



One Venture
Infinite
Possibilities

WATERS QBR – 21st May 2020



AGENDA (1530 - 1730)

- INTRODUCTIONS
- BUSINESS UPDATES (Presenter : Loo Kok Leong)
- MATERIAL UPDATES (Presenter : Lee Lean Lye)
- NPI & ENGINEERING UPDATES (Presenter : Teo Yiek Tiong)
- QUALITY UPDATES (Presenter : Bernadette Balan)
- GENERAL DISCUSSIONS

BUSINESS OVERVIEW

Presenter : Loo Kok Leong



REVENUE YOY COMPARISON

FCST as of 1st May'20



Revenue YOY Growth	LC								LC + MS			
	0	15%	90%	52%	3%	28%	15%	7%	6%	15%	-2.1%	-21.1%

- Huge forecast reduction - received in Apr'19 across all LC instruments
- Negative growth at 21.1%

REVENUE BY PRODUCT GROUP (in \$'000)



<i>Revenue by Product Group</i>	<i>Total Rev. (Y2019)</i>	<i>Percentage (Y2019)</i>	<i>Total Rev. (Y2020)</i>	<i>Percentage (Y2020)</i>	<i>2020 vs 2019 Rev.</i>
UPLC H & I	\$ 24,612	47.7%	\$ 18,914	46.5%	\$ (5,698)
ARC	\$ 7,096	13.8%	\$ 3,587	8.8%	\$ (3,509)
HPLC	\$ 5,794	11.2%	\$ 3,925	9.6%	\$ (1,869)
QDA	\$ 4,488	8.7%	\$ 5,583	13.7%	\$ 1,095
SPARE KIT	\$ 4,072	7.9%	\$ 3,457	8.5%	\$ (615)
UPLC COMMON	\$ 3,023	5.9%	\$ 2,189	5.4%	\$ (834)
PCBA	\$ 1,154	2.2%	\$ 1,229	3.0%	\$ 75
BEACON	\$ 298	0.6%	\$ -	0.0%	\$ (298)
UPLC CLASSIC	\$ 422	0.8%	\$ 391	1.0%	\$ (30)
LEGACY LC	\$ 265	0.5%	\$ 57	0.1%	\$ (208)
UPC2 & APC	\$ 119	0.2%	\$ 59	0.1%	\$ (60)
SIT	\$ -	0.0%	\$ 1,211	3.0%	\$ 1,211
MISCS (NRE/ PPV/ Rework/ scrap) etc	\$ 266	0.5%	\$ 99	0.2%	\$ (167)
	\$ 51,609		\$ 40,701		\$ (10,908)

- Total reduction YOY at US\$10,908K
- The only increase is on QDA, PCBS , & also the SIT (new project in Y2020)

OTD (ON-TIME DELIVERY) 2019 & Q1'20



Target $\geq 98\%$

OTD (Instruments & Spares)	Q1'19	Q2'19	Q3'19	Q4'19	Q1'20	Average till date
%	99.75%	99.54%	99.70%	99.69%	98.05%	99.66%

OTD consistently > 98% quarter on quarter !

COST REDUCTION Y2020 – PROJECTION



2020 CR Opportunities	Projected Savings based on Q1'20 PP	Projected Savings based on Q2'20 PP2	CR postponed due to production plan cut
QDa - Assembly Reduction	\$ (65,927)	\$ (47,620)	
Supplier Negotiation - PCBA	\$ (93,504)	\$ (66,221)	
Supplier Negotiation - Trend	\$ (57,044)	\$ (40,163)	
Tube Guide ECO	\$ (30,251)	\$ (20,856)	
MOQ Review	\$ (14,338)	\$ (8,864)	
Supplier Consolidation	\$ (890)	\$ (792)	\$ (2,007)
QDA - Testing Reduction	\$ (13,095)	-	\$ (13,095)
Total	\$ (275,049)	\$ (184,516)	\$ (15,102)

