



2009-2019

PROGRAM TITIAN DIGITAL

Bridging Digital Divide For A Decade

"There Is No Better Predictor Of A Nation's Future Than
What Is Currently Happening In Its Classrooms"

- Ministry of Education, Malaysia

We would like to acknowledge and express our appreciation to



Hindu Youth Organisation Port Klang
(HYO Port Klang)

&



Malaysian
Community & Education
Foundation

Malaysian Community & Education Foundation
(MCEF)

For initiating and setting the path way to institute PROGRAM TITIAL DIGITAL (PTD) since 2009

Regards

PTDM

PERTUBUHAN TITIAN DIGITAL
MALAYSIA

CONTENTS

PTD in a Nutshell	4
An Innovative ICT Education Ecosystem	7
Year on Year Growth	9
Key Learnings	16
PTD Roadmap	18
Partner Network	19
We Aspire to Inspire	21
PTD Academy at a Glance	26
Sponsors and Funders	27
PTD Accolades in a Decade	29
PTD Picture Gallery	30



PTD IN A NUTSHELL

EVOLUTION OF MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE

Project in Brief

- In today's rapidly paced global growth, ICT has evolved to become a core anchor in all aspects of our lives. In embracing this mass wave of ICT revolution, Hindu Youth Organisation Port Klang (HYO Port Klang) & Malaysian Community & Education Foundation (MCEF) initiated Program Titian Digital (PTD) - an ICT literacy initiative for Malaysian Tamil schools in 2009.
- Currently overseen & actively managed by Pertubuhan Titian Digital Malaysia (PTDM) - PTD has successfully impacted 47,103 students, conducted daily ICT education programmes in 83 schools, setup 80 school ICT labs nationwide & been awarded as Malaysia's Largest Participation of Open Source Software Users by the Malaysian Book of Records in 2011.

Project Goals

- To assist Tamil school students acquire ICT literacy.
- To provide ICT labs to mainly partially aided SJK(T)'s.
- To reduce the digital divide among the rural, urban poor & urban Tamil communities.



PTD IN A NUTSHELL

CONTINUED

Key Progress Drivers

- School complimentary & non-inclusive ICT tutoring, mentoring, talent & programme management model.
- Smart partnerships with School Board of Governors (LPS), Parent Teacher Associations (PIBG) & School Management teams.
- Consistent stream of funding from Well endowed foundations, Community of entrepreneurs, Corporations, Government (*not including Ministry of Education), Parents teachers association (PIBG), School board of governors (LPS) & Goodwill individuals.
- Deployment of Open Source software for zero software scalability & sustainability cost. Real world ICT experts input in curriculum development.

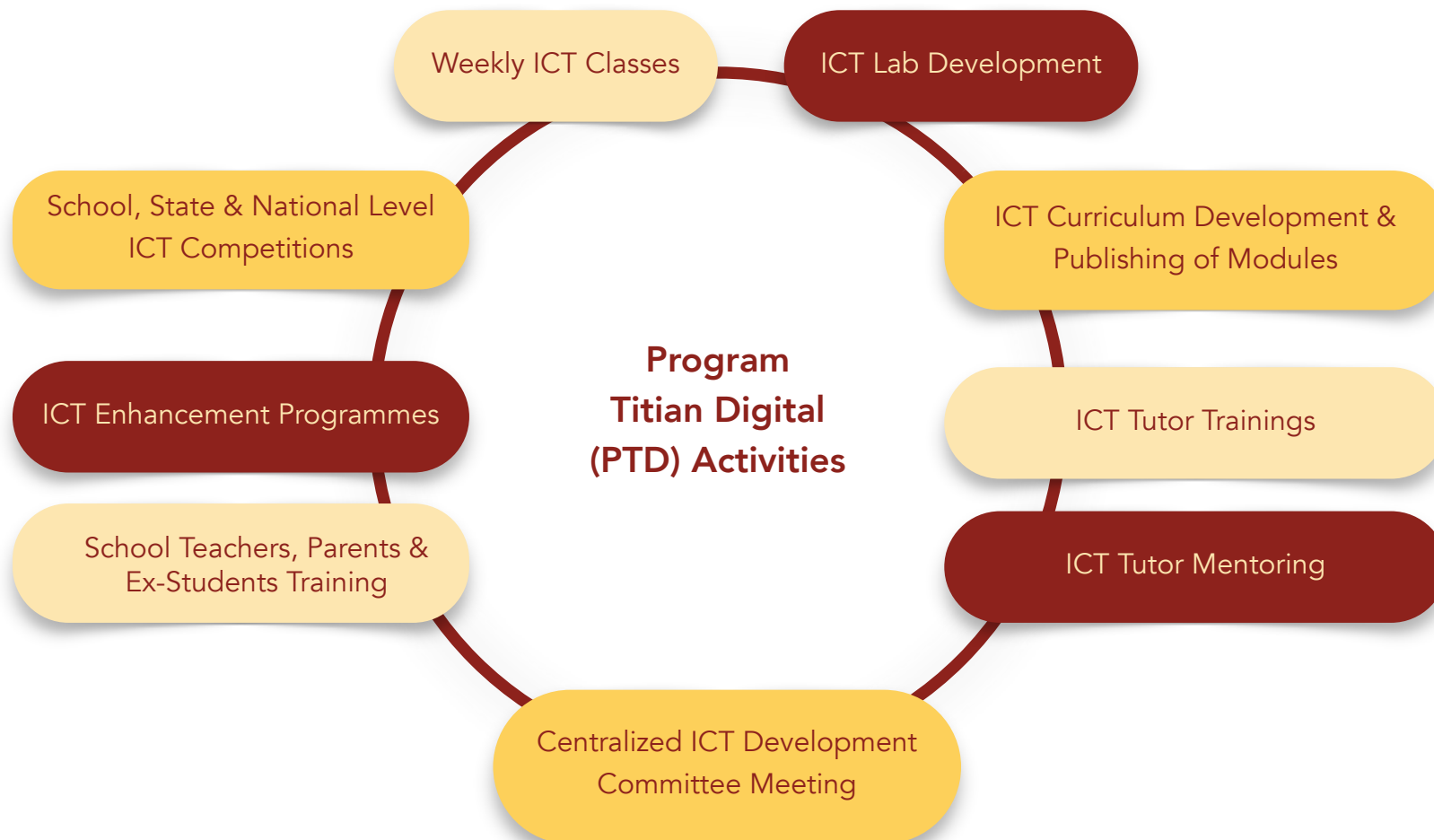
What Parents Say

- Well done, good program for Tamil students in Tamil language - ***Gauri Jagatheesan***
- Over the years, technology has revolutionised our world & daily lives. Technology has created amazing tools & resources, putting useful information at our fingertips. Program Titian Digital is one of the technology platform for all the students, which I find a great educational platform to the students for brainstorming and self development - ***Pathmavathy Surikumaran***
- Very good program. Students can improve their knowledge in technology - ***Malathiramadas Malathi***
- Best program to enhance students ICT knowledge and general knowledge - ***Naveendran Chellamuthu***



