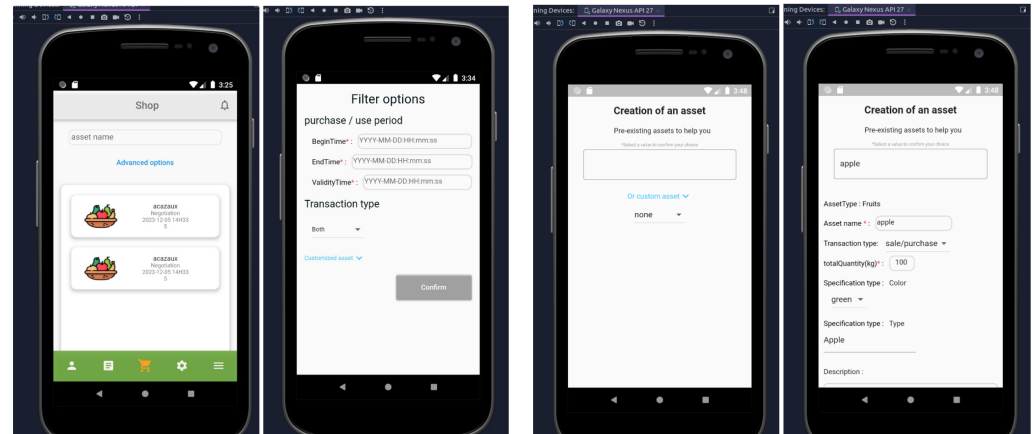
WP2

- Development of the RESILINK platform started in Jan. 2023
 - Definition & Development of the software architecture
 - Integration of ODEP API and test of ODEP performances
- Feedback from interviews shaped every stage of the platform's development process
- The PoC was initially a simple mobile app front-end using & wrapping ODEP API

Implementation of the application Compatibility

Android minSDK => 20 and IOS => 9

Device	OS Version	Screen Size	Resolution	Pixel Density	Year
Android 11	Android 11	1080x2400	4320x9600	420	2020
Android 10	Android 10	1080x2400	4320x9600	420	2019
Android 9	Android 9	1080x2400	4320x9600	420	2018
Android 8	Android 8	1080x2400	4320x9600	420	2017
Android 7	Android 7	1080x2400	4320x9600	420	2016
Android 6	Android 6	1080x2400	4320x9600	420	2015
Android 5	Android 5	1080x2400	4320x9600	420	2014
Android 4	Android 4	1080x2400	4320x9600	420	2013
Android 3	Android 3	1080x2400	4320x9600	420	2012
Android 2	Android 2	1080x2400	4320x9600	420	2011
Android 1	Android 1	1080x2400	4320x9600	420	2010
Android 0	Android 0	1080x2400	4320x9600	420	2009
Android -1	Android -1	1080x2400	4320x9600	420	2008
Android -2	Android -2	1080x2400	4320x9600	420	2007
Android -3	Android -3	1080x2400	4320x9600	420	2006
Android -4	Android -4	1080x2400	4320x9600	420	2005
Android -5	Android -5	1080x2400	4320x9600	420	2004
Android -6	Android -6	1080x2400	4320x9600	420	2003
Android -7	Android -7	1080x2400	4320x9600	420	2002
Android -8	Android -8	1080x2400	4320x9600	420	2001
Android -9	Android -9	1080x2400	4320x9600	420	2000
Android -10	Android -10	1080x2400	4320x9600	420	1999
Android -11	Android -11	1080x2400	4320x9600	420	1998
Android -12	Android -12	1080x2400	4320x9600	420	1997
Android -13	Android -13	1080x2400	4320x9600	420	1996
Android -14	Android -14	1080x2400	4320x9600	420	1995
Android -15	Android -15	1080x2400	4320x9600	420	1994
Android -16	Android -16	1080x2400	4320x9600	420	1993
Android -17	Android -17	1080x2400	4320x9600	420	1992
Android -18	Android -18	1080x2400	4320x9600	420	1991
Android -19	Android -19	1080x2400	4320x9600	420	1990
Android -20	Android -20	1080x2400	4320x9600	420	1989
Android -21	Android -21	1080x2400	4320x9600	420	1988
Android -22	Android -22	1080x2400	4320x9600	420	1987
Android -23	Android -23	1080x2400	4320x9600	420	1986
Android -24	Android -24	1080x2400	4320x9600	420	1985
Android -25	Android -25	1080x2400	4320x9600	420	1984
Android -26	Android -26	1080x2400	4320x9600	420	1983
Android -27	Android -27	1080x2400	4320x9600	420	1982
Android -28	Android -28	1080x2400	4320x9600	420	1981
Android -29	Android -29	1080x2400	4320x9600	420	1980
Android -30	Android -30	1080x2400	4320x9600	420	1979
Android -31	Android -31	1080x2400	4320x9600	420	1978
Android -32	Android -32	1080x2400	4320x9600	420	1977
Android -33	Android -33	1080x2400	4320x9600	420	1976
Android -34	Android -34	1080x2400	4320x9600	420	1975
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Android -39	Android -39	1080x2400	4320x9600	420	1970
Android -40	Android -40	1080x2400	4320x9600	420	1969
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Android -43	Android -43	1080x2400	4320x9600	420	1966
Android -44	Android -44	1080x2400	4320x9600	420	1965
Android -45	Android -45	1080x2400	4320x9600	420	1964
Android -46	Android -46	1080x2400	4320x9600	420	1963
Android -47	Android -47	1080x2400	4320x9600	420	1962
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Android -55	Android -55	1080x2400	4320x9600	420	1954
Android -56	Android -56	1080x2400	4320x9600	420	1953
Android -57	Android -57	1080x2400	4320x9600	420	1952
Android -58	Android -58	1080x2400	4320x9600	420	1951
Android -59	Android -59	1080x2400	4320x9600	420	1950
Android -60	Android -60	1080x2400	4320x9600	420	1949
Android -61	Android -61	1080x2400	4320x9600	420	1948
Android -62	Android -62	1080x2400	4320x9600	420	1947
Android -63	Android -63	1080x2400	4320x9600	420	1946
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Android -71	Android -71	1080x2400	4320x9600	420	1938
Android -72	Android -72	1080x2400	4320x9600	420	1937
Android -73	Android -73	1080x2400	4320x9600	420	1936
Android -74	Android -74	1080x2400	4320x9600	420	1935
Android -75	Android -75	1080x2400	4320x9600	420	1934
Android -76	Android -76	1080x2400	4320x9600	420	1933
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Android -95	Android -95	1080x2400	4320x9600	420	1914
Android -96	Android -96	1080x2400	4320x9600	420	1913
Android -97	Android -97	1080x2400	4320x9600	420	1912
Android -98	Android -98	1080x2400	4320x9600	420	1911
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Android -100	Android -100	1080x2400	4320x9600	420	1909



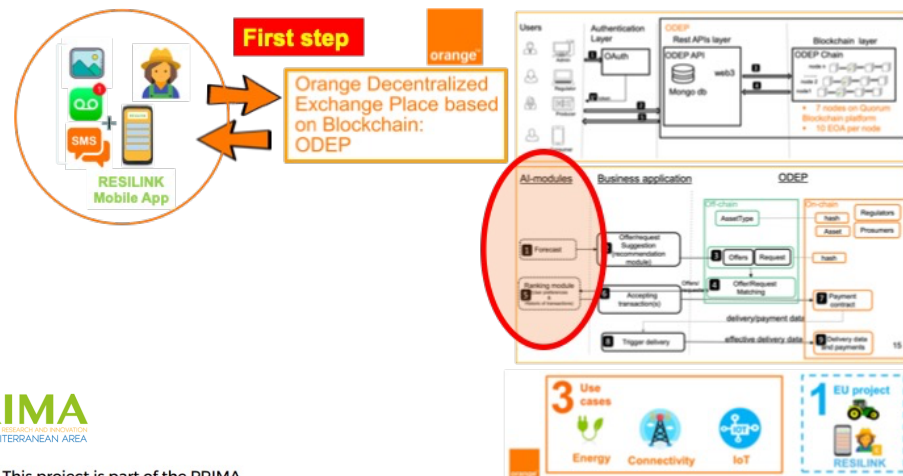


Need for a more advanced platform

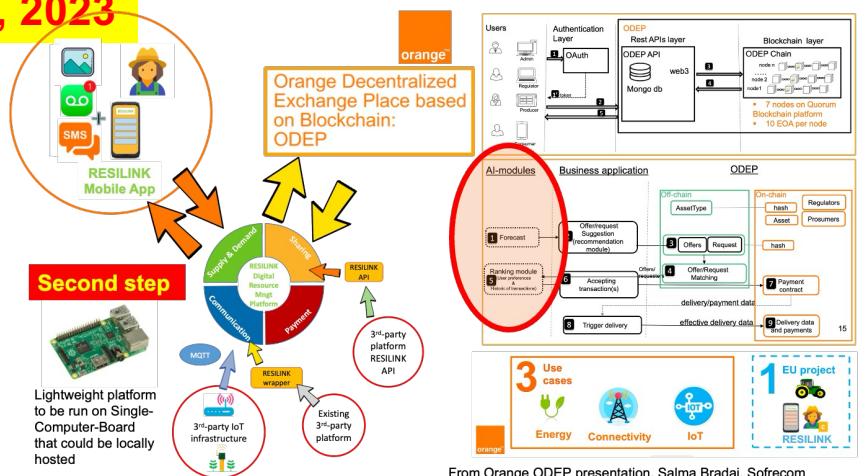
Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- In March 2023, the limitations of the PoC showed the need of more elaborated architecture to implement all the "resource sharing in crisis situation" functionalities
- Alert system, pre-configuration system per country, advanced search & offer matching system, integration of photos, etc.



Mar. 13th, 2023



From Orange ODEP presentation. Salma Bradai, Sofrecom



Related Deliverables & Documents



A first and preliminary description of the architecture and framework used for developing the RESILINK mobile application proof-of-concept, by Axel Cazaux.

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

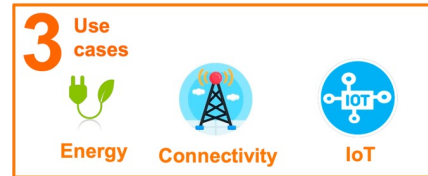
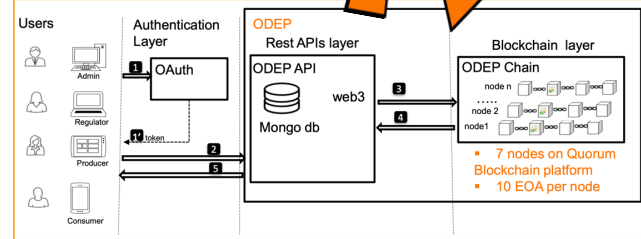
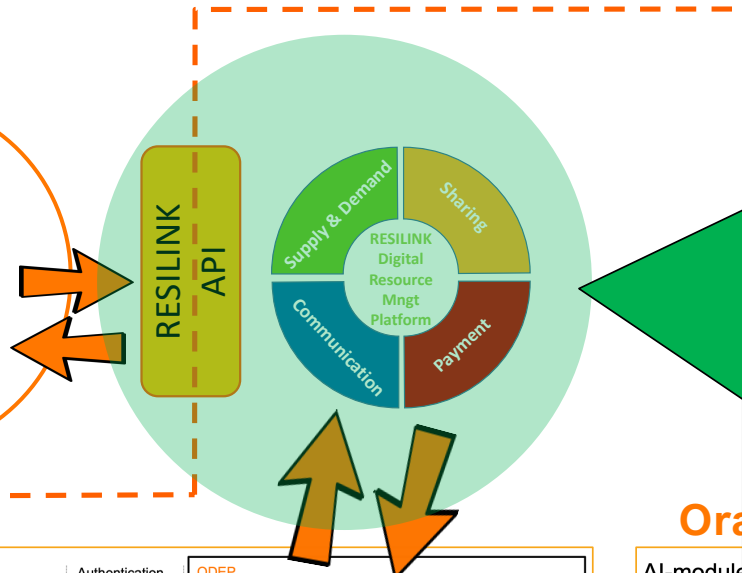
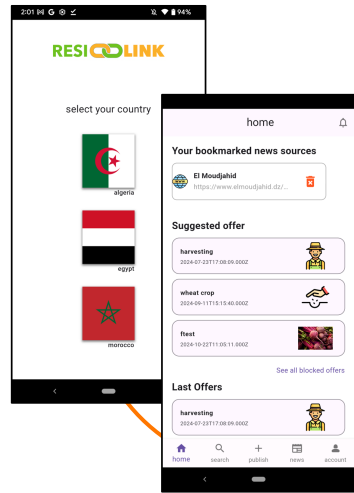
Living-Lab piloting and
large-scale evaluation
program

WP5

- https://resilink.eu/wp-content/uploads/2024/07/presentation_POOC_MobileApp.pdf
- **D5.2a** "Evaluation technical framework – v1"
- **D5.2b** "Evaluation technical framework – v2"
- **D2.2a** "RESILINK resource sharing digital platform – v1"

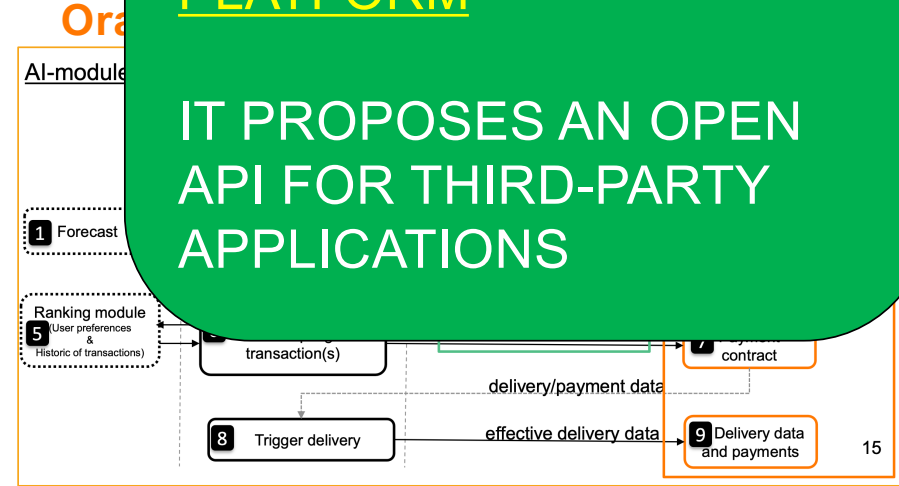


The final RESILINK Platform architecture



THE RESILINK PLATFORM IMPLEMENTS ADDITIONAL FUNCTIONALTIES TO BUILD AN EFFICIENT RESOURCE SHARING PLATFORM

IT PROPOSES AN OPEN API FOR THIRD-PARTY APPLICATIONS



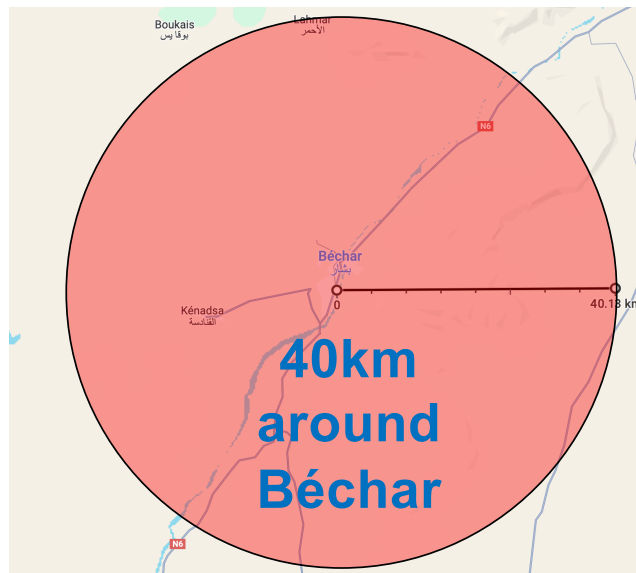


→ Better management of resources

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- Local resources are... **local!**
- In crisis situation, the objective is to rely & discover resources linked to a small geographical area



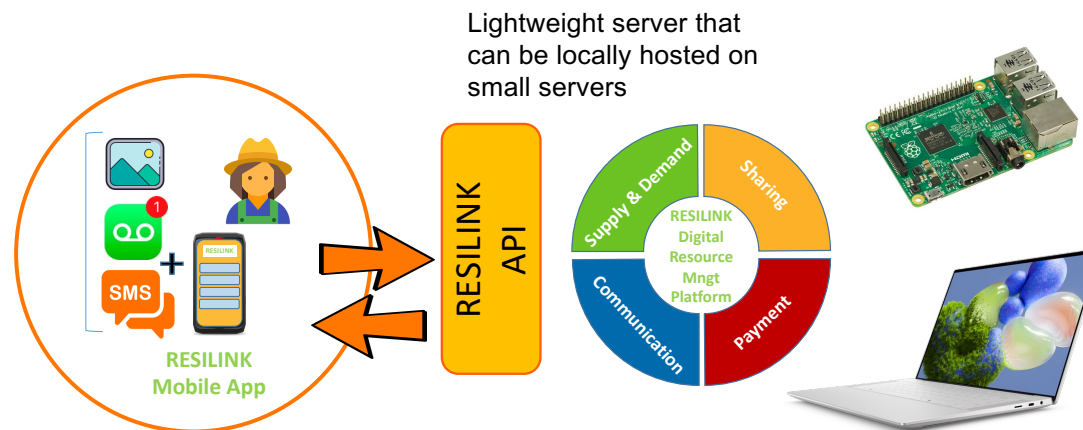


→ Faster deployment

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- Lightweight! The RESILINK digital platform server can run on a small server, even on a Raspberry Pi !



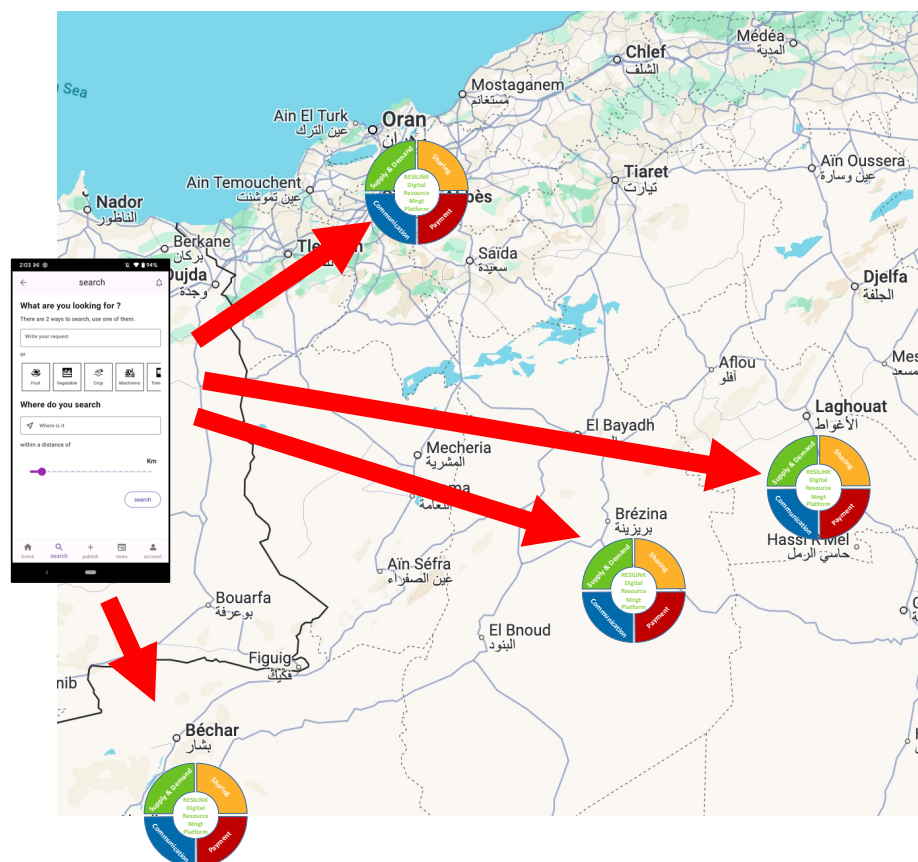
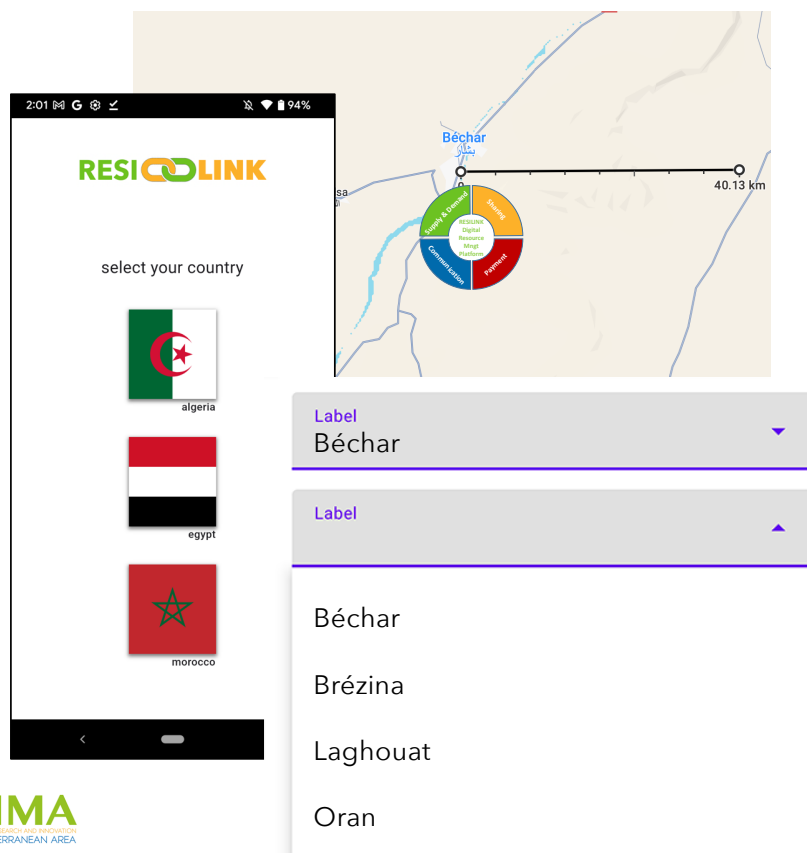
- A RESILINK server can be **locally deployed** by local city government agencies, agriculture cooperatives, agriculture services, ... in 1 hour!



→ Incremental deployment

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2



RESILINK

INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

RESILINK DIGITAL RESOURCE
MANAGEMENT PLATFORM

3 – RESILINK mobile app

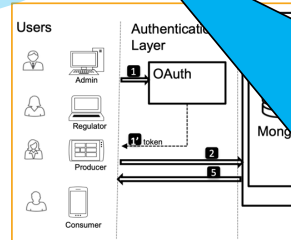
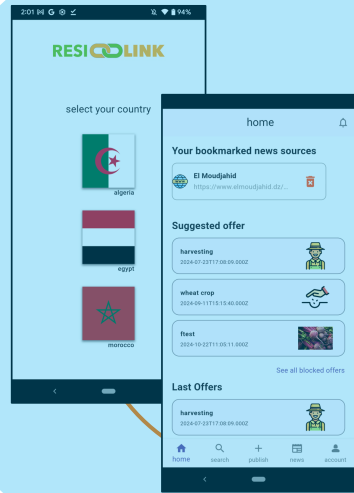


RESILINK Framework

**CO-DESIGN IS
ESSENTIAL!**

THE RESILINK MOBILE APP IS THE MAIN INTERFACE TO THE RESILINK PLATFORM, SEEN BY END-USERS

IT USES THE OPEN API EXPOSED BY THE RESILINK PLATFORM





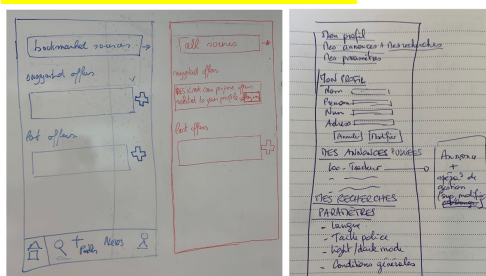
Preliminary studies & first mockups

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

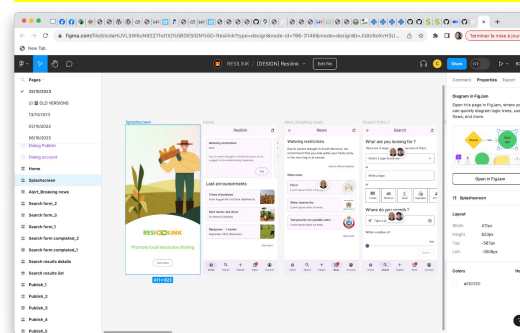
WP2

- Meetings & design thinking sessions lead by Orange have been organized to discuss on functionalities, mockups and feedback

