

The importance of establishing R&D ecosystems in support of digital disruption

Wits DigiMine digital technology seminar

Head of Technology and Innovation, Alex Fenn

10 December 2020

The information in this announcement may contain forward-looking statements within the meaning of the “safe harbour” provisions of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements, including, among others, those relating to Sibanye Stillwater Limited’s (“Sibanye-Stillwater” or the “Group”) financial positions, business strategies, plans and objectives of management for future operations, are necessarily estimates reflecting the best judgment of the senior management and directors of Sibanye-Stillwater.

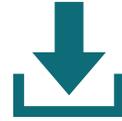
All statements other than statements of historical facts included in this announcement may be forward-looking statements. Forward-looking statements also often use words such as “will”, “forecast”, “potential”, “estimate”, “expect” and words of similar meaning. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances and should be considered in light of various important factors, including those set forth in this disclaimer. Readers are cautioned not to place undue reliance on such statements.

The important factors that could cause Sibanye-Stillwater’s actual results, performance or achievements to differ materially from those in the forward-looking statements include, among others, our future business prospects; financial positions; debt position and our ability to reduce debt leverage; business, political and social conditions in the United States, South Africa, Zimbabwe and elsewhere; plans and objectives of management for future operations; our ability to obtain the benefits of any streaming arrangements or pipeline financing; our ability to service our bond instruments; changes in assumptions underlying Sibanye-Stillwater’s estimation of their current mineral reserves and resources; the ability to achieve anticipated efficiencies and other cost savings in connection with past, ongoing and future acquisitions, as well as at existing operations; our ability to achieve steady state production at the Blitz project; the success of Sibanye-Stillwater’s business strategy; exploration and development activities; the ability of Sibanye-Stillwater to comply with requirements that they operate in a sustainable manner; changes in the market price of gold, PGMs and/or uranium; the occurrence of hazards associated with underground and surface gold, PGMs and uranium mining; the occurrence of labour disruptions and industrial action; the availability, terms and deployment of capital or credit; changes in relevant government regulations, particularly environmental, tax, health and safety regulations and new legislation affecting water, mining, mineral rights and business ownership, including any interpretations thereof which may be subject to dispute; the outcome and consequence of any potential or pending litigation or regulatory proceedings or other environmental, health and safety issues; power disruptions, constraints and cost increases; supply chain shortages and increases in the price of production inputs; fluctuations in exchange rates, currency devaluations, inflation and other macro-economic monetary policies; the occurrence of temporary stoppages of mines for safety incidents and unplanned maintenance; the ability to hire and retain senior management or sufficient technically skilled employees, as well as their ability to achieve sufficient representation of historically disadvantaged South Africans in management positions; failure of information technology and communications systems; the adequacy of insurance coverage; any social unrest, sickness or natural or man-made disaster at informal settlements in the vicinity of some of Sibanye-Stillwater’s operations; and the impact of HIV, tuberculosis and the spread of other contagious diseases, such as coronavirus (“COVID-19”). Further details of potential risks and uncertainties affecting Sibanye-Stillwater are described in Sibanye-Stillwater’s filings with the Johannesburg Stock Exchange and the United States Securities and Exchange Commission, including the Integrated Annual Report and the Annual Report on Form 20-F.

These forward-looking statements speak only as of the date of the content. Sibanye-Stillwater expressly disclaims any obligation or undertaking to update or revise any forward-looking statement (except to the extent legally required).



Organisations in different verticals have varied focus in terms of R&D associated with their primary value proposition



Specific verticals will have majority focus on finite objectives due to a dissociation in their product value chain



This, in general, makes R&D investment decisions easier to contemplate for a significant majority of organisations

Long Term Example

- Significant multi-disciplinary fundamental research
- Requires absolute certainty (life or death)
- Entire product evolution

Pharmaceuticals 5-15 years

Medium Term Example

- One-dimensional applied research with pockets of fundamental research
- Requires high levels of certainty (and absolute in cases)
- 30% product evolution

Automotive 3-5 years

Short Term Example

- Rapidly evolving fundamental and applied space
- Requires low level of certainty in most cases
- 2-10% product evolution

Information Technology 0-3 years

Despite a large variety of R&D types, generally, industry is able to focus investment



Neighbouring mines may produce the same material but be infrastructurally and operationally different



Bespoke operating paradigms and philosophies dilute the impact of industry investment and limit collaboration



This results in disparate R&D programmes with mining companies looking internally to resolve technical challenges

Long Term Example

- Significant evolution in mining methods and layouts
- Requires absolute certainty (major capital investment decisions)
- A new mine, a new complex product

Exploration, Resource Management

Medium Term Example

- New fixed, and mobile machinery, energy mediums and safety systems
- Requires high levels of certainty (and absolute in cases)
- Diverse machinery and applications

Effective Equipment and Operations

Short Term Example

- Process automation, visualisation
- New management and reporting methods
- Limited automation
- Complex value chain

Digital Operational Management

An industry agnostic concept

means mining companies are now able to look outward at technology concepts, developed in other industries, that are potentially applicable to our value chain,

But,

Our organisations are not structured

*to capitalise on the vast opportunities, **beyond adoption**, that digital presents,*

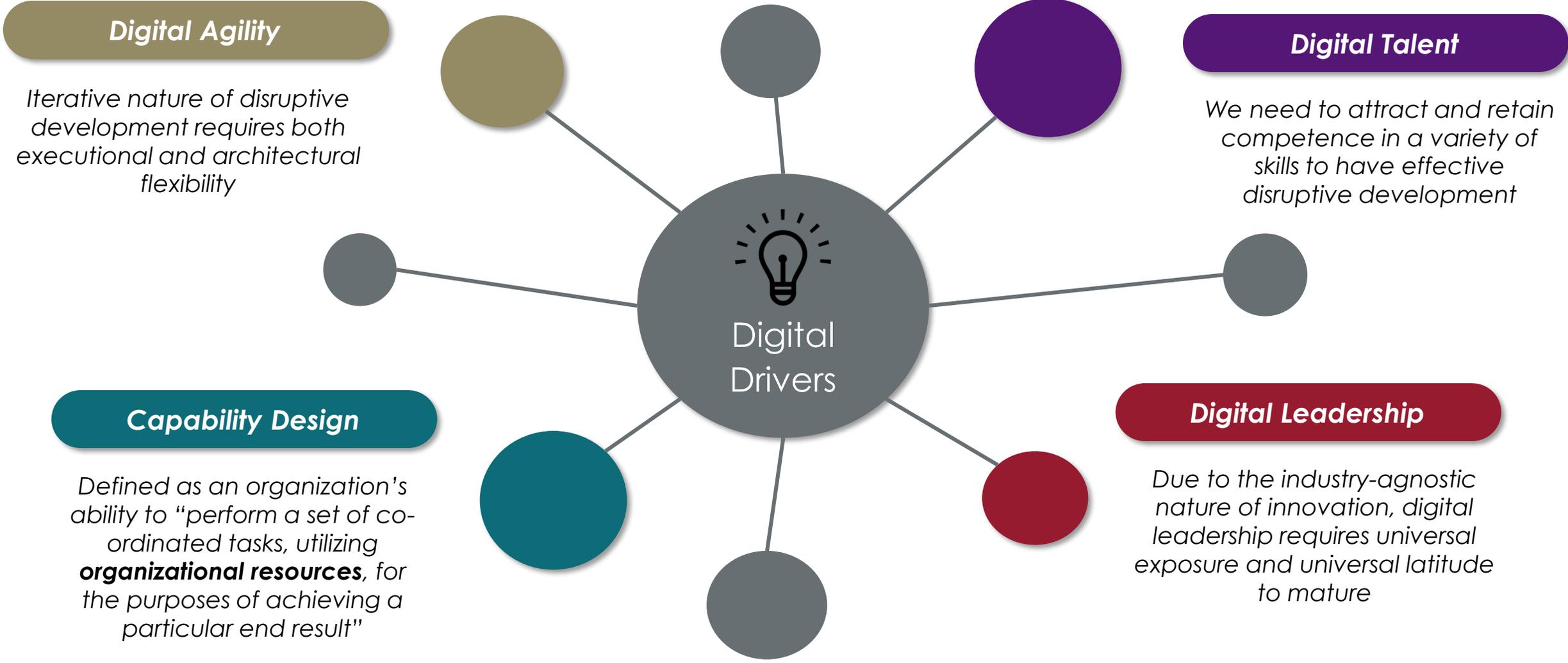
And,

Our industry is still digitally nascent.

A lack of digital (or data) density across a vastly complex value chain limits our ability to adopt off the shelf technology without additional R&D



Considering the limitations
*Understanding structure and
R&D requirements*



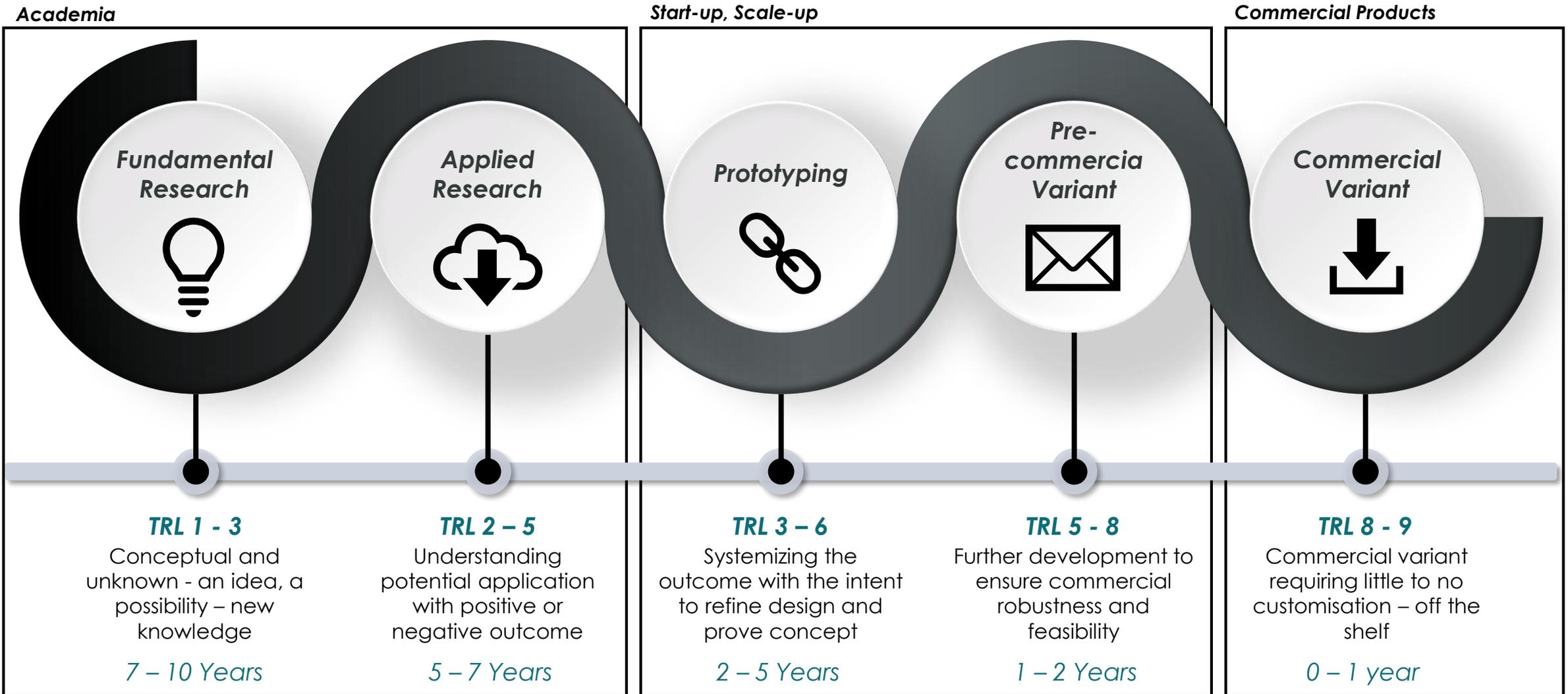
New structures, processes, capability, talent and leadership are required for successful digital disruption

But we are limited in terms of internalisation or establishment



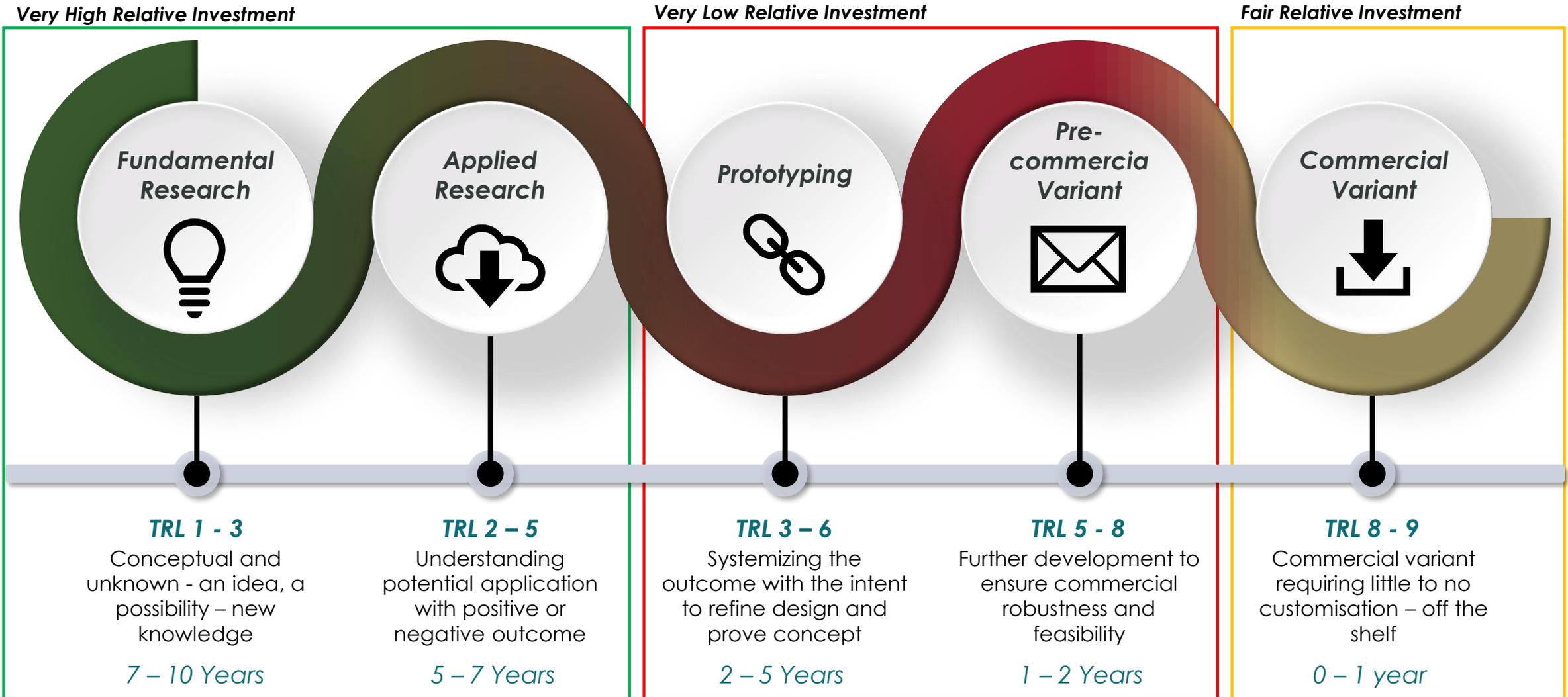
Internalisation would compromise flexibility, limit exposure, and reduce opportunity

We need to consider all R&D phases to be truly digitally disruptive



The majority of mining related digital adoption is generally an adaptation of commercially available technology

However our industry investment profile is relatively imbalanced



The industry investment profile does not support effective end-to-end development of technology

We need to...





Developing the solution

Establishing a structured and balanced ecosystem with stable investment

We have long standing relationships with the University of Johannesburg and Wits through anchor funding agreements



2015 – 2017

Recognising the need
to support academic
institutions, we established
anchor agreements with
our partner universities

R 25 million

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG



2018 – 2020

Understanding the value
delivered, we renewed our
partnerships and
developed methods to
strengthen our relationships

R 40 million



WITS MINING INSTITUTE

2021 – 2023

The benefits of a strong
relationship have become
apparent and we are
working towards further
integrating our partners

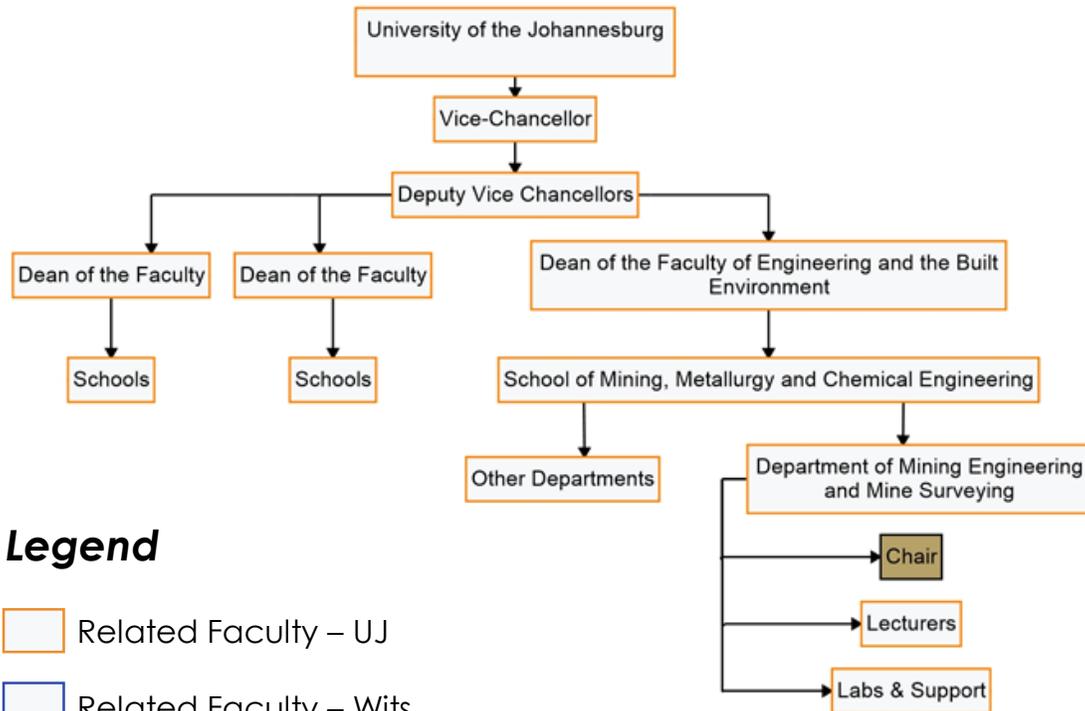
TBD

We're proud to have extended partnerships that have strengthened and evolved over time

Our relationship provides access to broader infrastructure and collaboration opportunities within both institutions...



The University of Johannesburg

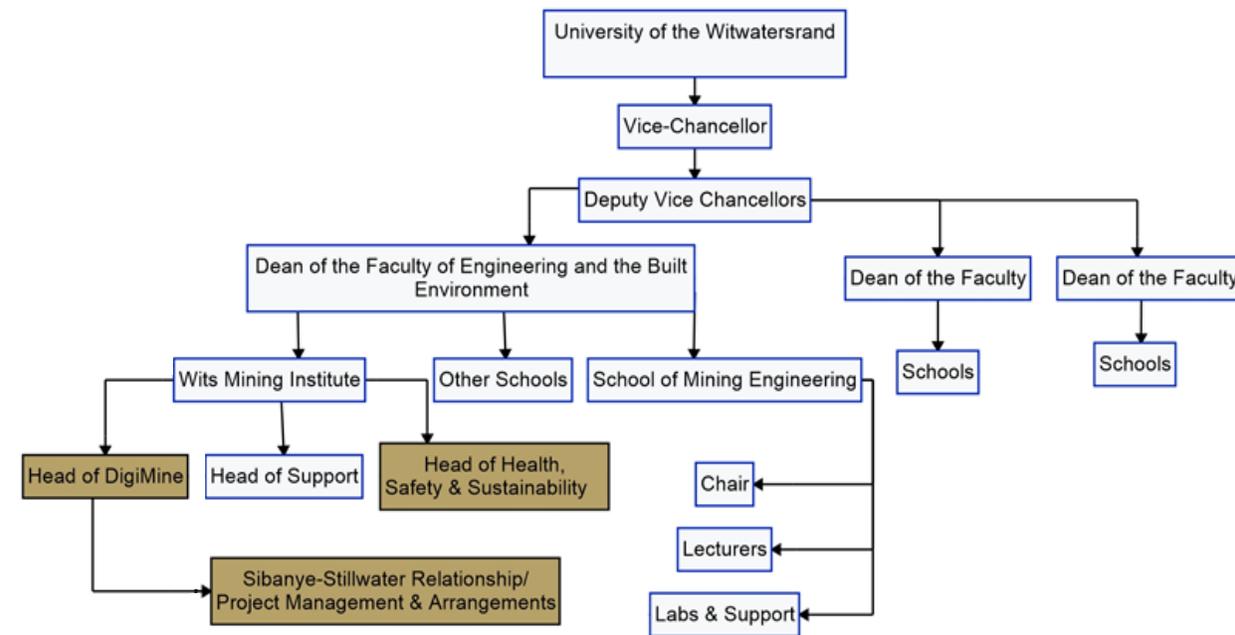


Legend

- Related Faculty – UJ
- Related Faculty – Wits
- Sibanye Funded Entity



Wits University



Our partnerships provide exposure to a multidisciplinary intellectual capital, beyond funded faculties

As well as unique and extensive partnership networks in the mining and technology industry, both locally, and abroad...



The University of Johannesburg



Wits University

FUNDING PARTNERS



OTHER PARTNERS



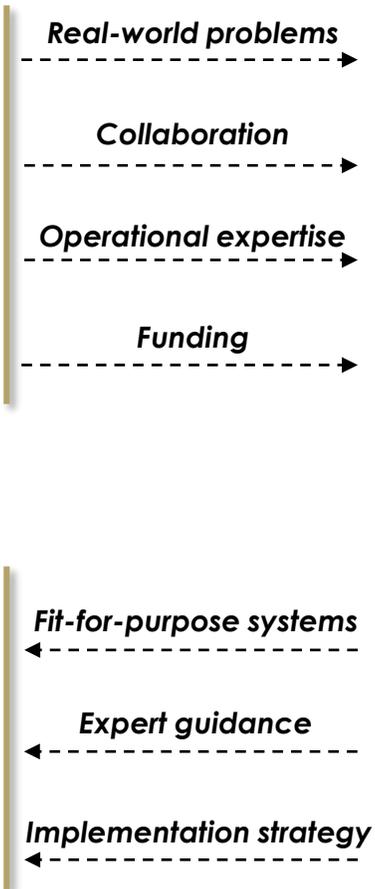
Our partners help to assess potential and applicability

Which enables an effective “solution factory” in support of our organisation

Sibanye Stillwater we are one
Strategic innovation programme

Problem/
 Opportunity
 Identification

Sibanye Stillwater we are one
Operational technology adoption



Partners Institutions

- Fundamental and applied research programmes
- Fast-track initiatives
- Incubation
- Product identification and testing
- Coordination

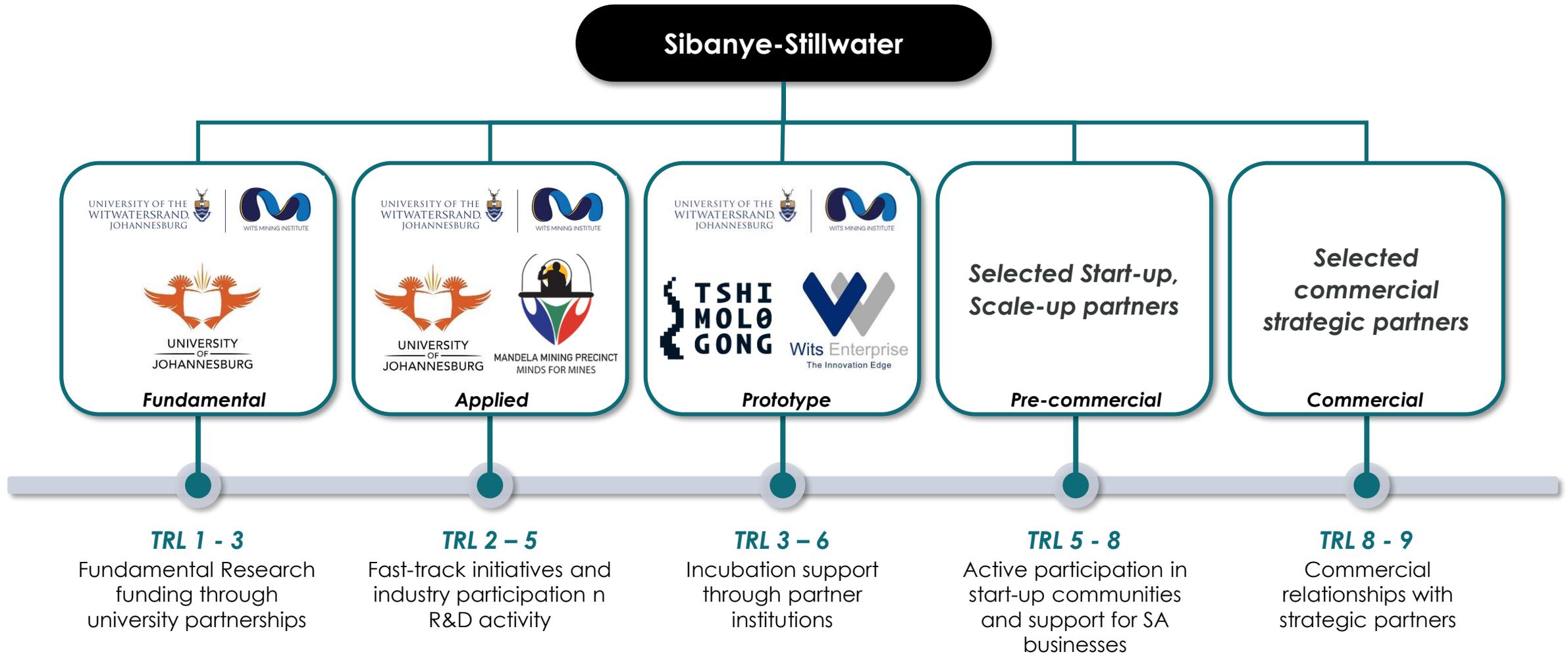
Ecosystem Enablers

- Industry professionals and organisations/bodies
- Multidisciplinary subject matter experts
- Global academic networks
- Strategic industry partners

Supplier Networks

Our partners help to assess potential and applicability

And helps establish a comprehensive R&D ecosystem



Our participation in various stages, identified as a technology imperative, is ever increasing and comprehensive

Sibanye-Stillwater

Balance



Access

Maturity

Influence

Agility

Responsibility

A systemic view of R&D participation and investment address key issues and objectives

It is important that we look inward,

and establish culture, structures and processes to ensure our organisation is able to lead the adoption of digital technology and innovation,

But,

To be truly digitally disruptive,

our industry needs to look outward and evolve our thinking to address key limitations, broaden horizons, develop fit-for-purpose solutions, and maximise returns on R&D investments.

And,

“No man (organisation) is an island” - John Donne

Digital is multi-faceted and disciplined, broad, complex and ever-evolving which requires the establishment of a flexible ecosystem that covers all aspects of digital capability, research and development.



Thank you. Questions?

Contacts

James Wellsted/ Henrika Ninham/ Chris Law
ir@sibanyestillwater.com

Tel: +27(0)83 453 4014/ +27(0)72 448 5910/ +44 (0)7923126200

Website: www.sibanyestillwater.co.za

Tickers: JSE: SSW and NYSE: SBSW