

DIGITAL HEALTH SYSTEMS AND APPLICATIONS IDENTIFIED BY THE MAP&MATCH AND VITAL WAVE PROJECTS

The extract below shows selected fields from the complete list of 150 systems and applications identified by the **Map&Match¹** and Vital Wave projects. The 55 systems marked with * were also identified during the South African HIV Digital Health landscape assessment through the online questionnaire, KIIs and literature - their descriptions can be found in Annexure C of the landscape assessment.

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
1	Ada Health App			Unknown		Proprietary		https://play.google.com/store/apps/details?id=com.ada.app&referrer=adjust_reftag%3DcOe60eA8nEKhh%26utm_source%3DOrganic_Website
2	AI-fluence	Targeted Client Communication: Social media and marketing	Includes HIV as part of tool	Unknown		itself a platform		https://www.ai-fluence.com/
3	AitaHealth *			Subnational - Some districts	Fully government funded	Proprietary	AitaHealth	
4	Alexa Audience Overlap Tool	Targeted Client Communication: Social media and marketing	not used for HIV so far	Unknown				https://try.alex.com/marketing-stack/audience-overlap-tool
5	ART Cohort system *			National	Don't know			https://art.dhis.dhmis.org/dhis-web-dashboard/#/XTTAcnZqzK0
6	askNivi			National	No, they have not yet contributed	Proprietary		https://www.asknivi.co.ke/
7	Aspect			Unknown		Proprietary		
8	Aviro Pocket Clinic	Targeted Client Communication: Client support and follow-up	HIV-specific	Unknown		bespoke		https://www.avirohealth.com/product-page
9	Bahmni			Unknown		Non protective free and open source software (e.g. Apache)	Bahmni	
10	BAS (Basic Accounting System) *			National	Don't know			http://bas.pwv.gov.za/
11	Big Sis	Targeted Client Communication: Information and support messaging	Includes HIV as part of tool	Unknown		turn.io		https://www.turn.io/news/girl-effect
12	Bluebird			Unknown		Unknown		
13	B-Wise *	Targeted Client Communication: Information and support messaging	Includes HIV as part of tool	Unknown				https://bwisehealth.com/
14	CAD4COVID			Subnational		Freemium		https://www.delft.care/cad4covid/

¹ <https://static1.squarespace.com/static/59bc3457ccc5c5890fe7cacad/60db9e566c38632e50d75366/1625005656905/M%26M-brief-South+Africa.pdf>

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
15	Cadasta platform			Unknown		Proprietary	XLS Form, Esri	
16	CareConekta	Healthcare Provider Decision Support	HIV-specific	Unknown				https://clinicaltrials.gov/ct2/show/NCT03836625
17	CasePro			Subnational		Open source	RapidPro	
18	CCMDD (Central Chronic Medicine Dispensing and Distribution System) *							
19	CHARISMA mobile *			Unknown	Partially funded / contributed in-kind people or time			https://www.mycharisma.org/
20	Coach Mpilo	Telemedicine	HIV-specific	Unknown		turn.io		https://www.genesis-analytics.com/projects/a-mobile-solution-to-supporting-hiv-treatment-adherence https://menstarcoalition.org/not-linked/coach-mpilo/
21	CommCare *	Healthcare Provider Decision Support	Includes HIV as part of tool			Open source	CommCare	https://www.dimagi.com/commcare https://www.dimagi.com/sectors/hiv-aids
22	Communicable Diseases *			Unknown				
23	Community Health Toolkit				No, they have not yet contributed	Protective free and open source software		https://communityhealthtoolkit.org/
24	CoronaFighter			Subnational		Unknown		https://www.coronafighter.co.za/
25	Coronapp			National	No, they have not yet contributed	Unknown		https://www.coronapp.co.za/assessment
26	COVID Alert South Africa			National		Unknown		https://play.google.com/store/apps/details?id=za.gov.health.covidconnect&hl=en&gl=US
27	COVID-19 HealthAlert			National		Open source	WhatsApp, Turn.io	https://api.whatsapp.com/send?phone=27600123456&text=check&source=&data=&app_absent=
28	COVID-19 HealthCheck			National	Yes, they are contributing in-kind people or time	Open source	Turn.io	https://healthcheck.higherhealth.ac.za/login/?next=
29	COVIDConnect			National		Unknown		
30	Covi-ID			Unknown		Open source		
31	Data Warehouse (KZN) *	Data Collection, Management and Use		Unknown		bespoke		TBD - from primary research slides 18 Aug
32	Data Warehouse (WC) *	Data Collection, Management and Use		Unknown		bespoke		TBD - from primary research slides 18 Aug
33	DataFi	Data Collection, Management and Use	Includes HIV as part of tool	Unknown		bespoke		https://datafi.thepalladiumgroup.com/wp-content/uploads/2020/12/Data.FI-Malawi-Stakeholders-Build-Digital-Skills_JS-20-06-1.pdf https://datafi.thepalladiumgroup.com/about/
34	DATCOV *			National		Unknown	Power BI	https://www.nicd.ac.za/diseases-a-z-index/covid-19/surveillance-reports/daily-hospital-surveillance-datcov-report/