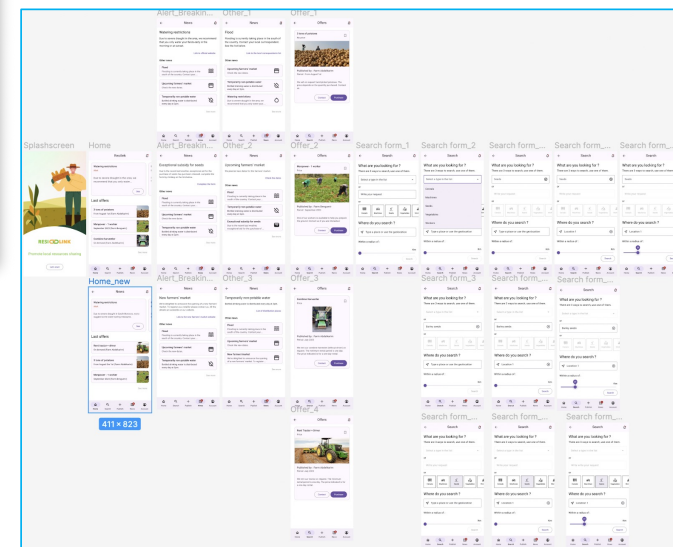
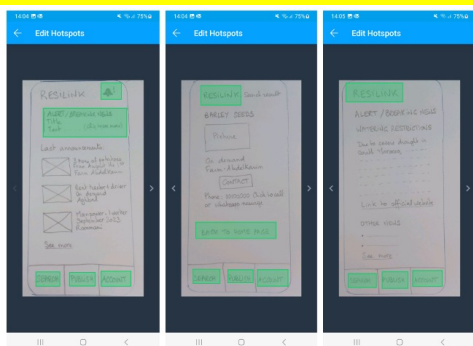
First concepts



Oct. 2023. Design of an elaborated mockup with Figma



First mockup with MarvelApp





Interviews & feedback with mockup

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- Conducted from Jan 2024 to May 2024 in Algeria, Egypt and Morocco

Jan 2024 to May 2024

From March 2023 to May 2024. A series of workshops and interviews with questionnaires and then with the RESILINK mobile application mockup have been conducted by our Algerian, Egyptian and Moroccan research teams to ensure that proposed functionalities meet the farmers' needs and expectations. It was a great source of information to prepare the piloting in Living-Lab mode. Congrats to UCM (Algeria), ARC (Egypt), INRA & USMS (Morocco) for their hard work!





Preparing the interview phase

Generalized & localized resource sharing in the agri-food value chain

WP1

Lightweight, Edge-enabled RESILINK resource sharing digital platform

WP2

- ⦿ A video playing the mockup has been produced
- ⦿ A manual explaining how to use the mockup has been written
- ⦿ A document describing how to conduct the interviews with the mockup has been produced

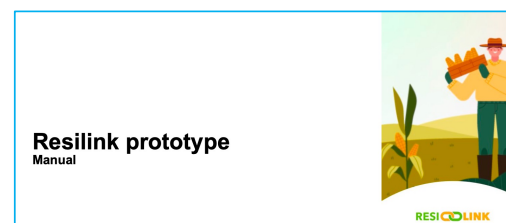
Meetings, working groups, ...

INTERACTIONS WITH TESTERS

- Direct contacts, especially at the beginning
- Questionnaires at different steps
- Collection of logs, factual feedback
- Meetings / discussions / focus groups

RESILINK Mobile App

- Figma mockup
- Evaluation of the mockup can be assigned to WP5
- Need to start some interviews using the mockup
- Resources
 - Mockup manual
 - Mockup videos
 - https://drive.google.com/file/d/1q50Y1t8RbCgZQ1RYYCvsvdV8PyG4/view?usp=drive_link
 - How to organize the tests & interviews
 - https://docs.google.com/document/d/1Fa-nCceWETOTDPEz02EnaiAVB224m/edit?usp=drive_link&oid=10961885558903722440&tpid=tree&sd=tree



Play the prototype on your mobile phone

Screen size issue

If you don't see the "Let's start" or the main menu at the bottom of the page, then try to scroll down





Related Deliverables & Documents

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- **D2.1a/D2.1b** "First/Final report on user requirements, user interface and co-design of the RESILINK generalized resource sharing digital platform"
- Video playing the mockup
<https://resilink.eu/wp-content/uploads/2024/05/resilink-new-mockup.mov>
- Manual explaining how to use the mockup
<https://resilink.eu/wp-content/uploads/2024/05/resilink-new-mockup-manual.pdf>
- Document describing how to conduct the interviews with the mockup
<https://resilink.eu/wp-content/uploads/2024/05/RESILINK-How-to-organize-tests-of-the-mockup.pdf>

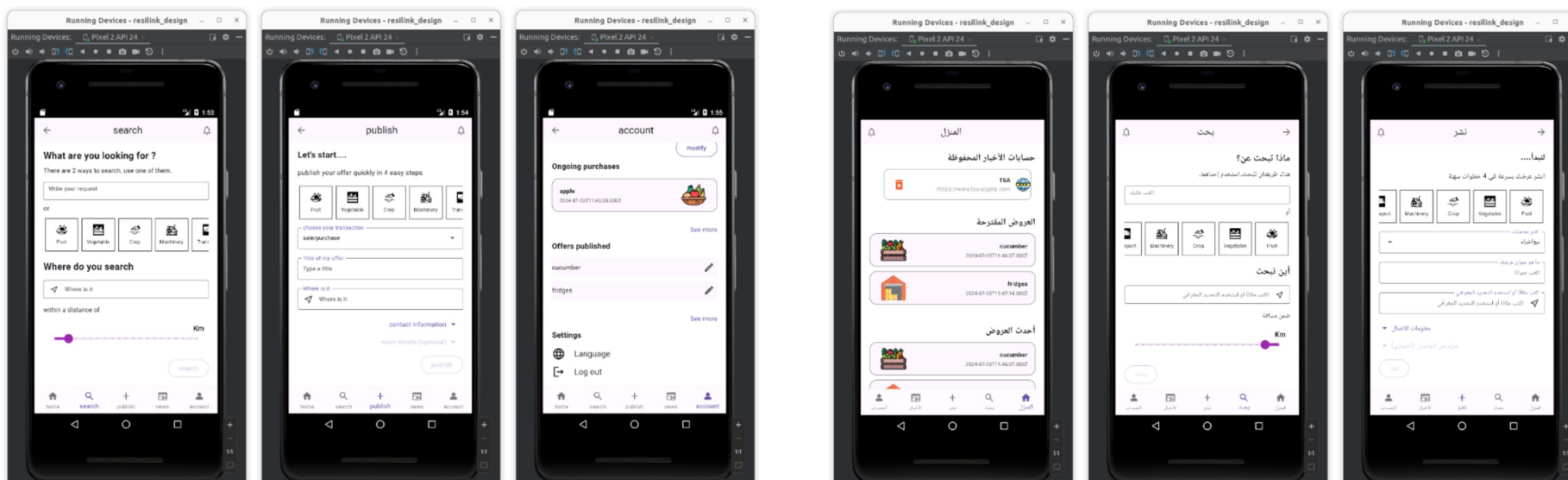


Development of the mobile app

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- Feedback from interview/demo sessions were taken into account and in June 2024, a RESILINK mobile app was ready for first internal tests!
- Multi-language support ready





Continuous improvement on UI/UX

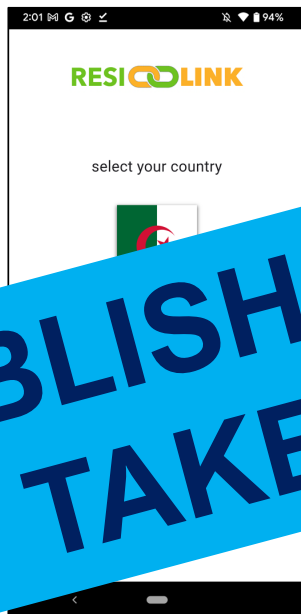
Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- ⦿ User Interface / User Experience
- ⦿ Preparing the Evaluation Program & Living Labs

Living-Lab piloting and
large-scale evaluation
program

WP5



**PUBLISH AN OFFER SHOULD
TAKE LESS THAN 30S!**

At first run, you need
to select your country

The "Search" screen

The "Publish" screen

You can switch to Arabic in
the Account/Language menu



RESILINK

INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

RESILINK DIGITAL RESOURCE
MANAGEMENT PLATFORM

4 – RESILINK open API

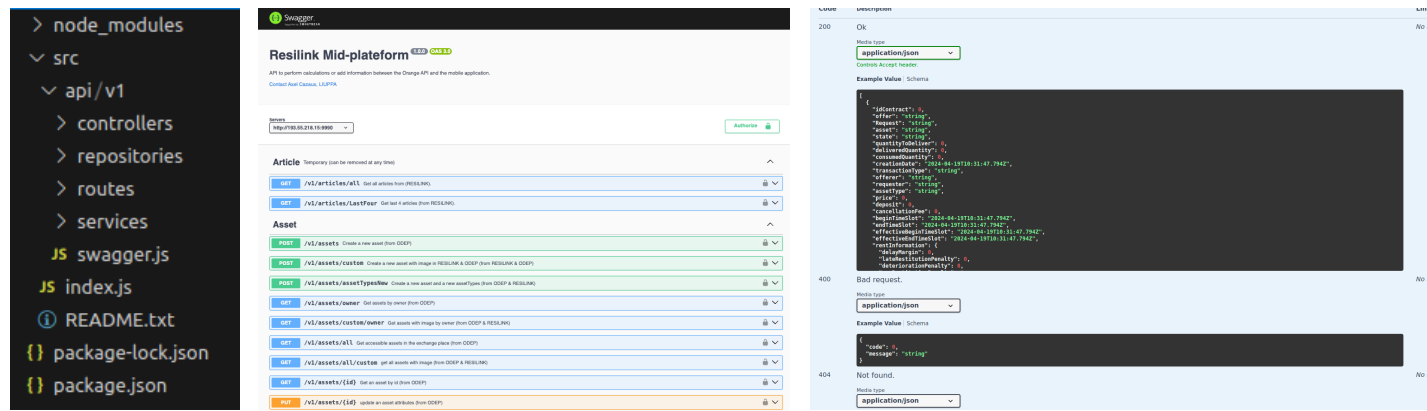


RESILINK's Open API

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

🔗 <https://resilink-api.onrender.com/v1/api-docs/>



Communication,
dissemination &
partnerships

WP4

🔗 D2.2a "RESILINK resource sharing digital platform – v1"

🔗 D2.3a "First report on API and software connectors" – M28

🔗 RESILINK API Documentation

<https://resilink.eu/wp-content/uploads/2025/01/RESILINK-Platform-API-Documentation.pdf>



