



# Digital health at scale: Key considerations for developing markets

Best practise examples from South Africa and Mexico

GDHN webinar

Thursday 30<sup>th</sup> August 2018



# Webinar overview

- Scaling digital health in developing markets [5 min]
- Mezzanine – SVS in South Africa [20 min]
- Carlos Slim Foundation – CASALUD in Mexico [20 min]
- Q&A [10 min]



# What does GSMA mHealth do?

Who is GSMA M4D?

GSMA Mobile for Development (M4D) works with the mobile industry to identify opportunities and deliver innovations with socio-economic impact. It is a donor-funded, not-for-profit organisation.

What is mHealth's mission?

The mission of M4D's mobile health programme (mHealth) is to advance the digital health industry through scalable and commercial mobile services.

What have we achieved?

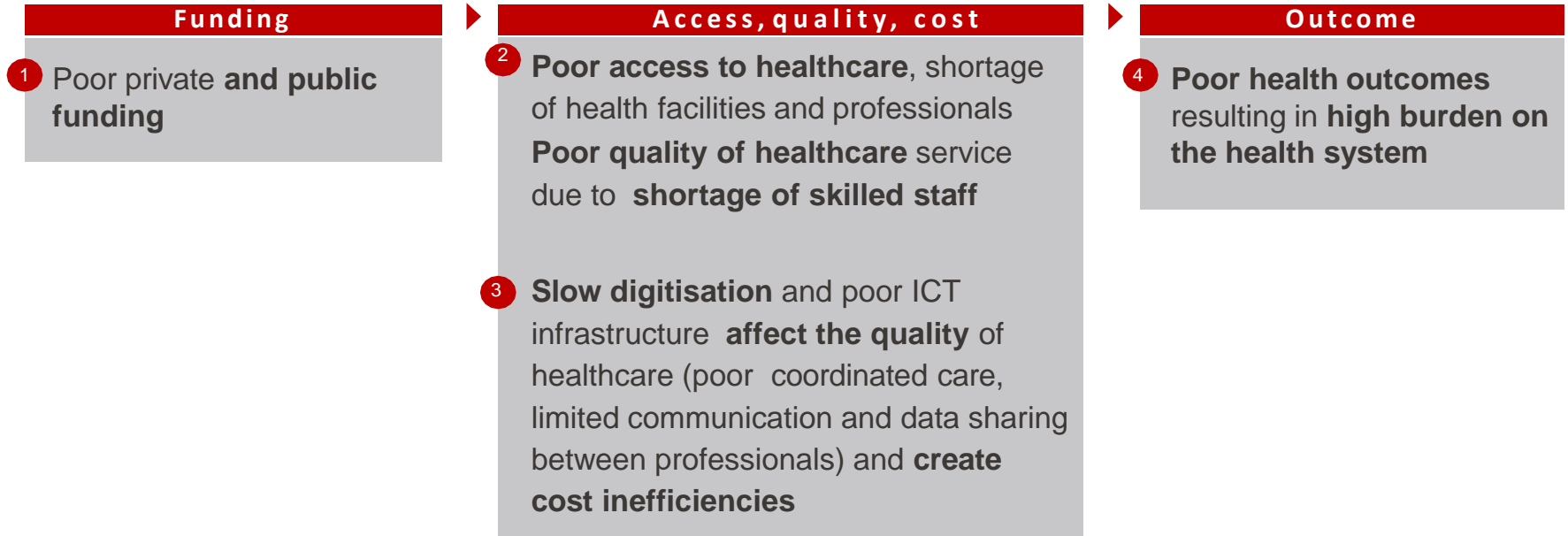
Since 2014, the mHealth programme, under the mNutrition Initiative, supported digital health services across 8 markets in SSA. The programme successfully reached over two million users with mobile-based health and nutrition information with evidenced behaviour change among users.

What are our plans for the coming months?

We are focused on advocating best practice approaches to delivering digital health at scale, with commercially sustainable business models.



