

An aerial photograph of a city, likely in a developing region, showing a mix of modern multi-story buildings and older, more densely packed structures. The city is situated in a valley with rolling hills and fields in the foreground and mountains in the distance. A large blue rectangular box is overlaid on the center of the image, containing white text.

# How to secure land administration capacity in a rapidly changing environment?

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Ordnance Survey

# Megatrends

Define what we do,  
how we do things and  
what is possible to do

The digital  
transformation



Globalization



Urbanization



Technological  
advancement

New business  
ecosystems



Climate change



Individualization



Knowledge-based  
society



Diversity and pluralism

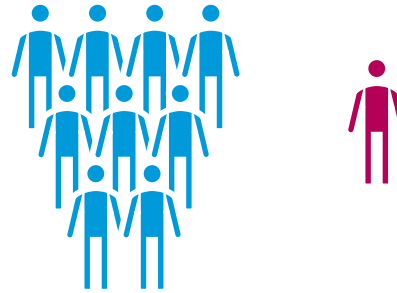


Agenda 2030

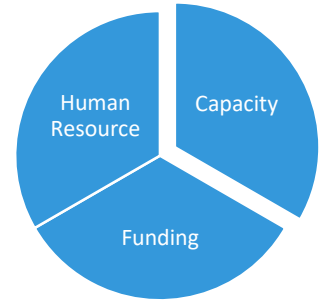
# Challenges

## Challenges

Individuals/land excluded from formal system



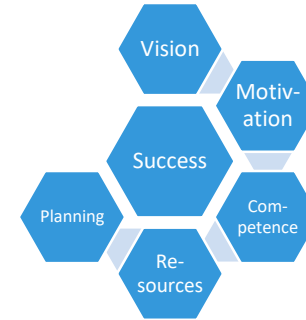
Financial and human resources constraints



Paper-based systems



Unsustainable custom-made systems



Change management failures

Costly one-off digitalization






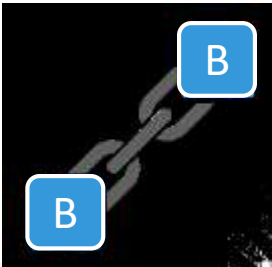



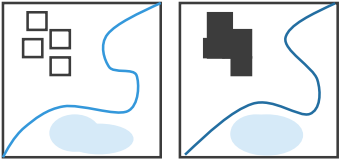
Data in silos and weak interoperability



# Unlocking the Benefits of Technology and SaaS

| Solution Attributes                       |   | Customer Benefits  |
|---|---|--|
| <b>Cloud-based</b>                        | <ul style="list-style-type: none"><li>• “As-a-service” delivery model</li><li>• Scalable architecture</li><li>• Ubiquitous access</li><li>• Flexibility in hosting</li></ul>  | <ul style="list-style-type: none"><li>• Reduced up-front investment</li><li>• Faster time-to-deployment</li><li>• Facilitates data sharing</li><li>• Reduced risk</li><li>• Ability to expand storage and processing capability</li><li>• Data security</li><li>• Can be hosted on-site or in public or private cloud</li></ul>  |
| <b>Modular architecture</b>               | <ul style="list-style-type: none"><li>• Embedded capabilities</li><li>• Highly configurable</li><li>• Global/shared platform</li><li>• Accept flexibility in data source</li><li>• Capable of swift evolution</li></ul> | <ul style="list-style-type: none"><li>• Customer begins with head-start</li><li>• Increased ability to deal with change</li><li>• Shares cost/knowledge across customer base</li><li>• Allow for differing levels of data completeness and quality</li><li>• Quickly absorb new types of data (e.g. 2D -&gt; 3D)</li><li>• Reduced upgrade costs and re-engineering work</li><li>• Resilient to architecture erosion</li></ul> |
| <b>Configurable evolutionary services</b> |   | <ul style="list-style-type: none"><li>• Trusted collaboration for sustainable systems and services</li></ul>   |
| <b>Leverage domain expertise</b>          |   | <ul style="list-style-type: none"><li>• De-risk capacity constraints</li></ul>   |

# Built-in Evolution

|   |   |   |  |
|---|---|---|--|
| 3D/4D representation  |   | BIM   |   |
|    | Automated change detection  |    | Blockchain   |
| Automated feature extraction  |  | Big Data  |  |
|  | AI/AR   |  | Automated generalization   |

# Configurable evolutionary systems and services for sustainable land administration

