



INNOVATION EDGE

invest early



TEAMPACT

An innovative tool for monitoring and tracking impact

A case for Early Learning Programmes in South Africa



Overview.

TeamPact is a data-lite platform developed by Waves for Change, that leverages the selfie culture and artificial intelligence facial recognition technology to make tracking attendance fun and easy. Innovation Edge (IE) invested in the platform to support its development, testing and scaling up. The platform is useful for funders, organisations and sectors working with teams and groups who need accurate attendance to make informed decisions. TeamPact provides instant, transparent and reliable data, which users can share with key stakeholders in real time, enabling effective reporting and data-informed decision-making.

Innovation Edge

We are an impact-first investor focused on solving early childhood challenges in South Africa. Our investments support social entrepreneurs to develop, test and launch innovative solutions to early childhood challenges focusing on the following impact areas: Early Learning in the Home, Quality Early Learning Programmes, Early Health and Well-being, and Early Security and Safety.



Read more at:
www.innovationedge.org.za

This report shares the impact story of TeamPact. It provides the background of the problem that TeamPact is solving, with more focus on the Early Childhood Development (ECD) sector. This is followed by the overview of IE's investment in the platform and the story of TeamPact, how the platform works, and the reach and impact up to date.

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Waves for Change

Waves for Change provides child-friendly mental health services to children and young people in under-resourced communities. The social enterprise organisation developed TeamPact to track attendance and impact of their mental health surf therapy programme participants.



Read more at:
waves-for-change.org



Tracking Attendance in the Early Childhood Development Sector.

A child's early years are the basis of their future development, and they provide a solid foundation for lifelong learning and learning abilities, including cognitive and social development. Research proves and continues to emphasise the importance of early learning as an essential building block for a child's future success. Children who have access to at least two years of high-quality early learning programme, prior to starting the first grade, generally perform better compared to their peers. Evidence suggests that a minimum of 15 to 20 hours of quality learning engagements per week is required, and that outcomes are even improved if children are enrolled before the age of four years.

There are over three million children between the ages of three and five in South Africa, 63% of whom attend some kind of group-based early care and education (ECCE) programme. These range from preschools, creches and playgroups to mobile centres and day mothers. However, it is unclear how many programme sessions they attend, the duration and the frequency. Attendance is usually captured using a notebook, if it is recorded at all. The issue with these paper-based records is that they rely on

practitioner's careful marking. If they make a mistake or a discrepancy arises, there are often no additional ways to verify attendance. Further, marking and looking through the registers is time-consuming and it is difficult to analyse, manage and share the records. It is also an expensive exercise to audit these records.

Although some organisations and ECCE programmes have more advanced systems for tracking attendance, these systems do not meet the needs of practitioners in under-resourced areas. They can be expensive, complicated, and require technical support and hardware.

In South Africa, registered early learning centres currently receive a R17 subsidy per child per day from the Department of Social Development (DSD). These centres are required to report to the DSD, stipulating how the money was used. By ensuring that the data is accurate and verifiable, these centres are ensured the opportunity to sustain support as needed. Such data also opens up opportunities for further funding support to improve the centres' learning programmes, infrastructure and services.



