Executive Summary of Annual 2019

Service Performance

RECHARGE
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

BROADBAND
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

VOICE & SMS
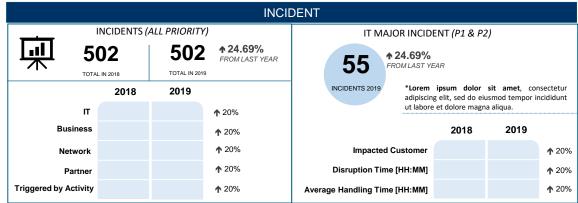5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

ROAMING
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.00%** AVERAGE SUCCESS RATE

CONTENT
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

BANKING
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

DIGITAL MONEY
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

ADVERTISMENT
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **95.99%** AVERAGE SUCCESS RATE

LOYALTY POIN
5.502 TRANSACTION | ↑24.69% FROM LAST YEAR | **99.99%** AVERAGE SUCCESS RATE

Application Performance

CHANNEL	ORDERING & PROVISIONING	CHARGING & BILLING	DIGITAL SYSTEM & OTHERS
99.99% AVERAGE SUCCESS RATE OF XX APPLICATIONS	**99.00%** AVERAGE SUCCESS RATE OF XX APPLICATIONS	**95.00%** AVERAGE SUCCESS RATE OF XX APPLICATIONS	**99.00%** AVERAGE SUCCESS RATE OF XX APPLICATIONS

Infrastructure Performance

SERVER
- **99.99%** AVERAGE CPU OF XX APPLICATIONS
- **99.00%** AVERAGE MEMORY OF XX APPLICATIONS
- **99.00%** AVERAGE AVAILABILITY OF XX APPLICATIONS

STORAGE
- **99.00%** AVERAGE OCCUPANCY OF XX APPLICATIONS

DATABASE
- **95.00%** AVERAGE OCCUPANCY OF XX APPLICATIONS
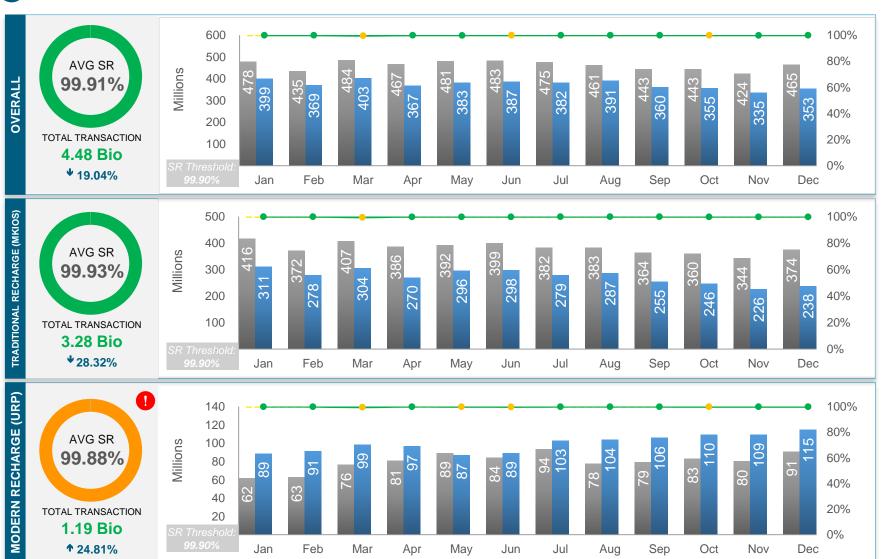- **99.00%** AVERAGE AVAILABILITY OF XX APPLICATIONS

FIREWALL
- **99.00%** AVG CPU | **99.00%** AVG MEMORY
- **99** AVG CONNECTION | **99.00** AVG THROUGHPUT

LOAD BALANCER
- **99.00%** AVG CPU | **99.00%** AVG MEMORY
- **99.00** AVG THROUGHPUT

PROXY
- **99.00%** AVG CPU | **99.00%** AVG MEMORY
- **99.00** AVG THROUGHPUT

ROUTER & SWITCH
- **99.00%** AVG CPU | **99.00%** AVG MEMORY
- **99.00** AVG THROUGHPUT

Operational Excellence

INCIDENT

INCIDENTS (ALL PRIORITY)
502 TOTAL IN 2018 | **502** TOTAL IN 2019 ↑24.69% FROM LAST YEAR

	2018	2019	
IT			↑20%
Business			↑20%
Network			↑20%
Partner			↑20%
Triggered by Activity			↑20%

IT MAJOR INCIDENT (P1 & P2)
55 INCIDENTS 2019 | ↑24.69% FROM LAST YEAR

*Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

	2018	2019	
Impacted Customer			↑20%
Disruption Time [HH:MM]			↑20%
Average Handling Time [HH:MM]			↑20%

