FACT SHEET

SABPP™
SA BOARD FOR
PEOPLE PRACTICES
Setting HR standards

HR TECHNOLOGY

INTRODUCTION

From hiring an Uber to get you home after a late night, to listening to a book on audio while zooming through the quickest route in traffic provided by Google Maps, information technology (IT) has taken the world by storm. Not only in our personal lives, but also in business activities. The use of IT ensures faster, more accurate, reliable and consistent performance. While many functions in organisations have adopted IT to improve their offering to the business, functions have also collaborated in many organisations to develop user-friendly applications to improve the customer experience.

IT has also penetrated every element of the HR value chain and this encourages HR practitioners to evolve with technology. This Fact Sheet attempts to demystify the field of HR technology and provide HR practitioners with some pragmatic guidelines regarding HR technology implementation and understanding. Information technology is the study of systems that store, retrieve or convey information. Consequently, HR technology (also referred to as HR information technology) can be described as the systematic treatment of information in the field of HR.

"How many of us can say, with certainty, what jobs we would choose if we were kids today? The pace of technological change in the time I've been in work is only a shadow of what we will see over the next 15 to 20 years. This next wave of change will fundamentally reshape all of our careers, my own included. It's estimated that some 65% of children entering primary schools today will likely work in roles that don't currently exist. We expect the pace of change in the job market to start to accelerate by 2020. Office and administrative functions, along with manufacturing and production roles, will see dramatic declines accounting for over six million roles over the next four years. Conversely, business and financial operations along with computer and mathematical functions will see steep rises."

Niall Dunne Chief Sustainability Officer, BT

The adaption from paper recording systems to technological systems has been visible throughout the last four decades. HR has adopted a variety of systems including, for example, performance management systems, leave tracking, interviewing over skype, or digital sourcing of cv's in the development and advancement of utilising technology. The trend is growing in leaps and bounds and this is evident in the Deloitte 2016 Global Human Capital Trends report as shown on the next page, digital HR was seen as one of the most important trends within the HR profession.
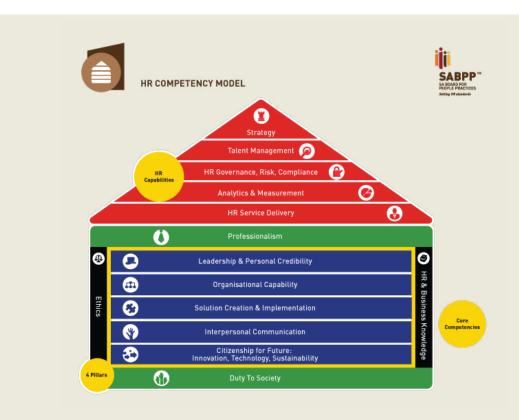
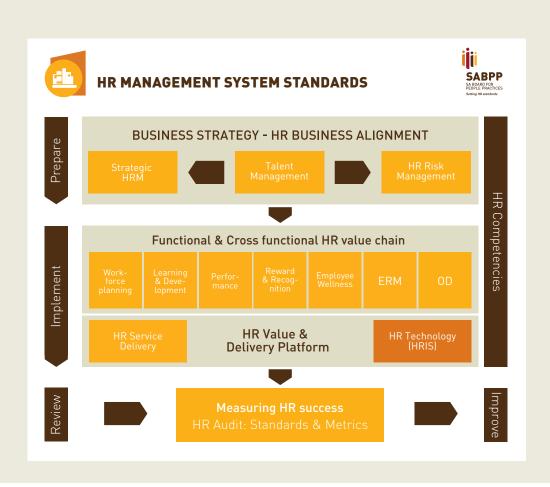The 2016 Global Human Capital Trends research identified 10 important trends:

The SA Board for People Practices (SABPP) HR Competency Model Core Competency 5: Citizenship for the Future includes technology in its definition:

"The ability to drive innovation, optimise technology and contribute to sustainability of organisations."