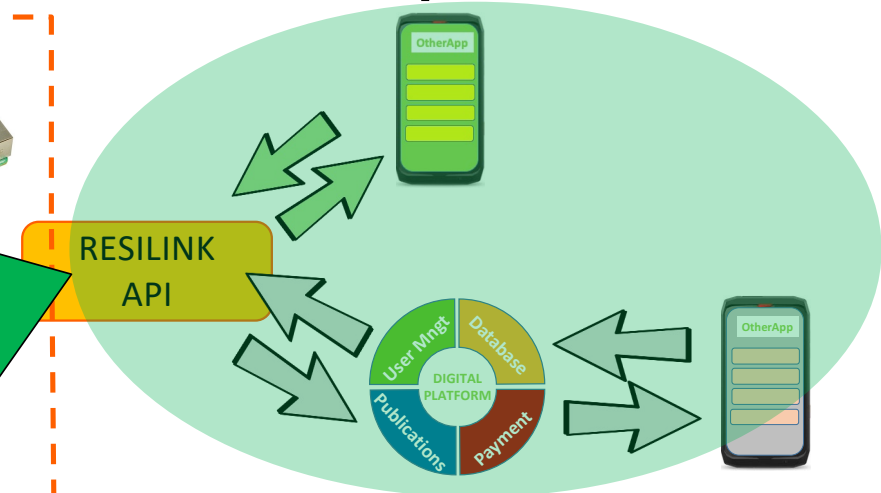
RESILINK Framework with Open API

Lightweight server that
can be locally hosted on

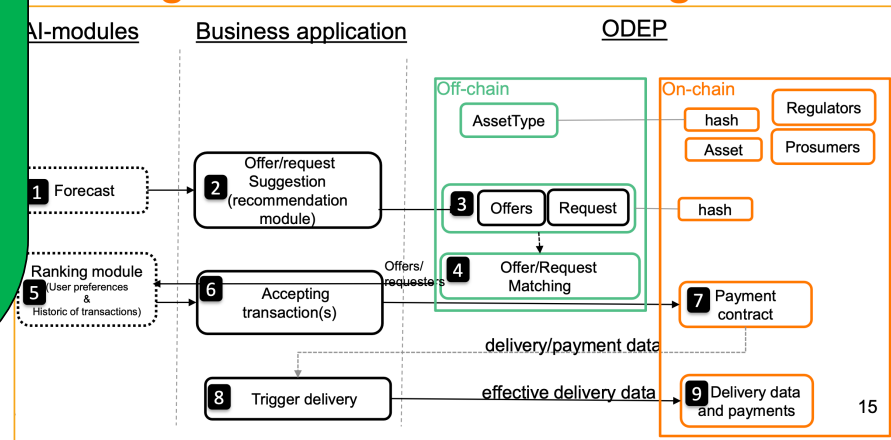


THE RESILINK OPEN API
ALLOWS THIRD-PARTY
APPLICATIONS TO SIMPLY &
QUICKLY DEVELOP NEW
RESOURCE SHARING APPS

WILL ENABLE THE
PLATFORM-OF-PLATFORMS
APPROACH FOR INCREASED
INTEROPERABILITY



Orange Decentralized Exchange Place





RESILINK

INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

RESILINK PILOTING &
EVALUATION PROGRAM



Preparing the Evaluation Program

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

○ Evaluation Program

- Internal, then External tests of the whole RESILINK Framework
- Feedback are collected to improve the developed solutions

Living-Lab piloting and
large-scale evaluation
program

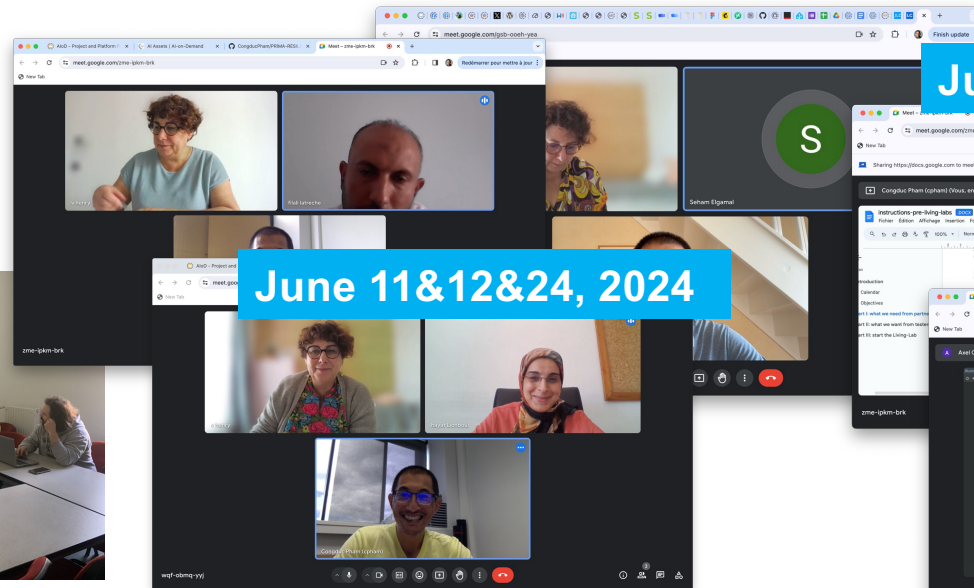
WP5

○ Preparation of the Evaluation Program started on May 2024

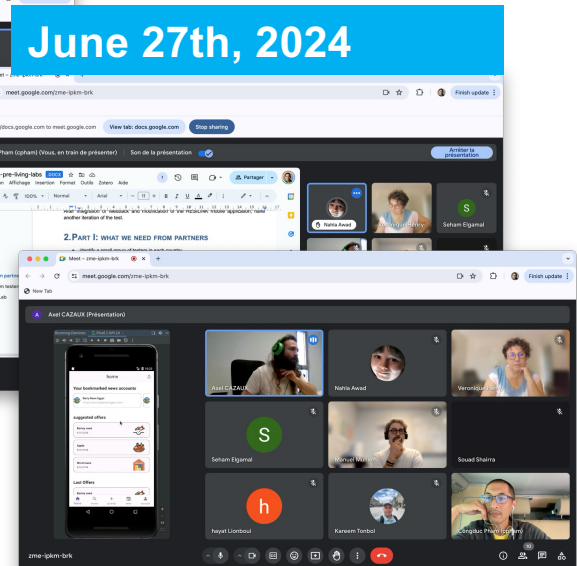
May 27-29, 2024



June 11&12&24, 2024



June 27th, 2024





Installation, Deployment & Testing

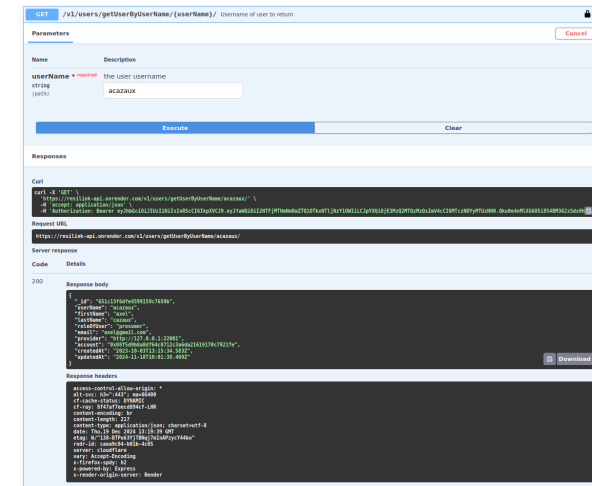
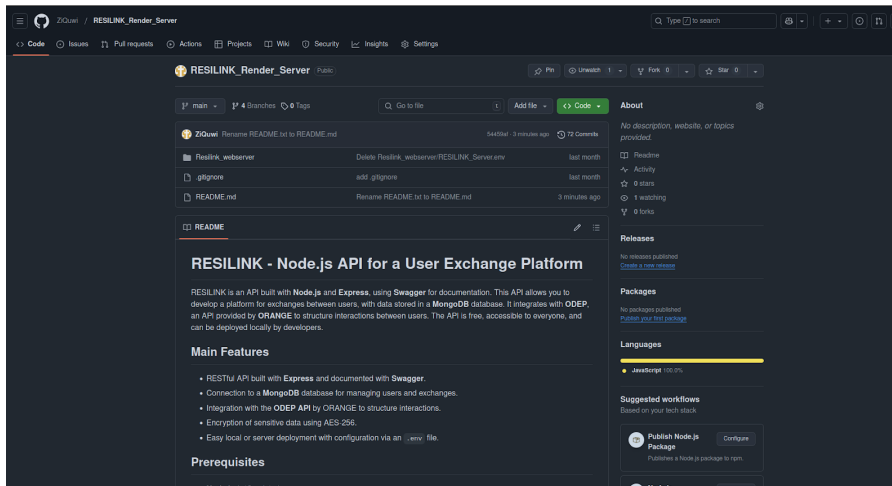
Living-Lab piloting and large-scale evaluation program

WP5

Communication, dissemination & partnerships

WP4

- The whole RESILINK platform is available on GitHub https://github.com/ZiQuwi/RESILINK_Render_Server
- All components can be installed for deployment and tested



- **D2.4a** "1st report on test & validation of the full RESILINK framework" – M28



Tutorials & Documents

Living-Lab piloting and large-scale evaluation program

WP5

**Communication,
dissemination &
partnerships**

WP4

- Several technical and guideline documents have been produced, having in mind the next steps with capacity-building activities to demonstrate the platform-of-platforms approach



Evaluation Program: internal tests

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- Internal test were conducted from Sep. 2024 to Nov. 2024
- RESILINK partners provided feedback to track bugs and improve the mobile application – test accounts were created

Living-Lab piloting and
large-scale evaluation
program

WP5

1.1. JUPPA

- in "home" menu, "suggested offer" → "Suggested offer" **Done**
- in "search" menu, "Write your request" → "keyword" ? **Done**
- in "news", → "List of news sources" **Done? I'm not sure what it m**
- what is the unit of quantity? Maybe we should always put the quar offer like "200kg of potatoes"? **Do we remove the quantity? Ne everyone**
- in the "Last offers" section maybe it is better to be able to scroll **For the scroll, we had said via a technical meeting that the on offers would be the search page, putting a scroll is very simple, seen how many offers we put in this scroll (all the offers or interface to add a "see more" button and display all the latest result page?**
- after selecting an asset type (in "search" menu for instance), select/change to another asset type. one must click again on the to enable selection of another asset type. This is not the case for where clicking on another asset type automatically enables th asset types. **Done**
- the section "suggested for you" shows your own offers. **This shou Done**
- maybe have the possibility to remove an offer from the "suggest **Done**
- it seems that you can purchase your own offers. **This should n production, Done.**
- when clicking on your published offers, there should be a cancel modify and delete? **Done**

1.3. ARC

1. User Interface and User Experience (UI/UX)
The user interface of the Resilink application is consistent and visually appealing, making the user experience comfortable.

2. Performance and Speed:

The application's performance is good, with no lag, ensuring a smooth experience even under varying conditions.

3. Reliability and Stability:

While the application is relatively stable, there have been occasional crashes or sudden malfunctions. These problems remain reliable for farmers at all times.

4. Application Functions:

The application's functions require additional development to include basic features of connecting farmers with markets, promotional offers, purchase requests, company advertisements, and price comparisons. These features should be added to make the app more functionally complete.

1.4. INRA

- 1/ On the main page "Home": **Done**
 - Replace : " المنزل " "Home "
 - => " الرئيسية "
- 2/ In " Search ", **Done except for new AssetType**
 - Replace : " المحاصيل " " Crop " :
 - => " الحبوب و القطن "
 - Replace : " الماكينة " " Machinery " :
 - => " الآلات الزراعية "
 - Replace : " المدخلات " " Inputs " :
 - => " الآلات الزراعية "
 - Add a new category: " Seeds " = " بذور "
 - When clicking on some icons, the full text is **expected behavior, I didn't think it was very nice to reduce the size of the text to make it fit.**

1.5. ORANGE

PUBLISH:

- There's an issue with the "Add picture" feature, whether selecting from the phone gallery or elsewhere: the "Choose your option" popup remains open, and you have to click outside it to close it. **Done**

SEARCH:

- Clicking on "Purchase" opens the Account screen. Is this normal? **Yes, it's normal behavior**
- If no items are found for a search, there should be a message like, "There's no offer available, try again later!" **Done**

NEWS:

- I selected 2 sources, and a popup appears: "Problems in adding to your favorites the news – The connection didn't work properly." **In my case, it's fixed but I'll try with less connectivity**
- You can check a source but can't uncheck it (you have to go to the home screen and use the red trash icon). **Normal behavior: News added by the user is managed on the home page, with the possibility of adding the news section to the profile page for a better view of the news.**
- On the home screen, when you have multiple sources and delete one, all of them disappear. You need to switch to another screen and come back to the home screen to see the ones you didn't delete. **Fixed**



Evaluation Program: external tests

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

- External test started on Nov. 2024 and are on-going
- Various additional tutorials/documents were produced

Living-Lab piloting and
large-scale evaluation
program

WP5

Evaluation Program Guide



Feedback form

A. Tester Identification

- What is your age group?
Under 18 ☐ 18-30 ☐ 31-45 ☐ 46-60 ☐ Over 60 ☐
- What is your gender?
Male ☐ Female ☐
- How many years of experience do you have in agriculture?
Not a farmer ☐ Under 5 years ☐ 5-10 ☐ 11-20 ☐ over 20 ☐
- What type of agriculture do you primarily practice, if you are a farmer?
Subsistence ☐ Commercial ☐ Both ☐ Not applicable ☐
- What is the size of your farm, if you are a farmer?
up to 2ha ☐ up to 5ha ☐ up to 10ha ☐ more than 10ha ☐