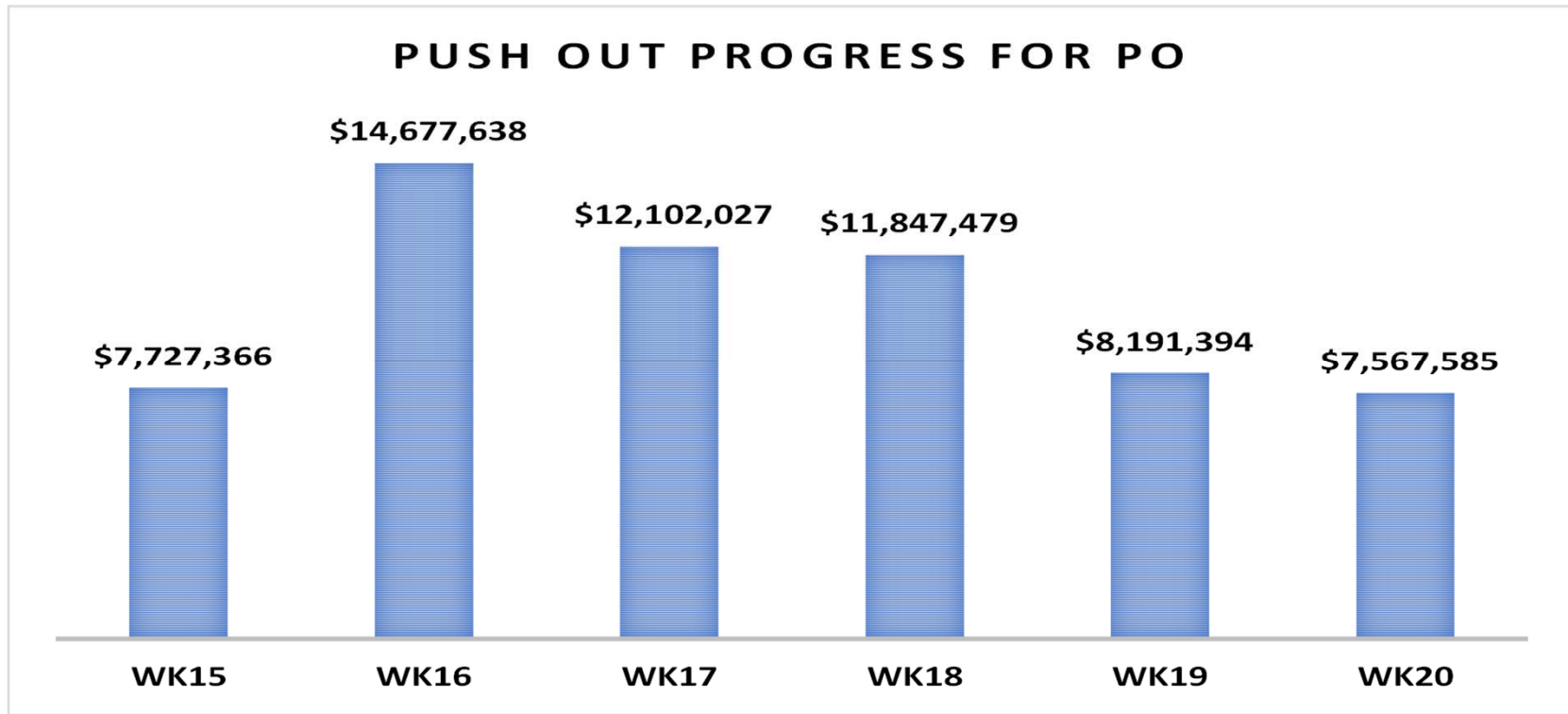
- CRs have been phase-in Since Jan'20
- Transducer - ECR#9231993, tentative phase in by mid of Sept'20 , CR up to U\$24,072 upon ECO released by Waters.