The SABPP defines HR Technology as "the effective utilisation of technological applications and platforms that make information real-time, accessible and accurate, providing HR and line management with the knowledge and intelligence required for more effective decision-making, and that supports efficiency and effectiveness in other HR services."

HR technology is captioned within the SABPP Competency Model and the HR Management System Model.

HR COMPETENCY MODEL

HR MANAGEMENT SYSTEM STANDARDS
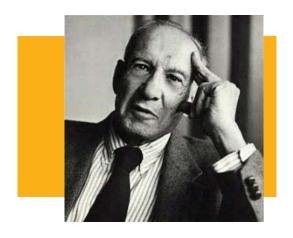
HR MEETS TECHNOLOGY

In order to proceed with this HR technology adventure, a good understanding of key terms underlies the thinking and engagement. Some of the terms are:

HR Information Systems (HRISs)

An HR information system (HRIS), also known as HR management system (HRMS), is one of the vehicles through which HR technology is implemented in organisations. An HRIS acquires, stores, analyses and distributes information to various stakeholders. There are different forms of HRISs with variations in functionality and performance. While some systems may reside on a server at the physical location of the business, others may reside entirely at a vendor location. In many instances HRISs reside partly at the business location or at a vendor location.

HR Metrics

HR metrics are the various measurements that are related to the people or the HR function of an organisation. In general, these measurements are used to determine the effectiveness of HR initiatives. HR metrics are commonly included in internal and external reports and organisational dashboards. HR practitioners are required to quantify their strategy (show how achievement of the strategy will be measured). As the professional body in HR, the SABPP has focused its strategic priorities on building a HR metrics framework to guide the decision-making process and to enable an efficient, effective and consistent assessment of the people measures critical to business success.

*"If you can't measure it,
you can't manage it."*

Peter Drucker

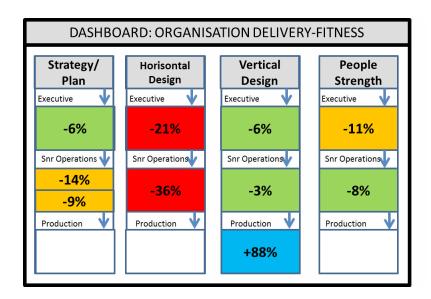### HR measurement

HR measurement is defined within the SABPP standard as "a continuous process of gathering, analysing, interpreting, evaluating and presenting quantitative and qualitative data to measure, align and benchmark the impact of HR practices on organisational objectives, including internal and external auditing of HR policies, processes, practices and outcomes."

1 SABPP 2013

HR MEASUREMENT SYSTEM

METRICS FOR PEOPLE MANAGEMENT IN THE ORGANISATION

METRICS FOR HR EFFECTIVENESS/ EFFICIENCY

SABPP
SA BOARD FOR PEOPLE PRACTICES
Setting HR standards

WHAT ISSUES DO WE NEED TO MANAGE (RISK/OPPORTUNITIES)?

WHAT ARE THE OUTCOMES SPECIFIED IN THE SLA?

WHAT ARE THE DRIVERS BEHIND THOSE ISSUES?

HOW CAN WE MEASURE THOSE IN A BALANCED SCORE CARD?

FINANCIAL AND OPERATIONAL REPORTING SYSTEMS IN ORGANISATION

HOW CAN WE MEASURE THOSE DRIVERS?

METRICS

MANAGEMENT SYSTEM & RESOURCES TO COLLECT AND REPORT

MONITOR & EVALUATE

SABPP HR Measurement System, 2013

In its drive to promote HR best practice in HR technology trends and lead innovation, the SABPP has also created a database of innovative products that they have endorsed which will form part of the HR metrics offering. The SABPP has endorsed products that align extensively to the HR Standards and Competencies and thereby enhance the profession. These products enable the HR strategy to be integrated right down to the actual HR service delivery with success metrics in place. The dash board below has been endorsed by the SABPP for its innovative approach to measure organisational delivery.