# Healthcare landscape: Key health issues in developing countries





# An increasing number of initiatives and solutions

Source: GSMA Intelligence

## Digital health – key categories and use cases

Healthcare systems <span data-bbox="542 349 600 401">B2G</span>	Healthcare centres <span data-bbox="956 349 1014 401">B2G or B2B</span>	Healthcare professionals <span data-bbox="1360 349 1418 401">B2G</span>	Patients <span data-bbox="1785 349 1852 401">B2C</span>
<ul style="list-style-type: none"><li>• Digitisation of supply-chain management</li><li>• Digitisation of patient information (vital event tracking)</li><li>• Digital booking and payment platform</li><li>• Personal data hosting &amp; storage</li><li>• Data analytics (e.g. disease outbreak risk)</li></ul>	<ul style="list-style-type: none"><li>• Digitisation of health centres</li><li>• Remote patient monitoring</li><li>• Remote diagnostics</li><li>• Mobile health records</li><li>• Imaging</li></ul>	<ul style="list-style-type: none"><li>• Digitisation of professionals and their interaction</li><li>• Workforce management</li><li>• Education and training</li><li>• Telemedicine</li><li>• Data collection and reporting</li></ul>	<ul style="list-style-type: none"><li>• A2P health and wellness information</li><li>• P2P anonymous consultation</li><li>• P2P medical advice</li><li>• Digital payment for health purposes</li><li>• Insurance</li></ul>



## Recommendations for the industry

- Digital health stakeholders need to **demonstrate the value of digital solutions to drive stable financial investment**
- Ecosystem collaboration is needed to **address current fragmentation** and create a **holistic digital health model**
- Industry collaboration is needed to **address current interoperability** issues and drive **healthcare data integration**



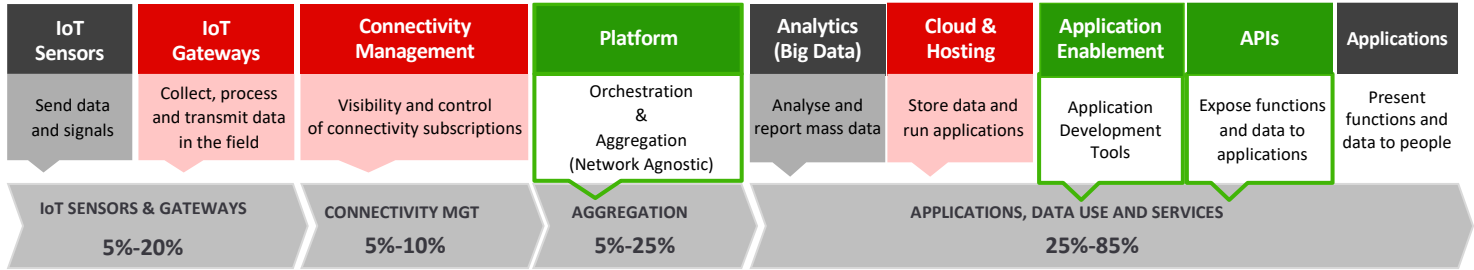
**Mezzanine**  
Jacques de Vos  
CEO



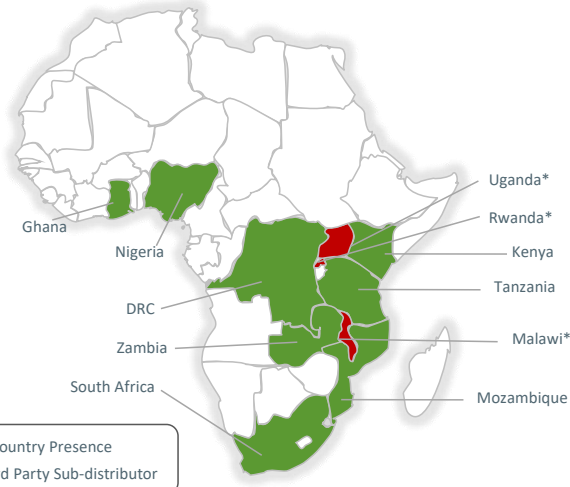
**GSMA**  
Kim Viljoen  
Insights Manager