KEY SUPPLIERS & MATERIALS OUTLOOK



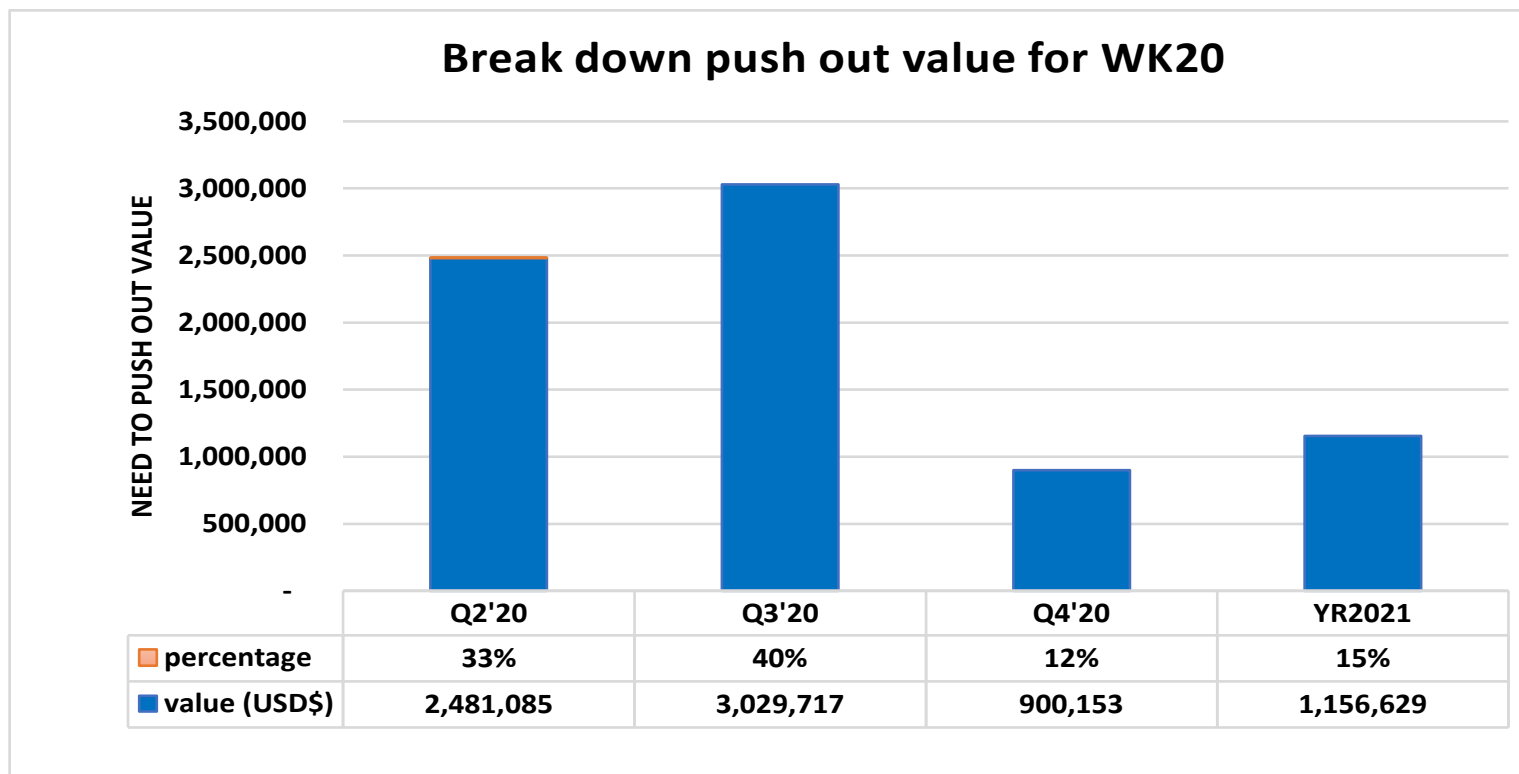
Presenter : Lye Lee Lean

INVENTORY PUSH OUT STATUS



- WK'15 push out value is based on pre alert by WATERS on plan cut. WK'16 push out value increased almost 100% to 14.6 mil based on official revised plan .
- Push out value reduced from 14.6 mil to 7.5 mil throughout week 16'20 to week 20'20.
- Some of the push out values cannot be realized mainly due to supplier material in house or parts in transit.

INVENTORY PUSH OUT STATUS



- Total value that needs to be pushed out for week'20 is amounted to 7.5mil.
- Q3'20 contributed 40% for the total push out.
- Total estimated end Q2 inventory projected at 9.7 mil with 2.75 turns.
(Average 4.7 turns for Q1'20).

INVENTORY PUSH OUT STATUS



TOP 20 SUPPLIER LIST NEED FUTHER PUSH FROM Q2'20

SUPPLIER	VALUE (USD\$)	MATERIAL GROUP
CEI LIMITED	\$272,659	PCBA
LAIRD TECHNOLOGIES (SHENZHEN) LTD.	\$194,651	ELEC-MECH
ABB POWER ELECTRONICS (SINGAPORE)	\$182,021	POWER SUPPLY
TYCO ELECTRONICS SINGAPORE PTE LTD	\$165,099	ACC/CABLE OTHER
SHENZHEN BAITENG TECHNOLOGY	\$107,224	MTL SHEET
THERMAL CIRCUITS INC	\$101,325	HEATER/ CAB
TE TECHNOLOGY INC	\$93,582	HEATSINK
PFEIFFER VACUUM SINGAPOE PTE LTD	\$90,443	PUMP
DYNISCO - DJ INSTRUMENTS	\$77,300	ELEC-MECH
SL POWER ELECTRONICS CORP	\$62,739	POWER SUPPLY
USHIO AMERICA, INC.	\$59,202	LAMP
IDEX HEALTH AND SCIENCE LLC	\$53,546	PUMP
MRPC NORTHEAST DIVISION	\$51,549	PLASTIC
YANGBUM ENGINEERING PTE LTD	\$47,916	MACHINING
XP POWER LIMITED	\$41,468	POWER SUPPLY
KAMAN AUTOMATION, INC	\$32,944	MOTOR
WATERS TECHNOLOGIES CORPORATION	\$32,796	MACHINE SHOP
MIDSTATE MOLD AND ENGINEERING	\$31,970	PLASTIC
ONEIDA MOLDED PLASTICS LLC	\$25,562	PLASTIC
AES GLOBAL HOLDINGS PTE LTD	\$23,400	POWER SUPPLY
TOP 20 NEED TO PUSH OUT VALUE	\$1,747,395	
GRAND TOTAL PUSH OUT VALUE	\$2,481,085	

- Above suppliers contributed to 70% (1.7mil)of total push out value for POs due in Q2'20.
- Venture needs Waters joint effort to push out the value further.