DASHBOARD: ORGANISATION DELIVERY-FITNESS

Strategy/ Plan	Horisontal Design	Vertical Design	People Strength
Executive	Executive	Executive	Executive
-6%	-21%	-6%	-11%
Snr Operations	Snr Operations	Snr Operations	Snr Operations
-14% / -9%	-36%	-3%	-8%
Production	Production	Production	Production
		+88%	

KEY	
	Critical Risk below requirement
	Comfortable but growing risk below requirement
	On Par with requirement
	Comfortable with growing risk above requirement
	Critical Risk above requirement

Source: P Marais, Kontextit

HR Analytics

Many people tend to confuse HR analytics and HR metrics. "HR analytics is the application of mathematical, statistical and data mining techniques to HR and business data to solve HR-related business problems" (CIPD, 2015). Simply put, HR analytics uses HR metrics to investigate specific matters with the aim of finding solutions to specific problems.

HR Analytics Data Model, Bersin.com

A careful choice of appropriate, strategy focused HR metrics, supported by an HRIS which can process the data and allow for modelling, allows for sound HR analytics. Having the right HRIS is only one step in the process, and the entire process will be flawed if inaccurate data is put into the HRIS. Also, the role of HR technology is not just to provide reports on HR metrics.

"Making Use of Data Analytics: Businesses and governments will need to build a new approach to workforce planning and talent management, where better forecasting and planning metrics will need to be central."

Source: Future of Jobs, WEF

EMPLOYING TECHNOLOGY IN HR

The utilisation of technology in HR can be broadly categorised into three areas:
1.   HR services and transactions;
2.   HR data analytics and reporting;
3.   HR communication and employee connectivity.

HR services and transactions

Many of the administrative functions that used to be done manually in the HR department are now being executed by technological applications. Workforce administration, leave management, payroll and rewards management, benefits administration, healthcare administration and talent management are some of the areas in which technological interventions have reduced the administrative load of the HR professional.

The benefits of such technological interventions are:

• The efficiencies of the HR processes increase;
• Processes can be delivered faster and consistently;
• Reduction in human error can be mitigated;
• HR practitioners can now reduce their administrative activities and focus on being more strategic.

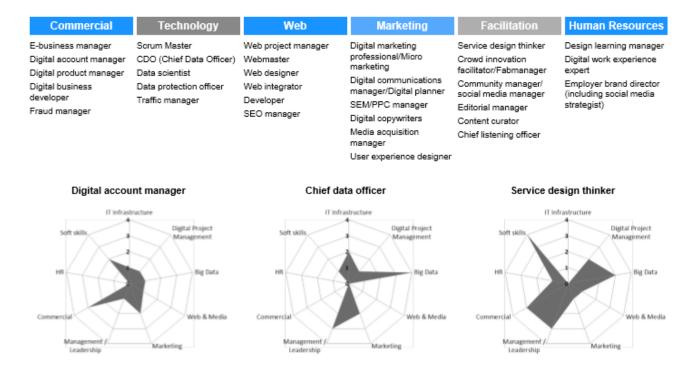The challenges in introducing technology are equally important to note. The challenges are as follows:

• Adapting the HR function to be driven by technological processes also requires development in competencies to manage the technology;
• Human intervention will have to be integrated at relevant points;
• The element of the human touch can be lost;
• Implementation and maintenance of technology is a high cost.

HR data analytics and reporting

HR data analytics refer to the statistical and mathematical manipulation of workforce metrics that can help companies gather information about their people. The HR function has always collected data, keeping track of employees' personal information, salary data, health and safety incidents, disciplinary matters and all people related data. Since data collection is now done through various technological systems, HR practitioners can focus on the next level of data analytics, which is interpreting the collected data so that it can be of use to the organisation. If HR practitioners can spot trends based on the collected data, they can then report the same to the organisation and suggest courses of action or predict possible trends, based on evidence.
"Predictive models and analysis are typically used to forecast future probabilities. Applied to business, predictive models are used to analyze current data and historical facts in order to better

understand customers, products and partners and to identify potential risks and opportunities for a company. It uses a number of techniques, including data mining, statistical modeling and machine learning to help analysts make future business forecasts." The HR practitioner can predict future trends in their workforce planning etc to align to business growth thinking. The consulting firm Accenture has laid out a digital job competency dictionary that looks at the emerging and changing dynamics of jobs and their profiles. This enables business decision making and planning for future sustainability.

Commercial	Technology	Web	Marketing	Facilitation	Human Resources
E-business manager	Scrum Master	Web project manager	Digital marketing professional/Micro marketing	Service design thinker	Design learning manager
Digital account manager	CDO (Chief Data Officer)	Webmaster	Digital communications manager/Digital planner	Crowd innovation facilitator/Fabmanager	Digital work experience expert
Digital product manager	Data scientist	Web designer	SEM/PPC manager	Community manager/social media manager	Employer brand director (including social media strategist)
Digital business developer	Data protection officer	Web integrator	Digital copywriters	Editorial manager	
Fraud manager	Traffic manager	Developer	Media acquisition manager	Content curator	
		SEO manager	User experience designer	Chief listening officer	

Source: Accenture digital job competency dictionary: 0-4 (where 4 is most important)

"A radical change is needed to address the learning disconnect, questionable impact and difficulty in quantifying the return on investment of current learning and training modalities, as identified by various industry experts and authors such as Bersin (2014) and the American Management Association (2010). Indeed, our own Minister of Higher Education and Training, Blade Nzimande, told a Department of Labour (DoL) Employment Equity (EE) and Transformation Indaba gala dinner on 18 April 2013 that "South Africa has spent R57-billion over the past 10 years through the Sector Education and Training Authorities (SETAs) in various training programmes, but the country does not have much to show for this investment".

Knowledge Swarming using Mobile Knowledge Mentoring - the emergence of the ubiquitous Cyber Sage by Philip Marsh, Mentoring 4 Success

2 http://www.webopedia.com/TERM/P/predictive_analytics.html
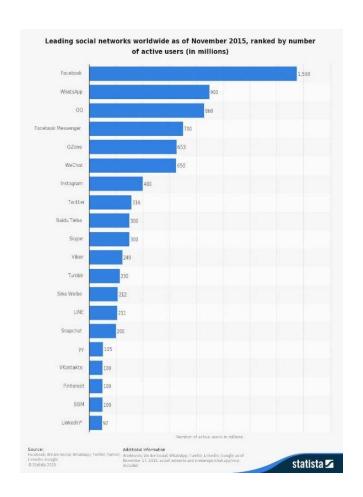
HR communication and employee connectivity

Internal business reporting and external compliance documents that need to be put together, an HR practitioner must never overlook a key stakeholder group, employees. Internal communication is key to building a more connected and informed team. It can drive a culture where information sharing will motivate, give a sense of direction and purpose to employees. Technology is an enabler for such a culture. Deloitte's Open Talent Economy Continuum gives a good explanation of how to connect employees and the organisation.

	Balance sheet talent	Partnership talent	Borrowed talent	Freelance talent	Open source talent
What is it?	Statutory employees of your organisation. You bear all the carrying costs of these employees.	Employees that are part of a partnership or joint venture that are on a related balance sheet.	Employees who are part of your value chain or ecosystem but who reside on someone else's balance sheet.	Independent workers you hire for specific but temporary projects.	People who provide services for you for free, either independently or part of a community.
Useful for					
Who's doing it?	• Large global organisations. • Various industries focussed on consistent delivery from hourly labour.	• Joint ventures. • Strategic alliances.	• Staffing agencies. • Consulting firms.	• Independent contractors. • Individual business owners.	• Community boards on a specific topic. • Innovation contests for customers. • Product/ service user communities.

The Open Talent Economy Continuum (Closed → Open)
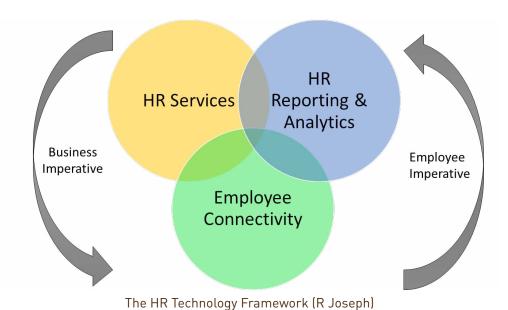
Building your digital DNA, Deloitte

Social networks have become crucial tools to build the employee value proposition (EVP) and the customer value proposition (CVP), showcase job opportunities, culture, and what it's like to work with a particular organisation. It enables employees sitting in satellite offices to have access to the same information in a head office. Employers must be aware of the social networks that their employees have access to as it can again "predict" employee current and future needs. Skype and WhatsApp calling/messaging are popular communicative methods that support the technology discussion. Employers can capitalise on the usage and save costs in the process. The analysis by Mckinsey gives a clear indication of the increase and usage of social networks. Almost all of South Africa's large and medium-sized organisations, including Standard Bank, Discovery, Telesure, SAB Miller, Tiger Brands use automated systems and these platforms to inform potential jobseekers about openings and the status of their job applications.

Leading social networks worldwide as of November 2015, ranked by number of active users (in millions)

Social Network	Active users (millions)
Facebook	1,550
WhatsApp	900
QQ	860
Facebook Messenger	700
QZone	653
WeChat	650
Instagram	400
Twitter	316
Baidu Tieba	300
Skype	300
Viber	249
Tumblr	230
Sina Weibo	212
LINE	211
Snapchat	200
YY	105
VKontakte	100
Pinterest	100
BBM	100
LinkedIn*	97

Number of active users in millions

Source:
Facebook; We Are Social; WhatsApp; Twitter; Tumblr; LinkedIn; Google © Statista 2015

Additional Information:
Worldwide; We Are Social, WhatsApp, Tumblr, LinkedIn, Google as of November 17, 2015; social networks and messenger/chat app/voip included

statista

@SABPP1
JOIN THE DISCUSSIONS
#hrstandards

EMPLOYING TECHNOLOGY IN HR

These three areas of HR technology are linked and the constant interaction of these fields make for interesting findings and solutions. For example, if 125 out of 200 employees in an organisation use Yammer to keep in touch, and if they are sharing qualitatively sound information, one can create the metric 'Yammer efficiency', which would be 62.5% and include this in an internal business report. While the areas of HR services, reporting and analytics emerge predominantly from a business imperative, the employee connectivity element arises from an employee requirement. All three areas in the HR Technology Framework Model (see p12) are important and are impacted by the business and employee directly or indirectly.

3   https://www.weforum.org/agenda/2016/03/the-looming-social-media-skills-gap-at-work/

The HR Technology Framework (R Joseph)

WHERE TO USE HR TECHNOLOGY?

HR Shared Services
One of the popular HR delivery models that is facilitated by technology is the HR shared services centre which has three primary drivers (cost, quality and business enablement) for the use of shared services.

In this model a common HR unit or function provides services to more than one business unit or business location within an organisation. HR shared services are mostly found in large organisations, where some of the functions of HR are located at the head office, serving other locations, sometimes even in different countries.

Employee Self-Service (ESS)
ESS features provide employees with the opportunity to perform HR-related and job-related tasks that would otherwise need to be done at least partially by an HR practitioner or administrator. While the most basic ESS systems allow employees to view their personal information and payroll information, more advanced ESS systems allow employees to enter and change personal information and HR-related information, like performance goals, self-review and ratings, etc. Approval is needed in most instances to change or enter new information. An overall benefit is that it proves to save the parties time and mitigate or avoid entry errors.

Mobile First Strategy
The mobile first strategy is a derivative of the ESS feature. It refers to companies designing products for mobile devices before making related designs for desktop and laptop computers. While this strategy assures the organisation of better user experience and more efficient work and HR process administration, design and maintenance of mobile-based applications or features can be quite challenging. Also, if employees do not have access to or cannot afford data on their

"Basic mobile phones can circumvent lack of broadband access, but only to a certain extent. Nelson Mandela said, "Education is the most powerful weapon you can use to change the world," yet use of mobile for education (m-learning) is still in its infancy and focused on basics like literacy. For example, the nonprofit Worldreader delivers books on mobile devices for free, using a compression technology to achieve high speeds even on low-bandwidth networks. The service is available across the developing world, with high use in sub-Saharan Africa and India."

Tae Yoo, Senior Vice-President, Cisco

cell phones outside the organisation, having a mobile strategy would end up being a costly affair.

Cloud-computing and SaaS-based HR technologies

More recently, cloud-computing and Software as a Service (SaaS) have become hot topics in the field of HR technology. Cloud computing has an impact on HR and employees in that the employees' information may be stored on a virtual server and certain data privacy requirements must be adhered to.

SaaS on the other hand is a software application that is not located on an organisation's premises. Instead of the application running on servers and data storage locally in the organisation, it now runs on the vendor's servers and data centres.
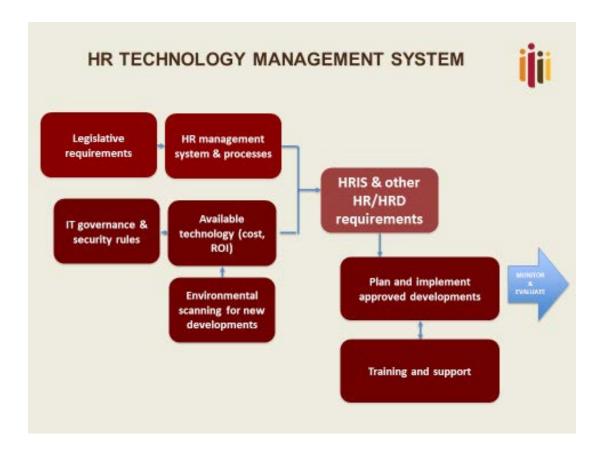
Advantages in using cloud-based and SaaS-based technologies are:

• Reduced cost associated with maintaining the back end;
• Organisations do not need to accommodate and manage technical experts;
• Cloud- or SaaS-vendor becomes responsible for upgrading, uptime and security, therefore maintenance is low.

THE PROCESS OF HR TECHNOLOGY IMPLEMENTATION

When deciding to implement HR technology, HR practitioners must envisage the "why, how, and when? The why has been discussed in depth within this fact sheet, however the "how and when" is critical in creating solutions for the why.

The SABPP HR Management System Standards are a useful starting point when considering implementation (the "how") of technology. The Standards provide a basis to check processes against and provide a framework to ensure proper integration of processes and provides a sound HR Technology management system process.

The Data Centric Model (DCM), see diagram below, can also assist with HR technology implementation process and its alignment to the business strategy. The step by step model pulls through the elements of people, processes and technology.
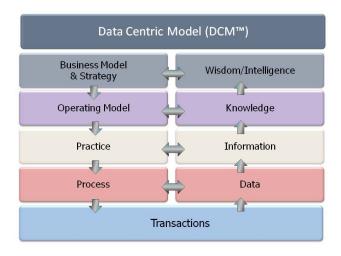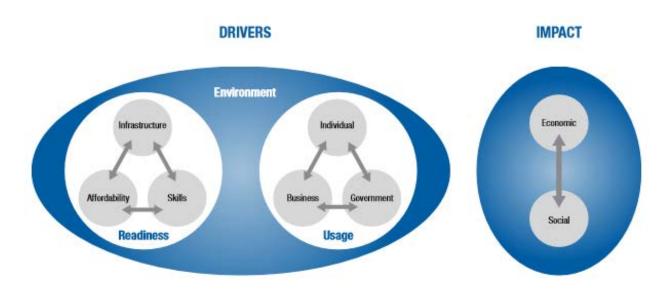

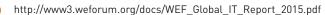Figure 2. The Data Centric Model™
(Pretorius, 2009)

The "when" depends on various organisational factors must be taken into consideration when deciding on which HR technology applications and platforms the organisation should use. Some of the factors that must be considered are:

• Business, network structures and culture readiness;
• employee technology familiarity;
• policy alignment;
• skills development plan aligned to technology strategy;
• size of organisation, technological competencies of management; and
• the budget available for implementation.

By understanding the factors, the HR practitioner can position the technology based on key drivers and impact of the implementation. According to the Global IT Report, the network readiness is key to enable technology implementation and clearly displays areas that need to be developed.
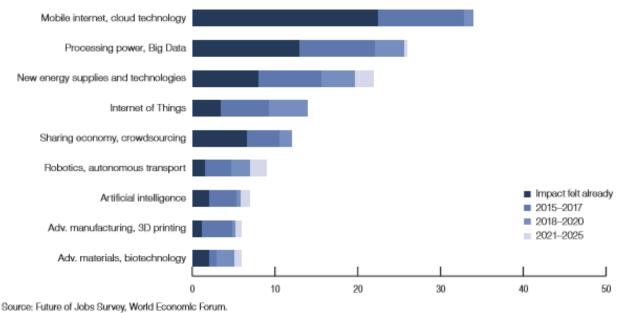

Global IT report (2015)

---

4   http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf

5   www.wef.org

WILL HR TECHNOLOGY REPLACE HR PRACTITIONERS?

If an HR practitioner's role is purely administrative and not strategic, then the answer is YES. The trends points to a collaborative approach between HR practitioner and HR technology. In the World Economic Forum article: The Future of Jobs, the trends project the part technology plays in future jobs and the areas that will drive its existence.

TECHNOLOGICAL

Source: Future of Jobs Survey, World Economic Forum.
Note: Names of drivers have been abbreviated to ensure legibility.

The HR practitioner can utilise the information above for predictive workforce planning. The HR practitioner can seek advantage by leveraging off the technology and the data that it produces. The information can position the business in its market presence and competitive edge. The main point is that the HR function and/or the HR practitioner is enabled to evolve from administrative to strategic.

THE DO'S AND DON'TS OF IMPLEMENTATION

Do:

- Create an HR technology committee that will assist in the why, how and when. The committee should further extend itself to the relevant stakeholders that will support the implementation, advise on the technology, identify and screen potential service providers, and advise on the terms within the Service Level Agreements (SLA's). The SABPP has published a fact sheet on SLA's in March 2016, that can be used to assist this process.
- Align to the SABPP HR Technology Standard. The HR Technology Standard clearly indicates steps that must be taken to ensure that HR technology is implemented properly in your organisation.
- Know the HR Technology marketplace. Do not just follow the leading products, but also try and update yourself about new and upcoming products. Research is important for the HR practitioner to support the need for the relevant technology.
- Create a change management process and communicate to the employees.
- Create a phased approach to the actual technology implementation.
- Consider the ethics and data security measures to be considered. Communication and SLA's are key in this aspect.
- Benchmark and network with organisations and professionals who are experts in the field or are implementing an HR technology strategy.

Do not:

- Expect technology to fix everything for you. The key message of communication is to ensure that the employees understand the benefits and challenges explicitly.
- Blindly imitate what is successfully implemented in other organisations.
- Don't think short term impact. A strategy like this can be expensive and it should impact business positively long term.
- Dictate the HR technology implementation. Get buy-in and support from leadership and employees.
- Expect employees to understand the technology at first. Develop training platforms that are accessible and easy to understand.
- Rely on an external vendor to define the organisational needs.

Forbes 7 Hottest trends in HR Technology:

1. There will be a move from quantity to quality.
2. The number of so called breakthrough HR technologies will diminish.
3. It's all about implementation.
4. Analytics is the special sauce.
5. Social media and continuous learning continues to grow in significance.
6. Real time talent management matters.
7. Mobile, mobile, mobile.

To read more:

http://www.forbes.com/sites/meghanbiro/2013/10/06/7-hottest-trends-in-hr-technology

LOGGING OUT

It is important that HR professionals understand the impact that technology has on the business, but more the impact HR technology has on the profession. There is no denying that technological trends are emerging within the profession and the way things were done in the past has significantly shifted with technology's assistance. The question that beckons is whether HR professionals are adapting to the trend.

Traditional HR is now evolving from a support function to a more strategic business partner, and HR technology ensures that this transition is catalysed. HR itself can be measured through metrics that can track success and challenges. HR and technology is a delightful partnership that sets the pace for the futuristic development of HR. In the process HR gains credibility and respect for its strategic positioning and function.

Watch out for the SABPP's APP enabled and partnered by CSM called member zone to be launched in September 2016, a technology driven initiative that has been developed to enhance member engagement and customer experience. With that note, HR practitioners are encouraged to set the pace in the technology race and embrace the technology hand of partnership…**Logged out!**

This Fact Sheet was written by Lathasha Subban Head: Knowledge and Innovation of the SABPP with contributing author Renjini Joseph.

Renjini Joseph is an HRM Lecturer and Qualification Leader for the Undergraduate HRM qualifications in the Department of Industrial Psychology and People Management at the University of Johannesburg. She is also the Chairperson of the Human Resource Universities Forum. Renjini has extensive research, lecturing, facilitation, training, corporate and consulting experience.

FACT SHEET

DATE	NUMBER	SUBJECT
2013		
February	1	**GAINING HR QUALIFICATIONS**
March	2	**ETHICS, FRAUD AND CORRUPTION**
April	3	**NATIONAL DEVELOPMENT PLAN**
May	4	**BARGAINING COUNCILS**
June	5	**EMPLOYMENT EQUITY**
July	6	**HR COMPETENCIES**
August	7	**HR MANAGEMENT STANDARDS**
September	8	**PAY EQUITY**
October	9	**COACHING AND MENTORING**
November	10	**HIV/AIDS IN THE WORKPLACE**
2014		
February	1	**EMPLOYING FIRST-TIME JOB MARKET ENTRANTS**
March	2	**PROTECTION OF PERSONAL INFORMATION ACT**
April	3	**QUALITY COUNCIL FOR TRADES AND OCCUPATIONS**
May	4	**WORK-INTEGRATED LEARNING**
June	5	**RECRUITMENT – SCREENING OF CANDIDATES**
July	6	**HR RISK MANAGEMENT**
August	7	**BASIC HR REPORTING (1)**
September	8	**BASIC HR REPORTING (2)**
October	9	**EMPLOYEE ENGAGEMENT**
November	10	**SEXUAL HARASSMENT**

SABPP™
SA BOARD FOR
PEOPLE PRACTICES
Setting HR standards

AUGUST 2016 · NUMBER 2016/07
FACT SHEET

DATE	NUMBER	SUBJECT
2015		
February	1	**AMENDMENTS TO LABOUR LEGISLATION 2014**
March	2	**THE REVISED BROAD-BASED BLACK ECONOMIC EMPOWERMENT CODES OF GOOD PRACTICE**
April	3	**LESSONS LEARNED FOR EMPLOYERS FROM CCMA CASES**
May	4	**EMPLOYEE WELLNESS SCREENING**
June	5	**CHANGING THE EMPLOYMENT EQUITY LANDSCAPE**
July	6	**EMPLOYEE VOLUNTEERING**
August	7	**DEPRESSION IN THE WORKPLACE**
September	8	**EMPLOYEE WELLNESS**
October	9	**EQUAL PAY AUDITS**
November	10	**BASICS OF EMPLOYEE COMMUNICATION**
2016		
February	1	**PRODUCTIVITY BASICS**
March	2	**SERVICE LEVEL AGREEMENT**
April	3	**TALENT MANAGEMENT: PAST, PRESENT AND FUTURE**
May	4	**BUILDING ORGANISATIONAL CAPABILITIES**
June	5	**CHANGE MANAGEMENT**
July	6	**INNOVATION IN HR**
August	7	**HR TECHNOLOGY**

For more information about SABPP, visit our website www.sabpp.co.za or blog
www.hrtoday.me or follow us on twitter @SABPP1 and Instagram @sabpp_1 for daily HR information.