Sandbox Interactive Exercise

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1 Sandbox Cycle

2 Governance and Operating Framework
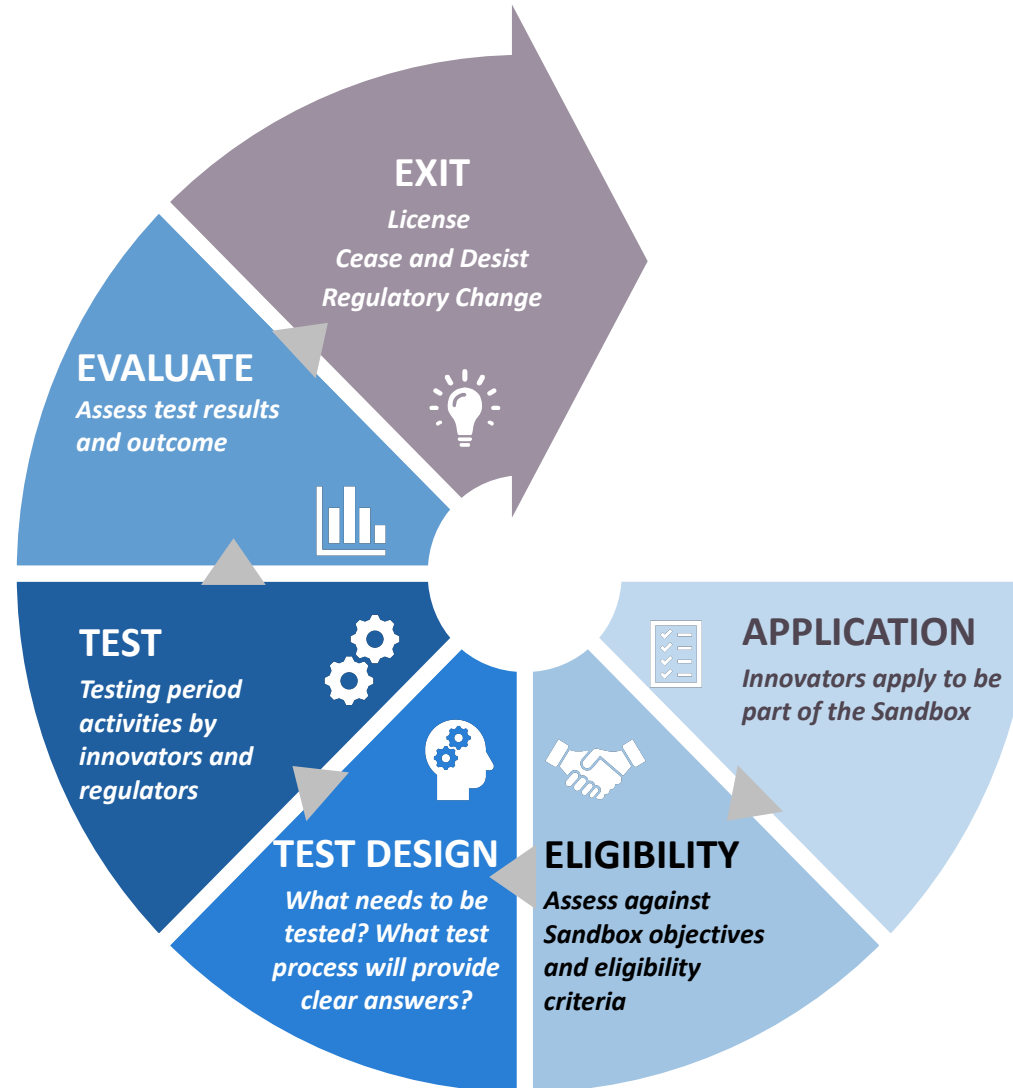
3 Designing a Test

1 Sandbox Cycle

Sandbox Cycle

EXIT
License
Cease and Desist
Regulatory Change

EVALUATE
Assess test results and outcome

APPLICATION
Innovators apply to be part of the Sandbox

TEST
Testing period activities by innovators and regulators

TEST DESIGN
What needs to be tested? What test process will provide clear answers?