KEY SUPPLIERS & MATERIALS OUTLOOK

NPI & ENGINEERING UPDATES

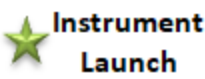
Presenter : Teo Yiek Tiong





NPI – Mantis Mass Detector

- ❑ Ionization : Integration of Atmospheric Solids Analysis Probe (ASAP)
- Vaporized samples by heated gas then ionized by Corona Discharge

Alpha			Beta			Pre-Production						Production		
Q3 2019			Q1 2020			Q2 2020			Q3 2020			Q4 2020		
Jul	Aug	Sep	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
														

- Pre-Production 1 : Venture to deliver modules (PCBA x1, Sub-Assemblies x9) by June 2020 ; *1
- Pre-Production 2 : Venture to build instruments in Sep 2020 (Qty : 6);
- Mass Production : Early 2021 onwards.
- *1 : Covid-19 affects the raw materials supply chain and disruption of parts delivery.

NPI – Bio-Accord System Integration Test

- ❑ Bio-Accord System : As per picture →
- Project kick off : 21 Jan 2020
- Training & NPI Build : Feb ~ May 2020 (Qty : 20 units)
- MR Qualification : June 2020 (Qty : 5 units)



2020 Improvements – Test Yield & Productivity Plans

LC – First Passed Yield :

Model	2020 Target	Q1'2020 Actual
FTN	70%	82%
BSM	58%	62%
QSM	55%	63%
CM	92%	90%

QDa -- Productivity :

Model	2020 Target	Q1'2020 Actual
QDa	0.5hr	0.61hr

FTN Sample Manager

- Needle Seal Force
- Syringe Decay – [Material](#)
- Needle Home -- [Software](#)

BSM/QSM - Solvent Manager

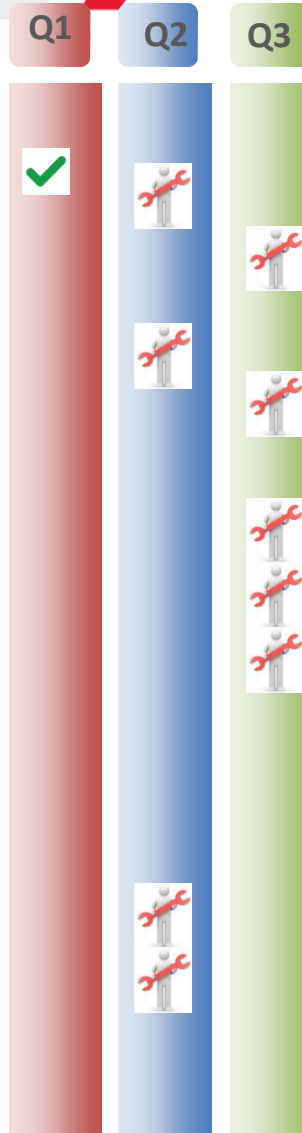
- Dynamic Leak – [Material](#)
- Priming – [Software](#)
- Perform manual priming in Q1

Column Manager

- Cooler / Heater Test -- [Software](#)
- Ecord -- [Software](#)
- Leak Detector -- [Software](#)
- Focus on software upgrade in Q3

QDa MS Detector

- Internal Cal -- [N2 gas](#)
- Pump Power – [Material](#)
- Turbo Pump Quality Issues increased rework timing