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
35	DHIS Aggregated (District Health Information System - Aggregated Module) *			National		Public Domain		https://kz.dhis.dhmis.org/dhis-web-commons/security/login.action?failed=true
36	DisaLab			National		Proprietary	DisaLab, DisaLink	
37	DrConnect			National		Unknown	Web, USSD	*111#
38	EDRWeb (Electronic Drug Resistant System) *			National	Partially funded / contributed in-kind people or time			https://www.wamsys.co.za/pages/product-info.php?cat_id=46
39	eLabs *	Laboratory and diagnostics imaging management		Subnational				
40	Electronic Registration and Performance Management System *			Subnational	Not yet contributed			Website discontinued because of lack of funding to sustain it
41	EPIC + PIMART	Healthcare Provider Training		Unknown				https://sahivsoc.org/Subheader/Index/pimart-online-course
42	EVDS (Electronic Vaccine Data System) *			National	Fully government funded			Available on the NDoH and SACORONAVIRUS.co.AZ websites
43	Everwell Hub			Unknown		Open source		
44	Falcon.io	Targeted Client Communication: Social media and marketing	not used for HIV so far	Unknown		itself a platform		https://www.falcon.io/ https://www.falcon.io/case-stories/wunderman-streamlining-approval-flows/
45	FoneAstra			Subnational	No, they have not yet contributed	Public domain		
46	GxAlert	2.10.3 Capture diagnostic devices results from digital; 3.3.1 Notification of public health events from point of diagnosis		National		Proprietary	Xpert, Aspect	https://systemone.id/gxalert
47	Health Systems Trust's Project monitoring tool			National	No, they have not yet contributed	Proprietary	Microsoft SQL and PHP	
48	Healthmap	Data Collection, Management and Use	Includes HIV as part of tool	Unknown		bespoke		https://healthmap.org/en/#!d=2
49	HealthWorkerAlert			National		Open source		
50	Hello Doctor App *			Unknown		Unknown	Hello Doctor	https://play.google.com/store/apps/details?id=com.hello doctor or.hello doctor
51	HITS preliminary results	Client Financial Transactions: Rewards		Unknown				https://www.ahri.org/small-financial-incentive-significantly-improves-mens-uptake-of-home-based-hiv-testing/
52	HIV digital health landscape			Unknown	Don't know			
53	HIV Engage	Targeted Client Communication: Information and support messaging	HIV-specific	Unknown				https://hivengage.co.za/
54	HIV hotspot mapping method	Data Collection, Management and Use	HIV-specific	Unknown				https://www.esri-southafrica.com/wp-content/uploads/2018/10/EsriSouthAfricaSANAC.pdf https://www.ee.co.za/article/hiv-hotspot-mapping-evidence-informed-hiv-response.html