# Introduction to Mezzanine



- Third Party
- Mezzanine
- Telco (MNO)





# Economic diffusion

Translate technology benefit into an economic benefit



Health



Security



Transport



Agriculture



Banking  
and Insurance



e-Commerce



Education



# Mezzanine's health portfolio



**mezzanine**  
creating productive societies



Medicine Supply



Government & Finance



Health Care Facility



Health Care Provider



Citizen



Pathology



Community

To transform  
**HEALTHCARE**  
Service Delivery



Cloud



Internet of Things



Payments



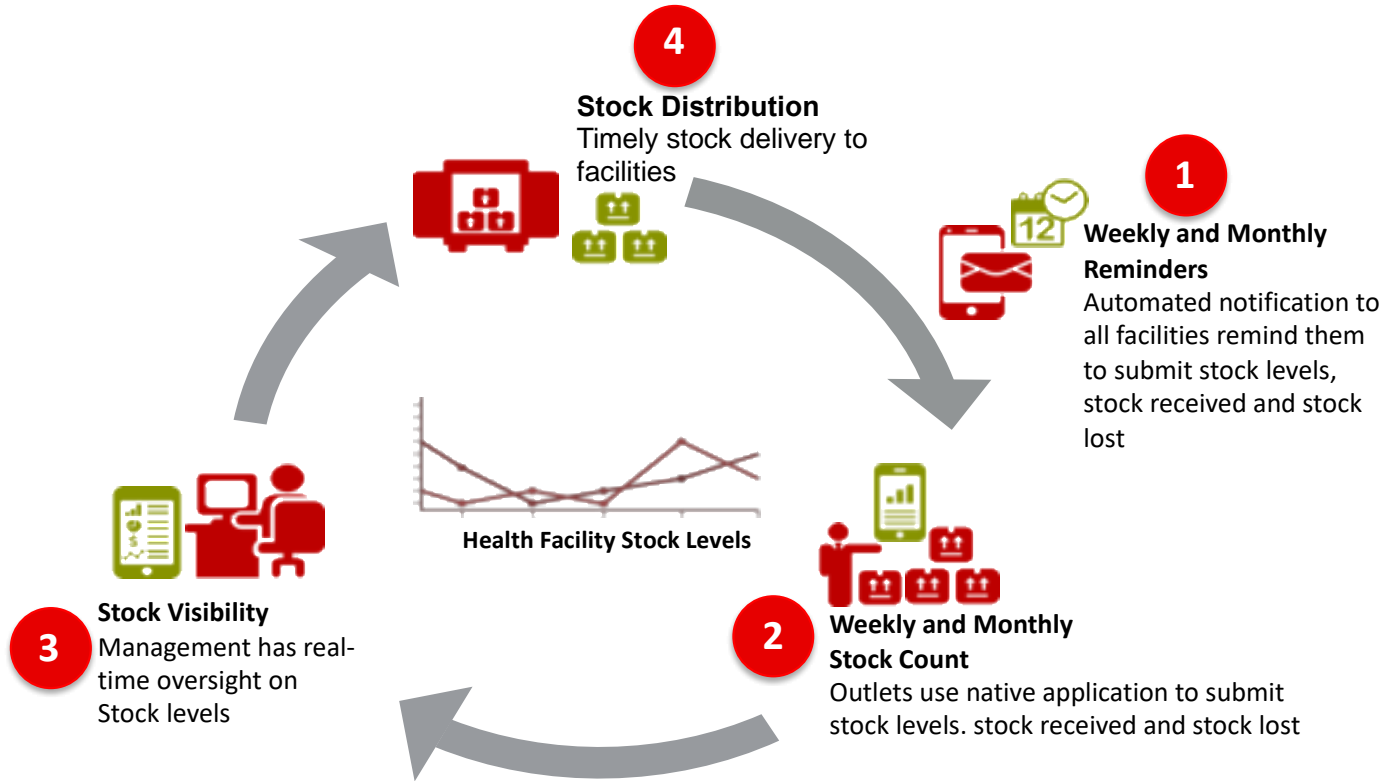
Big Data

# The need for improved stock management

- 30% of health facilities across SSA markets reported stock-outs of essential medicines