Information

Diagnostic Phase → Future State Design → Lean and Digitization



**Lean
FTN**

**Dashboard
Modelling
Weighted and
Individual
FPY**

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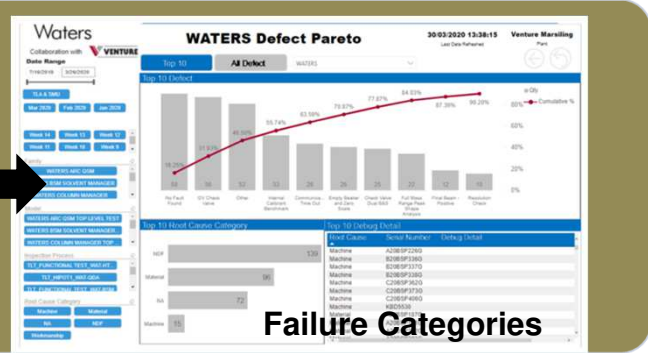
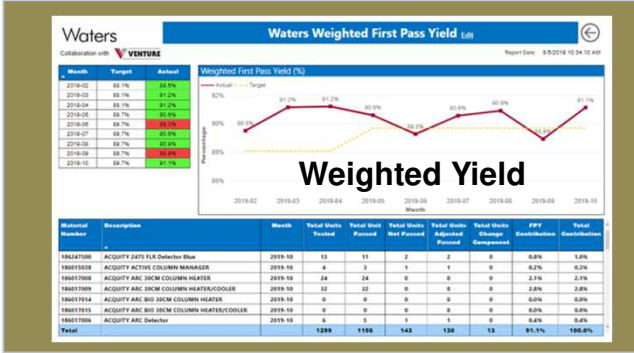
graph TD
    A[Dashboard Modelling Pareto Charts] --> B[Failure Categories]
  
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Cycle Time

9 minutes
Reduced Per Instrument

Floor Space

**38.19m² (411.07 ft²)
saved**

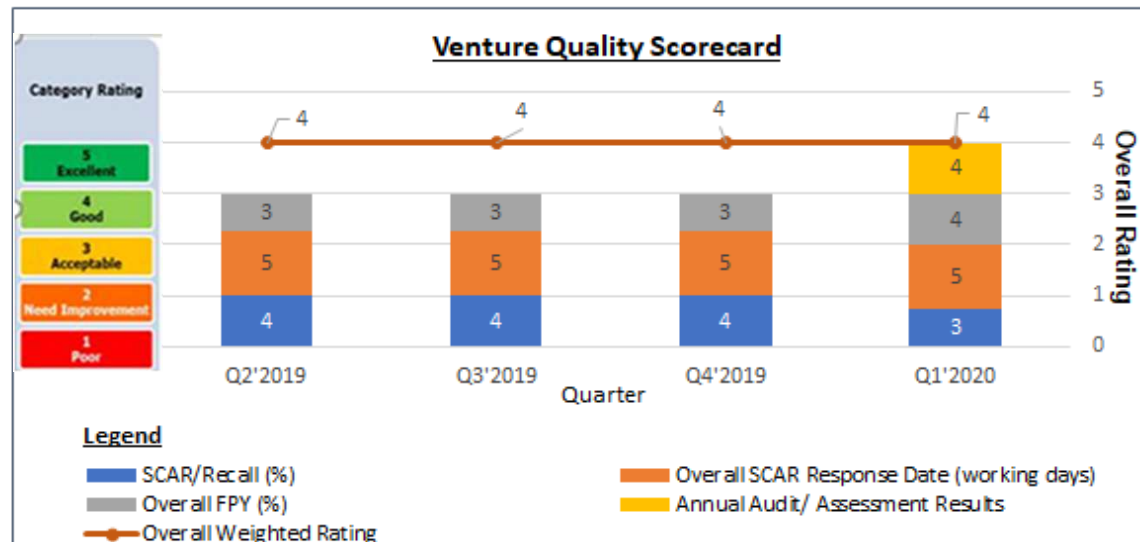


QUALITY UPDATES

Presenter : Bernadette Balan



Quality Dashboard



Quality Improvement Projects

E-Checklist



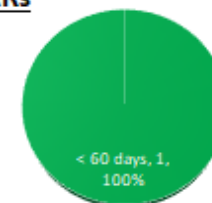
Inspection Enhancement



Legend:



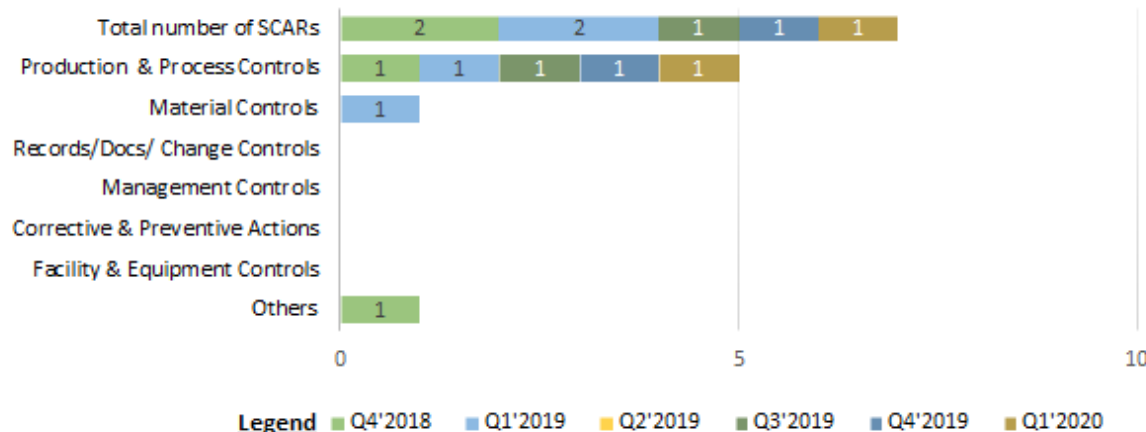
Open SCARs



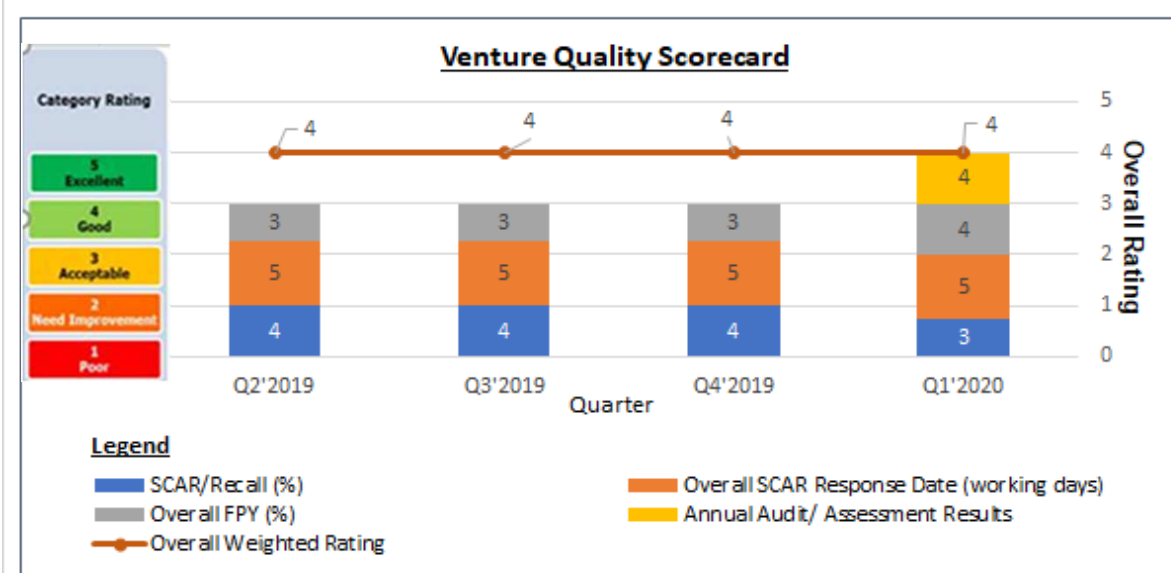
Open Audit NCs

All Audit NC were closed

SCAR Failure Mode Categories



Quality Dashboard



- Venture maintain overall GOOD weighted rating for the past 4 quarters.
- Venture Continuous improvement for 2020:

Initiatives	Description	Key Next Steps
Quality Partnership (Tripartite Task Force)	Waters Machine shop Identified as the focus supplier for 2020. Top 3 PN identified as the problematic part numbers.	WPPL started to work out with Waters Milford Quality Team on the improvement activities .
Digitalize Checklists and DHRs	Digitize the paper forms and checks across all Waters line and other projects	Introducing Paperless-based QMS to Meet the Challenges of Compliance, Complexity and Productivity gain to other on all other checks

Key Improvement Activities in Q1 2020



Key-Updates for e-Checklist and e-DHR: Paperless record and an electronic systems software within Venture that enforce production processes and capture all information and checks associated with as-built production records.