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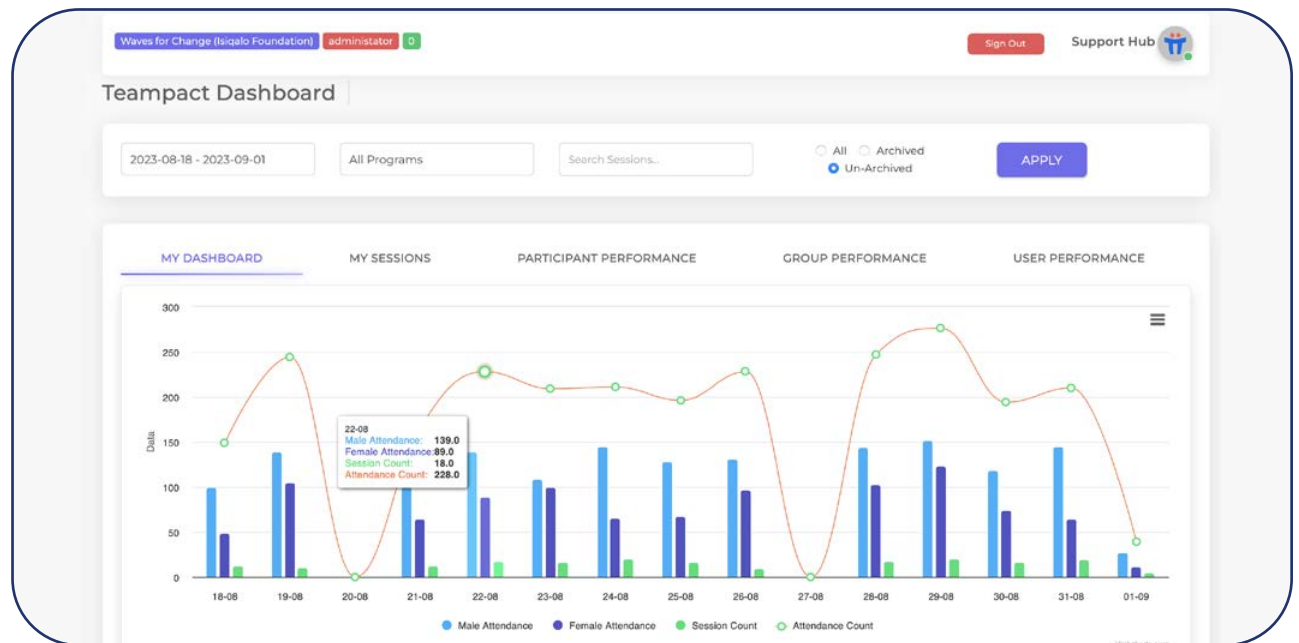
Knowing how many children attend early learning programmes, what programmes they attend, and duration is also useful for identifying those who attend less frequently. With this information, necessary follow ups can be done before children have dropped out. And, having to manage a large number of children with scarce resources, efficient data tracking is necessary to streamline the practitioners' work.

Innovation Edge (IE) provides financial and non-financial support to social entrepreneurs to test and launch innovative solutions to early childhood challenges. We provide multiple rounds of funding, strategic coaching, operational support and connections to social capital.

Improving the quality of early learning programmes is one of IE's impact areas. Between 2019 and 2022, we invested in the development, feasibility testing, and scaling up of an attendance-tracking tool called TeamPact in the Early Childhood Development (ECD) sector. We made an additional investment for the period between 2023 to 2024.

TeamPact

TeamPact – a platform developed by Waves for Change – addresses the attendance-tracking issue by providing a digital platform that simplifies the process and one that enables practitioners and



other users to collect, collate, analyse and share attendance data with relevant stakeholders.

The platform leverages the selfie culture and artificial intelligence facial recognition technology. The user simply takes a picture of the group at the beginning and at the end of each session using the TeamPact app installed on their mobile phone. They then sync the picture to the cloud database where it is automatically audited. Thereafter, the data is displayed onto the dashboard that funders, administrators and other relevant stakeholders can access and view in real time.

TeamPact appeals to funders, NGOs, foundations and sectors running programmes and who see attendance and session delivery as a key metric to track attendance and who want to make timeous, data-driven decisions. The app meets the demands of users in resource-poor communities due to its capability to work online and offline, making it easier to use than the existing methods of tracking attendance. It compresses photos and text, so that they require less data when synced to the database, resulting in lower internet data usage. (see "How TeamPact Works" on page 4).

IE's Investment in TeamPact



THE INNOVATION

A data-lite hybrid platform that organisations and sectors can use to track attendance and assess impact of their team- or group-based programmes.



NON-FINANCIAL SUPPORT

We provided strategic and business management guidance, including the pricing of TeamPact and building up the team. We also connected the TeamPact team with ECD role players and technology experts to coach and support them during certain stages of development and implementation of TeamPact.



PURPOSE OF OUR INVESTMENT

The grant funding supported the development of a pre-release version of TeamPact. The version was then used to test the feasibility of the platform in the ECD sector: four pilots tracking child attendance at after-school programmes and ECD centres, as well as staff attendance at home visits and ECD centres were conducted. Subsequently, three of the four ECD organisations that participated in the pilot converted to paying customers – two pay their own licences and one is funder sponsored.