PTD IN A NUTSHELL

CONTINUED





AN INNOVATIVE ICT EDUCATION ECOSYSTEM

EVOLUTION OF MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE

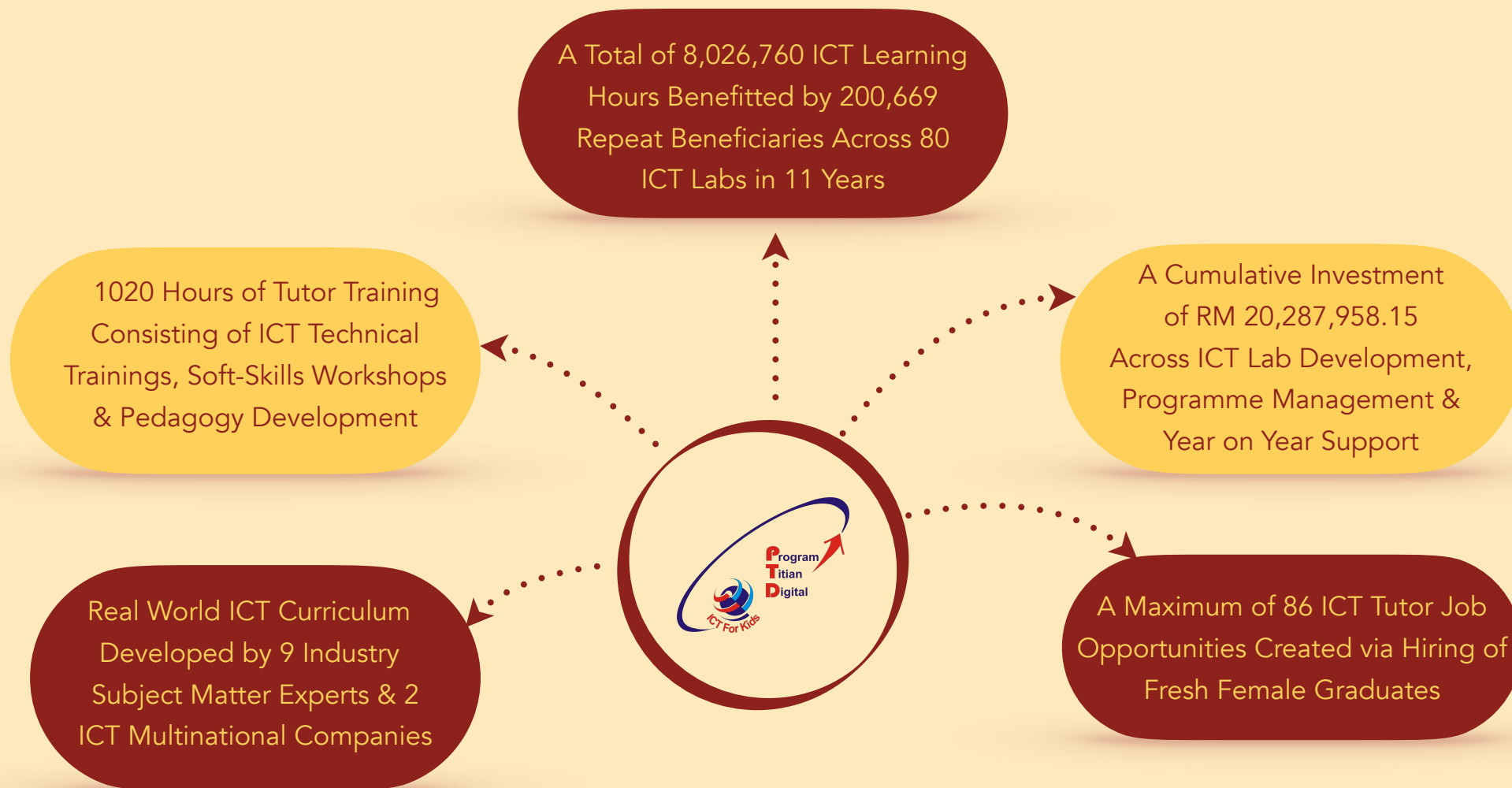


Figure: 7i-Innovation-Helix Model Adapted from Nair (2007)



AN INNOVATIVE ICT EDUCATION ECOSYSTEM

CONTINUED



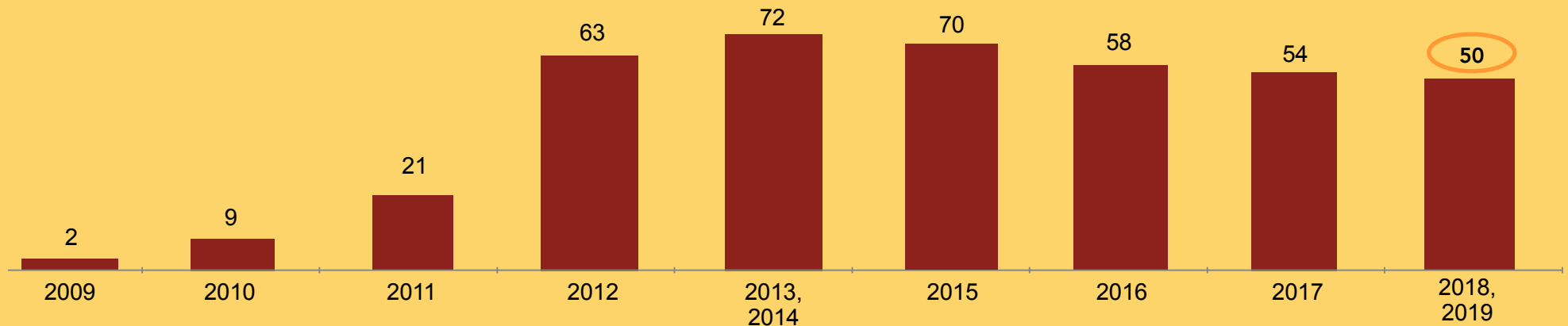


YEAR ON YEAR GROWTH

INFRASTRUCTURE READINESS & END BENEFICIARIES COVERAGE

State	School Location			Total
	Plantation	Sub-Urban	Urban	
Selangor	9	11	7	27
Negeri Sembilan	2	2	1	5
Johor	3	1	0	4
Kedah	4	2	0	6
Perak	4	3	0	7
Pulau Pinang	0	0	1	1
Total Labs	22	19	9	50