B. Ease of Use

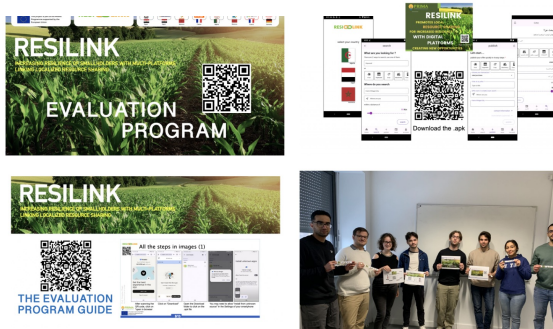
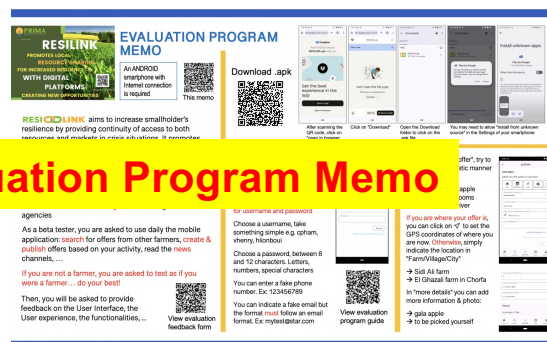
- Do you find it easy to create and publish offers in the application?
Yes ☐ No ☐
If no, why:
- Is it simple for you to search and filter for specific listings/offers?
Yes ☐ No ☐
If no, why:
- Is indicating the location with "Farm/Village/City" suitable?
Yes ☐ No ☐
If no, why:
- Is browsing governmental/agricultural news intuitive and quick?
Yes ☐ No ☐
If no, why:
- How would you rate the overall navigation of the application?
Very Easy ☐ Easy ☐ Difficult ☐ Very difficult ☐

2

QR code sheet



Evaluation Program Memo



Evaluation Program Kit



The Evaluation Program Memo

Lightweight, Edge-enabled
RESILINK resource sharing
digital platform

WP2

Living-Lab piloting and
large-scale evaluation
program

WP5



EVALUATION PROGRAM MEMO

An ANDROID smartphone with Internet connection is required



This memo

RESILINK aims to increase smallholder's resilience by providing continuity of access to both resources and markets in crisis situations. It promotes localized usage of resources

The RESILINK mobile application will allow you to **publish & search for resources**

It **connects smallholders to new supply, sharing opportunities & distribution channels**, keeping you informed of **news/alerts/regulations** from government agencies

As a beta tester, you are asked to use daily the mobile application: **search** for offers from other farmers, **create & publish** offers based on your activity, read the **news** channels, ...

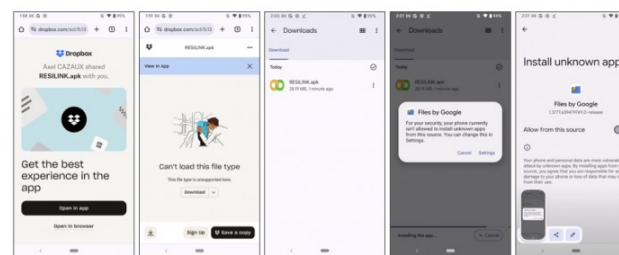
If you are not a farmer, you are asked to test as if you were a farmer... do your best!

Then, you will be asked to provide feedback on the User Interface, the User experience, the functionalities, ...



View evaluation feedback form

Download .apk



After scanning the QR code, click on "open in browser"

Click on "Download"

Open the Download folder to click on the .apk file

You may need to allow "install from unknown source" in the Settings of your smartphone

Without an account, you can only view offers

You will need to create an account to publish offers

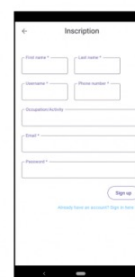
Latin alphabet MUST BE used for username and password

Choose a username, take something simple e.g. cpham, vhenry, hilionboui

Choose a password, between 8 and 12 characters. Letters, numbers, special characters

You can enter a fake phone number. Ex: 123456789

You can indicate a fake email but the format **must** follow an email format. Ex: mytest@star.com



View evaluation program guide

In the "Title of my offer", try to indicate in a synthetic manner what your offer is:

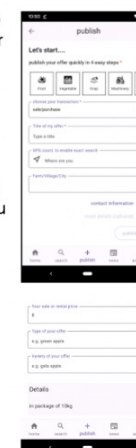
- 200kg of green apple
- 5 cold storage rooms
- 1 tractor with driver

If you are where your offer is, you can click on ↗ to set the GPS coordinates of where you are now. **Otherwise**, simply indicate the location in "Farm/Village/City"

- Sidi Ali farm
- El Ghazali farm in Chorfa

In "more details" you can add more information & photo:

- gala apple
- to be picked yourself





First external test sessions!

Living-Lab piloting and large-scale evaluation program

WP5

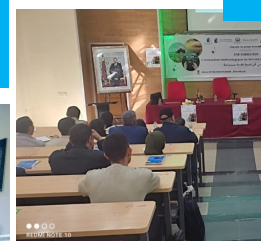
Dec. 10th, 2024, Morocco

Dec. 10th, 2024. As part of the RESILINK Evaluation Program, INRA in Morocco has started sessions to install and use the RESILINK Mobile Application. The Evaluation session was proposing various agriculture services in the Labrachoua village. Farmers were able to install and thoroughly test with the mobile application. As farmers are familiar to the farm environment, discussions have been in a manner, easing the collection of feedback after the installation and the demonstration of

Nov. 18th, 2024, Egypt

Dec. 26th, 2024, Morocco

Jan. 5-6, 2025, Egypt





Nov. 19th, 2024, Morocco





Risks & Difficulties

ID	Is foreseen	Description	Likelihood	Work package(s) involved	Outcome(s) potentially affected	Mitigation measures	Mitigation measures applied
2210	Foreseen	Local actors do not provide enough feedbacks and engagement is low	Medium	1. Generalized & localized resource sharing in the agri-food value chain 4. General project communication, capacity building, tech-community engagement & partnerships for the platform-of-platforms approach 5. Living-Lab piloting and large-scale evaluation program	Digital platform for generalized resource sharing targeting smallholders Intuitive mobile app for local resource management	RESILINK will rely on the expertise and on the network of local actors to ensure participation and feedbacks. Personal invitations, phone calls and meetings will further engage these actors if necessary.	
2211	Foreseen	Smallholders do not want to participate in piloting actions	Low	5. Living-Lab piloting and large-scale evaluation program	Generalized local resource sharing concept for increased resilience Digital platform for generalized resource sharing targeting smallholders Intuitive mobile app for local resource management IoT process automation methodology for resource sharing	When not familiarized with ICT technologies, smallholders may not have interest in participating in piloting actions that might appear as a burden in their daily work. RESILINK partners already have collaboration with small-scale farms and piloting in real environments is already guaranteed. Even if the number of new smallholders is small, the impact on the test & validation procedures is low.	

Partners in Algeria, Egypt & Morocco devoted lot of efforts to reach smallholders, conduct interviews, organize workshops, raise awareness, collect feedback, discuss with stakeholders, increase trust, ...

BUT WE ARE ABOUT 10 MONTHS BEHIND SCHEDULE

RESILINK

INCREASING RESILIENCE OF
SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

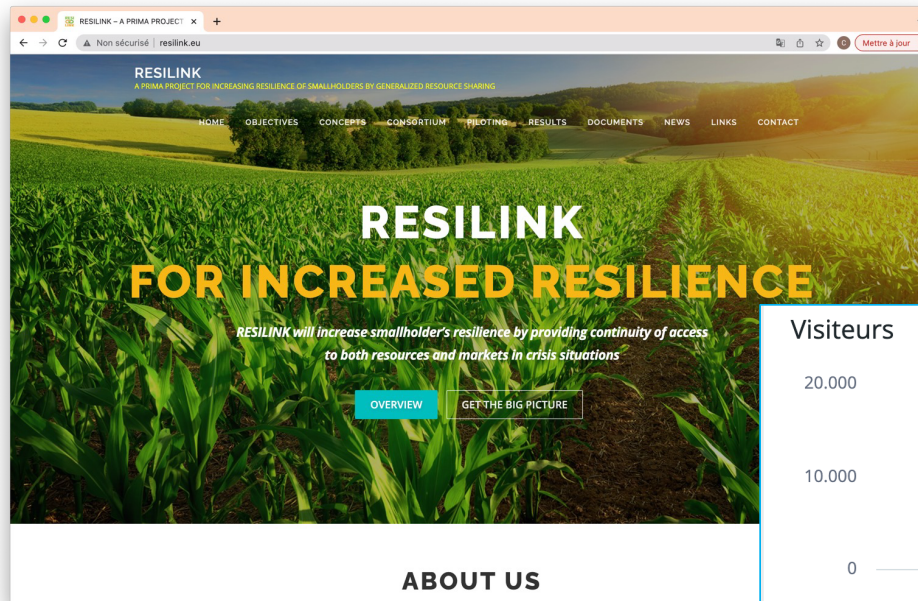
COMMUNICATION,
DISSEMINATION & OUTREACH

WP4

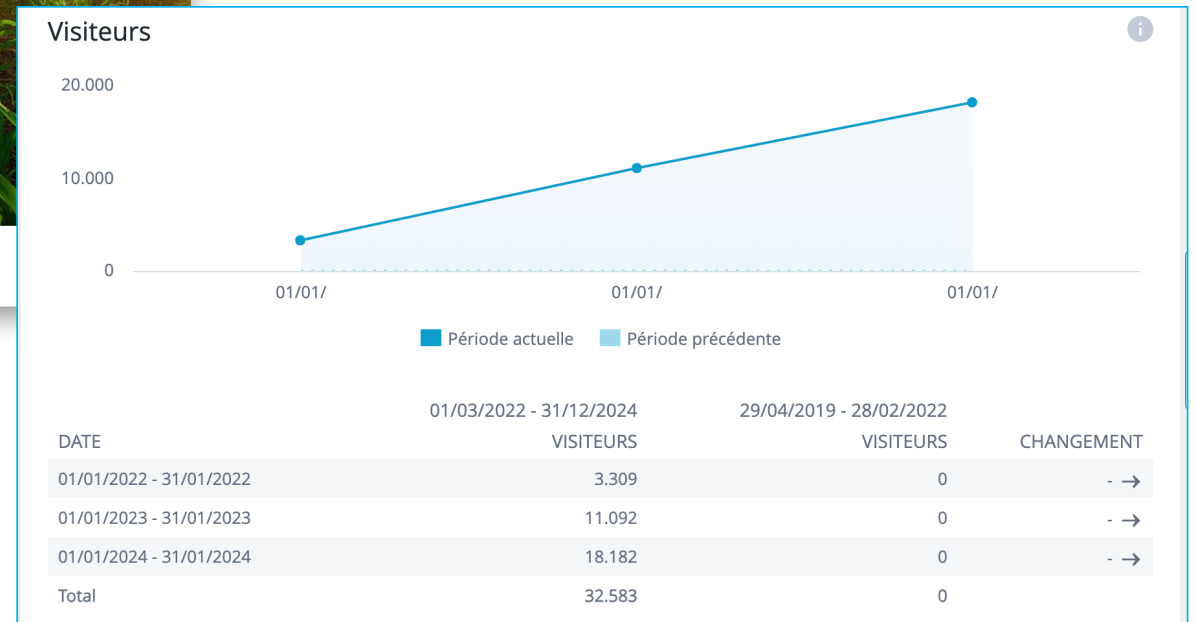
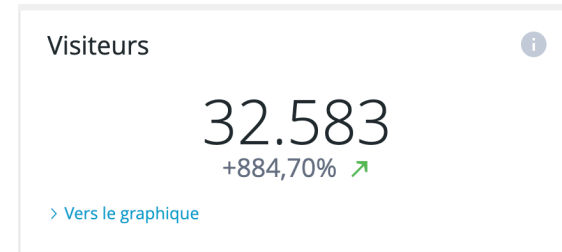
Communication,
dissemination &
partnerships



RESILINK web site



Web site
<https://resilink.eu>





Pilots, Results, Documents, News, Links...