Maintenance and Approval Module update

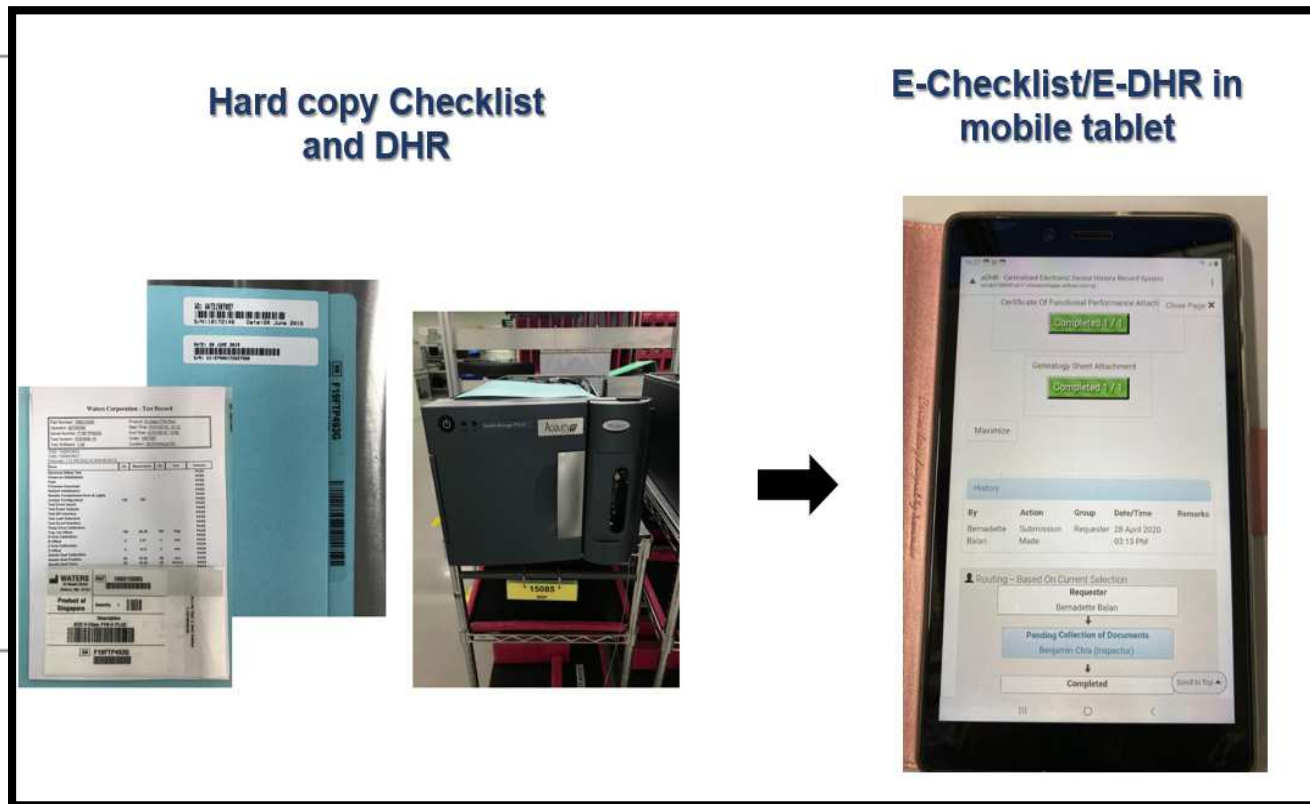
- Customized the permissions and approvals for each users.
- Adjustments of the functions and workflows according to requirement.

COMPLETED

Computer System Validation (CSV)

- User Requirement System (URS)
- Functional Design Validation (FDS)
- Installation, Operational and Performance Qualification

ONGOING (Q2'20)



User Acceptance Test

- Venture Internal Team – Production, Engineering Quality), Training session
- Iteration and Improvement of the solution

ONGOING (Q2'20)

Next Step:

- Pilot launch
- Scale up to other models/lines
- Go Live
- WIFI Infrastructure Upgrade

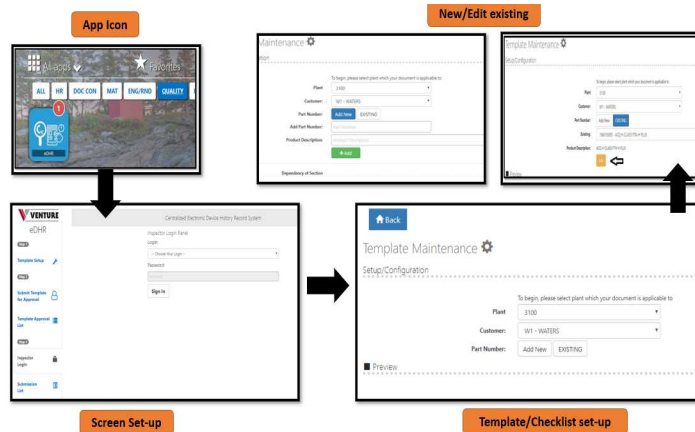
Tentative: July 2020

Key Improvement Activities in Q1 2020

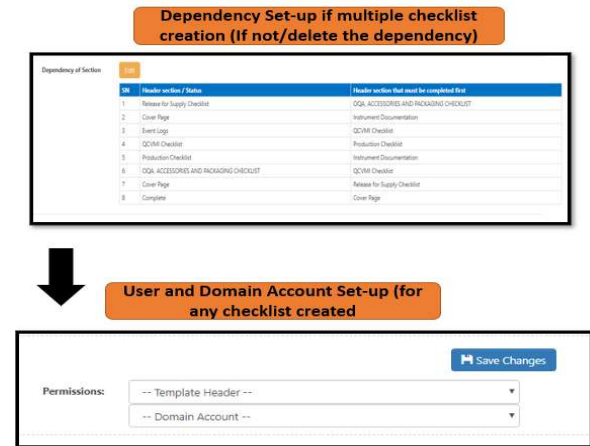


Key-Updates for e-Checklist and e-DHR: caters for paperless checklist and data recording and consolidation of records.