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55	HIV risk game (Z-tree)	Healthcare Provider Training	HIV-specific	Unknown				https://www.bhub.org/project/game-resets-teen-hiv-misconceptions/ https://www.ztree.uzh.ch/en.html
56	HIV self screening	On Demand Services to Clients		Unknown				https://www.hivselfscreening.co.za/
57	HIVSmart!	Targeted Client Communication: Client support and follow-up	HIV-specific	Unknown				http://nitikapantpai.com/wp-content/uploads/2014/03/HIVSmart_Poster.jpg
58	HPRS (Health Patient Registration System) *		Includes HIV as part of tool	National				https://hprs.health.gov.za/
59	HRIS (Human Resource Information System) *							
60	(HPV) Human Papilloma Virus *			National	Fully government funded			The instance is not in use anymore as the HPV conditional grant was decentralized to provinces and individual provinces are not able to fund their own information system as the grant allocation is not sufficient for vaccine procurement, temp staff, transportation. So for the past 2years, the province have no system to collect data and have resorted to excel
61	Humanitarian OpenStreetMap (HOT OSM)	Citizen based reporting	Includes HIV as part of tool	Unknown		itself a platform		https://www.hotosm.org/ https://tasks.hotosm.org/explore
62	Hyfe app	Personal Health Tracking	not used for HIV so far	Unknown				https://www.hyfeapp.com/
63	Ideal Clinic System *			Subnational	Not yet contributed			N/A - yet!
64	IDSR Malaria (Integrated Diseases Surveillance and Response System for Malaria) *							
65	ISHP (Integrated School Health Programme) *			National	Fully government funded			https://dd.dhmis.org/
66	ISS: Integrated Supportive Supervision (ODK)			National		Open source	ODK	
67	Ithaka HIVSS *			Subnational	Not yet contributed			This is available from the Provider
68	iThemba Life	Targeted Client Communication: Client support and follow-up	HIV-specific	Unknown		bespoke		https://www.ithembalife.com/global/en/hiv.html http://cquin.icap.columbia.edu/wp-content/uploads/2019/12/CQUIN-Panel_Lalla-Edward.pdf
69	Iyeza Express	On Demand Services to Clients		Unknown				https://www.iyezahealth.co.za/services/
70	JustTested			Subnational		Unknown	Communicate (Cell-Life)	
71	Keheala			Subnational		Unknown		

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
72	Lighthouse (Messaging/Engagement Tool)	Targeted Client Communication: Client support and follow-up	HIV-specific	Unknown				https://globalhealth.washington.edu/interactive-map/projects/3726/Two-way-Texting-2wT-to-Improve-Patient-Retention-While-Reducing-the-Healthcare-Workload-in-High-Burden-Public-HIV-Clinics-in-Malawi?faculty=229 https://globalhealth.washington.edu/interactive-map/projects/4126/-The-Community-based-ART-REtention-and-Suppression-CARES-App-an-innovation-to-improve-patient-monitoring-and-evaluation-data-in-community-based-antiretroviral-therapy-programs-in-Lilongwe-Malawi?faculty=229
73	Lime Survey			Unknown		Open source		https://www.limesurvey.org/
74	LMIS (Learner Management Information System)							
75	Love Life *	Telemedicine		Unknown				https://lovelife.org.za/en/programmes/
76	Lynx Health ADC Online *			National	Not yet contributed	Proprietary		qode.healthcare
77	Mapbox	Citizen based reporting	Includes HIV as part of tool	Unknown		itself a platform		https://blog.mapbox.com/mappers-across-africa-share-data-with-their-leaders-e30a60c3fad1 more mapping related to HIV: https://tasks.hotosm.org/explore?text=hiv
78	Med-Admin			Unknown	No, they have not yet contributed	Proprietary	Microsoft .NET Framework	www.digidatasystems.com
79	Mobenzi			Subnational		Unknown	Mobenzi	
80	modernART	Targeted Client Communication: Client support and follow-up	HIV-specific	Unknown				https://modernartforsouthafrica.co.za/
81	MomConnect *	1.1 Targeted client communication; 1.3 Client to client communication; 1.4 Personal health tracking; 1.5 Citizen based reporting; 2.1 Client identification and registration; 2.2 Client health records; 2.3 Healthcare provider decision support; 2.5 Healthcare provider communication; 2.6 Referral coordination; 2.7 Scheduling and activity planning for healthcare providers; 2.8 Healthcare provider training; 3.1 Human resource management; 3.2 Supply chain management; 3.3 Public health event notification; 3.4 Civil Registration and Vital Statistics (CRVS); 3.5 Health financing; 3.7 Facility management; 4.1 Data collection, management, and use; 4.2 Data coding; 4.3 Location mapping		National	Partially funded / contributed in-kind people or time		Vumi, OpenHIE, OpenHIM, DHIS2, SMS	http://health.gov.za/momconnect/momConnect.dhis.dhmis.org
82	mothers2mothers Application (CommCare)			Subnational		Open source	CommCare	
83	Mum & Baby			National		Unknown		
84	NACOSA Health Analytics Platform (NHAP) *			National		Proprietary	Zenysis	

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85	Naomi	Data Collection, Management and Use: Models and algorithms	HIV-specific	Unknown		bespoke		https://onlinelibrary.wiley.com/doi/full/10.1002/jia2.25788 https://naomi.unaids.org/public/resources/Naomi-basic-instructions.pdf https://naomi.unaids.org/
86	National Data Dictionary (NDD)*	Data Exchange and Interoperability		National	Partially funded / contributed in-kind people or time			https://dd.dhmis.org/
87	NDOH Dashboard - Pharmaceutical Service Management Dashboard			National	Yes, they are contributing in-kind people or time	Unknown	Highcharts jQuery, JSON, XML, MySQL, Wordpress	
88	NHLS (National Health Laboratory System) *							
89	NIDSapp *							
90	NurseConnect *	Targeted Client Communication: Client support and follow-up	Includes HIV as part of tool	Unknown				https://www.praekelt.org/nurseconnect
91	OpenBoxes	Supply chain management	Includes HIV as part of tool	Unknown				
92	OpenCRVS			Unknown		Open source	OpenCRVS	
93	OpenHIE *			Unknown		Open source		
94	OpenHIM *	1.1 Targeted client communication; 1.3 Client to client communication; 1.4 Personal health tracking; 1.5 Citizen based reporting; 2.1 Client identification and registration; 2.2 Client health records; 2.3 Healthcare provider decision support; 2.5 Healthcare provider communication; 2.6 Referral coordination; 2.7 Scheduling and activity planning for healthcare providers; 2.8 Healthcare provider training; 3.1 Human resource management; 3.2 Supply chain management; 3.3 Public health event notification; 3.4 Civil Registration and Vital Statistics (CRVS); 3.5 Health financing; 3.7 Facility management; 4.1 Data collection, management, and use; 4.2 Data coding; 4.3 Location mapping		National	No, they have not yet contributed	Non protective free and open source software (e.g. Apache)	OpenHIM, HEARTH	
95	OpenMRS	Client Health Records: EMR / EHR	Includes HIV as part of tool	Unknown		Non protective free and open source software (e.g. Apache)	OpenMRS	https://openmrs.org/ https://www.regenstrief.org/projects/openmrs-hiv-case-reporting/
96	OpenSRP	Client Health Records: Surveillance systems, registers	Includes HIV as part of tool	Unknown		itself a platform		https://www.jembi.org/Project/OpenSRP-Malawi https://smartregister.org/features/
97	Operation Phuthuma (dashboards)	Data Collection, Management and Use		Unknown				https://differentiatedservicedelivery.org/Portals/0/adam/Content/LUn23185V0aDet59YdligA/File/Overmeyer_Final.pdf

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
98	PEC (Patient Experience of Care) *			National				https://pec.dhis.dhmis.org
99	Pelex Box	Targeted Client Communication: Client support and follow-up	Includes HIV as part of tool	Unknown				https://www.pelebox.com/
100	PERSAL (Personnel and Salaries Management System) *			National	Fully government funded			https://pmg.org.za/committee-meeting/11882/
101	PMIS (Project Management Information System)							
102	PowerBI/Tableau (focus on NICD Surveillance Dashboards) *	Data Collection, Management and Use	HIV-specific	Unknown		PowerBI/ Tableau		https://mstrweb.nicd.ac.za/MicroStrategy/asp/Main.aspx?src=Main.aspx.2048001&evt=2048001&documentID=10C27D0E4B424B217EFD0C86730CD76D&currentViewMedia=1&visMode=0&Server=NICDSANDMSTRI01&Port=0&Project=Surveillance&
103	PPIP (Perinatal Problem Identification Programme) *			National	Don't know			https://www.up.ac.za/centre-for-maternal-fetal-newborn-and-child-healthcare/article/2871749/the-perinatal-problem-identification-programme
104	Primary Health Care Information System (PHCIS) *			Subnational		Unknown		
105	Pro-Clin *			Unknown	No, they have not yet contributed	Proprietary	Microsoft .NET Framework	www.digidatasystems.com
106	Provincial TB dashboard (PowerBI - app.powerbi.com)	Data Collection, Management and Use	not used for HIV so far	Unknown				https://www.westerncape.gov.za/site-page/provincial-tb-dashboard https://www.iol.co.za/news/south-africa/western-cape/western-cape-government-launches-first-of-its-kind-tb-dashboard-21e50128-5fce-4184-a9fd-be1acc26dc7b
107	Public Health Incentives App *			Unknown		Proprietary	Other	
108	Rapid Pro Sidekick	Telemedicine	not used for HIV so far	Unknown		Whatsapp		https://d9o52087pnd5x.cloudfront.net/posters/docs/gatesopenres-193890.pdf#page=23
109	Retention in care of ART patients through community-based adherence clubs (ACs)	Targeted Client Communication: Client support and follow-up		Unknown				https://za.usembassy.gov/wp-content/uploads/sites/19/1135_Retention-in-Care-of-Stephanie-Berrada-CaSIPO.pdf
110	Right ePharmacy ATM/PDU dispensaries and smart lockers *	On Demand Services to Clients	Includes HIV as part of tool	Unknown		itself a platform		https://rightepharma.co.za/
111	RIPDA (Rapid Internal Performance Data Audit) *			National	Partially funded / contributed in-kind people or time			
112	Risk scoring	Healthcare Provider Decision Support	Includes HIV as part of tool	Unknown				https://www.palindromedata.com/solutions/

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
113	Rx Solution *	Supply chain management	Includes HIV as part of tool	Subnational		Open source		https://www.msh.org/resources/rxsolution https://siapsprogram.org/tools-and-guidance/rxsolution https://siapsprogram.org/wp-content/uploads/2016/03/TechBrief-Tools-RxSolution.pdf
114	Safe Delivery App	2.8.1 Provide training content and reference material to healthcare provider(s); 2.8.2 Assess capacity of healthcare provider(s)		Unknown		Open source		https://apps.apple.com/us/app/safe-delivery/id985603707
115	SARMS: South Africa Rumor Monitoring System (DHIS2)			National	Yes, there is a financial contribution through MOH budget	Non protective free and open source software (e.g. Apache)	DHIS2, DHIS2 Capture	This is the guidance document, not the tool itself: https://covid19communicationnetwork.org/covid19resource/real-time-rumor-tracking-for-covid-19-system-design-and-implementation-guide/
116	Signapps *			Unknown		Unknown		
117	SIMPill® Medication Adherences Solution			Subnational		Proprietary	SIMPill	
118	SIMPlicity	Supply chain management	not used for HIV so far	Unknown				https://www.finddx.org/connectivity/
119	Single Patient Viewer (SPV) (OpenIHP)	Client Health Records: EMR / EHR	Includes HIV as part of tool	Unknown				https://spv.jembi.org/
120	Social Networking Platforms	Telemedicine	HIV-specific	Unknown				https://www.msf.org.za/news-and-resources/publications/youth-linkage-and-retention https://www.msf.org.za/sites/default/files/publications/youth-linkage_hiv_diagnosis_adultcare.pdf#page=13
121	Soul City television series *	Targeted Client Communication: Information and support messaging	Includes HIV as part of tool	Unknown				https://www.soulcity.org.za/media/soul-city-series
122	South Africa HMIS (DHIS2 + COVID-19 Surveillance + Tracker) *			National	Yes, they are contributing in-kind people or time	Non protective free and open source software (e.g. Apache)	DHIS2, Android	
123	Sunshine Cinema	Targeted Client Communication: Information and support messaging	Includes HIV as part of tool	Unknown				https://sunshinecinema.org/
124	SVS (Stock Visibility System) *	Supply chain management	Includes HIV as part of tool	National		Proprietary		https://www.ghsupplychain.org/sites/default/files/2020-12/GHSC-TA%20Technical%20Brief_Stock%20Visibility%20System_2019-09-16%20V.F_508%20compliant.pdf https://www.vodacombusiness.co.za/business/solutions/internet-of-things/stock-visibility# https://www.gsma.com/subsaharanafrica/wp-content/uploads/2018/11/GSMA_Mezzanine%E2%80%99s-Stock-Visibility-Solution.pdf Gavin interview
125	Syked	Telemedicine	not used for HIV so far	Unknown				https://www.syked.co.za/

Nr	Name	WHO Category	Use case	Scale	Contribution	Licence	Software	Link
126	SyNCH *	Supply chain management	HIV-specific	Unknown		bespoke		https://www.ccmd.org.za/login https://www.hst.org.za/publications/HST%20Publications/HIV%20and%20TB%20Supportive%20Supervision%20Toolkit.pdf https://www.hst.org.za/publications/Annual%20Reports/HST%20AR%202019%202020%20FINAL.pdf
127	SystemOne Aspect	Laboratory and diagnostics imaging management	Includes HIV as part of tool	Unknown		itself a platform		https://systemone.id/aids-2020-virtual https://www.slideshare.net/SystemOneUS/croi-2018
128	Talamus			Unknown		Proprietary		https://play.google.com/store/apps/details?id=com.talamus.community
129	Telkom track-and-trace solution			Subnational	Yes, they are contributing in-kind people or time	Unknown		
130	Thembi chatbot	Targeted Client Communication: Information and support messaging	not used for HIV so far	Unknown				https://www.roche.co.za/en/patient-support/collaboration-with-patient-groups.html
131	Thembisa	Data Collection, Management and Use: Models and algorithms	HIV-specific	Unknown				https://thembisa.org/downloads
132	TIER.Net *	Client Health Records: EMR / EHR	HIV-specific	National				https://www.tbhivinfosys.org.za/documents
133	TrackCare *	Laboratory and diagnostics imaging management	Includes HIV as part of tool	National		Unknown		http://www.exarohst.com/solutions-laboratory.html www.labresults.nhls.ac.za https://www.intersystems.com/products/trakcare/trakcare-lab-enterprise
134	Triggerise platform			Unknown		Unknown		
135	Ubongo			Unknown		Unknown		
136	U-Report	Citizen based reporting	Includes HIV as part of tool	National		Open source	RapidPro	https://ureport.mw/
137	Ushahidi	Citizen based reporting	not used for HIV so far	Unknown		itself a platform		https://www.ushahidi.com/
138	Vantage *	Data Collection, Management and Use	HIV-specific	Subnational	No, they have not yet contributed		Microsoft .NET Framework, Microsoft Teams, Microsoft Azure, SQL Server	https://vantagehealth.tech/ https://broadreachcorporation.com/patient-retention-solution
139	VigiFlow			Subnational		Open source		
140	Virtual Mentorship	Telemedicine	Includes HIV as part of tool	Unknown				https://www.msf.org.za/news-and-resources/publications/youth-linkage-and-retention
141	Vitality Health Check	Client Financial Transactions: Rewards	not used for HIV so far	National		Unknown	Vitality Health	https://www.discovery.co.za/vitality/how-vitality-works
142	Vula *	Healthcare Provider Decision Support	Includes HIV as part of tool	Unknown		itself a platform		https://www.vulamobile.com/
143	Vulendlela *							

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144	WBOT Digital Tracker Pilot *			Don't know	Not yet contributed			
145	WeTel Health Platform			Unknown	No, they have not yet contributed	Proprietary		www.welthealth.com
146	WHO HIV Testing Dashboard	Data Collection, Management and Use	HIV-specific	Unknown		Firebase		https://whohts.web.app/ZAF
147	WisePill	Targeted Client Communication: Client support and follow-up	Includes HIV as part of tool	Unknown		bespoke		https://www.wisepill.com/
148	World Continuing Education Alliance (WCEA)			National		Proprietary	WCEA	
149	World in Sign			Unknown		Proprietary	WIS2com	https://worldinsign.com/
150	Zenysis			National	No, they have not yet contributed	Proprietary	Zenysis Harmony	