IT ESCALATED TICKET

TOTAL **5.502** ↑24.69% FROM LAST YEAR

5.000 Customer Facing Tickets ↑24.69% FROM LAST YEAR
502 Enterprise Tickets ↑7.90% FROM LAST YEAR
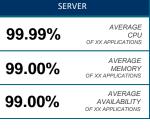
RESOLUTION RATE	RESOLUTION TIME	SLA ACHIEVEMENT
99.99%	**2:35** AVERAGE DURATION [HH:MM]	**99.99%**

TOP 3 CUSTOMER FACING TICKETS
- 34K mksnksnksbksbksksb
- 34K mksnksnksbksbksksb
- 34K mksnksnksbksbksksb

TOP 3 ENTERPRISE TICKETS
- 34K mksnksnksbksbksksb
- 34K mksnksnksbksbksksb
- 34K mksnksnksbksbksksb

RELEASE TICKET

TOTAL **5.502** ↑24.69% FROM LAST YEAR

5.000 Standard Change ↑24.69% FROM LAST YEAR
502 Normal Change ↑7.90% FROM LAST YEAR

TICKET STATUS
4.000 SUCCESS TICKETS	**502** ROLLBACK TICKETS	**1.000** CANCEL TICKETS

→ Each box is clickable for more detail information

Service Performance

RECHARGE SERVICE PERFORMANCE

OVERALL

AVG SR
99.91%

TOTAL TRANSACTION
4.48 Bio
↓ **19.04%**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	478	435	484	467	481	483	475	461	443	443	424	465
2018	399	369	403	367	383	387	382	391	360	355	335	353

SR Threshold: 99.90%

TRADITIONAL RECHARGE (MKIOS)

AVG SR
99.93%

TOTAL TRANSACTION
3.28 Bio
↓ **28.32%**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	416	372	407	386	392	399	382	383	364	360	344	374
2018	311	278	304	270	296	298	279	287	255	246	226	238

SR Threshold: 99.90%

MODERN RECHARGE (URP)

AVG SR
99.88% ❗

TOTAL TRANSACTION
1.19 Bio
↑ **24.81%**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	62	63	76	81	89	84	94	78	79	83	80	91
2018	89	91	99	97	87	89	103	104	106	110	109	115

SR Threshold: 99.90%

Legend:
- 2017 Total TRX
- 2018 Total TRX
- Success Rate 2018
- SR Threshold

Status Trx Distribution

Contribution per Status Transaction

- 0.06%
- 1.15%
- 98.79%

Success | SNR | Error

TOP 3 Denom Contribution (MKIOS)

Rank	Denom	Contribution	Current vs Last Week	Current vs Last Month
1	10000	36.90%	-7.83%	-2.87%
2	5000	23.79%	-2.88%	-11.85%
3	20000	11.89%	-5.20%	-7.76%

TOP 3 Region Contribution (MKIOS)

Rank	Region	Contribution	Current vs Last Week	Current vs Last Month
1	JATIM	13.95%	-0.57%	-3.18%
2	SULAWESI	11.57%	-9.44%	-26.82%
3	SUMBAGSEL	10.95%	-5.75%	+4.01%

TOP 3 Sender ID Contribution (URP)

Rank	Sender ID	Contribution	Current vs Last Week	Current vs Last Month
1	TSELCASHATM	16.41%	+15.82%	+92.67%
2	NFCINDONESIAKIOSK	13.84%	-8.35%	+52.01%
3	BRIFINATM	6.21%	-4.01%	-8.82%

➔ Each box is clickable for more detail information

Service Performance

CORE ACTIVATION PERFORMANCE

Legend:
- 2017 Total TRX (grey)
- 2018 Total TRX (blue)
- Success Rate 2018 (green line)
- SR Threshold (yellow dashed)

BROADBAND

AVG SR
99.49%

TOTAL TRANSACTION
6.05 Bio
↑ **40.88%**

Month	2017	2018
Jan	335	408
Feb	317	408
Mar	369	392
Apr	344	419
May	349	435
Jun	344	458
Jul	349	610
Aug	361	620
Sep	359	558
Oct	371	576
Nov	381	576
Dec	421	594

SR Threshold: 99.50%

Status Trx Distribution — Contribution per Status Transaction: 98.79% / 1.15% / 0.06%

TOP 3 Product Channel Contribution (All)