RESILINK

[HOME](#)

OBJECTIVES

CONCEPTS

CONSORTIUM

PILOTING

RESULTS

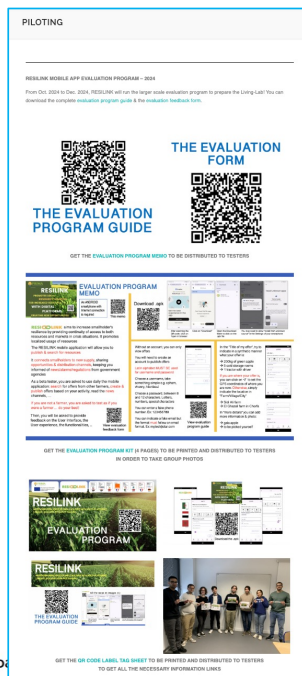
DOCUMENTS

NEWS

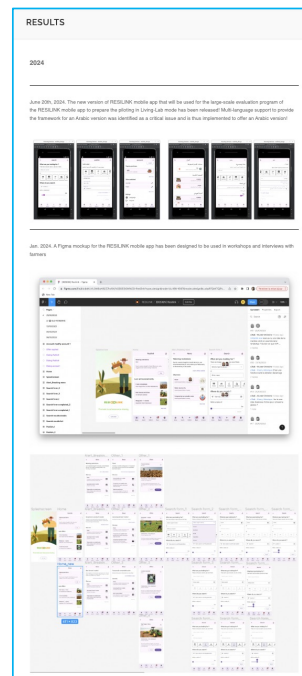
LINKS

CONTACT

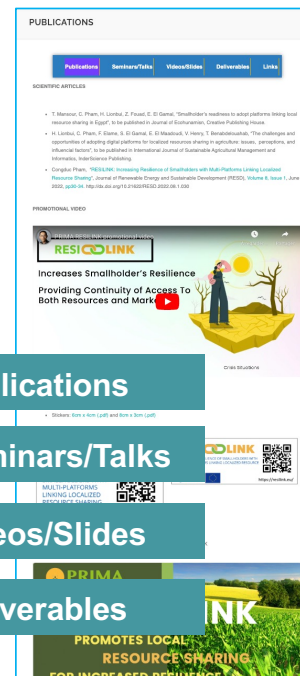
Piloting



Results



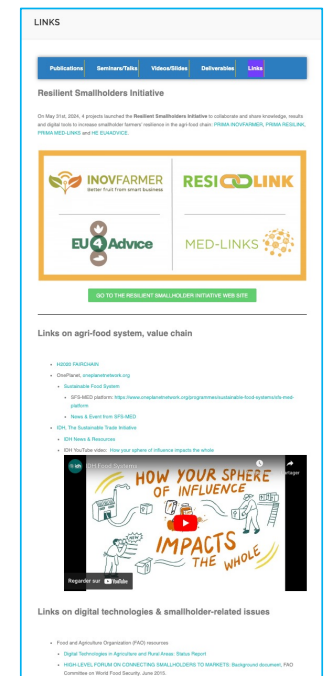
Documents



News



Links



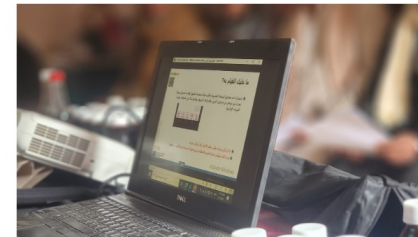


News

<https://resilink.eu/news>

Jan. 5-6, 2025. Training for the Evaluation Program

Jan. 5-6, 2025. As part of the RESILINK Evaluation Program, ARC in Egypt organized in Beni Suef Governorate a training session to present the RESILINK digital platform and the RESILINK mobile application to more than 35 smallholders.



Oct 25-26, 2022. First News for physical kick-off in Egypt



Oct. 25-26, 2022. The physical kick-off meeting of RESILINK took place in Alexandria, Egypt, with the participation of Mohamed Wageih, PRIMA project officer of Agro-Food thematic area.

The meeting was hosted by ACICT partner at AASTMT (Arab Academy for Science, Technology & Maritime Transport). The whole RESILINK team was honored to be received by Dr. Ismail Abdelghaffar Ismail Faraj – President of AASTMT.

May 27-29, 2024. Design session for mobile app



21 News
M1-M24

20 News
M8-M24

+13 News
M25-M32



Newsletters <https://resilink.eu/news>

Sep. 2023

RESILINK NEWSLETTER #1

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS LINKING LOCALIZED RESOURCE SHARING

NEWSLETTERS

After 1 year of project, here is NEWSLETTER #1

Content of NEWSLETTER #1 – September 2023

- Quick presentation of the PRIMA RESILINK project
- What are the main objectives and contributions?
- Is there a promotional video to watch?
- Why is it more than a product selling platform?
- What have been the activities during the first year?
- What are the next Newsletters?
- How to subscribe to Newsletters, ask questions and provide feedback to Newsletters?

QUICK PRESENTATION OF THE PRIMA RESILINK PROJECT

RESILINK is a PRIMA project accepted from the Section 2 Multi-Topic – The Orange Decentralized Exchange Place (ODEP) platform serves as a generic exchange place based on Blockchain technology. It facilitates the consolidation of sharing functionalities across diverse resource types. Through the integration of Blockchain, our platform enhances resource exchange accessibility via decentralized hosting, increases security through cryptographic mechanisms, offers flexibility with terms defined by ecosystem members, and notably reduces costs by eliminating fees imposed by a central authority. ODEP is implemented in three use cases with respect to Orange ecosystem

Feb. 2024

RESILINK NEWSLETTER #2

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS LINKING LOCALIZED RESOURCE SHARING

NEWSLETTERS

Content of NEWSLETTER #2 – February 2024

- The lower layer of the RESILINK digital platform: the ODEP component
- The RESILINK mobile application mockup
- How the RESILINK team is preparing the large-scale evaluation program?
- Why is an open API so important?
- What are the next Newsletters?
- How to subscribe to Newsletters, ask questions and provide feedback to Newsletters?

THE LOWER LAYER OF THE RESILINK DIGITAL PLATFORM: THE ODEP COMPONENT

The Orange Decentralized Exchange Place (ODEP) platform serves as a generic exchange place based on Blockchain technology. It facilitates the consolidation of sharing functionalities across diverse resource types. Through the integration of Blockchain, our platform enhances resource exchange accessibility via decentralized hosting, increases security through cryptographic mechanisms, offers flexibility with terms defined by ecosystem members, and notably reduces costs by eliminating fees imposed by a central authority. ODEP is implemented in three use cases with respect to Orange ecosystem

July 2024

RESILINK NEWSLETTER #3

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS LINKING LOCALIZED RESOURCE SHARING

NEWSLETTERS

Content of NEWSLETTER #3 – July 2024

- RESILINK has been very active in May 2024!
- The Resilient Smallholder Initiative
- RESILINK: a lightweight server for fast deployment
- What are the next Newsletters?
- How to subscribe to Newsletters, ask questions and provide feedback to Newsletters?

RESILINK HAS BEEN VERY ACTIVE IN MAY 2024!

The RESILINK partners have been very active in May 2024!

- First Symposium of InovFarmer.MED, organized by INOVFARMER in collaboration with and RESILINK at INRAE in Avignon, France.
- AIAGRI Day2024 organized in Morocco at University Sultan Moulay Slimane (USMS, Beni-Mellal) from May 21st to 26th
- Participation of the USMS team at the second edition of the International Exhibition for Agri-Food Industry, organized in Beni-Mellal from May 21st to 26th

Dec. 2024

RESILINK NEWSLETTER #4

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS LINKING LOCALIZED RESOURCE SHARING

NEWSLETTERS

Content of NEWSLETTER #4 – Dec. 2024

- The RESILINK Mobile Application: towards a more intuitive and efficient User Experience
- The RESILINK Mobile App Evaluation Program
- The activities conducted by the Resilient Smallholder Initiative
- What are the next Newsletters?
- How to subscribe to Newsletters, ask questions and provide feedback to Newsletters?

THE RESILINK MOBILE APPLICATION: TOWARDS A MORE INTUITIVE AND EFFICIENT USER EXPERIENCE

After 2 months of internal tests, feedback and integration of these feedback, the RESILINK Mobile Application, which serves as a front-end to the RESILINK Digital Platform, is evaluated since October 2024 at a larger scale, preparing the next & challenging Living-Lab phase!

A lot of efforts have been devoted to improve the User Experience, keeping in mind that the final users are the smallholder farmers who have, as top priority, to keep continuity in their activities during crisis.

Introduction & Context | RESILINK framework | Piloting | Communication... | KPI, risks & difficulties

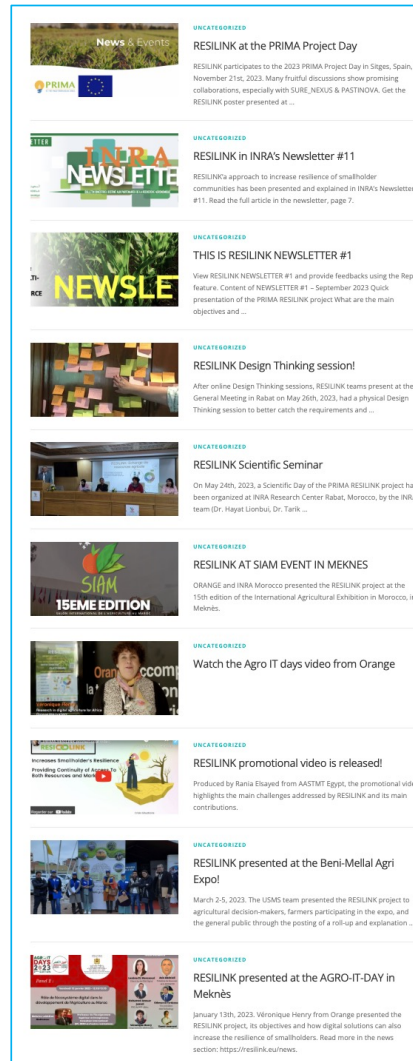
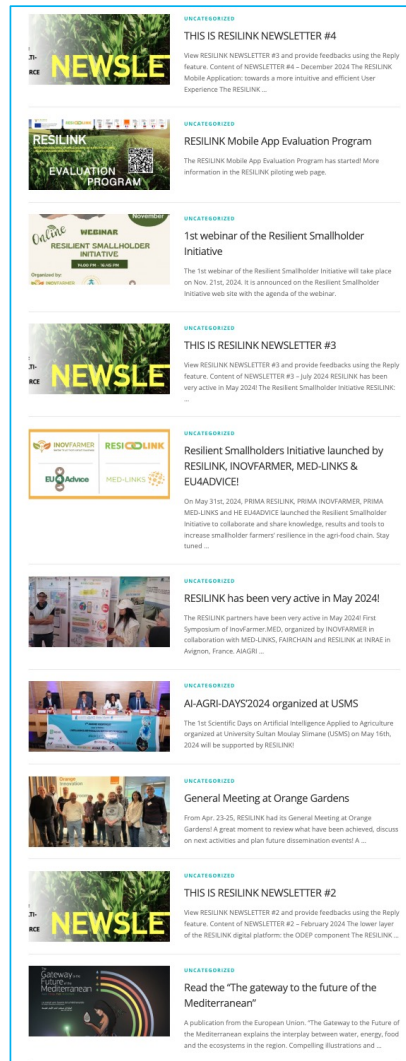
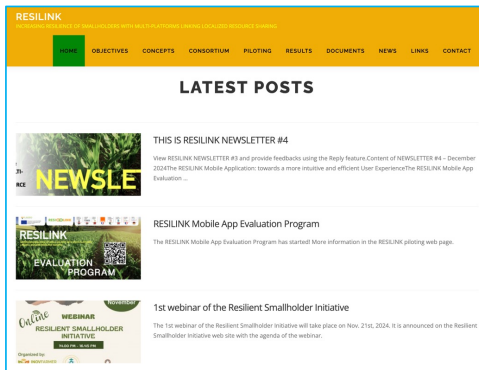
RESILINK



Posts!

27 Posts

Latest Posts on the Home page



Prof. Congduc Pham
http://www.univ-pau.fr/~cpham



This project is part of the PRIMA Programme supported by the European Union



2 important posts!

Launch of the Resilient Smallholder Initiative to foster collaboration between EU/PRIMA project on addressing specifically the resilience issue in smallholder communities.

Resilient Smallholders Initiative launched by RESILINK, INOVFARMER, MED-LINKS & EU4ADVICE!

POSTED ON JUNE 1, 2024 BY RESILINK-ADMIN

On May 31st, 2024, [PRIMA RESILINK](#), [PRIMA INOVFARMER](#), [PRIMA MED-LINKS](#) and [HE EU4ADVICE](#) launched the Resilient Smallholder Initiative to collaborate and share knowledge, results and tools to increase smallholder farmers' resilience in the agri-food chain. Stay tuned for more information and resources from this initiative!



RESILINK promotional video is released!

POSTED ON MARCH 9, 2023 BY RESILINK-ADMIN

Produced by Rania Elsayed from AASTMT Egypt, the promotional video highlights the main challenges addressed by RESILINK and its main contributions.



Very first communication activity of RESILINK!



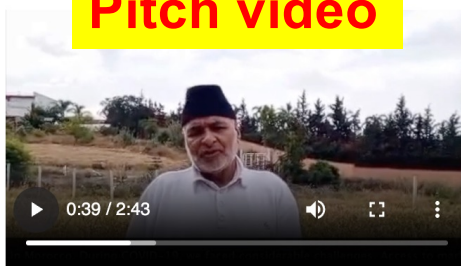
Communication materials

Roll-up

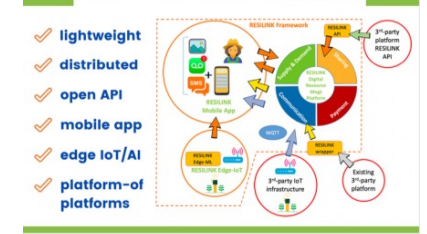
Promotional video



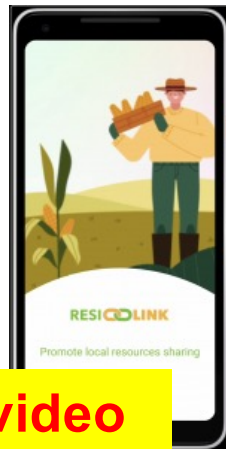
Pitch video



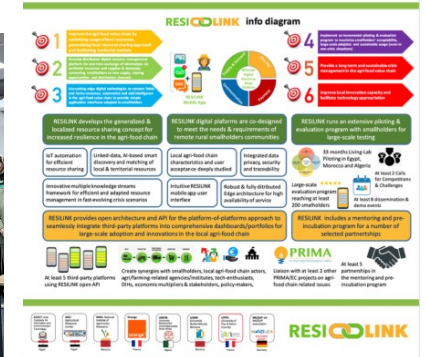
Posters



Mockup video



Stickers





Publications

- <https://resilink.eu/publications>
- 3 journals, 2 workshops
- Guides, manuals, evaluation kit, questionnaires, ...

SCIENTIFIC ARTICLES

- C. Pham, T. Mansour, H. Lionboui, Z. Fawzy, S. Shairra, N. Awad, S. El-Gamal, "Smallholder's readiness to adopt platforms linking local resource sharing in Egypt", Journal of Ecohunamism, vol. 3, no. 8, 2024. Creative Publishing House. <https://doi.org/10.62754/joe.v3i8.5702>
- H. Lionbui, C. Pham, F. Elame, S. El Gamal, E. El Maoudi, V. Henry, T. Benabdelouhab, "The challenges and opportunities of adopting digital platforms for localized resources sharing in agriculture: issues, perceptions, and influential factors", to be published in International Journal of Sustainable Agricultural Management and Informatics, InderScience Publishing.
- Congduc Pham, "RESILINK: Increasing Resilience of Smallholders with Multi-Platforms Linking Localized Resource Sharing", Journal of Renewable Energy and Sustainable Development (RESO), Volume 8, Issue 1, June 2022, pp30-34. <http://dx.doi.org/10.21622/RESO.2022.08.1.03>

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

EVALUATION PROGRAM

THE EVALUATION PROGRAM GUIDE

EVALUATION PROGRAM MEMO

RESILINK aims to increase smallholder's resilience by providing continuity of access to both resources and markets in crisis situations. It promotes localized usage of resources.

The RESILINK mobile application will allow you to publish & search for resources.

It connects smallholders to new supply, sharing opportunities & distribution channels, keeping you informed of news/alerts/regulations from government agencies.

As a beta tester, you are asked to use daily the mobile application: search for offers from other farmers, create & publish offers based on your activity, read the news channels, ...

If you are not a farmer, you are asked to test as if you were a farmer... do your best!

Then, you will be asked to provide feedback on the User Interface, the User experience, the functionalities, ...

Download apk

Without an account, you can only view offers.

You will need to create an account to publish offers. Latin alphabet MUST BE used for username and password. Choose a username, take something simple e.g. cpham, where's the password.

You can enter a fake phone number. Ex: 0345678910.

You can indicate a fake email but the email must follow an email format. Ex: myemail@com

View evaluation program guide

View evaluation feedback form

A. Personal information

1. Gender: ☐ Male ☐ Female

2. Which category below includes your age?

17 or younger	<input type="checkbox"/>
18-20	<input type="checkbox"/>
21-29	<input type="checkbox"/>
30-39	<input type="checkbox"/>
40-49	<input type="checkbox"/>
50-59	<input type="checkbox"/>
60 or older	<input type="checkbox"/>

3. Education

☐ No formal education
☐ Graduate of Primary school
☐ High school
☐ University / Technological institute

4. What percentage of your total income was the production cost for 2021-2022 (current year)?

<50%	<input type="checkbox"/>
50% - 80%	<input type="checkbox"/>
80% - 100%	<input type="checkbox"/>
>100%	<input type="checkbox"/>

5. Are you a member of an agricultural cooperative or a producer group? Yes ☐ No ☐

6. Do you participate in another local association or non-governmental organization? Yes ☐ No ☐

B. Farm information

1. Size of farm

Less than 2ha	<input type="checkbox"/>
2-5 ha	<input type="checkbox"/>
5-10 ha	<input type="checkbox"/>
More than 10 ha	<input type="checkbox"/>

2. How many years have you been involved in agriculture?

Less than 5 years	<input type="checkbox"/>
5-10 years	<input type="checkbox"/>
11-15 years	<input type="checkbox"/>
16-20 years	<input type="checkbox"/>
More than 20 years	<input type="checkbox"/>

RESILINK
INCREASING RESILIENCE OF SMALLHOLDERS WITH MULTI-PLATFORMS
LINKING LOCALIZED RESOURCE SHARING

FEEDBACK FORM

Participant Consent

I, the undersigned, _____, farmer at _____, hereby agree to participate in the testing of the mobile application for resource sharing in agriculture, developed by RESILINK project.

Purpose of the Test:
The purpose of this test is to evaluate the functionalities and effectiveness of the mobile application in the context of managing and sharing agricultural resources.

Confidentiality and Data Protection:
I understand that all data collected during this test will be treated confidentially and used solely for the purpose of evaluating the application. My personal information will not be shared with third parties without my prior consent.

Participant Rights and Freedoms:
I acknowledge that my participation in this test is voluntary and that I may choose to withdraw from the test at any time without any consequences.

Date and Signature of the Participant: _____

إقرار موافقة المشارك

أنا، الموقع أدناه، _____، مزارع في _____، أوافق على المشاركة في اختبار تطبيق التشارك المحلي للموارد الزراعية الذي تم تطويره بواسطة مشروع RESILINK.

هدف الاختبار:
الهدف من هذا الاختبار هو تقييم وظائف وفعالية التطبيق في سياق إدارة ومشاركة الموارد الزراعية.

السرية وحماية البيانات:
أفهم أن جميع البيانات التي يتم جمعها خلال هذا الاختبار سيتم التعامل معها بسرية وستبقى سرية ولن يتم مشاركتها مع أطراف ثالثة دون موافقتي المسبقة.

حقوق المشاركات وأصنافه:
أقر بأن مشاركتي في هذا الاختبار هي طوعية ويمكنني أن أقرر الانسحاب من الاختبار في أي وقت دون عواقب.

تاريخ توقيع المشارك

1

A. Tester Identification

1. What is your age group?

Under 18	<input type="checkbox"/>
18-30	<input type="checkbox"/>
31-45	<input type="checkbox"/>
46-60	<input type="checkbox"/>
Over 60	<input type="checkbox"/>

2. What is your gender?

Male ☐ Female ☐

3. How many years of experience do you have in agriculture?

Not a farmer	<input type="checkbox"/>
Under 5 years	<input type="checkbox"/>
5-10	<input type="checkbox"/>
11-20	<input type="checkbox"/>
over 20	<input type="checkbox"/>

4. What type of agriculture do you primarily practice, if you are a farmer?

Subsistence	<input type="checkbox"/>
Commercial	<input type="checkbox"/>
Both	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>

5. What is the size of your farm, if you are a farmer?

up to 2ha	<input type="checkbox"/>
up to 5ha	<input type="checkbox"/>
up to 10ha	<input type="checkbox"/>
more than 10ha	<input type="checkbox"/>

B. Ease of Use

1. Do you find it easy to create and publish offers in the application?

Yes ☐ No ☐

If no, why: _____

2. Is it simple for you to search and filter for specific listings/offers?

Yes ☐ No ☐

If no, why: _____

3. Is indicating the location with "Farm/Village/City" suitable?

Yes ☐ No ☐

If no, why: _____

4. Is browsing governmental/agricultural news intuitive and quick?

Yes ☐ No ☐

If no, why: _____

5. How would you rate the overall navigation of the application?

Very Easy ☐ Easy ☐ Difficult ☐ Very difficult ☐

2



Scientific Days, Conference, Webinars, ...

https://resilink.eu/seminar_talks

<https://resilink.eu/news>

Mar. 20th, 2023. Egypt



May 24th, 2023



May 16th, 2024



Nov. 5th, 2024



Dec. 26th, 2024



Nov. 21st, 2024

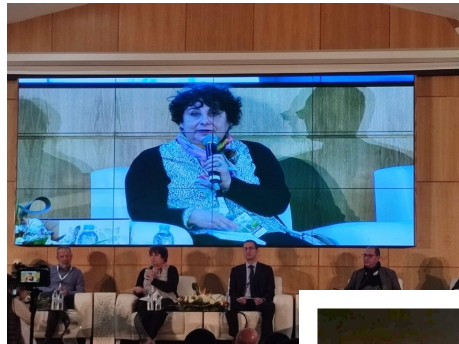


Dissemination

https://resilink.eu/seminar_talks

<https://resilink.eu/news>

Jan 23rd, 2023



Prof. Congduc Pham
<http://www.univ-pau.fr/~cpham>



This project is part of the PRIMA Programme supported by the European Union

Digital platforms and embedded AI to target the smallholder communities

Transdisciplinary research for a healthy planet
March 30-31 mars 2023 – Université de Reims



Mar. 31st, 2023



Mar. 4th, 2024



May 16th, 2024



May 3-5, 2023



Oct 29th, 2024



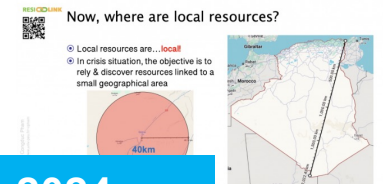
Nov. 19th, 2024



Jan. 17th, 2024



Nov. 5th, 2024





Exhibitions, Fairs, ...

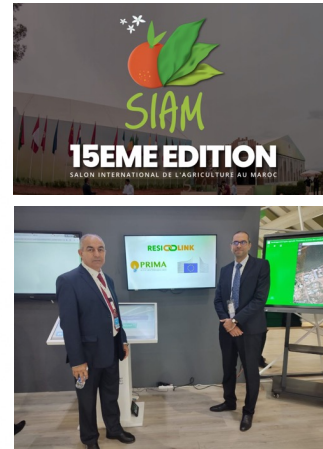
Jan. 23th, 2023



Mar. 2-5, 2023



May 2-5, 2023



May 22-23, 2024



May 21st, 2024





Resilience Smallholder Initiative

- The Resilient Smallholder Initiative was launched on May 31st, 2024, by PRIMA RESILINK, PRIMA INOVFARMER, PRIMA MED-LINKS, H2020 FAIRCHAIN and HE EU4ADVICE



INOVFARMER
Better fruit from smart business

MED-LINKS

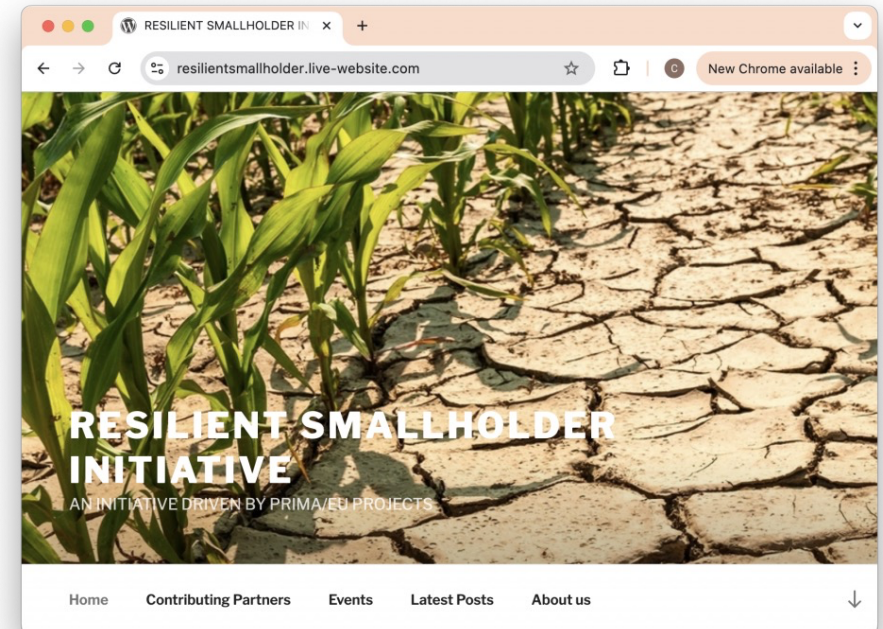


- The main objectives are to collaborate, organize events/webinars, share knowledge, results and tools to increase smallholder farmers' resilience in the agri-food chain, spanning all the aspects addressed by the contributing projects



Resilience Smallholder Initiative

- RESILINK set up the RSI website
- There are currently 11 contributing projects/organizations (6 PRIMA)
- <https://resilient-smallholder.resilink.eu/>



RESILINK



INOVFARMER
Better fruit from smart business

MED-LINKS



INDICATIC AIP
Instituto Nacional de Investigaciones Científicas Avanzadas en Tecnologías de Información y Comunicación AIP



OURMED
OUR NATURE OUR FUTURE

STOP
MED WASTE
Innovative sustainable technologies TO extend the shelf life of Perishable MEDiterranean fresh fruits, vegetables and aromatic plants and to reduce WASTE.



Co-opAbility

INSTITUTE



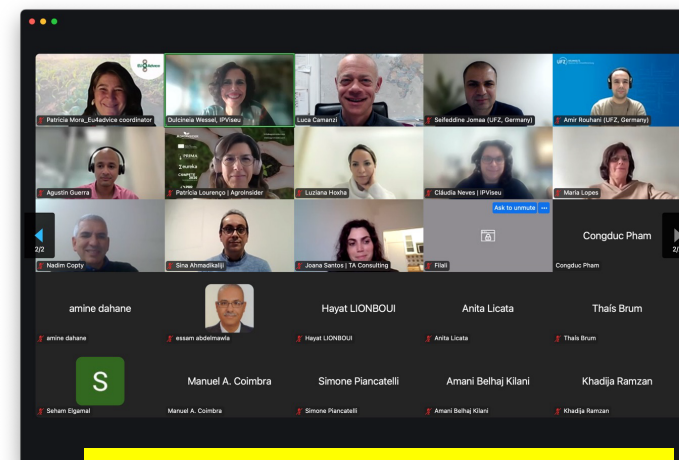


1st webinar of the Initiative

Nov. 21st, 2024



AGENDA	
Time are in CET (UTC+1)	
14:00-14:10	Welcome to Resilient Smallholders Initiative
14:10-14:20	StopMedWaste/FoodWaStop – Food Loss and Waste Postharvest
14:20-14:30	OurMED – Social and Technological Innovations
14:30-14:40	ReCROP – Eco-friendly Agronomic Practices to Increase Plant Resilience
14:40-14:50	EU4Advice – Advisory Services for Short Food Supply Chains
14:50-15:00	Med-Links – Efficiency, Sustainability and Fairness along Fruit and Vegetables Supply Chains
15:00-15:10	FairChain – Social, Technological, and Organizational Innovations for better Intermediate Food Value Chains
15:10-15:20	InovFarmer.MED – Better Fruit from Smart Business
15:20-15:30	RESILINK – Digital Platforms and Designs to Facilitate Resource Sharing
15:30-15:40	INDICATIP AIP – Defining ICT strategy towards smallholder farmers
15:40-16:30	Round Table with contributing projects and Dr Mohamed Wageih (PRIMA Project Officer, Agro-food Value Chain Thematic Area) on “The Challenges of Smallholders Towards Increased Sustainability and Resilience”.

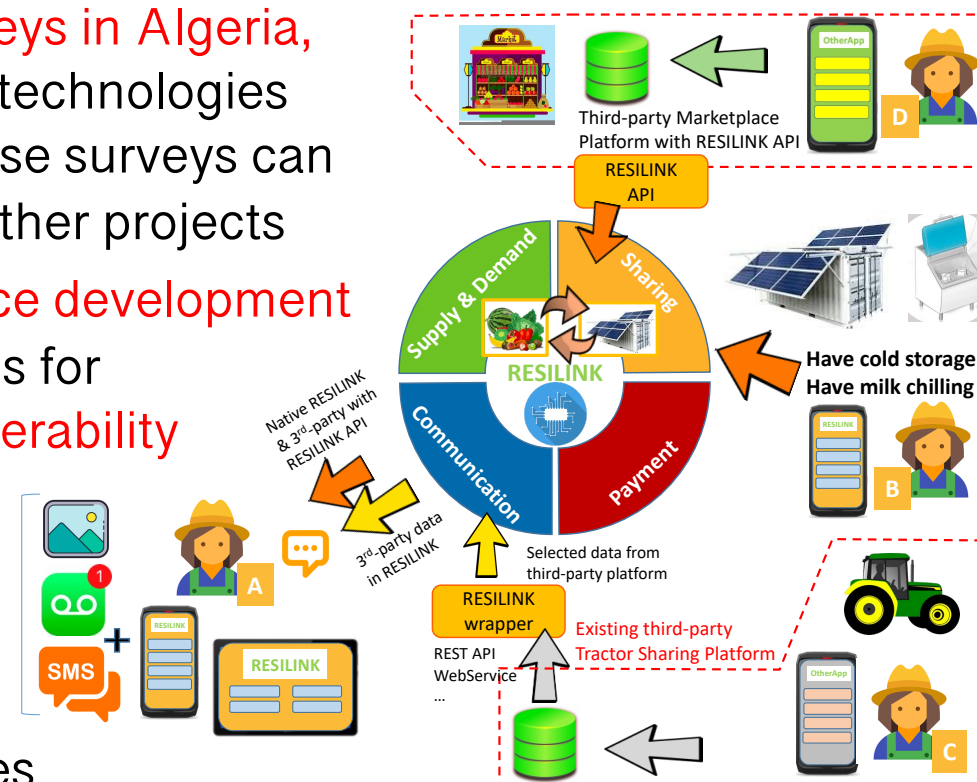


79 participants registered



What can RESILINK do for other projects?

- RESILINK conducted **several surveys in Algeria, Egypt and Morocco** on how digital technologies are perceived by smallholders. These surveys can provide valuable information for other projects
- The RESILINK open API will **reduce development time & complexity** for new platforms for sharing resources, allowing **interoperability**
- RESILINK can **test the open API for other application domains** addressed by projects in the Resilient Smallholder Initiative, increasing the number of Use Cases



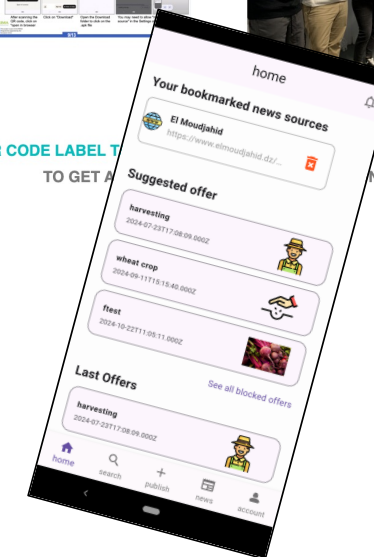


What other projects can bring to RESILINK?

- RESILINK is **regularly launching evaluation campaigns** for the developed digital tools
- RESILINK would like to **benefit from the network** provided by other projects to launch these test campaigns and to collect feedback
- RESILINK is also interested in **participating to dissemination events** where the RESILINK's approach could be presented and demonstrated



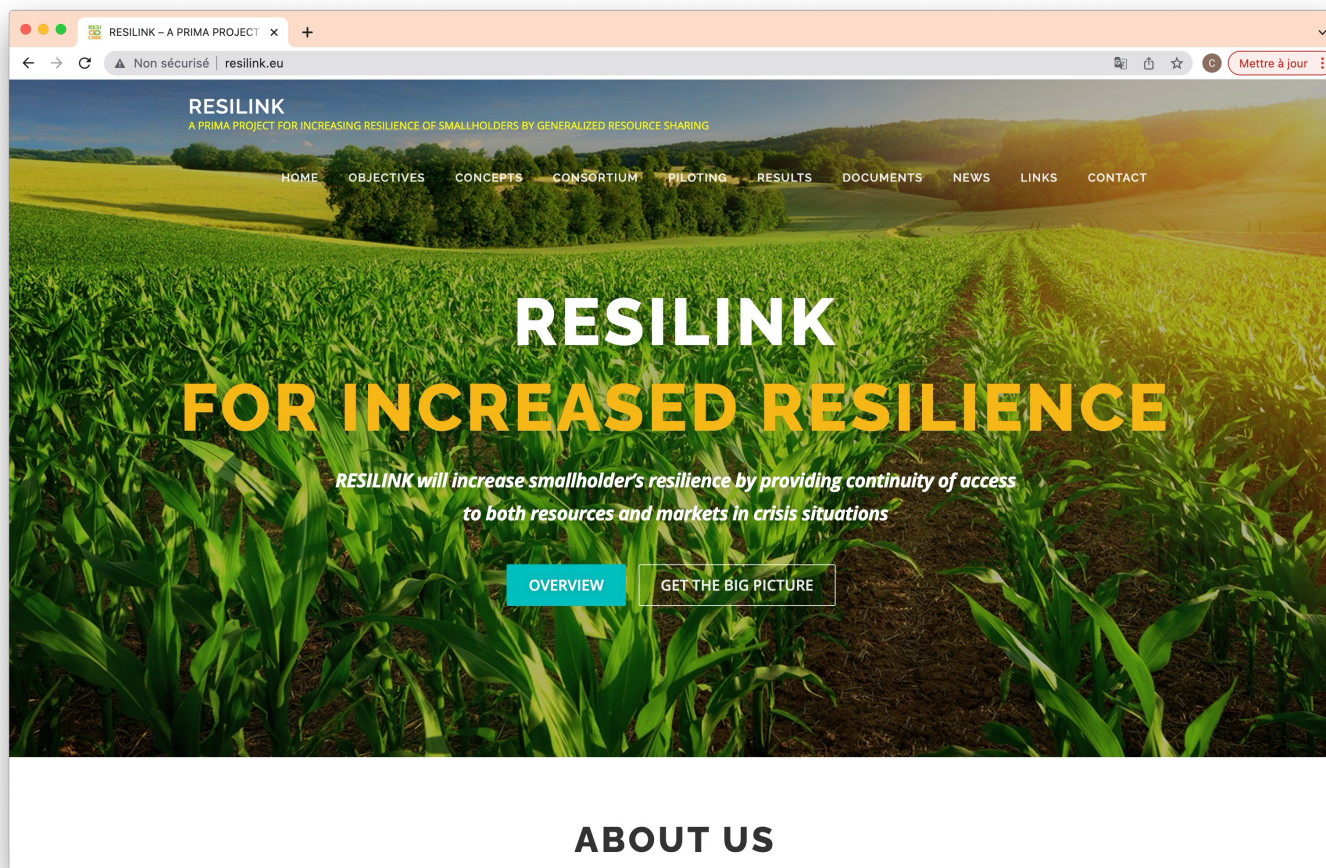
GET THE QR CODE LABEL TO GET A



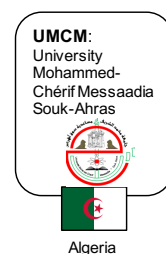
DISTRIBUTED TO TESTERS IN LINKS



Web site: <https://resilink.eu>



<https://resilink.eu>



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