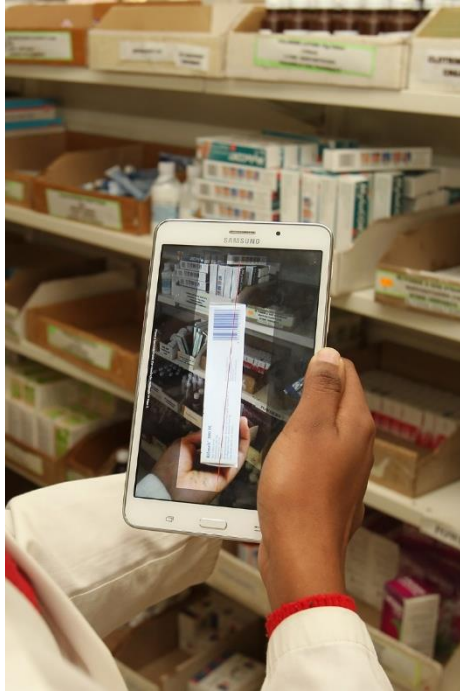


# The Stock Visibility Solution





# The Stock Visibility Solution





## SVS journey

- Piloted in 1,800 facilities across 3 provinces in SA from 2014 – 2016
- Following the successful pilot, the number of SVS implementation facilities grew from around 1,800 to 3,100 within four months
- In 2016 SVS was rolled out in 251 facilities in Kaduna State, Nigeria
- In 2017 SVS was implemented across 3 provinces in Zambia





## SVS results

- Over 14 million submissions to date
- 94% submission rate
- Following implementation in the province of KwaZulu-Natal, stockouts decreased by:
  - 46% for ARVs,
  - 49% for TB medicines, and
  - 14% for vaccines



## Let's chat...

- What were some of the key challenges or lessons that you have learned through scaling SVS nationally?
- What were some of the key approaches for securing government ownership and financing?
- What is the end goal for SVS with respect to funding?
- What are the primary considerations for implementing digital health solutions within the public health system?
- Evolution of SVS... what's next?





**Carlos Slim Foundation**  
Rodrigo Saucedo Martínez  
Health Innovations Senior  
Manager



**GSMA**  
Mojca Cargo  
Senior Market Engagement  
Manager



# Introduction to Carlos Slim Foundation

A high sense of social responsibility, efficiency and opportunity with the aim to improve the quality of life of people of all ages, promote the formation of human resources and create opportunities that foster the integral development of individuals and their communities.

Approach: solving social inequalities as private sector does:

1. Identify and find solutions
2. Provide the necessary resources to solve the problem

This approach is different from first providing the resources and then defining how to use them.

	<b>Education</b>		<b>Health</b>		<b>Employment</b>
	<b>Sport</b>		<b>Environment</b>		<b>Migrants</b>
	<b>Human Development</b>		<b>Humanitarian Aid</b>		<b>Culture</b>
	<b>Economic Development</b>		<b>Justice</b>		<b>Road Safety</b>



# NCDs are the main health problem in Mexico

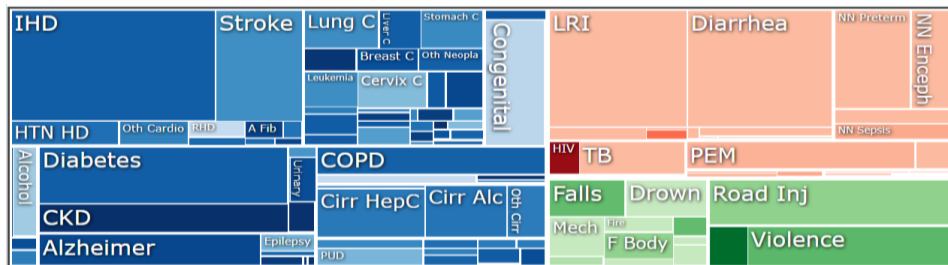
The prevalence of NCDs in Mexico has increased rapidly. It spans all levels of society and is increasing rapidly among the poor. The Mexican health system is struggling to effectively adapt to the new disease burden. Health care spending represents approximately 6% of GDP, and is divided near equally between the public and private sector.