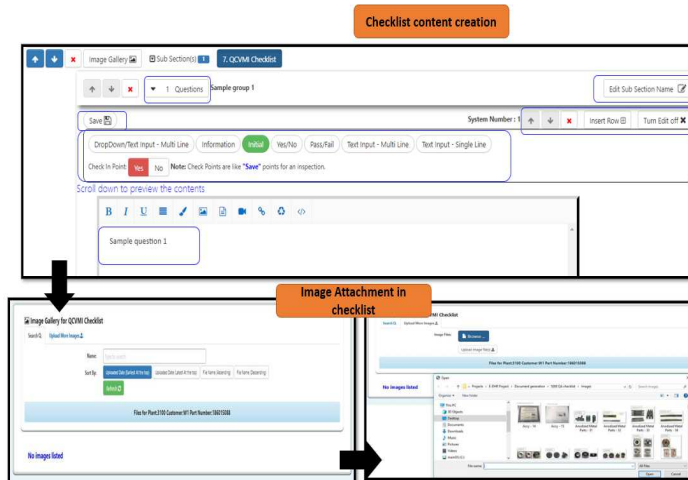
Home Screen Overview of the e-checklist/ e-DHR set-up



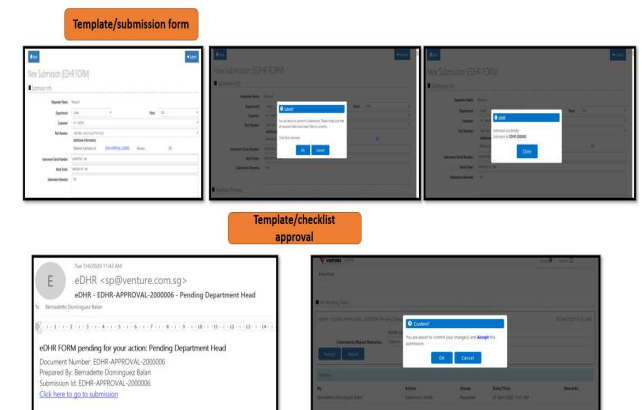
Dependency set-up overview and permission control set-up.



E-Checklist creation content



Template submission and approval screen overview.



GENERAL DISCUSSIONS



THANK YOU



APPENDIX



Instruments by Product Group



Product Group	Material	Material Description
UPLC H & I	186015000	ACQUITY UPLC I-Class BSM
	186015017	ACQUITY UPLC Sample Manager FTN
	186015042	ACQUITY CH-A
	186015043	ACQUITY UPLC CM-A
	186015045	ACQUITY HTCH-30A
	186015046	ACQUITY UPLC I-Class Sample Manager-FTN
	186015049	ACQUITY UPLC H-Class CM-AUX
	186015085	ACQUITY UPLC H-Class PLUS SM FTN-H
	186015088	ACQUITY UPLC I-Class PLUS SM FTN-I
	186015082	ACQUITY UPLC I CLASS PLUS BSM
HPLC	186001791	ALLIANCE COL. HEATER COOLER
	186001863	ALLIANCE COL.HEATER
	186002475	2475 FLUOROMETER
	186179100	Alliance Column Heater Cooler
	186186301	Alliance Column Heater
	186247500	2475 Multichannel Fluorescence Detector
UPLC COMMON	186015011	ACQUITY UPLC 30cm Col Htr/Clr.
	186015029	ACQUITY FLR Detector
ARC	186017000	ACQUITY Arc QSM-R
	186017006	ACQUITY Arc 2475 FLR Detector
	186017008	ACQUITY Arc 30cm Column Heater
	186017009	ACQUITY Arc 30cm Column Heater / Cooler
	186017014	ACQUITY ARC BIO 30CM COLUMN HEATER
	186017015	ACQUITY ARC BIO 30CM COL. HEATER/COOLER
UPLC CLASSIC	186015007	ACQUITY UPLC Column Mgr - Right Inlet
	186015008	ACQUITY UPLC Column Htr./Cooler
	186015009	ACQUITY UPLC Column Mgr.-Left Inlet
	186015010	ACQUITY UPLC Column Heater HT
LEGACY LC	186001500	1500 COLUMN HEATER
	186002441	Temperature Control Module II
	186002449	PCM II - PUMP CONTROL MODULE
UPC2 & APC	186015038	ACQUITY Active Column Manager
	186015039	ACQUITY Auxiliary Column Manager
QDA	186008511	ACQUITY QDA DETECTOR