No	Product ID	Contribution	Current vs Last Week	Current vs Last Month
1	00011019	3.28%	-21.58%	+0.83%
	Paket Combo 500 MB data, 30 SMS Tsel, 75 menit Tsel /1 hari Rp 5000			
2	SahurHarian1_Pre_UMB_OP	2.36%	-9.61%	+6.59%
	Paket Flash 1 GB (00-07)			
3	ulmadurapantura_AR	2.11%	+3.45%	+17.04%
	Paket SEPUASNYA Tsel (00.00-23.59)/1 hari			
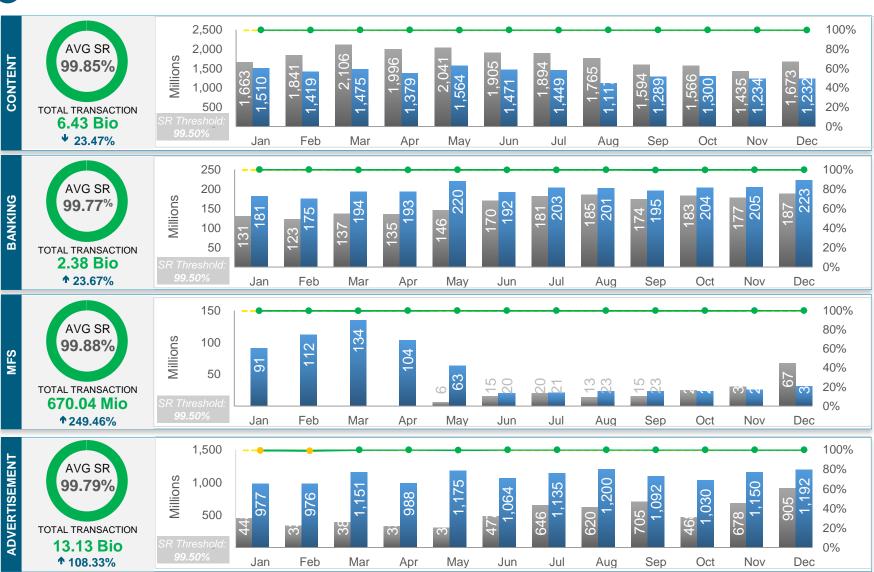
VOICE & SMS

AVG SR
99.42%

TOTAL TRANSACTION
3.09 Bio
↓ **28.95%**

Month	2017	2018
Jan	401	308
Feb	352	282
Mar	382	330
Apr	363	354
May	362	355
Jun	357	278
Jul	381	255
Aug	365	223
Sep	362	195
Oct	357	177
Nov	333	169
Dec	338	171

SR Threshold: 99.50%

Status Trx Distribution — Contribution per Status Transaction: 98.79% / 1.15% / 0.06%

TOP 3 Product Channel Contribution (All)

No	Product ID	Contribution	Current vs Last Week	Current vs Last Month
1	talkmaniaon	16.97%	+2.18%	-11.00%
	Paket Talkmania kuota 250mnt Tsel & 50mnt OprLain			
2	jagoanSiang	10.31%	-0.43%	-13.44%
	Paket TALKMANIA Siang 500mnt Tsel&10mnt OprLain			
3	jagoanMalam	8.51%	+7.02%	-6.66%
	Paket TALKMANIA Malam 400mnt Tsel&10mnt OprLain (17:00-23:59)			

ROAMING

AVG SR
99.15%

TOTAL TRANSACTION
7.24 Mio
↑ **100.55%**

Month	2017	2018
Jan	226	437
Feb	223	315
Mar	302	453
Apr	353	3,032
May	320	403
Jun	268	386
Jul	291	357
Aug	314	374
Sep	323	365
Oct	302	348
Nov	316	385
Dec	374	387

SR Threshold: 99.50%

Status Trx Distribution — Contribution per Status Transaction: 98.79% / 1.15% / 0.06%

TOP 3 Product Channel Contribution (All)

No	Product ID	Contribution	Current vs Last Week	Current vs Last Month
1	00006354	14.71%	-8.62%	+41.04%
	Paket Internet PROMO Asia Australia Internet Roaming 1GB /3 hari			
2	00006422	8.10%	+15.49%	+85780.00%
	Paket 3in1 Haji Internet Roaming 15GB, telepon 120 menit dan 120 SMS /40 hari			
3	00006356	7.73%	-18.21%	+34.28%
	Paket Internet PROMO Asia Australia 2.5GB /7 hari			

→ Each box is clickable for more detail information

Service Performance

DIGITAL SERVICE PERFORMANCE

Legend:
- 2017 Total TRX
- 2018 Total TRX
- Success Rate 2018
- SR Threshold

CONTENT
AVG SR 99.85%
TOTAL TRANSACTION
6.43 Bio
↓ 23.47%

SR Threshold: 99.50%

Month	2017	2018
Jan	1,663	1,510
Feb	1,841	1,419
Mar	2,106	1,475
Apr	1,996	1,379
May	2,041	1,564
Jun	1,905	1,471
Jul	1,894	1,449
Aug	1,765	1,111
Sep	1,594	1,289
Oct	1,566	1,300
Nov	1,435	1,234
Dec	1,673	1,232