ELIGIBILITY
Assess against Sandbox objectives and eligibility criteria

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Application

- Typical application requires
  - Description of innovation and why it should be in the sandbox
  - Details on company, team, technology, business plan
  - Proposed test including risks and mitigants
- Other considerations
  - Who: Regulated firms, new entrants
  - From where: domestic, foreign entrants
  - Cohort approach:
    - Prioritization or theme for the current cohort
    - Competitive implications of including/excluding if there are similar innovations

Eligibility

Mandate
- New technology
- New business model
- Falls outside existing regulated products and services, or is a hybrid
- Ready to test – sandbox is not an incubator

Focus
- New technology
- New business model
- Falls outside existing regulated products and services, or is a hybrid
- Ready to test – sandbox is not an incubator

Authority
- Is authorization required to operate outside existing rules
- Is the Sandbox able to issue a waiver
- Specific format:
  - Waiver
  - No-objection letter
  - Sandbox license

Test Design

- Most important and difficult task of the sandbox team
- More later…

Test

- Innovators operate, subject to the test design and limitations
- Sandbox operators monitor
  - Receive reports
  - Test themselves
  - Site visits
  - Customer feedback and/or focus groups
- Decisions may need to be made, e.g.:
  - Stop the test if appears dangerous to consumers or system
  - Modify test if customer behavior is not as expected or results are not leading to the required data

Evaluate

- Customer experience and product/service performance
  - Service levels, NPLs, other relevant criteria
- Regulatory issues tested
  - Does the product/service fit within an existing regulatory construct or does it merit a change in the regulation to permit rollout
- Technology issues tested
  - Is the technology safe, reliable, effective
- Business success is not a primary evaluation criteria for a sandbox unless there are implications for financial stability

Exit

Consider need for regulatory change

End of Test Period

2 Governance and Operating Framework

Governance

- Is Sandbox strategy determined within the regulator or externally?
  - What law, regulation or circular was required to set up the sandbox?
  - How was strategy and accountability defined
- Who holds decision-making authority
  - Issuing waiver, no-objection letter, or sandbox license
  - Approving test
  - Determining exit
- What other authorities need to be involved, consulted

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Operating Framework

Decision Making
- Overall guidance, strategy:
  - Policy
  - Regulatory issues
- Forming Fintech Unit
  - Management and accountability
  - External experts
- Criteria for participation
- Approvals of tests, waivers, cease & desist
- Decisions on post-test exit

Day-to-Day Operation
- Running the Sandbox (application, evaluation, testing, recommendation, reporting, monitoring, case officer)
- Review and short-list of applications
- Monitoring progress
- Reviewing final reports and making recommendations to decision making team.

Subject Matter Expertise
- Subject matter guidance to Fintech Unit/Sandbox team
  - Review applications, test plans
  - Assist in monitoring tests, evaluating results, exit plans
- May internal from other departments of the regulator, or external (local/international)

3 Designing a Test

Case: Banque Verte E-KYC

- Banque Verte, a retail bank licensed in Senegal, is seeking to implement totally digital customer onboarding and account opening for full service customer accounts.

- They are partnering with DigiKnowYC, a technology company, to offer full regular e-KYC through a smartphone app. This will allow remote account opening through the bank's smartphone app, Banque Verte Movile (BVM)

- DigiKnowYC enables customers to share their information and documentation electronically. This information is authenticated and validated by the platform remotely. The entire process is conducted over a video link and using facial recognition technology, so no longer requires going to a branch.

Banque Verte E-KYC – Sandbox Eligibility

- Is this available in the market now? If not, what is new here?
- Would this be a positive addition to the market?
- What regulations or laws cover this activity?
- Would a sandbox test require a waiver or NOL?

Banque Verte E-KYC – How it Works

The eKYC is accomplished through an online link with video functionality. Once an online account is created the consumer will be required to take pictures of two different types of identification documents. They will then be required to take multiple pictures of their face which will then be processed through the in-built facial recognition software and matched against the identification documentation submitted. A video "liveness test" completes the process by ensuring that it is a live person whose pictures and documents have been submitted.

Test Design – Round 1

- What do we need to test?

- How can we test that?

- What limits or parameters should be put in place?

- Any other considerations in the test design?

Test Design – Common Considerations

- How did we do in incorporating common test components?

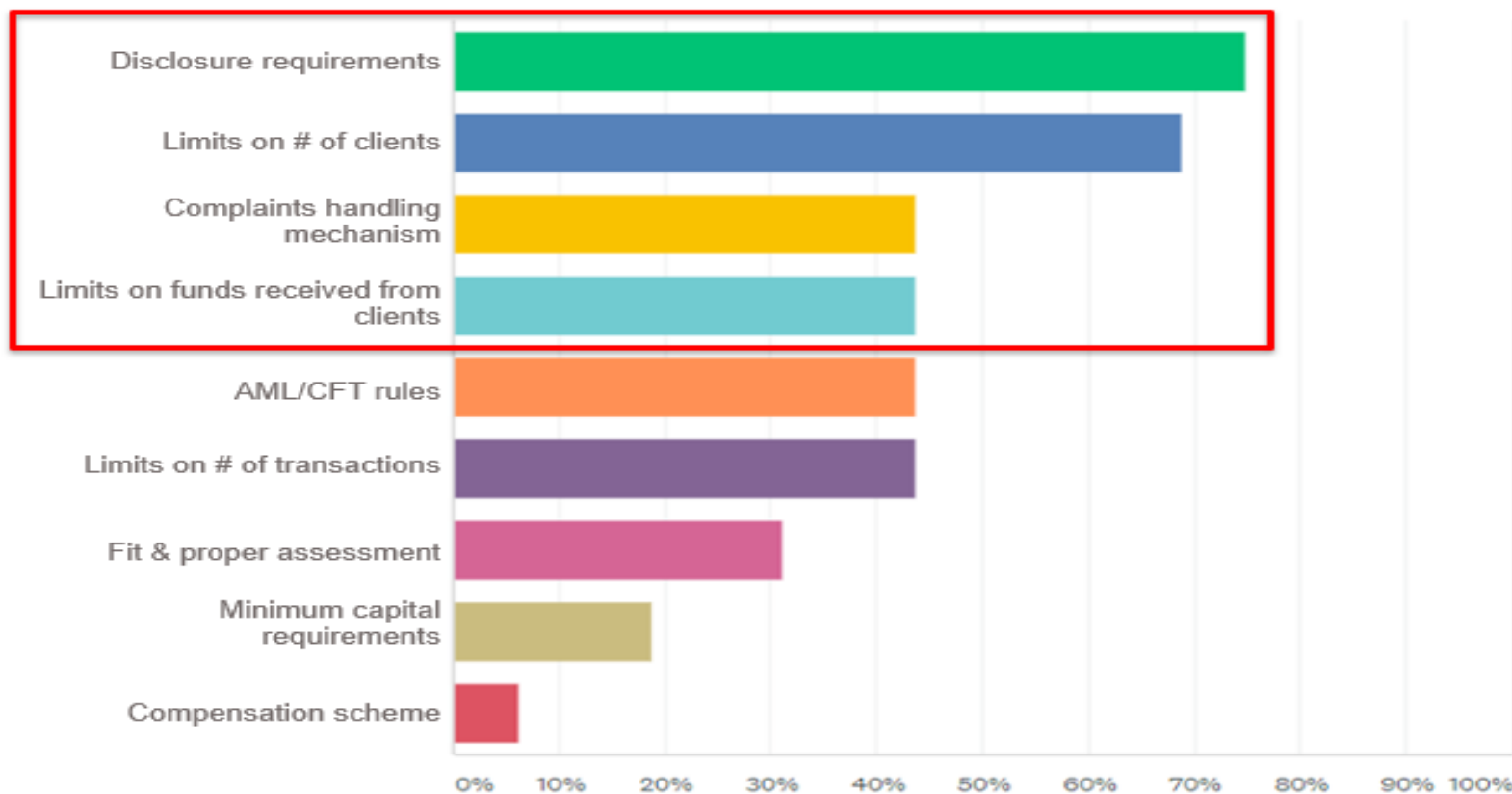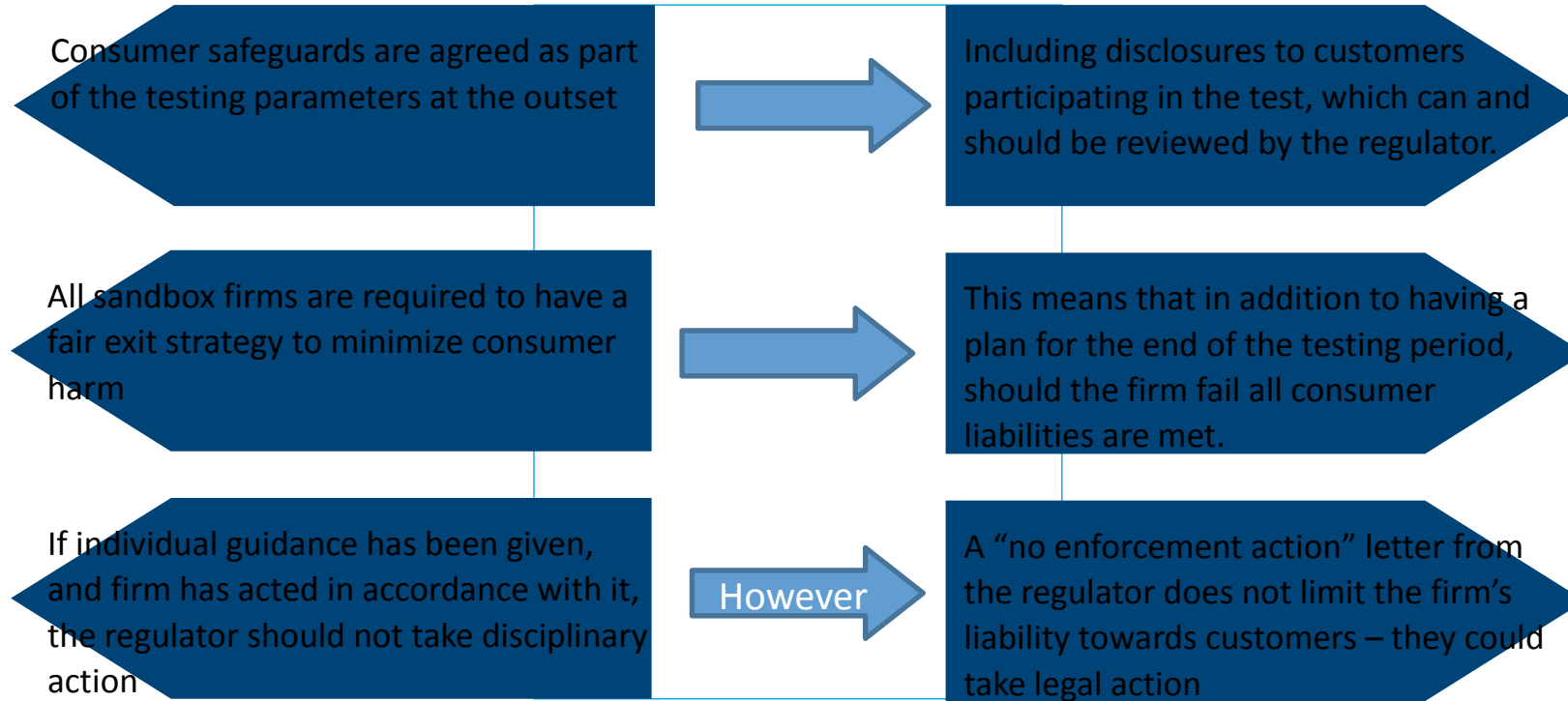|	
A plan for testing in the sandbox setting out the timeline and key milestones	Measures for success for testing (KPIs)
Testing parameters (duration, customer / transaction limit)	Customer safeguards
Risk assessment	Exit strategy

Test Design – Common Safeguards

Source: WBG-CGAP Innovation Facilitator Survey

Safeguard Issues

Consumer safeguards are agreed as part of the testing parameters at the outset → Including disclosures to customers participating in the test, which can and should be reviewed by the regulator.

All sandbox firms are required to have a fair exit strategy to minimize consumer harm → This means that in addition to having a plan for the end of the testing period, should the firm fail all consumer liabilities are met.

If individual guidance has been given, and firm has acted in accordance with it, the regulator should not take disciplinary action → However → A "no enforcement action" letter from the regulator does not limit the firm's liability towards customers – they could take legal action

Test Design – Round 2

- What elements might you add/change to your test design?
- How you ensuring that the key regulatory issue is being robustly tested?
  - What purposes does in-person account opening serve?
  - How does the test ensure that those purposes are adequately served? Null hypothesis: digital KYC cannot replace in-person account opening

Test Design – Robustness

- Null hypothesis:

  Digital KYC cannot replace in-person account opening

Type 1 error: rejection of true NH

  Test accepts e-KYC even though it is not as reliable

Type 2 error: acceptance of false NH

  Test rejects e-KYC even though it is just as reliable, or better

One Approach

- Market the availability of instant account opening through BVM. Allow new customers to apply through the app, with appropriate disclosures.

- For those customers that pass the checks on eKYC, require in-person verification at a branch within one month (so account is open instantly, but needs in-person verification for use beyond one month). Limit transactions until in-person verification.

- Collect customer feedback through app. Fine tune product accordingly.

- Six months; report to sandbox team/case officer monthly.

Discussion

- What level of matching e-KYC to in-person should be required (what error rate is acceptable)
- Is this test robust? What type(s) of error does it address?
- Safeguards: What are the risks? How are they mitigated?
- Exit: what should happen if e-KYC is accepted? Rejected?