Total Number of Active ICT Labs





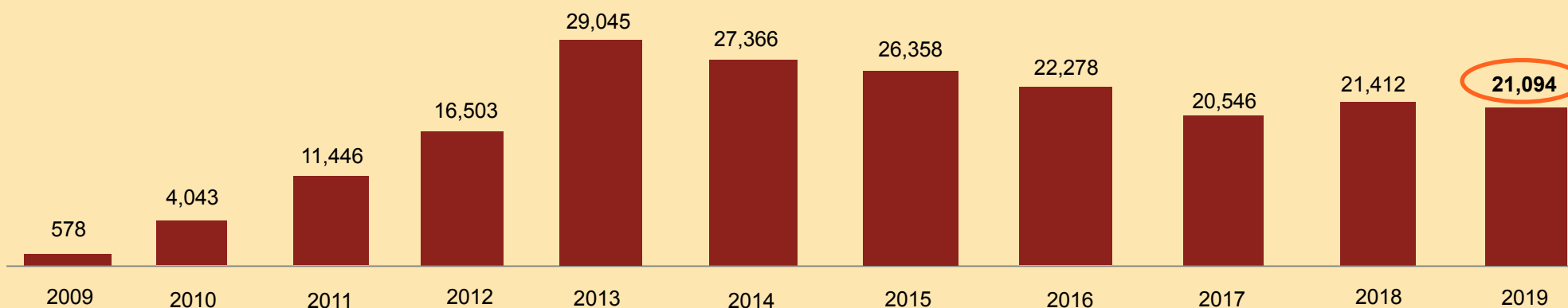
YEAR ON YEAR GROWTH

CONTINUED

State	Student Type			Total
	Plantation	Sub-Urban	Urban	
Selangor	3,136	2,991	7,267	13,394
Negeri Sembilan	1,210	576	481	2,267
Johor	1,997	523	0	2,520
Kedah	976	453	0	1,429
Perak	201	1,283	0	1,484
Pulau Pinang	0	0	0	0
Total Students	7,520	5,826	7,748	21,094

*Total Number of B40 Students Learning ICT Through PTB in 2019 were: 18,252 (87%)

Total Number of Students Learning ICT





YEAR ON YEAR GROWTH

CONTINUED

Year	OPEX Funding (MYR)	CAPEX Funding (MYR)	PTD Staff Quantity	Active ICT Labs	ICT Labs Growth	No of Beneficiary Students	Beneficiary Students Growth
2009	98,000	142,242.98	1	2	0	578	0
2010	377,680.30	1,262,319.41	2	9	7	4,043	3,465
2011	672,110	1,111,942.69	2	21	12	11,446	7,403
2012	1,388,520	2,344,235.87	3	63	42	16,503	5,057
2013	1,667,020	868,555.28	4	72	9	29,045	12,542
2014	1,972,154.69	338,679.28	7	72	0	27,366	(1,679)
2015	2,036,900	212,484.30	6	70	(2)	26,358	(1,008)
2016	1,204,800	176,058.42	7	58	(12)	22,278	(4,080)
2017	1,821,520	163,916.46	6	54	(4)	20,546	(1,732)
2018	1,074,650	151,774.50	7	50	(4)	21,412	866
2019	1,000,555.47	201,838.50	6	50	0	21,094	(318)

Total:

MYR
13,313,910.46

MYR
6,974,047.69

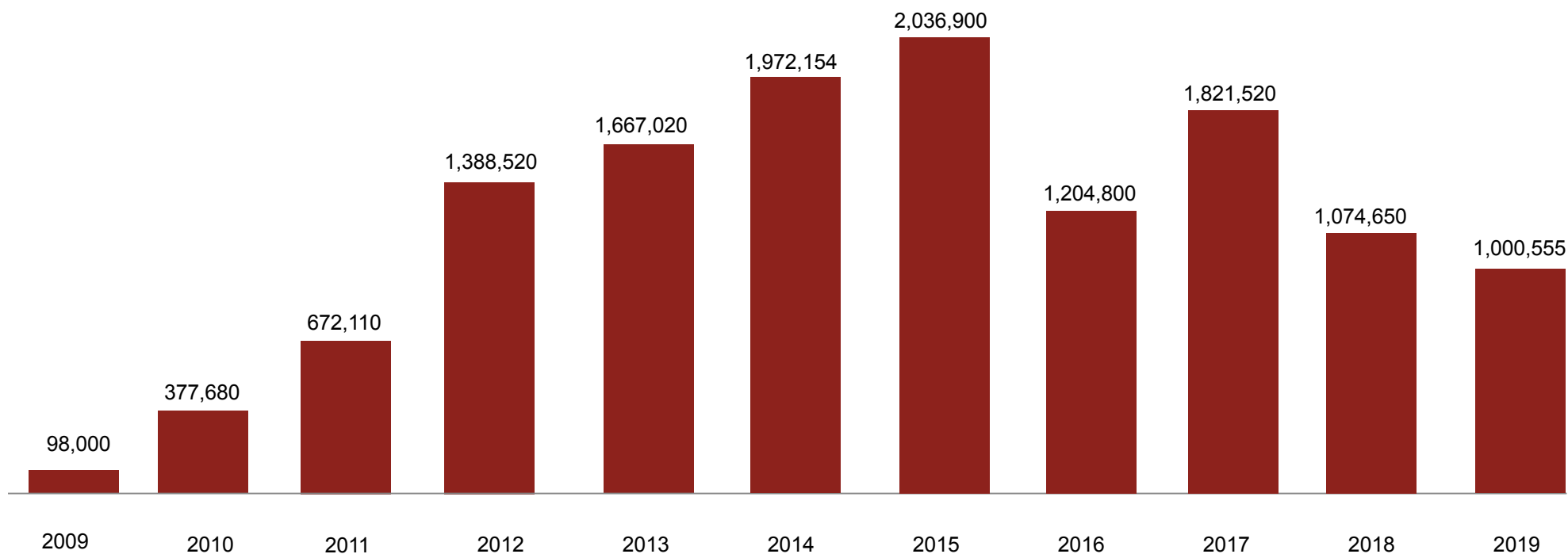
200,669
Students



YEAR ON YEAR GROWTH

CONTINUED

PTD OPEX Funding Year after Year



Sustenance of ICT Labs & Students Growth
are OPEX + CAPEX Reliant Year after Year