Through the equity funding, with which we invested in the TeamPact business, the team was able to look for new customers in the ECD sector, improve the software and cover other operational expenses. They were also able to register a new company – TeamPact International – to attract international clients. Subsequently, one client in London purchased a TeamPact licence in 2022, enabling the social enterprise to make revenue beyond South African borders.



INVESTMENT PERIOD

2019–2024



IE'S IMPACT AREA

Quality Early Learning Programmes (ELP)



AMOUNT INVESTED

Grant (R297 500)
Equity (R1 600 000)



WHY WE INVESTED

We invest in innovative solutions that address early childhood issues in South Africa's under-resourced communities; that are scalable and able to sustain themselves beyond our financial and non-financial support.



By tracking attendance and providing accurate and verifiable data, early learning centre operators, managers, service providers and policy-makers can make data-informed decisions to improve resource allocation and the quality of learning programmes. Improving the quality of Early Learning Programmes is one of IE's impact areas.

Through our investment in other impact measurement tools, and the resultant [Early Learning Programme Outcomes study](#), we learnt that attendance data is essential when trying to understand programme effectiveness. Attendance is also a key variable for funders, and is often the metric upon which resources are allocated. We saw the continued opportunity to utilise TeamPact as a tool for increasing transparency in programme attendance data, not only for ECD but for the sector funders and other key stakeholders. Making reliable and accurate programme data readily available bolsters funders' and stakeholders' confidence in allocating funding and resources to these programmes.



Tracking Attendance to Maximise Impact.

TeamPact (initially named Coach Assist) was developed by Waves for Change in 2018 with the aim to assist coaches with monitoring and tracking attendance of youth that are participating in their mental health [surf therapy programme](#). The Waves for Change team needed a tool that would collect individual participant attendance longitudinally. This was to ensure that they can generate reliable and verifiable statistics for their funders, and be able follow up and provide necessary support to the children who were not attending. After conducting a robust analysis of available tools, they discovered that none were customised for South Africa. This led to the development of TeamPact. The idea was to use photos to document activities to make tracking attendance easy and transparent, and provide the opportunity for data-informed decision-making.

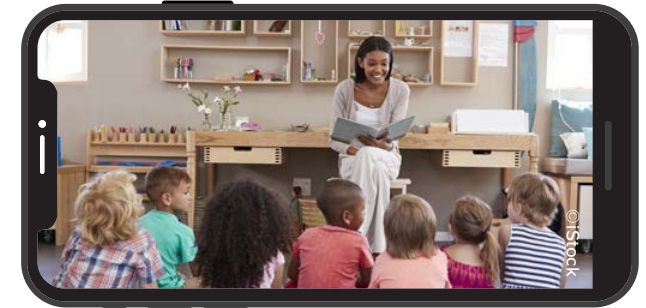
How TeamPact Works

An ECD Use Case

TeamPact is made up of three components – the app for data collection, cloud database for storage and the back-end dashboard for visualisation and management. Users need to go through TeamPact's onboarding and licensing process to be able to use the platform for their programmes. The onboarding process includes training on how to use the platform (the app and dashboard), registering the programme participants, creating classes, and populating programme and participant details into the platform.



Users can download the TeamPact app from Google Play, Apple Store, or Huawei App Gallery using any type of smartphone. The dashboard is set-up by the TeamPact team and can be accessed through a mobile device or a computer.



TeamPact can record data at a programme level, session level and activity level for individuals or groups at a centre.

At the beginning and end of each programme session, at an early learning centre, for example, the practitioner uses the app on their mobile device to capture a picture of the group of children attending their session. The group of children would have already had their individual profiles loaded into the TeamPact database at onboarding. Similar to Facebook and other similar platforms, the facial recognition feature is used to accurately tag all the children in the picture according to their corresponding data on the TeamPact database. The location and time when the photo is taken are recorded. Moreover, the practitioner can add any notes about the session or performance on an individual child basis.



The sessions are stored in the app. Depending on the availability of internet connection, the practitioner can immediately sync the data to the cloud database or keep it on their phone for syncing at a later stage. As soon as it is synced, the session data becomes available for viewing on the TeamPact dashboard.

Through the live, digital and software-audited data, managers and administrators or other relevant stakeholders can have a quick overview of the

centre's programmes, sessions per programme and individual child records. They are able to see how the child has been attending the session and their progress if noted by the practitioner. It also enables them to generate accurate data for effective reporting, making it easy for those who want to provide support, to make data-informed decisions.