BANKING
AVG SR 99.77%
TOTAL TRANSACTION
2.38 Bio
↑ 23.67%

SR Threshold: 99.50%

Month	2017	2018
Jan	131	181
Feb	123	175
Mar	137	194
Apr	135	193
May	146	220
Jun	170	192
Jul	181	203
Aug	185	201
Sep	174	195
Oct	183	204
Nov	177	205
Dec	187	223

MFS
AVG SR 99.88%
TOTAL TRANSACTION
670.04 Mio
↑ 249.46%

SR Threshold: 99.50%

Month	2017	2018
Jan	91	
Feb	112	
Mar	134	
Apr	104	
May	6	63
Jun	15	20
Jul	20	21
Aug	13	23
Sep	15	23
Oct		
Nov	3	
Dec	67	3

ADVERTISEMENT
AVG SR 99.79%
TOTAL TRANSACTION
13.13 Bio
↑ 108.33%

SR Threshold: 99.50%

Month	2017	2018
Jan	44	977
Feb	31	976
Mar	38	1,151
Apr	31	988
May	3	1,175
Jun	477	1,064
Jul	646	1,135
Aug	620	1,200
Sep	705	1,092
Oct	468	1,030
Nov	678	1,150
Dec	905	1,192

Status Trx Distribution
Contribution per Status Transaction

- Success: 98.79%
- SNR: 1.15%
- Error: 0.06%

Top Apps Contributor of Advertisement

No	Apps	Contribution	Current vs Last Week	Current vs Last Month
1	ROLI	40.75%	-3.73%	-2.09%
2	MALENABULK	34.30%	+4.74%	+5.72%
3	LBA	23.48%	-20.54%	+8.59%
4	MYADS	1.38%	+61.05%	+111.42%

TOP 3 Bank Contribution

No	Bank	Contribution	Current vs Last Week	Current vs Last Month
1	Bank BRI	25.23%	-4.27%	+9.15%
2	Bank BNI	24.07%	-5.66%	+8.95%
3	Bank Mandiri	21.02%	-5.51%	+5.99%
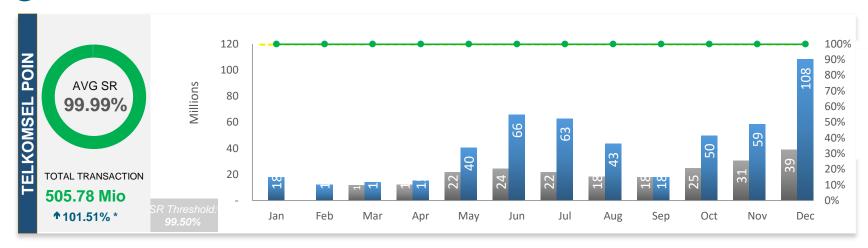
TOP 3 Highest Contribution of Channel

Channel	Contribution	Current vs Last Week	Current vs Last Month
MerchantH2H	88.99%	+11.53%	+58.13%
SMS/USSD	8.86%	+11.88%	-2.14%
Web Check Out	1.93%	-57.32%	+171.48%
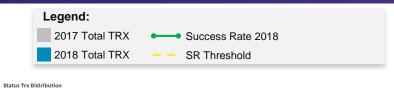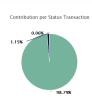
Top Apps Contributor of Advertisement

No	Apps	Contribution	Current vs Last Week	Current vs Last Month
1	ROLI	40.75%	-3.73%	-2.09%
2	MALENABULK	34.30%	+4.74%	+5.72%
3	LBA	23.48%	-20.54%	+8.59%
4	MYADS	1.38%	+61.05%	+111.42%

Service Performance

CUSTOMER LOYALTY SERVICE PERFORMANCE

Legend:
- 2017 Total TRX
- 2018 Total TRX
- Success Rate 2018
- SR Threshold

TELKOMSEL POIN

AVG SR
99.99%

TOTAL TRANSACTION
505.78 Mio
↑**101.51% ***

SR Threshold: 99.50%

Chart (Millions):
- Jan: 2017 = 18
- Feb: 2017 = 1
- Mar: 2017 = 1, 2018 = 1
- Apr: 2017 = 1, 2018 = 1
- May: 2017 = 22, 2018 = 40
- Jun: 2017 = 24, 2018 = 66
- Jul: 2017 = 22, 2018 = 63
- Aug: 2017 = 18, 2018 = 43
- Sep: 2017 = 18, 2018 = 18
- Oct: 2017 = 25, 2018 = 50
- