

SA Tourism ICT Strategy

Moving into the 4IR



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Background



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Background

- **United Nations World Tourism Organization (UNWTO):** worldwide international tourist arrivals > by 6% to 1.4 bn in 2018, above the 3.1% growth in the global economy. Middle East had the largest growth - 10%, followed by Africa (+7%), Asia and the Pacific, Europe (both at +6%). Americas (+3%) below the average of 5.6%.
- **Tourism in SA 2018/19:** The 10.4 mn international arrivals, a 0.6% decrease & below target of 11.2 mn. Africa is largest source market, 74% (7.7 mn). However, only responsible for 40% of the revenue of 2018/19.
- **Tourism injected R116,9 bn in 2018/19.** This is an increase of 12.7% over 2017/18. International tourists: 75% (R87,4 bn). Foreign: 6.6% over R82,0 bn in 2017/18 Domestic tourists: R29,5 bn: growth of 35.7% over the R21,7 bn in 2017/18. WTTC estimates tourism contributed approximately 1,5 mn jobs or 9.2% of employment.



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Legislative Mandate

- **The Tourism Act (2014)** provides that The Board (SA Tourism) is a public entity, listed under Schedule 3A of the Public Finance Management Act, 1999 (PFMA). The Board's primary activities, as set out in its founding legislation, are to:
 - Market South Africa as a **domestic** and **international** tourist destination.
 - Market South African tourism **products** and **facilities** internationally and domestically.
 - Develop and **implement** a **marketing strategy** for tourism that promotes the objectives of the Act, and the National Tourism Sector Strategy.
 - **Advise** the **Minister** of Tourism on any other matters relating to tourism marketing.
- **The Act also provides that** with the approval of the Minister, establish a **National Convention Bureau** in order to market South Africa as a destination for business events by coordinating bidding for international conventions; liaising with other organs of state and suitable bodies to promote South Africa as a destination for business events.
- **The functions of the Tourism Grading Council** have also been delegated by the Minister to the South African Tourism Board in Section 28.



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Vision and Mission

- **VISION:** *To position South Africa as an exceptional tourist and business events destination that offers a value-for-money, quality tourist experience that is diverse and unique.*
- **MISSION:** *To contribute to inclusive economic growth by increasing the volume of tourists and the value they add to the South African economy.*



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SA Tourism Strategy

- **5-in-5 Strategy** – increase the number of visitors/travellers by 5 million within five years, by the end of 2021.
 - The strategy was approved in 2017/18 and covers the five-year period 2017/18 to 2021/22.
 - Covid-19 has added two years' delay. More on that later.
- **To achieve this goal**, South African Tourism has identified the following **strategic objectives**:
 - **Increasing** the **number** of international and domestic **tourists**.
 - **Contribute** to an **enhanced**, recognised, appealing, resilient and competitive **tourism** and business events **brand**.
 - **Enhance collaboration** with stakeholders
 - **Contribute** to an **improved** tourist **experience**
 - **Position** South African Tourism's corporate **brand** in such a way that it becomes **recognised** as a tourism and business events industry **leader**
 - **Increase** the Tourism Sector's **Contribution** to **Inclusive** Economic Growth
 - **Achieve Operational Efficiency and Good Governance, specifically via Project iGnite** – South African Tourism's internal restructuring exercise aimed at transforming the organisation into one that is optimally positioned and resourced to achieve its 5-in-5 strategy.



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External Challenges

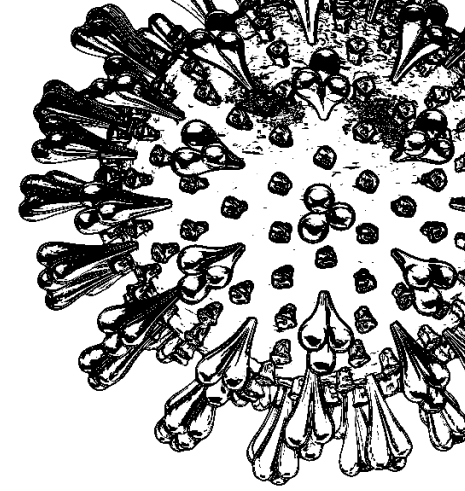
- Challenges appear to be mostly in the category of **Negative Perceptions**:
 - **Safety** and Security Concerns
 - **Drought** in Cape Town
 - Inappropriate **Wildlife Interaction**
 - **Debate** on **Land Expropriation**
 - **Visa** challenges, specifically around minors' travel
 - **Cost** to get to South Africa
 - **Covid-19**



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Covid-19 Impact – 1



- **In 2020/21, Covid-19 struck and tourism effectively was halted**, effectively bringing the over 300k sector jobs to an end, or suspended. (<https://www.news24.com/news24/southafrica/news/tourism-sector-has-lost-billions-of-rands-shed-more-than-300-000-jobs-deputy-minister-20210210>)
- **The identification of a “South African variant” of the Covid-19 virus had unfairly led to South Africa being not visited.** (<https://pmg.org.za/committee-meeting/32321/>)
- **The tourism industry was one of the biggest contributors to South Africa’s gross domestic product (GDP) at 8.6%**, and also contributed significantly in terms of jobs supported, and to the high number of small, medium and micro enterprises (SMMEs), and the total spend and foreign exchange earnings. The country’s economic recovery was heavily dependent on tourism, but this would not be achieved if its businesses did not survive. (ibid)
- **According to the Tourism 2020 report released by Statistics South Africa, foreign arrivals dropped by 71% from just over 15, 8 million in 2019 to less than 5 million in 2020.** In South Africa, the direct contribution of the tourism sector to GDP (Gross Domestic Product) was 130,1 billion rand in 2018 and constituted nearly 3% direct contribution to GDP.1 In 2018, the tourism sector contributed about 4,5% of total employment in South Africa. (<http://www.statssa.gov.za/?p=14281>)
- **In 2020, the volume of tourists decreased by 72,6% from 10,2 million in 2019 to 2,8 million in 2020.** The distribution of tourists by region of residence shows that 74,8% of the tourists who arrived in South Africa in 2020 were residents of the Southern African Development Community (SADC) countries and 1,5% were from ‘other’ African countries. These two sub-regions constituted a total of 76,3% tourists from Africa. Residents of overseas countries made up 23,6% of the tourists. (ibid).