Practitioners can quickly see daily attendance on a child by child level and sort children by top attendees and bottom attendees. They can also see the duration of the sessions. This makes it possible for practitioners to respond in real time to children who struggle with attendance and who are not receiving the full benefit of the programmes by missing out on the sessions.

Practitioners can quickly see daily attendance on a child by child level and sort children by top attendees and bottom attendees.



Photo: The tagged faces on the photo verify who attended the session and the total number of attendees, providing accurate statistics.



Location: The name of the learning centre or place in the case of other organisations, at which the photograph was captured is tagged onto the photo, adding another level of transparency

between the user and the stakeholders. Funders can identify centres with consistent performance issues and can investigate in real time whether beneficiaries need additional support.



Time: The times at which the photos were captured – at the beginning and end of the session – show the duration of the session. This helps to see the child engagement hours in order to assess the impact of dosage.



Individual profiles: Each child's profile shows which sessions the child has attended, when and the length of engagement they receive. It also shows which sessions they missed. These can be measured against results to assess impact.

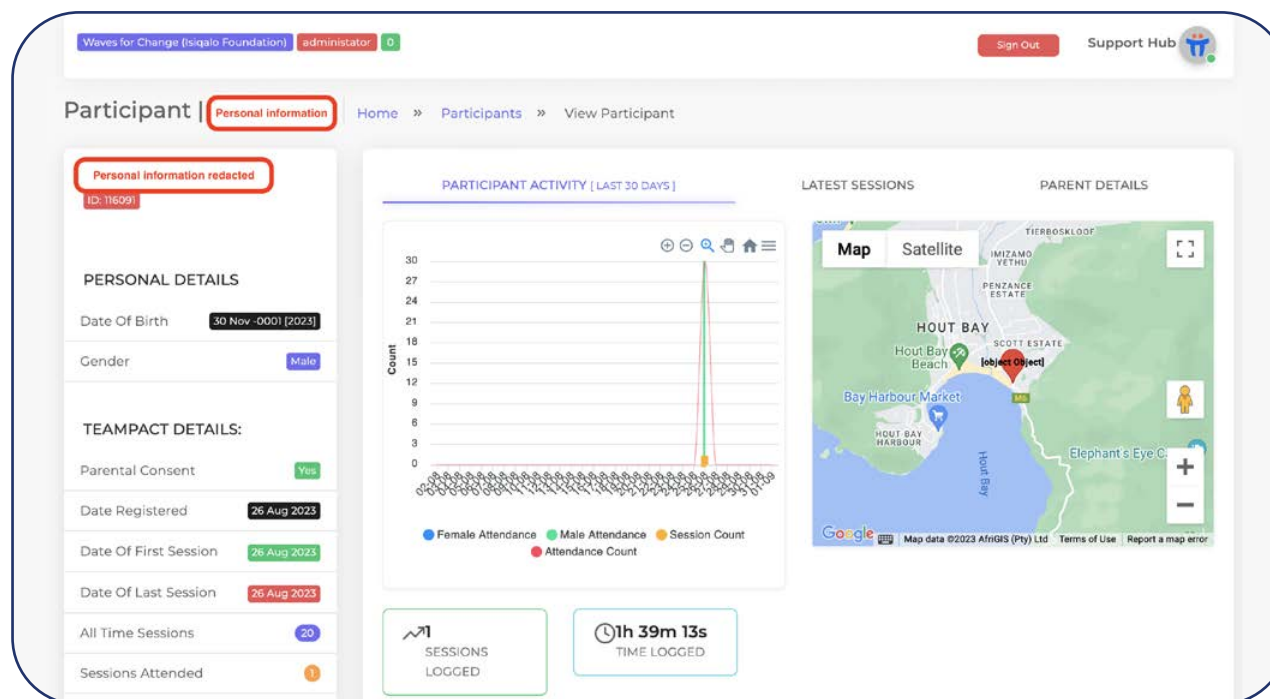
All data generated through the TeamPact dashboard is exportable and populated into a downloadable excel spreadsheet or CSV file allowing the platform to link with other data storage solutions or management platforms like Salesforce, PowerBI and AirTable. It also provides advanced reporting functionality and visualisation of data using graphs and map widgets.

TeamPact Use Outside ECD

Although IE's investment on TeamPact focuses more on making an impact in ECD programmes, there has been clear evidence that the tool is useful in tracking attendance across programmes in different sectors.

In 2022 and 2023, TeamPact was tested and proven to be effective in youth and social development, and social employment services:

- In 2022, TeamPact was successfully utilised by **Laureus Sports for Good Foundation South Africa** and **The Learning Trust** to track attendance data for reporting, safeguarding, and resource allocation. **The Learning Trust** also aimed to understand the scale and role of the after-school sector in South Africa.
- In 2023, the **DG Murray Trust** is piloting TeamPact in their Zero Dropout Campaign (a national campaign focused on halving the rate of school dropout by 2030). If the pilot is successful, there is interest in integrating TeamPact further across their portfolios.
- The **Job Fund's partners, Year Beyond** and **Sports for Social Change Network**, are using TeamPact to track 10 000 young people in jobs across South Africa. Staff, including teaching assistants, librarians, and sports coaches, track their own attendance at work.



For security purposes, programme participants provide consent before hand for use, and storage of their details on TeamPact's cloud-based data storage system [where the participant is a minor, the consent is obtained from a competent person]. The information is stored, processed and shared according to the Protection of Personal Information (POPI) Act of South Africa or General Data Protection Regulation (GDPR) for international clients. These regulations ensure that all personal data is collected and used in a secure and responsible manner. For additional protection, the users of the platform are required to enter log-in details and answer a security question to access participant data.

Eight Benefits of Using TeamPact

1 Contextually relevant

TeamPact meets the demands of practitioners with limited resources, low data connectivity, limited digital literacy and low income. The platform design is optimised for users with limited experience of data-informed project management.

2 Quick and transparent data

Compared to paper registers, attendance tracking through TeamPact is quicker and more transparent. In an ECD environment, it allows live monitoring of the learning programmes, including the duration of engagement for each child, which is key to reviewing programme and child's performance.

The use of facial counting improves data accuracy and transparency. It shows when and where the records were taken and who submitted them, with the photo as evidence of the time the register was conducted.

3 Saves time

The process takes minutes, but provides robust data. TeamPact also saves hours of back-end management time by using facial counting to audit registers, allowing for mass and rapid auditing.

4 Provides accessible data

All data is exported as excel spreadsheet or CSV file that is downloadable and can be integrated into other data storage and visualisation solutions, such as Salesforce, Power BI and AirTable.

5 Improves performance management and monitoring

The cloud-based dashboard allows easy tracking and sorting of classes over time from anywhere, improving performance management and monitoring.

6 Data visualisation for easy understanding

The dashboard enables updates at a glance and creates smart charts to help managers with limited experience see which classes are full, which classes have missed sessions, and which children need home visits.

7 Informs timely data-driven decision-making

With a solid set of data, those who support the ECD sector, including academics, can benefit from consistent, long-term verifiable data.

Policy makers can make better-informed policy decisions, and practitioners can quickly identify children who missed multiple days and need to be contacted. NGOs can take advantage of shared and aggregated data to better allocate needed resources like food and training. Administrators can see ratios of practitioners and children, and the concentration of coverage of centres.

As identified by the practitioners that the TeamPact team has been working with, preschools are a key place for nutrition providers to intervene with large groups of young children. Switching from paper forms gives providers access to the dashboard for faster and more accurate reporting and alignment of nutrition needs and outcomes.

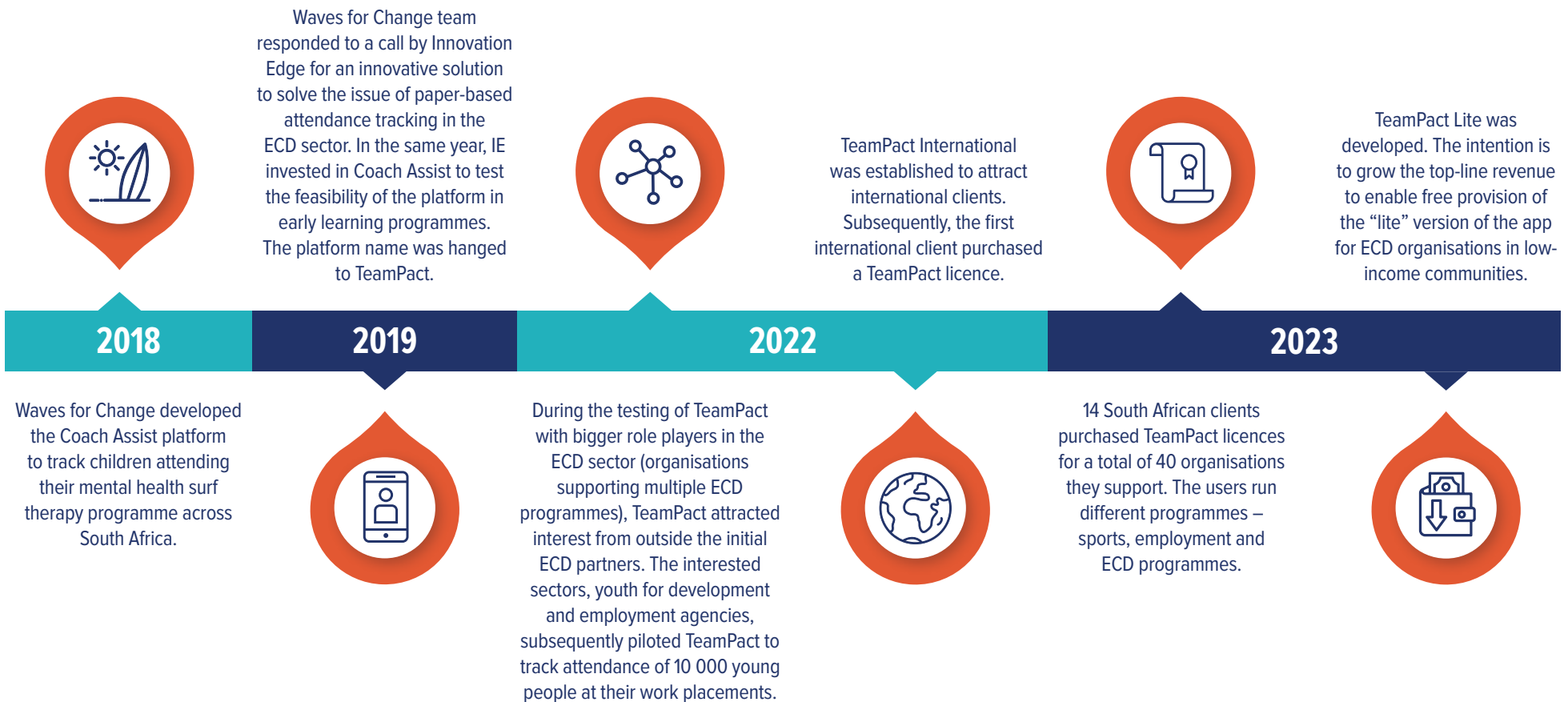
8 Safe data storage

A cloud-based POPI and GDPR-compliant online/offline data storage system allows TeamPact users to safely store their data in a secure cloud environment. The online/offline functionality allows users with data or Wi-Fi restrictions to use TeamPact without a challenge.



TeamPact's Reach and Impact at a Glance.

Major Milestones



Reach in Numbers



870 000+

Sessions have been logged into the TeamPact app



3 000+

Users engage with the TeamPact app daily

14

TeamPact licenses bought by funders to support their grantees

40

Organisations are using TeamPact



85 000+

Children are registered on TeamPact, of which 8 500+ are of ECD age from across four provinces – Western Cape, KwaZulu-Natal, Northern Cape and North West

5 OF THE 40

Organisations are from the ECD sector



5 000+

TeamPact app installations on Google Play

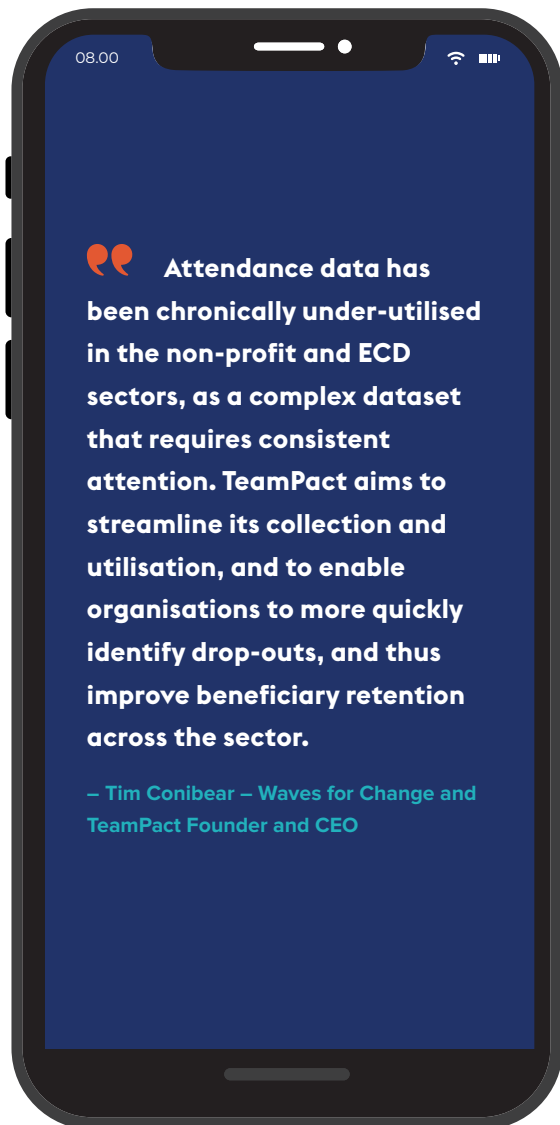


TeamPact has been used across

SIX SOUTH AFRICAN PROVINCES



Insights from TeamPact



A Quick Chat with TeamPact Users

The TeamPact team works with several ECD users in the Western Cape, including Sikhula Sonke ECD in Khayelitsha, Vusa Rugby and Learning Academy in Langa and Ikamva Labantu – an organisation that supports communities in the Cape Flats. Amongst other programmes, these TeamPact users provide a range of different ECD services, from running informal day-care centres for children and providing training and support for day mothers to running fun extra-mural activities for children aged five and six.

The following feedback on their experiences of using TeamPact was collected in March 2023:

Vusa Rugby and Learning Academy

Vusa Rugby and Learning Academy provides a range of developmental experiences to children of different ages in Langa in the Western Cape. The academy also supports four registered ECD centres, developing numeracy and literacy skills through play as well as through other programmes. Vusa has been using TeamPact to track children's attendance since 2019.

Nikki Matthews is a Chief Operating Officer at Vusa and she uses the platform six days a week for checking coaches' activities on the dashboard.



What caught your interest in using TeamPact for attendance tracking, and what were you using before?



Before using TeamPact, we were using paper forms and found that we were not getting accurate data, as in-depth information such as gender, age and parental details was lacking. The coaches were only using paper attendance data on an ad hoc basis, and data digitisation was a huge undertaking. Initially, the interest in using attendance tracking software was for donor purposes, as reporting was impossible using paper attendance data.



How has using TeamPact changed the way you manage your programmes?

With better attendance tracking, we have a better indication of when there are more or fewer kids, which makes catering easier and reduces waste. We've also noticed patterns in attendance based on what activity is offered (learning vs sports and games), and as a result we've changed the way we incentivise kids to attend a broader spectrum of activities. Using TeamPact has also empowered staff and allowed them to prove whether kids were present or not for safeguarding purposes. For funders, it is much easier to show proper figures, particularly figures relating to gender, which we were not collecting before.



What changes have you noted in children's attendance since you have been using TeamPact?

We've noted better attendance since the use of TeamPact. This is because we've made a greater effort to get broader information about each beneficiary, including parents' contact details, which means we can now contact parents directly through an SMS group if beneficiaries are not attending the sessions. Before TeamPact, we did not have contact information. So, having TeamPact has incentivised the proper use of attendance data to chase drop-outs. We'd love an auto SMS feature on the TeamPact app.



What value has the use of TeamPact added to the processes of monitoring children's attendance?

The use of TeamPact has upskilled coaches and given them a stronger sense of ownership and responsibility. Although it was a long learning process, now that they are comfortable, it has instilled a sense of responsibility.



What do you do with the attendance tracking data collected through TeamPact?

We use the attendance tracking data for several purposes, including creating feeding plans, determining whether attendance is up or down, and using it for incentives for kids (such as selecting kids who attend academics more regularly to be more likely to be picked for rugby matches).



Would you recommend the use of TeamPact in other ECD centres?

Yes 100%, we would recommend the use of TeamPact in other early learning centres, especially for ECD services in communities where there is no information about the kids attending the programmes. They arrive or don't arrive, but they can't give any data on the kids. For safeguarding, it would be a huge benefit. We work with four ECD centres and none of them have data on their kids. We provide those centres with data from TeamPact as and when they need it.



Sikhula Sonke ECD

Sikhula Sonke is a community-based organisation addressing the need for early childhood development in Khayelitsha in the Western Cape. The organisation offers quality early childhood development training and support to caregivers and ECD practitioners in over **160 centres** in Khayelitsha.

Papama Mateza is an M&E Manager at Sikhula Sonke. He uses TeamPact from Monday to Friday, checking the dashboard daily and doing bulk analysis at the end of the week and at the end of each quarter. The organisation has been using TeamPact since 2019 to track attendance at their ECD programmes and site visits to different projects they implement.

Papama shares that they switched from using paper-based registers to TeamPact after they tested the platform for a few weeks. They liked that it allows for auditable records and that it saves time compared to entering data into an excel spreadsheet, which is what Papama did every day prior to using TeamPact.

TeamPact has made it easier to track beneficiaries and follow up on who is not attending. We are also able to keep track of the numbers at various sites, which allows us to keep on top of funder reporting and resource planning.

Since the use of TeamPact, Sikhula Sonke has also noticed better attendance of children. They are able to check-in on dropouts and follow up with parents using the information on TeamPact.

Cool Play

Cool Play is a sport for development programme that works in underprivileged communities in South Africa. They run after-school programmes for learners aged five to 18.

Carl Davids is an M&E manager at Cool Play. He was initially a coach using the app to capture the data in the field, then was promoted to a management position. He uses the dashboard to monitor their coaches' and teams' activities every day and extracts in-depth data on a weekly basis for analysis. The coaches use the TeamPact app daily to capture their teams' attendance.

According to Carl, TeamPact has opened up opportunities ...

... The accuracy of the data has allowed the organisation to apply for further funding and expand into new areas.

... and it has enabled them to track attendance of both the coaches and children:

We've noticed that the app has increased the attendance of coaches at their designated schools due to its functionality as an HR tool. The location feature has helped identify coach attendance. With learners, it has allowed us to have a set of data where we can see specifically which learners are attending, at a glance, and identify dropouts and strong attenders.



*Cool Play saves **four to five days** per month in capturing and tracking attendance data with TeamPact.*

Year Beyond (Social Employment User)

TeamPact has given the Year Beyond Programme greater speed in data turnaround. Its ability to reflect live data allows for real-time intervention and accurate understanding.

– William Crawford, Data Manager, Year Beyond



*Year Beyond saves about **80%** of time in running time sheets with TeamPact.*

Ocean Mind (Youth Development User)

Team Pact has revolutionised how we collect and input our attendance data. Data collection has moved from being a manual process taking hours of management time each month to a 10-minute job, checking if staff have completed their sessions. It's a simple system to use for both staff and management. The data we have collected has enabled us to make significant improvements to our processes, increasing engagement with young people and volunteers and tracking our staff. Using TeamPact has also supported us in gaining more grants and funding for the organisation as we can showcase our impact with our data. I recommend using this system for surf therapy programmes.

– Rachel Parker, CEO, Ocean Mind – Australia



TeamPact has been saving Ocean Mind about 2.5 hours per week in attendance tracking and reporting.

Edunova schools

Edunova is a non-profit company that focuses on effective use of Information Communication Technologies in schools that are situated in disadvantaged communities across South Africa.

Users of the TeamPact app in schools supported by Edunova shared their highlights and challenges about using TeamPact:

I love working on TeamPact. It makes everything easier and faster and also less paper work.

It helps you keep a record of how long your coding class is. At first I struggled but I now know how it works and is very easy.

It's good because it saves a lot of time because there is no paperwork done, just click and you are good to go. It is a very interesting app to use – simple and easy if I can put it that way. First week of using the app there was a problem to sync a session but it was fixed by the TeamPact team.

Much easier than doing it manually. We can maybe edit certain stuff on our own like adding or removing names. Instead of waiting for the problem to be solved by the TeamPact team, we can actually instead do it ourselves.





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Our investments aim to improve the chances of children's life-long success by influencing the quality of their first six years of life.

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