## Consequences of NCDs in Mexico: mortality and morbidity

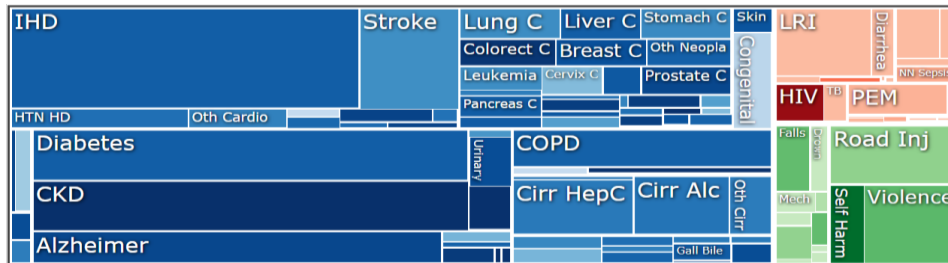
Rapid increase in the prevalence of NCDs has also increased the ratio of morbidity and mortality attributable to NCDs.

- 1990: 55% of deaths
- 2016: 80% of deaths
- 2025: 90% of deaths

Deaths in 1990



Deaths in 2016





# The CASALUD model

## Reengineering the prevention and management of NCDs

CASALUD centers its model on proactive prevention and detection of risk factors and NCDs, as well as evidence-based disease management .

### CASALUD relies its operation on:

- Use of innovative tools to connect households and primary care clinics
- Enhance patient-centered care medical personnel
- Detect disease in a timely manner
- Improve the availability of medicines



### **Integrated Metabolic Approach**

Obesity, diabetes, hypertension, dyslipidemia and CKD

### **Anticipatory Approach**

Proactive prevention through systematic risk assessment

### **Coordinated Approach**

Throughout the continuum of care

### **Performance-based approach**

Evidence-based disease Management

### **Accountable Care**

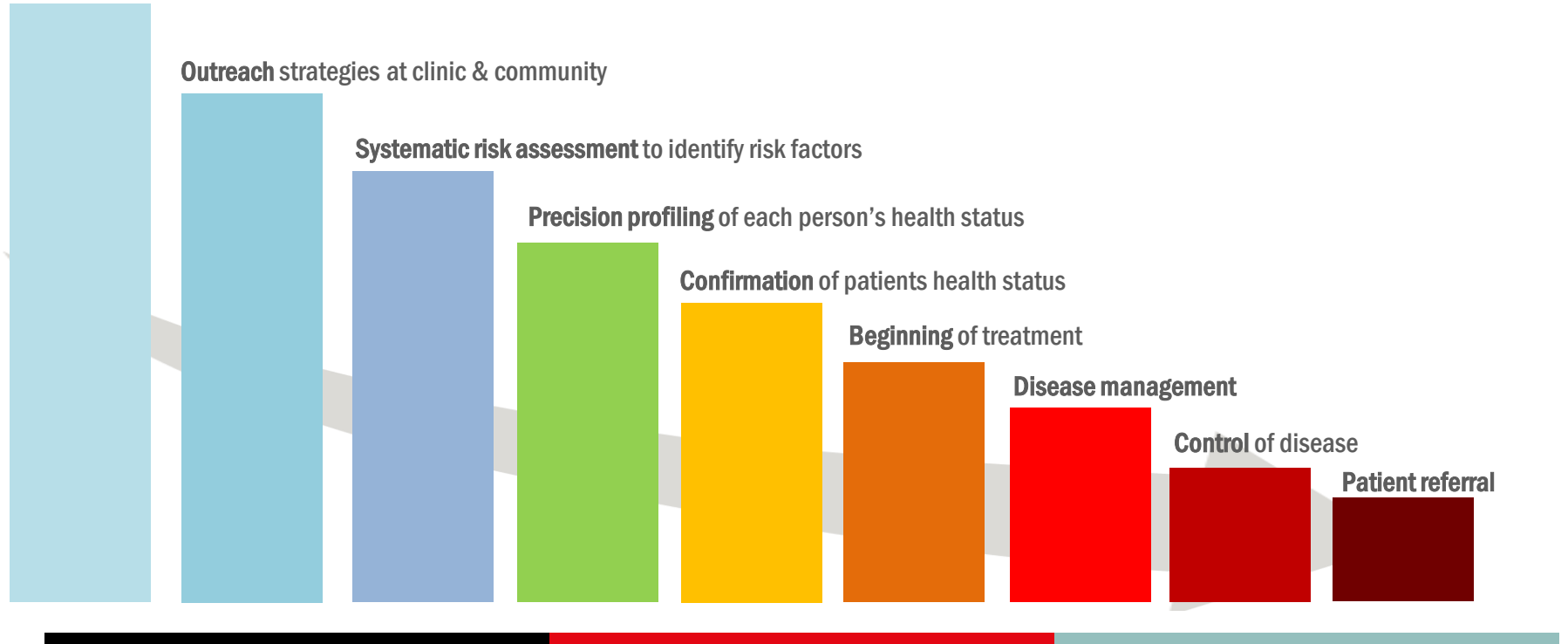
Transparency



# The CASALUD model

## Following the person throughout the continuum of care

Identification of target population





# The CASALUD model: Main elements

## Effective management of NCDs

### Co-responsibility

Engagement into a healthy lifestyle and continuous interaction with health professionals

### Performance monitoring

Web-based coaching and cloud-based dashboard

### Human capital strengthening

Robust online platform



## Person-centered health experience

**Systematic risk assessment** Proactive prevention at the community, household and primary health clinics with MIDO®

**Systematic risk management** Clinical decision making support and follow-up

### Online stock monitoring

Medicines and lab tests



# Results: Inclusion as a nationwide health policy

**CSF established a strategic partnership with the Mexico's MoH to:**

- A) Implement CASALUD as the national model of reference at the National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes in October 2013.
- B) Monitor the performance of CASALUD in OMENT, the Mexican Observatory of NCDs, where data is updated on a daily basis.

## **Main results:**

- MIDO: 815,194 individuals have been screened since January 2014 in 138 clinics, and a national scale-up is in progress.
- SIC is the official information system of Mexico's NCDs management at primary care clinics:
  - Information of 1.8 million patients with diabetes, hypertension and obesity.
  - Measurement of A1c has increased from 13.9% to 52.2%.
  - A1c < 7% has increased from 35.6% to 42.6%.
- The Diabetes Quality of Care Index (ICAD) is now the official metrics to monitor performance.
  - Diabetes quality of care index has increased from 58.7 to 63.4 from July 2016 to April 2018.
- Strengthening of human capital: to date 17,000+ has graduated alumni since 2009.



# Recommendations

## Tips for scaling

- Create demand and build your case; it will attract government investment.
- Convene partnerships; leverage on others' expertise.
- Build trust: it takes time.

## About the solutions

- Add value to the end-user, not only the patient.
- Interoperability: along the continuum of care and across different health areas.
- Engage the users and the patients; go to the field and listen to them.





# Future plans

- **Today:** disease approach
- **Future:** client approach → integrated health



Thank you for joining this webinar

For more information please contact us on  
[mobilehealth@gsma.com](mailto:mobilehealth@gsma.com)

To access our resources visit:

[www.gsma.com/mobilefordevelopment/resources-2/](http://www.gsma.com/mobilefordevelopment/resources-2/)