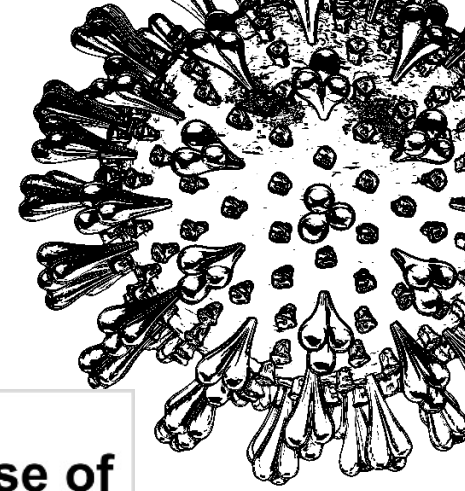


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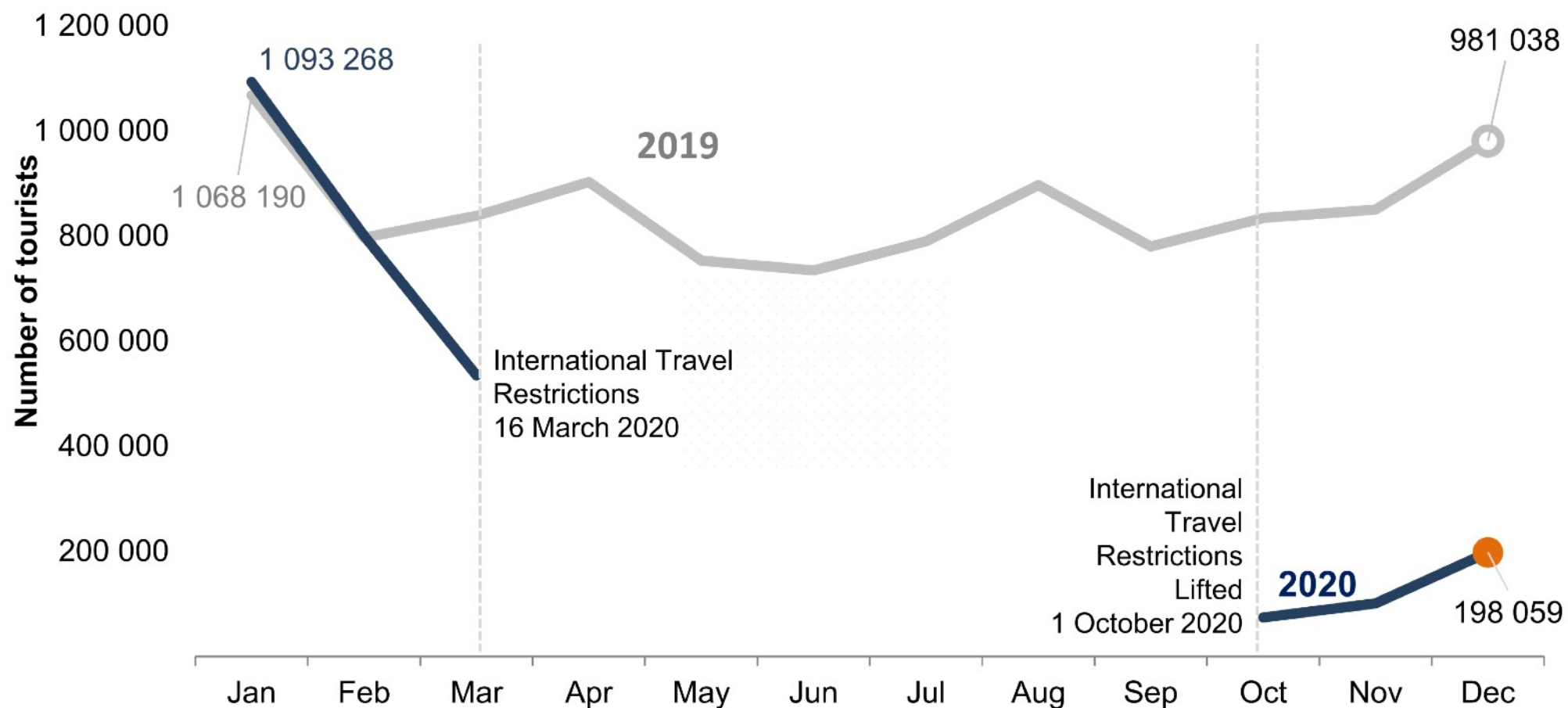
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Covid-19 Impact – 1



A total of 2,8 million tourists came to South Africa in 2020, showing a decrease of 72,6% from the 10,2 million tourists recorded in 2019. *The highest number of tourist arrivals was recorded in January 2020 whilst the least number was recorded in October 2020.*

Number of tourists by month and year of travel, 2019 and 2020



stats sa
Department:
Statistics South Africa
REPUBLIC OF SOUTH AFRICA

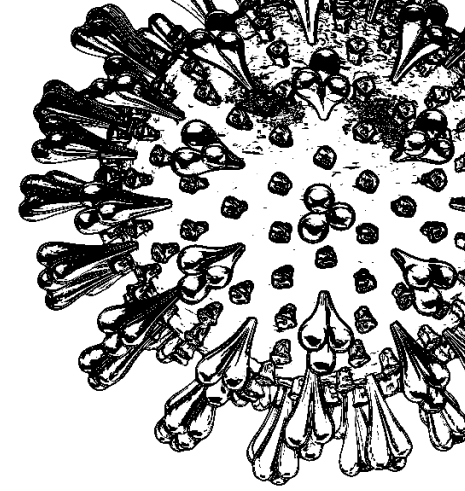


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Covid-19 Impact – 2



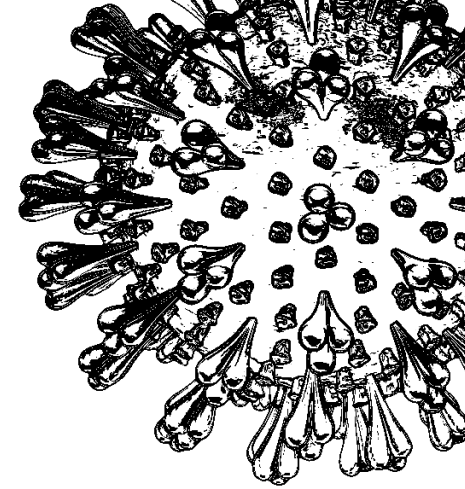
- **On the 16th of March 2020, President Ramaphosa announced measures to combat the spread of COVID -19 in South Africa.** In addition, a travel ban on selected foreign nationals from high-risk countries into SA was communicated on 18 March 2020. Of the 53 land ports, 35 were shut down, as well as 2 of the 8 sea ports. The Level 5 (hard) lockdown introduced by President Ramaphosa on the 26th of March 2020 resulted in tourism numbers dropping drastically for both incoming and outgoing travellers. In light of this, South Africa did not receive visitors for a period of six months from April to September 2020. (ibid).
 - **A Tourism Sector Recovery Plan has been drafted and published in March 2021.** (<https://www.tourism.gov.za/AboutNDT/Documents/Tourism%20Sector%20Recovery%20Plan.pdf>)
-
- The question for this presentation is how can the sector be revitalised in this context, and how can ICT help?
 - Not just internal business process optimisation
 - But sector-wide ICTs to facilitate tourism
 - Overarching strategy



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Tourism Sector Recovery Plan (TSRP)



- **Implement norms and standards** for safe operation across the tourism value chain to enable safe travel and rebuild traveller confidence; (In the context of Covid)
- **Stimulate domestic demand through targeted initiatives and campaigns;**
- **Strengthening the supply-side** through resource mobilisation and investment facilitation;
- **Support for the protection of core tourism infrastructure and assets;** (e.g. Apartheid Museum, Robben Island, Lilliesleaf all closed or in trouble)
- **Execute a global marketing programme** to reignite international demand;
- **Tourism regional integration;**
- **Review the tourism policy** to provide enhanced support for sector growth and development;
- **Targeted, strategic partnerships** between government and industry;
- **Partnering with relevant departments to ensure improved travel facilitation through the implementation of**
 - e-visas;
 - tourist safety;
 - airlift capacity;
 - quicker turnaround times in the processing of tour operator licences;
 - deployment of the vaccine to frontline workers;
 - attainment of population immunity;
 - participating in global efforts to facilitate safe travel; and
 - stimulating domestic demand.



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Risks



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Risk Management

- **The South African Tourism Board promotes a “risk-matured and risk-intelligent”** culture through the Risk Management Policy and Framework, which was approved in 28 March 2018.
 - **Business Unit Risk Champions** facilitate risk identification and are enablers of the risk management process.
 - **Staff are responsible for identifying risks** and implementing strategies to deal with them.
 - SWOT, risks and mitigation matrix to be drawn up for ICT
-
- *Which ICT risks are relevant?*

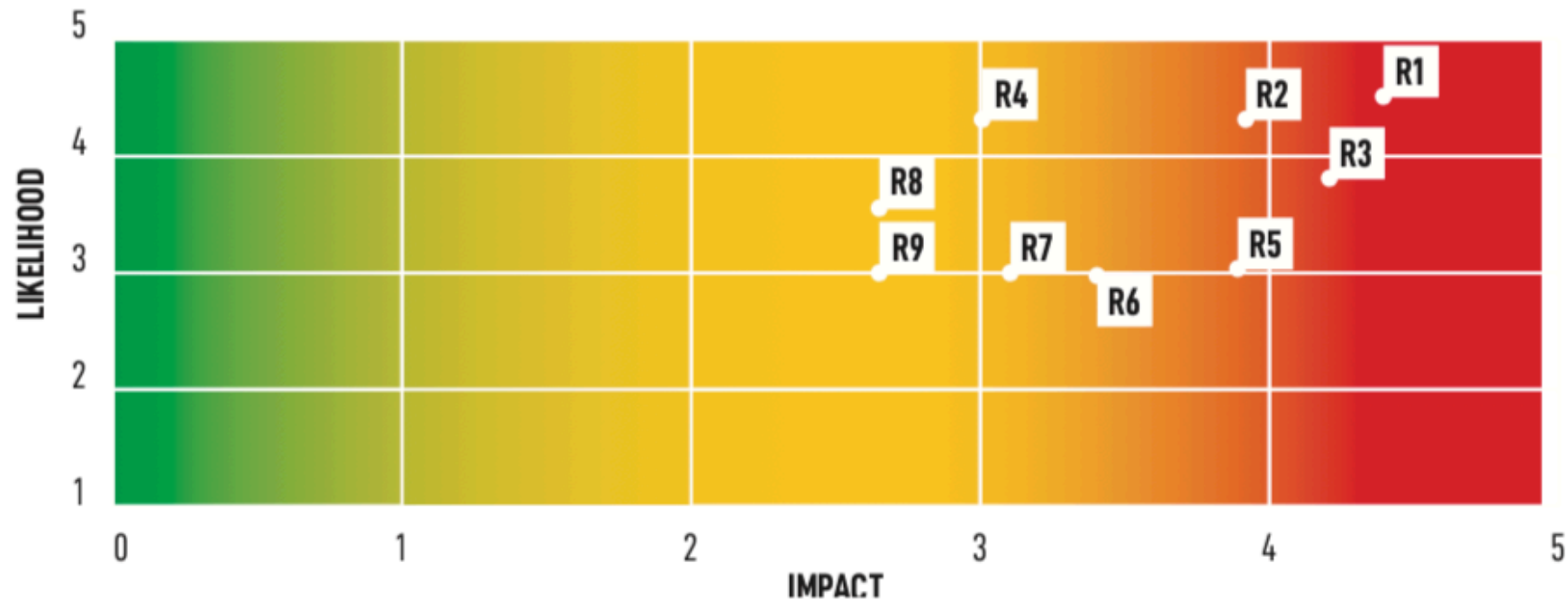


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External Risks

South African Tourism Strategic Risks



R1	R2	R3	R4	R5	R6	R7	R8	R9
Barriers to access (both international and domestic tourism)	Potential visitor having negative perceptions of SA	Ineffective marketing strategies, partnerships and execution	Inability to deliver 5-in-5 (ICT, Finance, HR, GRC)	Potential changes in national policies which impact tourism	Rapidly changing climate conditions and extreme weather events	Cyber crime	Inadequate transformation that negatively impacts inclusive growth in the tourism sector	Geopolitical risks (i.e. terrorism, regional conditions, increased protectionism, restrictive trade agreements, outbreak of communicable diseases)



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External ICT Risks and Stakeholders

- **DHA**

- e-Visa and barriers to entry (<http://www.dha.gov.za/index.php/statements-speeches/1299-media-briefing-on-e-visa-border-management-authority-and-facilitation-of-traveller-movement> and <https://ehome.dha.gov.za/epermit>).
- Digital Covid vaccine status from other countries? How do we/DHA ensure validity and verifiability?
- Interface between DHA, immigration desks, and SAT

- **Local issues**

- Connectivity and marketing online, e.g. Recent Facebook outage, network reliability in SA, informing foreigners of policies like RICA
- POPIA
- Creation of local companies for tourism (SMME) facilitation — DoL, DSBD, Trade, Industry and Competition

- **Global issues**

- Geopolitical e.g. cyberwarfare
- Cybercrime
- Fake news — an important one in terms of perception, negative propaganda sites



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Internal Risks (ICT)

- **ICT infrastructure, architecture, systems and applications may be outdated**
- **Infrastructure is predominantly on premises** meaning Covid-19 challenges, access challenges in terms of connectivity going down etc., burglary risks etc.
- **Fragmentation** among BUs with many of its systems not integrated and largely paper-driven.
- **Capacity challenge** resulting in heavily dependant on external service providers and obstacles to digitally transform
- **To this list we can add:**
 - Potential challenges around change management inherent in any architecture refresh/revision;
 - Questions of possible measures to respond to requirements of King-IV especially reporting



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Proposed Strategy



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Proposed Strategy

- **The SA Government has made significant commitment to, and recognises of the challenge and future value of, the Fourth Industrial Revolution (4IR).** This ICT strategy thus anticipates the creation and implementation of an ICT landscape that will serve as a foundation from which to pursue and prepare the sector to adopt features of the 4IR. The participation and use of ICT in daily experiences of tourists, officials and operators provides the springboard for the leap into this new way of working and interaction.
- **To give realisation to the Vision and Mission,**
 - **VISION:** To position South Africa as an exceptional tourist and business events destination that offers a value-for-money, quality tourist experience that is diverse and unique.
 - **MISSION:** To contribute to inclusive economic growth by increasing the volume of tourists and the value they add to the South African economy.
- **And to align with the 5-in-5 strategic objective of:** "Achiev[ing] Operational Efficiency and Good Governance, specifically via Project iGnite – South African Tourism's internal restructuring exercise aimed at transforming the organisation into one that is optimally positioned and resourced to achieve its 5-in-5 strategy."
- **SA Tourism needs to revise its Enterprise Architecture (EA) to:**
 - facilitate ICTs both to address internal and external challenges and risks identified on previous slides;
 - move into the 4IR;
 - Enable Virtual Tourism, e.g. the AirBNB initiative ("Experiences"... could be digital)
 - Meet the Vision, Mission and governance requirements



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Strategy Detail – 1

- **Alignment and inputs**
 - King IV
 - PFMA
 - NDP
 - POPI
 - Tourism Act
 - 5-in-5
 - Vision/Mission
 - Principles and Policies (IT)
 - SWOT
 - Identify needs: URS, Map Business Processes / Value chain - BPMN

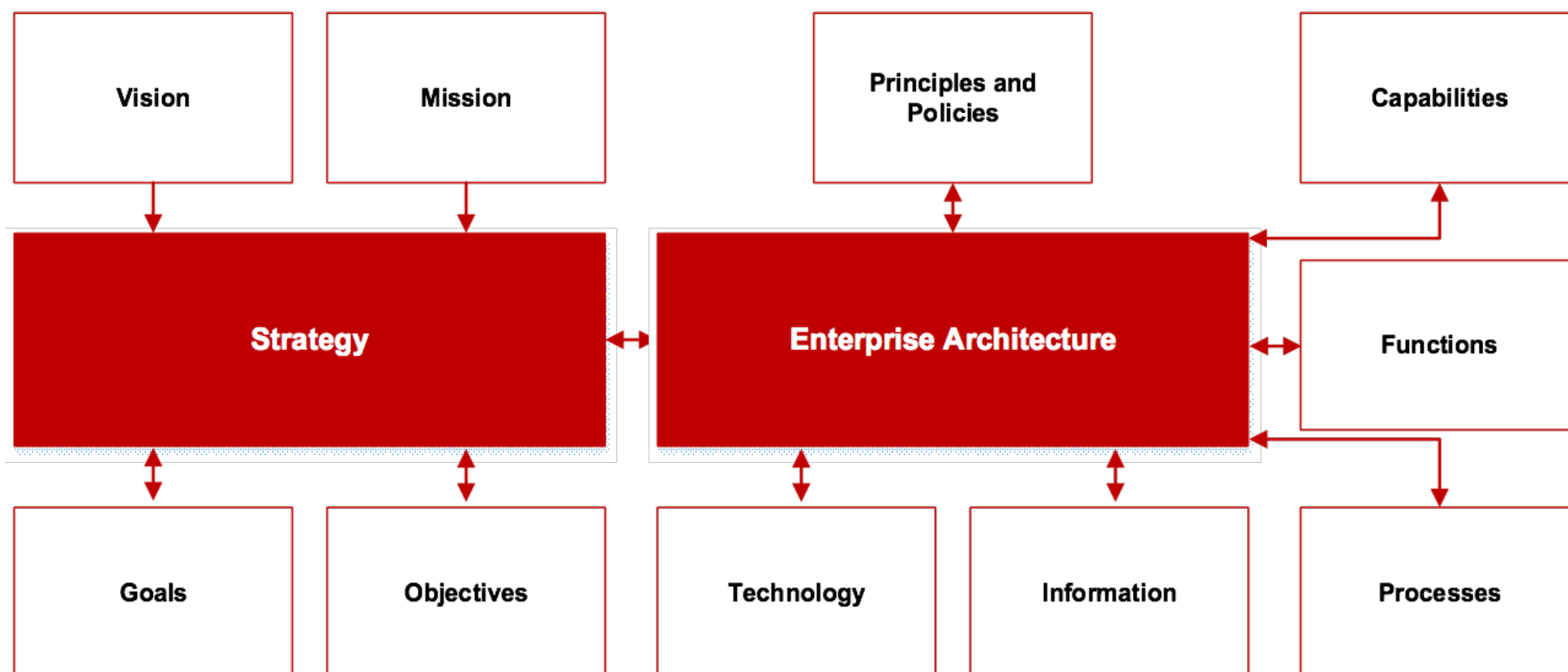


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Strategy Detail – 2

- Address internal challenges
- Address external challenges



Ensure Alignments - Example

- **Alignments with all frameworks and relevant legislation should be performed. As an example, consider King IV, "Principle 12":**
 - The governing body [Board] should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives.
- **King IV - Governance:**
 - Policy choice
 - Delegation of management
 - Independent external oversight and reporting
- **King IV - Oversight of specifically ICT-related factors:**
 - Integration of people, technologies, information and processes across the organisation.
 - Integration of technology and information risks into organisation-wide risk management.
 - Arrangements to provide for business resilience.
 - Proactive monitoring of intelligence around incidents especially social media
 - Management of the performance of SLAs
 - Assessment of value of projects through their lifecycles
 - Responsible, secure and environmentally friendly disposal of obsolete technology
 - Ethical and responsible use of technology and information.
 - Compliance with relevant laws.
 - The leveraging of information to sustain and enhance the organisation's intellectual capital.
 - An information architecture that supports confidentiality, integrity and availability of information.
 - The protection of privacy of personal information.
 - The continual monitoring of security of information.
 - The management of the risks pertaining to the sourcing of technology.



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Critical Success Factors

- **Leadership:** Leadership responsibilities do not reside in one person, but require a cohesive sector-wide leadership to support the agenda (a common purpose)
- **Governance:** The applied, visible and active management oversight and support through the relevant forum
- **Strengthen human capacity** and capabilities as per organogram: Ensure that all the relevant skills are on-board
- **Change management:** Ensure that stakeholders are brought along and perceive value in the changes



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Proposed Enterprise Architecture



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Address Internal Challenges

- **ADDRESS INTERNAL CHALLENGES**

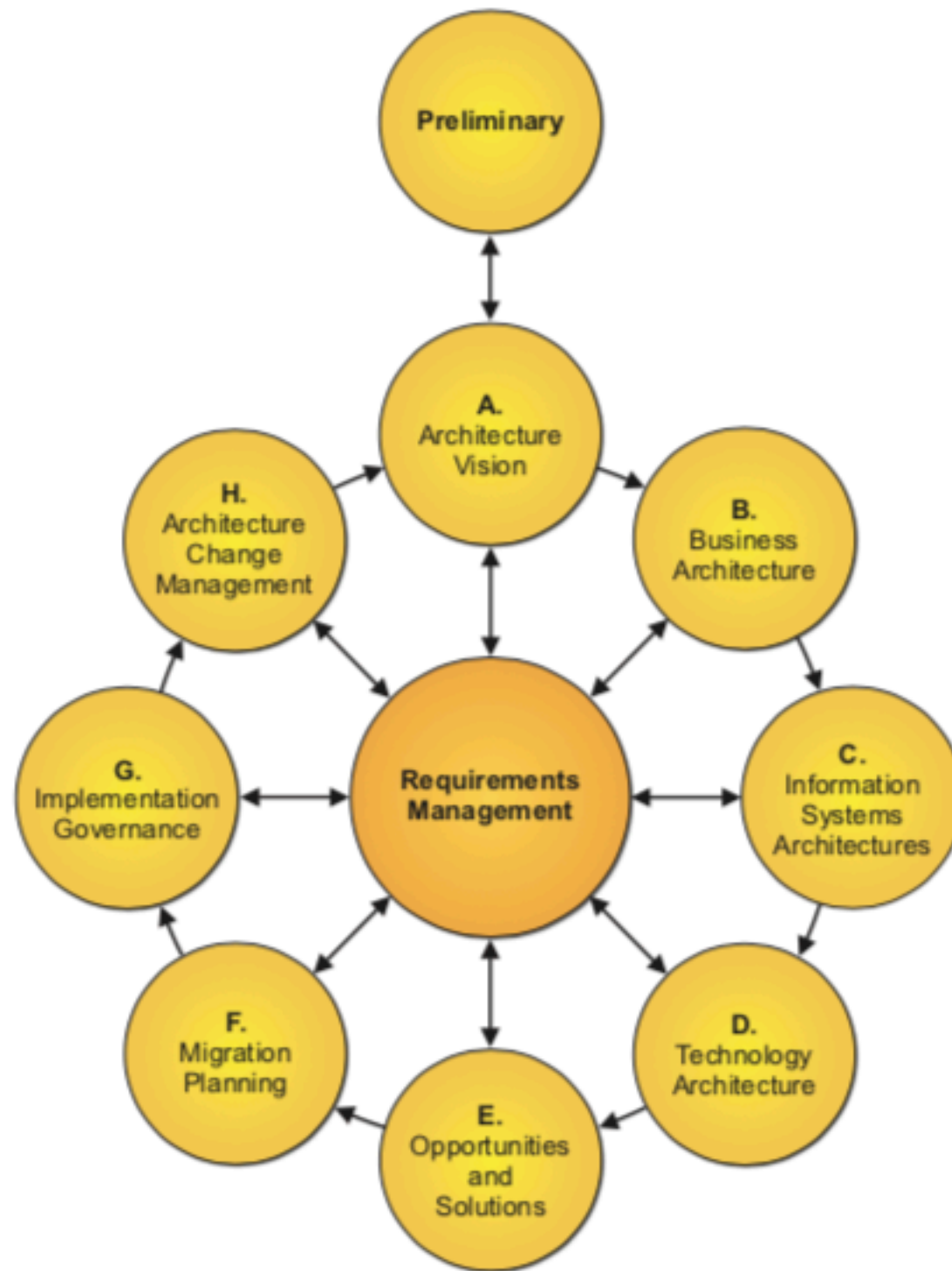
- In order to design an appropriate EA we should follow the industry-standard TOGAF:
- Stage 1: Understand environment and propose: Preliminary stage/TOGAF A.
- Stage 2: Determine SaaS, Application Standardisation and Rationalisation needs (end-user applications, workflow applications) (As-Is vs To-Be) - TOGAF B.
- Stage 3: Design Data and Information Management, 'single version of the truth'; (As-Is vs To-Be) - TOGAF C.
- Stage 4: Determine ICT Governance / management model e.g: assets, SLAs, service desk, reporting, incident management, etc (As-Is vs To-Be)
- Stage 5: Design Architecture model (To-Be): TOGAF D, but also above items included.
- Stage 6: Verify requirements and identify solutions (TOGAF E).
- Stage 7: Plan migration TOGAF F.
- Stage 8: Rollout and Project Manage as per selected PM framework: TOGAF G.
- Stage 9: Manage change and verify end-user satisfaction: TOGAF H.
- **All the above to be aligned with King-IV requirements**
- **All the above to be cost-effective**
- **All the above to be SMART (Specific, Measurable, Achievable, Relevant and Time-bound)**



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Address Internal Challenges - TOGAF



STAGE Preliminary-1- ENVIRONMENT SCAN

- Identify facilities to manage, update, improve as per ITIL:
 - Connectivity / Communications / Telecomms
 - SaaS / Application services / Data storage etc
 - Desktop computing needs / Workflow processes
 - Devices / Infrastructure
 - User Requirements / custom development needs if any



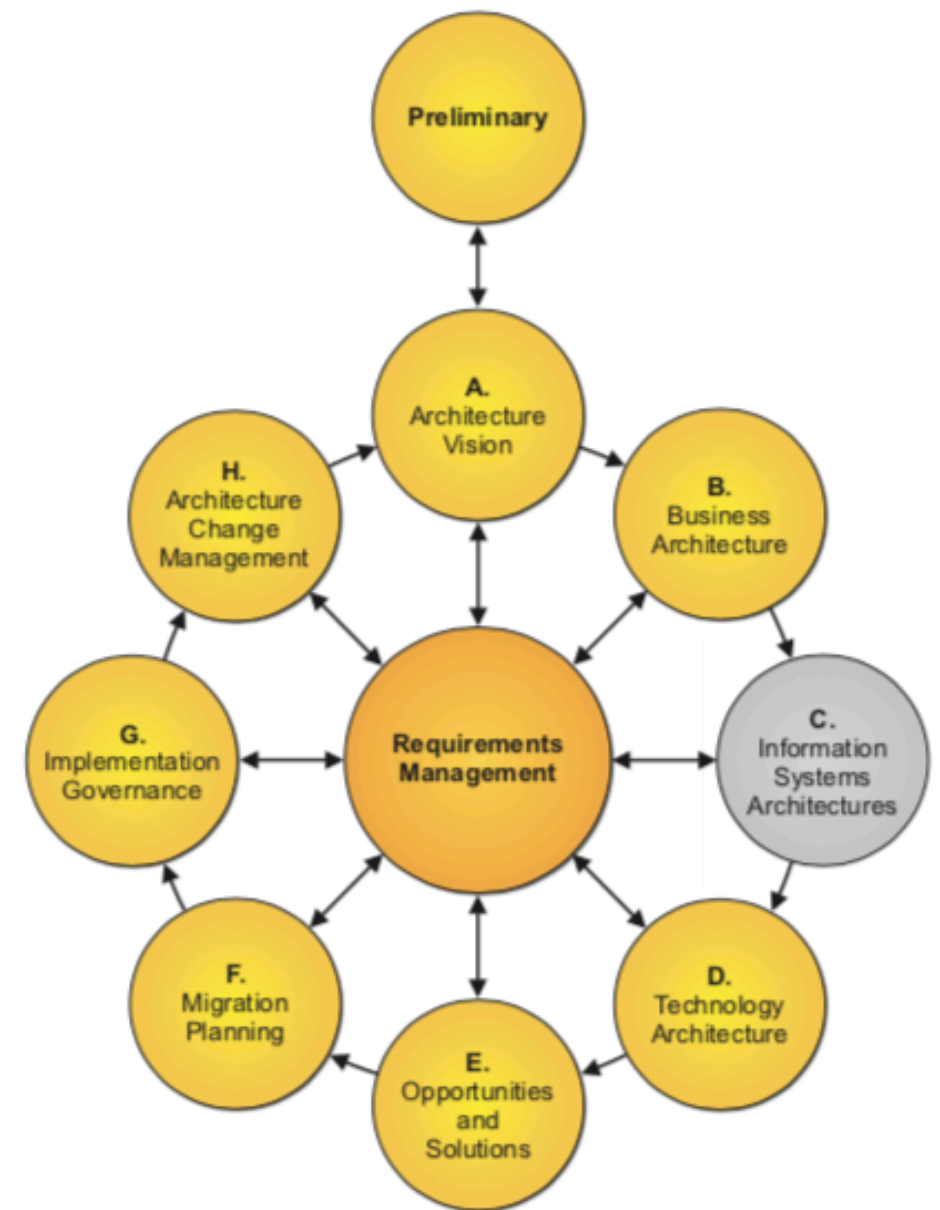
STAGE 2 - Business Needs

- **Determine Needs such as:** SaaS, Application Standardisation and Rationalisation needs (end-user applications, workflow applications)
- **We assume the needs are:**
 - Interface to BAS and PERSAL
 - VPN
 - Telecomms, Email, etc.
 - Workflow processing (e.g: memoranda)
 - Document and report production
 - Knowledge and information management / repository including public sharing (web)
 - Monitoring of external Tourism environment, stats, etc.
 - Social media



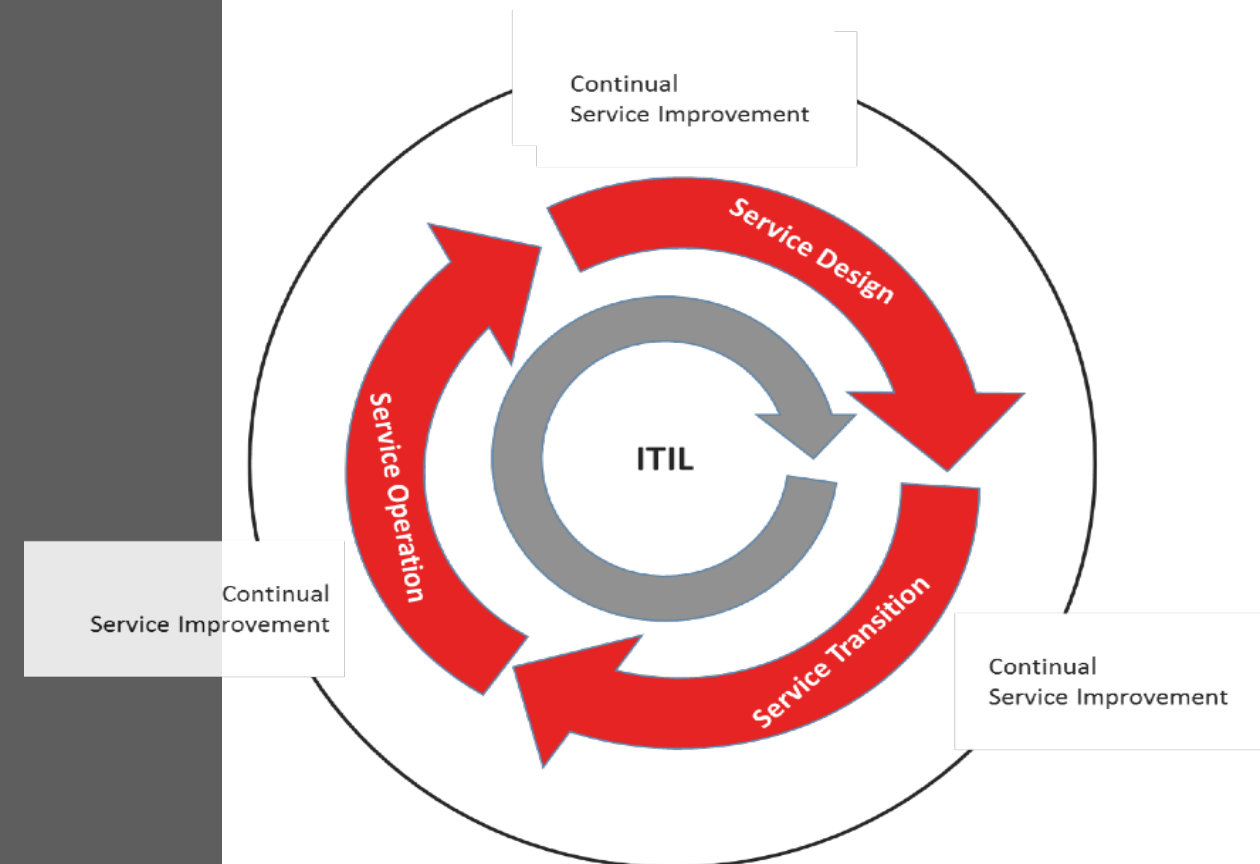
STAGE 3 - System Architecture

- **Determine preference for on-site vs cloud**
 - CAPEX (onsite) vs OPEX (cloud)
 - Ongoing cost of hire vs equipment refresh consideration
- **Understand As-Is configuration** and CAPEX/OPEX implications, as well as other risks such as security
- **Understand URS** and how/whether the existing architecture meets URS
- **Determine** whether existing needs refresh, upgrade, development or replacement
- **Understand information flow** and where it breaks down between applications (manual intervention)



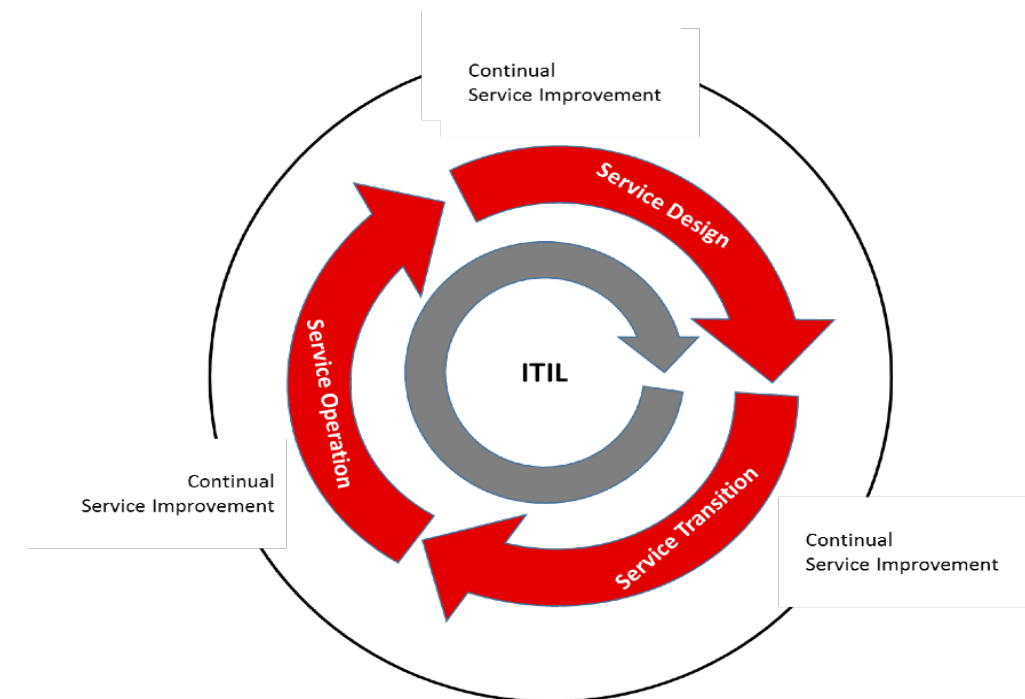
STAGE 4 - Determine Governance

- Determine existing ICT governance practices and processes
- Service desk, incident capturing
- SLAs
- Asset management
- Training
- Reporting
- ITIL and King IV

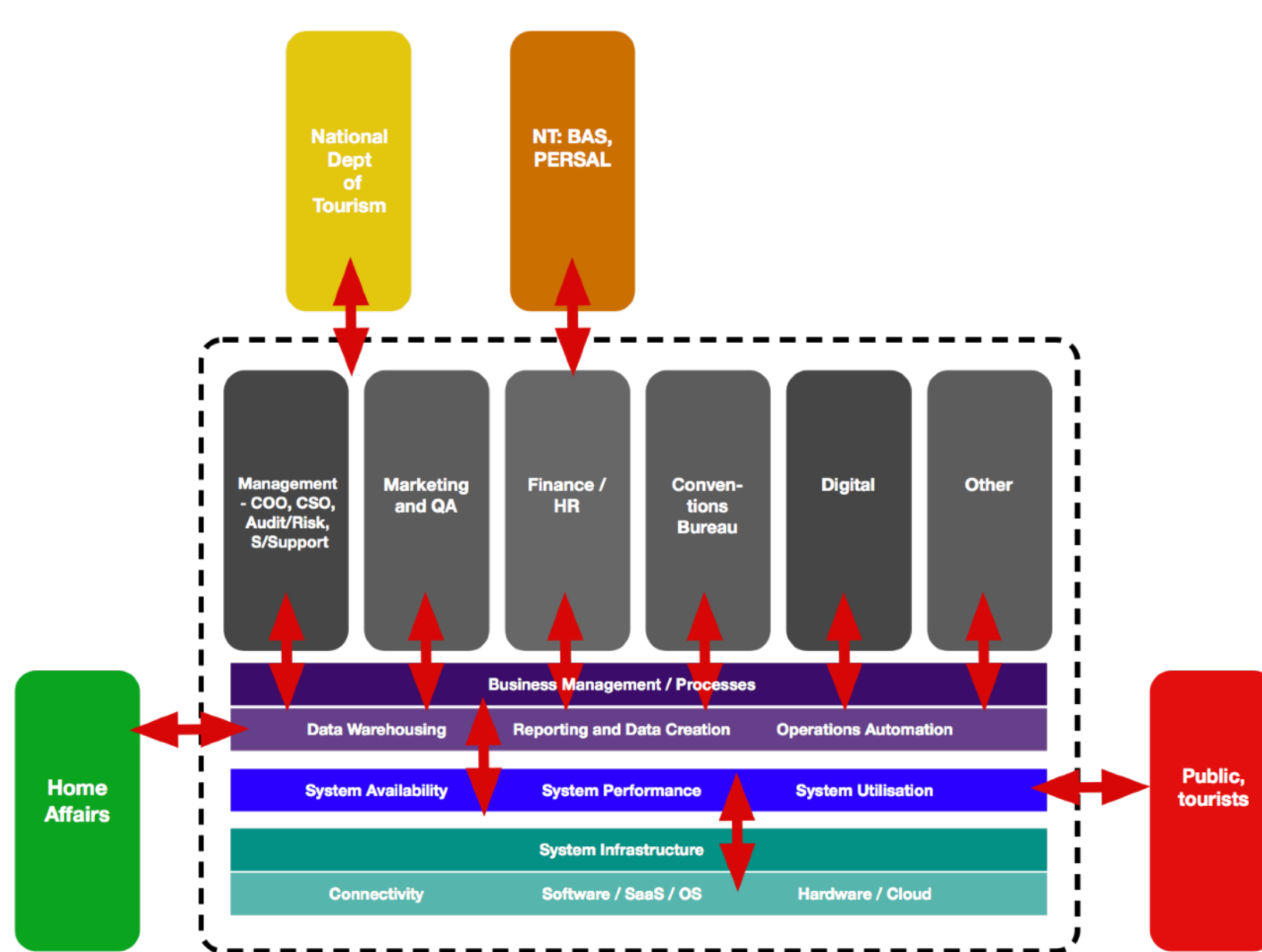


STAGE 4 - Determine Governance

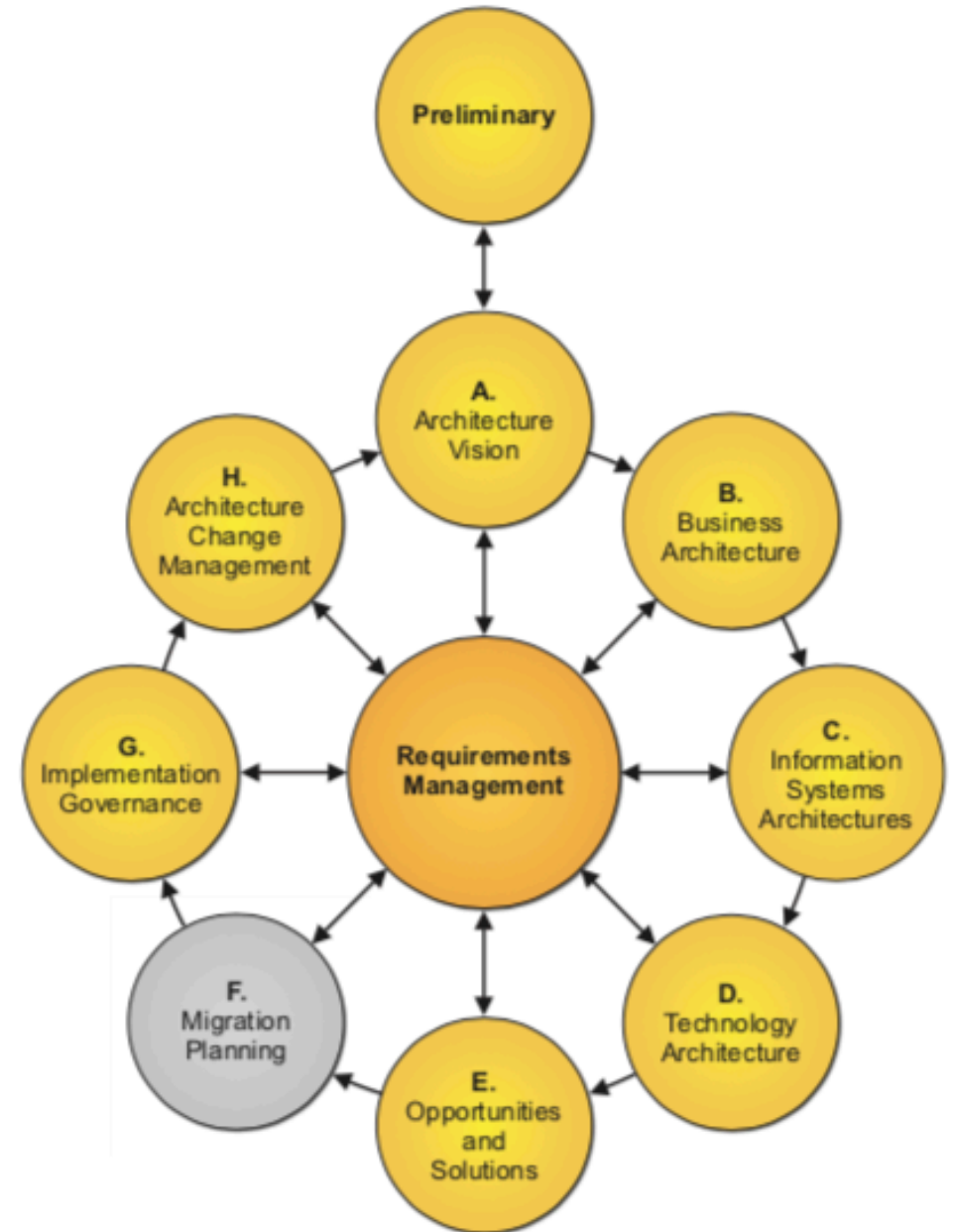
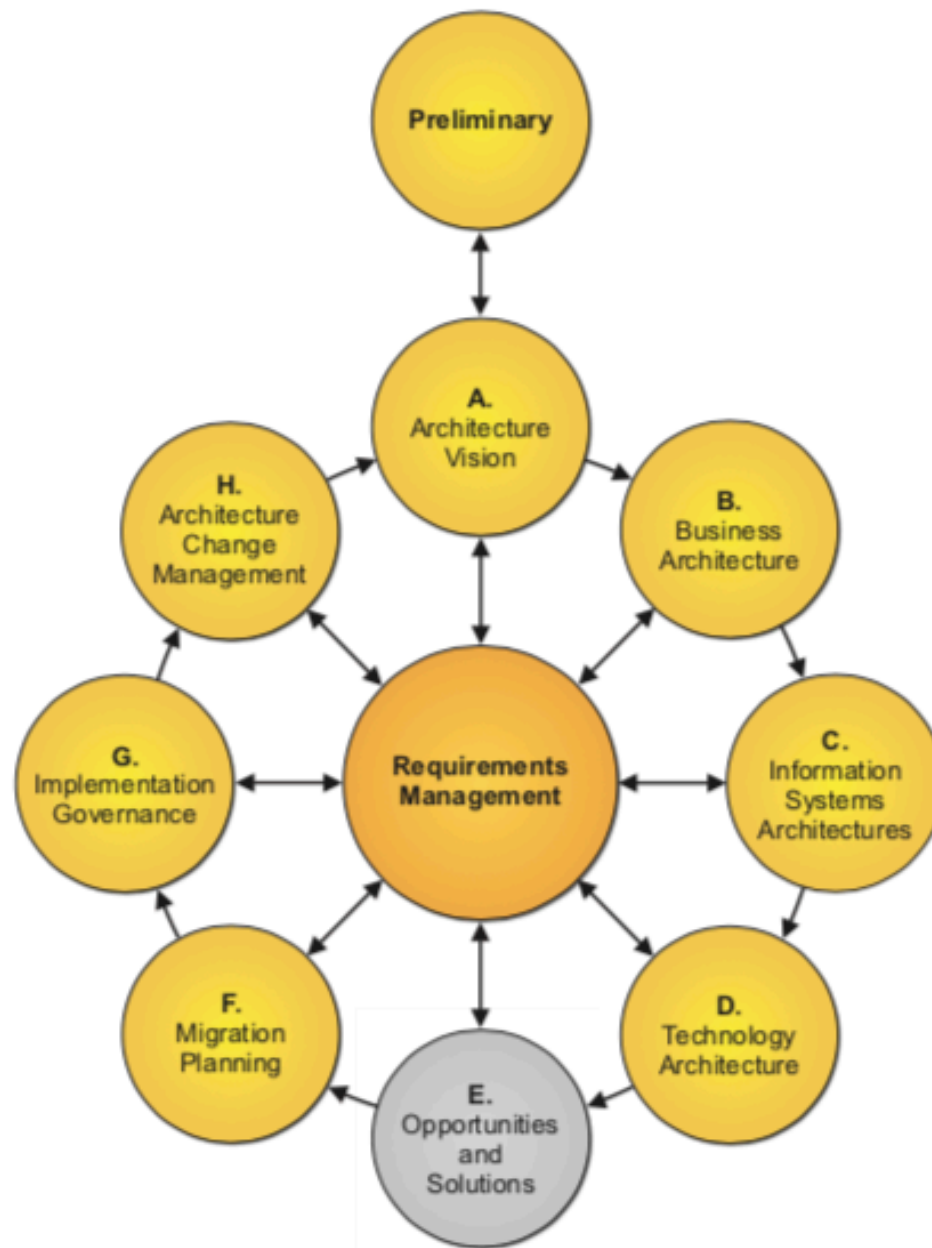
- **Provide for the following reasonable capacities as per ITIL:**
 - Project Management (PM)
 - IT Services Management (ITSM) and reporting/oversight/tracking and service desk facility
 - Contract management / SLA Management - Outsource whatever is best performed by external capacity
 - Change Management
 - Data Warehousing / Knowledge Repository facilities and Management
 - Custodianship of architectural standards and practices for a support facility / service desk as well as knowledge handovers.
 - ICT Technical expertise - internally, especially system admin or development
 - Data Security policy and POPI compliance as well as EU General Data Protection Regulation (GDPR)
- **In addition: Ensure that the**
 - proposed architecture is robust
 - organisation is able to function under future pandemic scenarios
 - services are accessible, reliable and facilitate business processes
 - stakeholders can benefit from the systems
 - data can be exchanged with external systems.



STAGE 5 - Design To-Be (Technology) Architecture

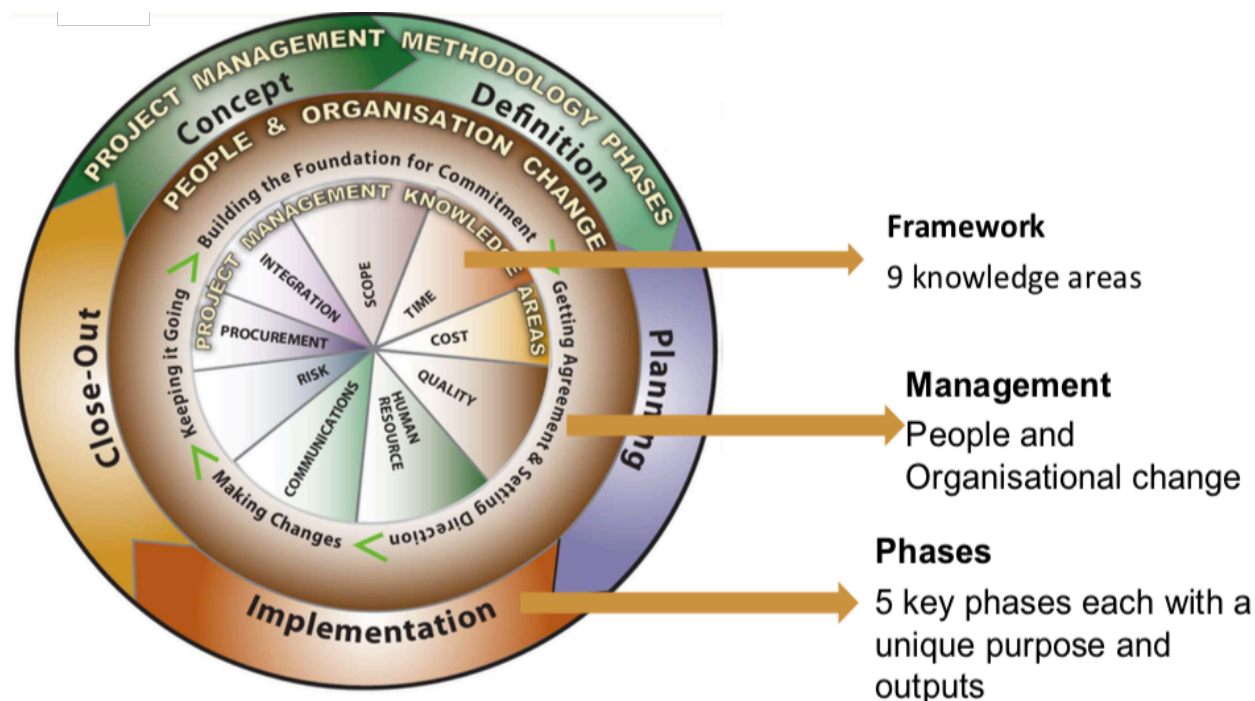


STAGE 6-7 - Verify and Plan Rollout



STAGE 8 - Implement

- Roll out architecture as per agreements of Stage 6-7
- Employ suitable project management tools e.g. PMBOK, Agile (context-dependent)
- Verify functionality



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STAGE 9 - Change Management

- Bring stakeholders along the journey
- Engage individuals on their needs and requests for change (RFC) process
- Ensure solution meets needs and changes are accepted by stakeholders
- Re-iterate process if required





Thank you!

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Appendices



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ICT Policy Environment

TABLE 1: South African ICT Policy Environment

Date of Publication and Title	Document Short Title
1996, Act 108 of the Republic of South Africa, The Constitution of the Republic of South Africa	The Constitution
Treasury Regulations for departments, constitutional institutions and public entities, Issued in terms of the Public Finance Management Act, 1999	Treasury Regulations
Government Gazette Vol. 449 No. 38 of 7 November 2002, State Information Technology Agency Act as Amended	SITA Act
2005, 29 April, Memorandum by Hanlie Smit, Treasury, Minimum requirements for an Asset Register	Minimum requirements for an Asset Register
August 2006, Department of Public Service & Administration. Policy on Free and Open Source Software Use for South African Government	FOSS Policy Document
September 2007, Department of Public Service & Administration. Minimum Interoperability Standards (MIOS) for Information Systems in Government	Government MIOS Policy
April 2008, SITA/Department of Public Service & Administration. Flight Plan: Free Open Source Software (FOSS) Deployment in the South African Government	SITA FOSS Flight Plan
2012/2013, DPSA, not yet public, derived from ISO 27002. Minimum Information Security Standards (MISS)	MISS
2010, Government Gazette 33059 of 1 April. Public Finance Management Act No. 1 of 1999 as amended	PFMA
2012, National Planning Commission, Presidency. National Development Plan – Vision for 2030	NDP
Government Gazette, No. 582/37119, of 6 December 2013, DoC. South Africa Connect	SA Connect
Act 4 of 2013, Protection of Private Information Act	POPI
Government Gazette Vol. 586, No. 37538, 7 April 2014. Act No. 3 of 2014: Tourism Act, 2014	Tourism Act



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Acronyms

BYO	Bring Your Own	King IV	The King report, version 4.
CGICT	Corporate Governance of Information Communication Technology	MIS	Management Information System
CGICTPF	Corporate Governance of Information Communication Technology Policy Framework	MNO	Mobile Network Operator
CIO	Chief Information Officer	MOU	Memorandum of Understanding
COBIT	Control Objectives for Information and Related Technologies	MSA	Master Service Agreement
DG	Director General	PM	Project Management
DPSA	Department of Public Service and Administration	PMBOK	Project Management Book of Knowledge
DTPS	Department of Telecommunications and Postal Services	Prince2	Projects in Controlled Environments, version 2
EA	Enterprise Architecture	PMO	Project Management Office
GITO	Government Information Technology Officers (Council)	POPI	Protection of Private Information Act
GDPR	EU General Data Protection Regulation	SLA	Service Level Agreement
GTAC	Government Technical Advisory Centre	SDLC	Software Development Life Cycle
ICT	Information Communication Technology	SteerCo	Steering Committee
IM	Information Management	SITA	State Information Technology Agency
IP	Internet Protocol	TOGAF	The Open Group Architecture Framework
ITSM	Information Technology Service Management	URL	Universal Resource Locator
ITIL	Information Technology Infrastructure Library	VM	Virtual Machine
IoT	Internet of Things	VPN	Virtual Private Network



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