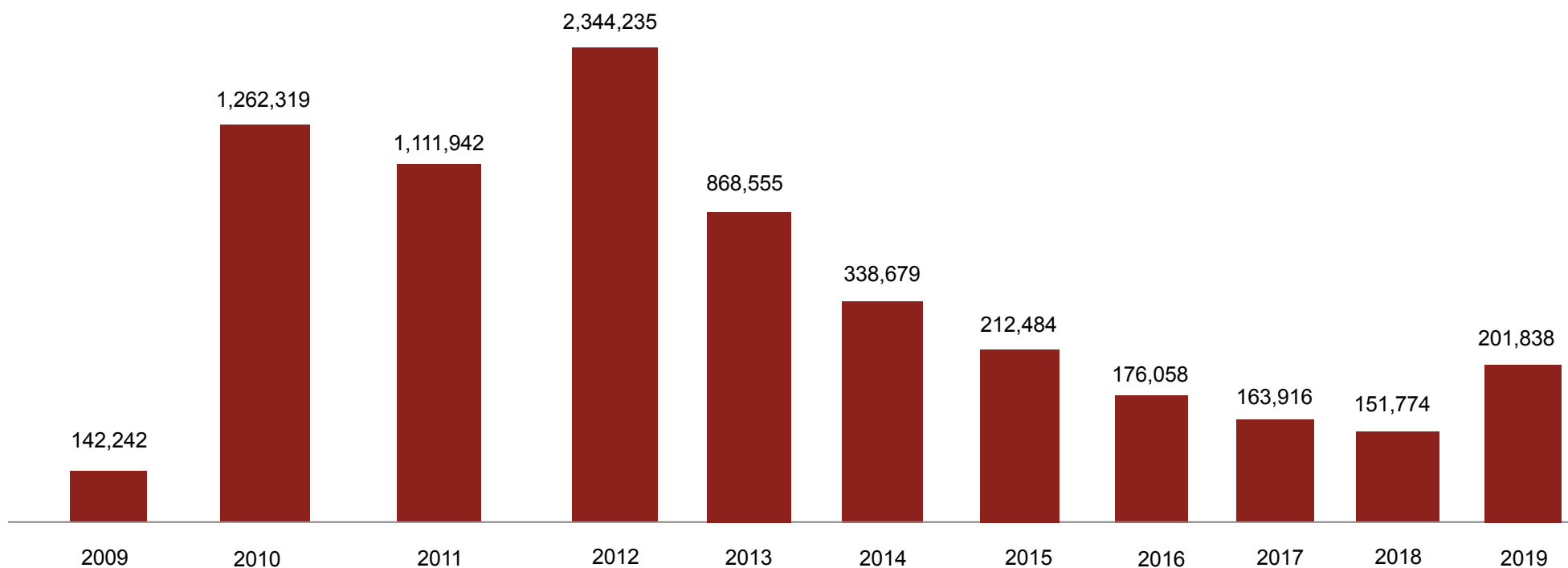
Average Contribution by School's Board,
Management & Parents Amount to
RM18,635.49 per Year per School for ICT
Tutor Remuneration & ICT Lab Maintenance



YEAR ON YEAR GROWTH

CONTINUED

PTD CAPEX Funding Year after Year



80 ICT Labs are Permanent Education Assets of Schools with a Total Value of RM 6.72 Million



YEAR ON YEAR GROWTH

CONTINUED

PTD ICT Competition Participation Year after Year

Year	Total PTD Schools	Total Tamil Schools in ICT Competition	Total Students in ICT Competition
2015	70	88	972
2016	58	96	946
2017	54	181	1,091
2018	50	174	1,572
2019	50	240	1,737

Geared Towards ICT Talent Development ie: School, State & National Level ICT Talents

Produced Malaysian Google Doodle Design Competition Champion, Penang International Science Fair Programming Competition Champion, 2 International Competitions & Assessments for Schools (ICAS) Gold Medalists, 4 Malaysian Digital Economy Corporation (MDEC) Digital Ninja's & others.



YEAR ON YEAR GROWTH

CONTINUED

Digital Divide Reduction by Students Year after Year

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Active PTD Schools	2	9	21	63	72	72	70	58	54	50	50
Total SJK(T) Schools	523	523	523	523	523	523	524	524	524	524	525
Total PTD Students	578	4,043	11,446	16,503	29,045	27,366	26,358	22,278	20,546	21,412	21,094
Total SJK(T) Students	109,086	104,797	102,642	97,884	92,919	89,007	85,473	83,343	81,483	81,488	81,321
Digital Divide Reduction by Students (%)	0.53	3.86	11.15	16.86	31.26	30.75	30.84	26.73	25.22	26.28	25.94



KEY LEARNINGS

PROPELLING MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE FORWARD

01

Industry Partnerships

- The PTD Industry Partnerships portfolio encompasses strategic stakeholder management across key government agencies, multinational corporations, business conglomerates & academics to develop a full- fledged PTD ecosystem and a healthy funding pipeline.
- The collective PTD ecosystem enhances PTD's learning & teaching process through aggregating offerings in collaboration with expert industry partners in the aspects of research & development, curriculum enhancement, access to software, technical trainings, soft-skills development & internship opportunities.



Microsoft **SUNWAY**®



LEADERONOMICS
The Science of Building Leaders



MONASH University

02

Governance Structure

- PTD which started as a community project under Hindu Youth Organisation Port Klang (HYO Port Klang) is being effectively positioned under a newly established NGO entity ie: Pertubuhan Titian Digital Malaysia (PTDM).
- Via this effective positioning, PTD aspires to grow at a greater scale where the incorporation of a NGO at the national level would help enhance long term government and industry partnership initiatives.



KEY LEARNINGS

CONTINUED

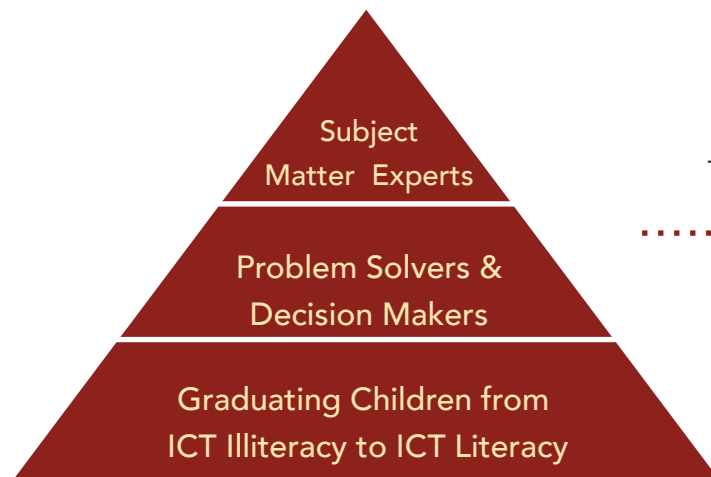
03

ICT Lab Optimisation

- The PTD - Microsoft Office Productivity Hub is envisioned to empower students, teachers, parents & the public with Microsoft Office productivity technology & hands-on-training.
- The PTD - MDEC MYDigitalMaker Hub is geared to encourage a digital making ecosystem within the community. The hub shall be a development platform on ICT software & hardware involving Artificial Intelligence, 3D Printing & Robotics.

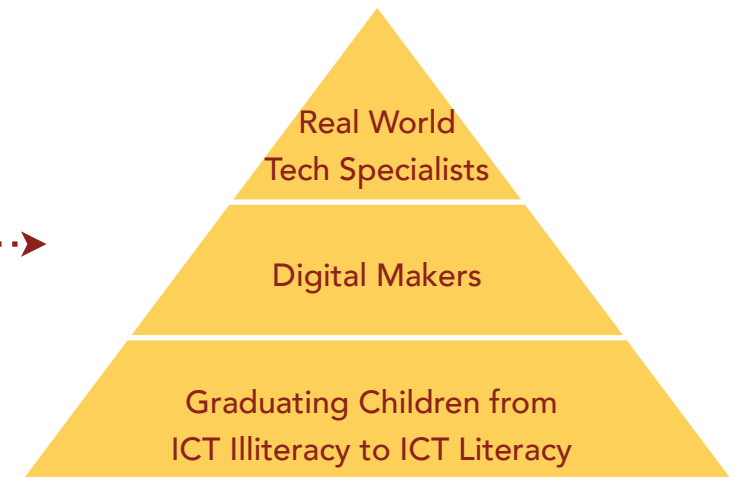
04

PTD Digital Talent Readiness



Year 2009 up to 2017

Transforming into



2018 onwards



PTD ROADMAP

INTEGRATING VALUE ACROSS THE EVOLUTION STREAM

PHASE 1

Establishing 4 Value Proposition Pillars

1. Children & Teacher ICT Literacy Growth
2. Real World Curriculum Delivery
3. ICT Lab Infrastructure
4. Talent Growth Platform

PHASE 2

Optimise & Innovate on Value Proposition Pillars via Industry Partnerships

- 1 & 2. Monash University, Microsoft for Education, Google, MDEC, Leaderonomics
3. MDEC, Sunway Group, Microsoft for Education
4. MNC's, IT Start-Up's, Sunway Group, MDEC

PHASE 3

Building Value-Add Impacts Along the Spectrum

1. Tamil School ICT Literacy Blueprint
2. PTD Academy to Hone IT Talents
3. Research Report via Data Analytics
4. Formation of Leading Industry Advisory Board

Epitomising a Learner Centered & Active Teaching Approach



PARTNER NETWORK

ENHANCING LEARNING & TEACHING PROCESS THROUGH AGGREGATING OFFERINGS IN COLLABORATION WITH EXPERT INDUSTRY PARTNERS



LEADERONOMICS
The Science of Building Leaders

LEADERONOMICS

To integrate 21st century leadership learnings + teaching models in PTD schools.



MONASH University

MONASH UNIVERSITY R&D MALAYSIA

To integrate research to yield a greater understanding of teaching methodology & children learning outcomes.



MALAYSIAN DIGITAL ECONOMY CORPORATION (MDEC)

To integrate PTD with MYDigitalMaker Initiative & educate B40 communities on e-commerce opportunities.



Microsoft

MICROSOFT FOR EDUCATION

To expand children's ICT literacy via access to software & industry tech curriculum.



PARTNER NETWORK

CONTINUED



SUNWAY GROUP

To empower PTD with business conglomerate's education ecosystem offerings including school adoption programmes, sponsored university placements, education scholarships, industry internships & full time job offerings.



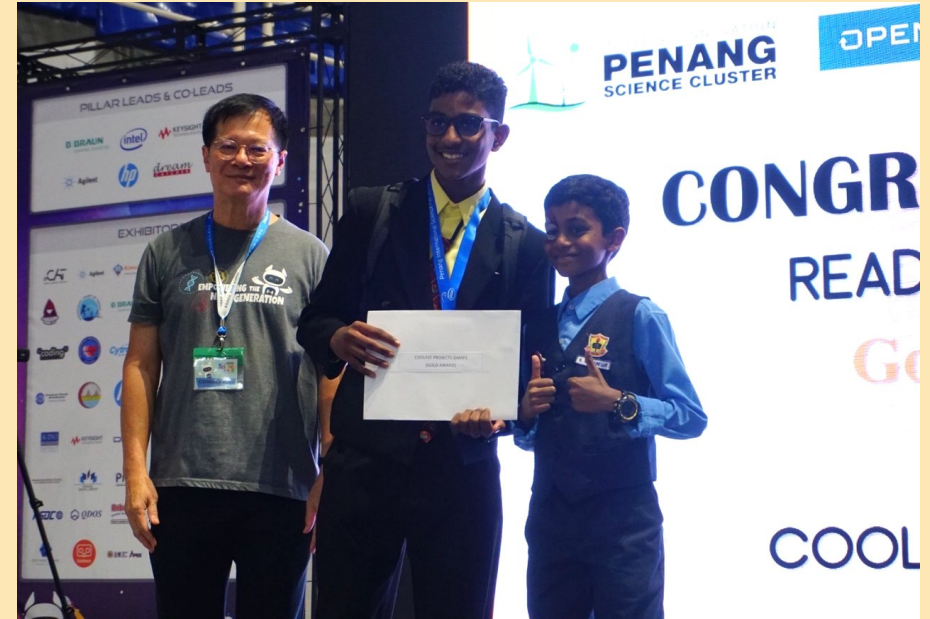
GOOGLE

To widen children's ICT literacy domain via access to web based education resources & industry tech curriculum. *(In Pipeline)*



WE ASPIRE TO INSPIRE

A PTD CASE STUDY – LEAPFROGGING PLANTATION STUDENTS EDUCATION



Thavaanesan Kesawan

SJK(T) Ladang Senawang, Negeri Sembilan

Winner of Penang International Science Fair 2019 (Scratch Gaming Programming)

MDEC Digital Ninja 2019 - 2022



WE ASPIRE TO INSPIRE

CONTINUED



- 1st Runner-Up: Program Titian Digital National Level Scratch Gaming Programming Competition 2017
- 1st Runner-Up: Penang International Science Fair Scratch Gaming Programming Competition 2018
- Champion: TAR University College Engineering & Technology Video Competition 2019
- 1st Runner-Up: Negeri Sembilan State Level 3D Animation Video Competition 2019
- Master Trainer: A Beginner to Advance Guide to Scratch Programming, Program Titian Digital ICT Tutor Training 2019
- SJK(T) Ladang Senawang ICT Junior Mentor, Program Titian Digital Academy





WE ASPIRE TO INSPIRE

CONTINUED



Jitesh Moganaraja

SJK(T) Ladang Wellesley, Kedah

Winner of Kedah State MRSM Robotics Competition 2019

MDEC Digital Ninja 2019 - 2023



WE ASPIRE TO INSPIRE

CONTINUED



- Merit Award: Kedah State Level Mathematics Olympiad 2016
- 1st Runner-Up: MOE – ASTI Kedah State Level Science Fair 2017
- Honourable Mention: Kedah State Level MOE – Kangaroo Mathematics 2017
- District Champion: MOE English Public Speaking Competition 2016, 2017 & 2018
- State Champion: Program Titian Digital State Level ICT Quiz Competition 2017 & 2018
- Top 5/50: Battle of MDEC Digital Ninja's National Level Competition 2019





WE ASPIRE TO INSPIRE

A PTD SUCCESS STORY – A TRANSFORMATIONAL UPLIFTMENT FROM B40



Tharmaraj Batmanathan

SJK(T) Watson, Selangor

High Touch Operations Manager at Cisco

Ex-Technology Consultant at Hewlett Packard Enterprise (HP)

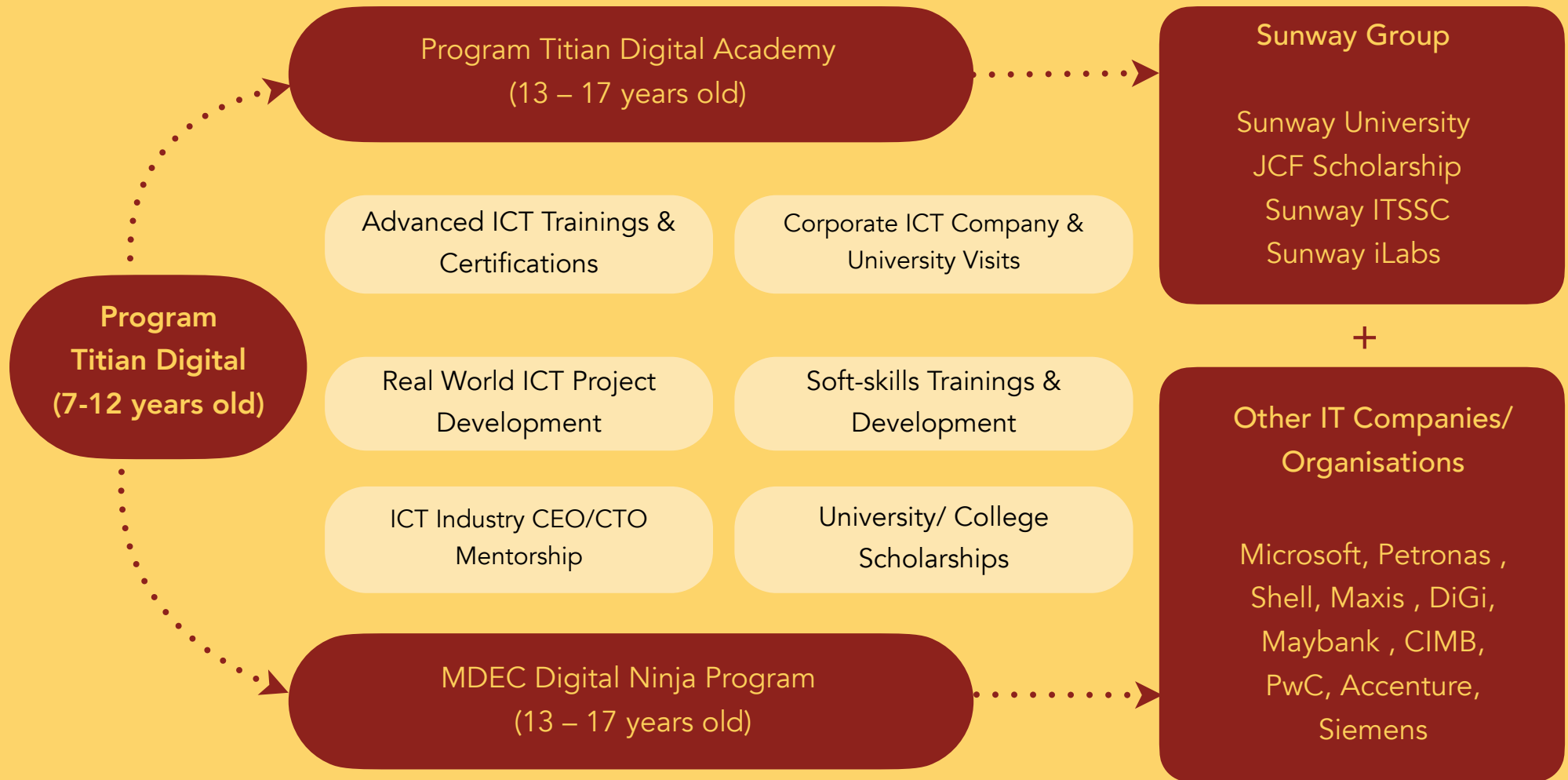


- Bachelor of Engineering (B.Eng): Electronics Majoring in Computer (Year 2010)
- Networking Certifications: Fortinet, F5 Networks, ITIL Foundation, Arista Networks
- Family Background: Father worked as a Fireman with Port Klang Authority with a monthly salary of RM 2,400
- 8 years of IT industry work experience with a current salary of RM 11,000
- Owns 2 condominium properties with a total value of RM 750K & a car worth 130K
- Currently serves as Vice President of Pertubuhan Titian Digital Malaysia (PTDM) & Treasurer of Hindu Youth Organisation (HYO) Port Klang NGO.



PTD ACADEMY AT A GLANCE

ADVANCING HIGH POTENTIAL PTD TALENTS





PTD ICT LAB SPONSORS

GROWING MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE



**Malaysian
Community & Education
Foundation**



Prime Minister's Department



Selangor State Government



SUNWAY®



Rotary Club Kelana Sungai Ujong



Mr. Ramasanderan Appannan



PTD PROGRAMME FUNDERS

GROWING MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE





PTD ACCOLADES IN A DECADE

EVOLUTION OF MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE



2011

Malaysia Book of Records
Title Holder for Largest Participation of Open Source Software Users



2015

GOPIO International Excellence Award for Synergising Tamil School Growth - ICT Development



2015

Best ICT Lab in Selangor by Ministry of Education (MOE) – SJK(T) Ladang North Hummock, Klang, Selangor



2017

Third Best Managed School ICT Lab in Selangor by Ministry of Education (MOE) – SJK(T) Sepang, Sepang, Selangor



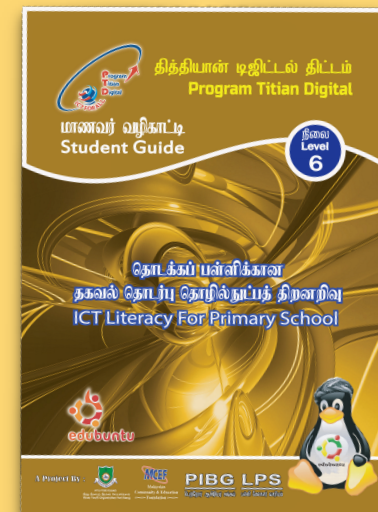
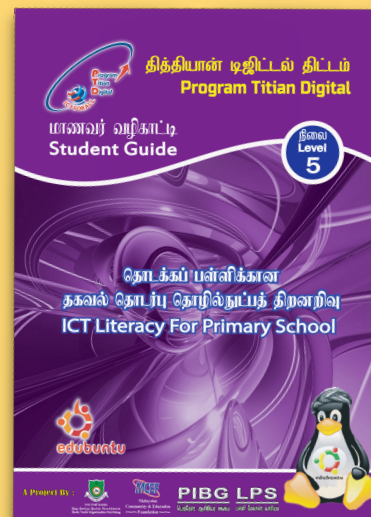
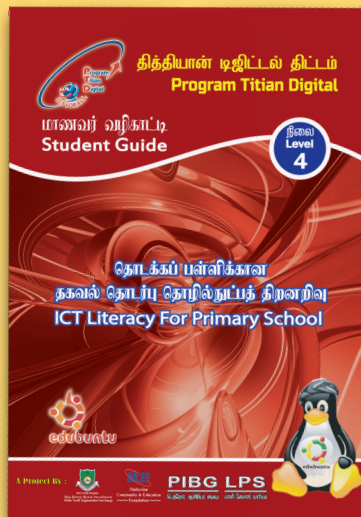
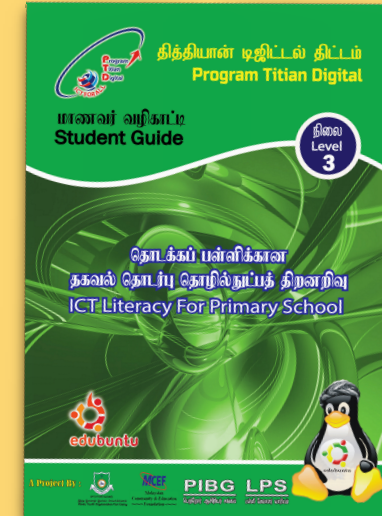
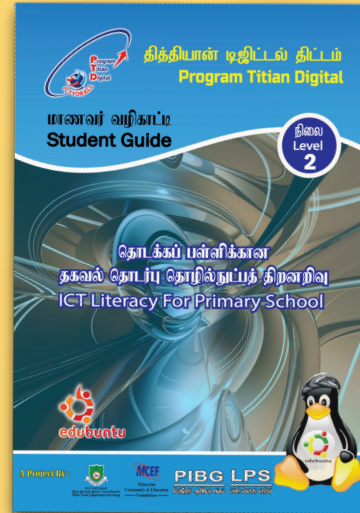
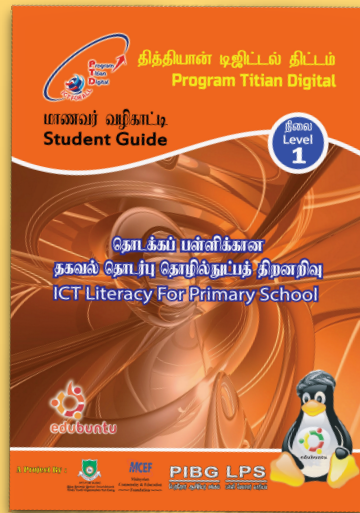
2017

Special Award for School Improvement (in ICT Education) in Selangor by Ministry of Education (MOE) - SJK(T) Ladang Bukit Rajah, Klang, Selangor



PTD STUDENT MODULES GALLERY

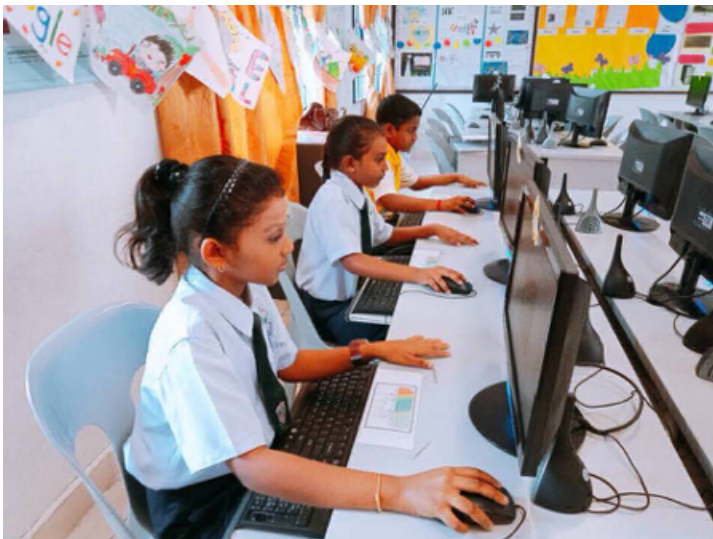
EVOLUTION OF MALAYSIA'S TAMIL SCHOOLS BIGGEST ICT LITERACY INITIATIVE





PTD PICTURE GALLERY

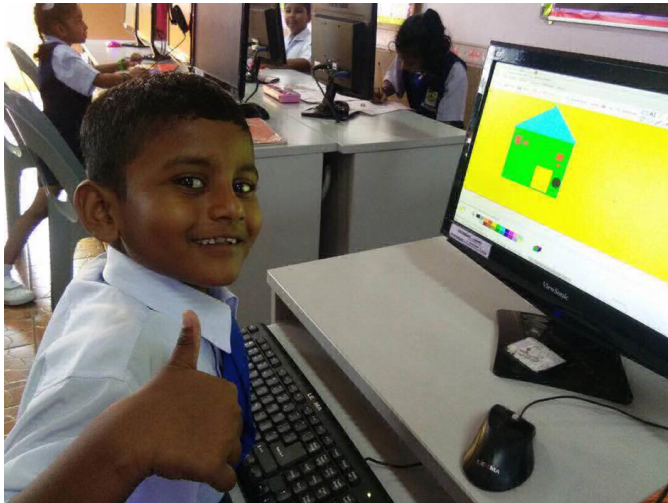
ICT CLASSES





PTD PICTURE GALLERY

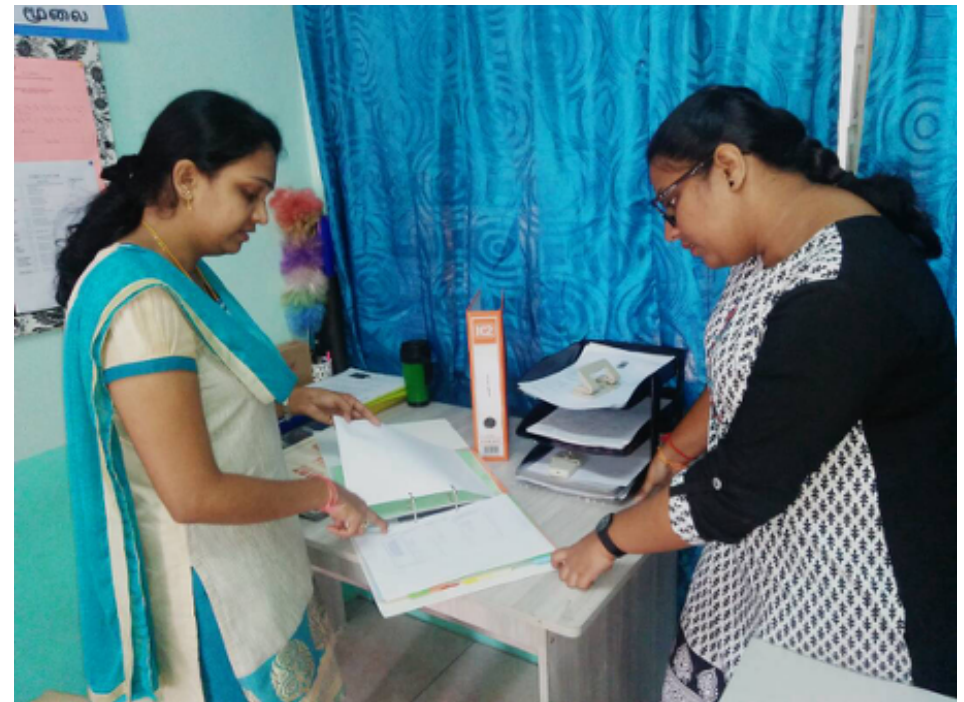
CONTINUED





PTD PICTURE GALLERY

MENTOR & PROJECT OFFICER VISITATIONS / CHECK-IN'S





PTD PICTURE GALLERY

ICT TUTOR TRAININGS





PTD PICTURE GALLERY

CENTRALIZED ICT DEVELOPMENT COMMITTEE MEETING





PTD PICTURE GALLERY

PTD STATE & NATIONAL LEVEL ICT COMPETITION





PTD PICTURE GALLERY

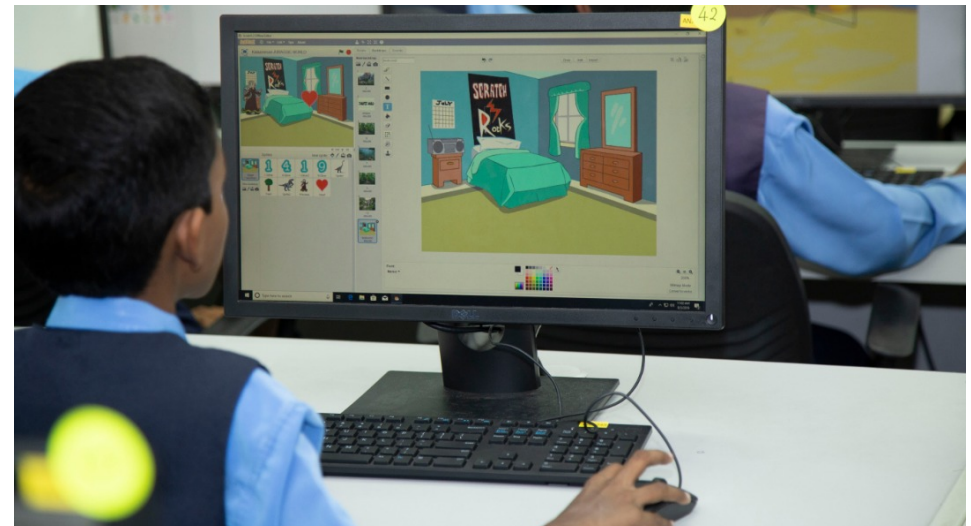
CONTINUED





PTD PICTURE GALLERY

CONTINUED





PTD PICTURE GALLERY

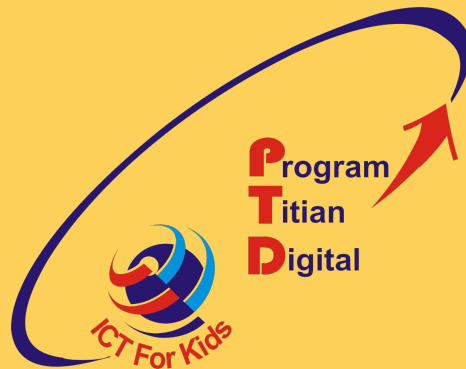
CONTINUED



THANK YOU

“ Education Is The Most Powerful Weapon
Which You Can Use To Change The World ”

- Nelson Mandela,
Late President of South Africa



An Initiative by,

PTDM

PERTUBUHAN TITIAN DIGITAL
MALAYSIA

Pertubuhan Titian Digital Malaysia
Suite 726, Level 7, Block B2,
Leisure Commerce Square,
Jalan PJS 8/9, 46150 Petaling Jaya,
Selangor Darul Ehsan.

Telephone No: 03-76603496
E-mail: titiandigital@gmail.com
Website: www.titiandigital.org
Blog: titiandigital.blogspot.com/
Facebook: [programtitiandigital](https://www.facebook.com/programtitiandigital)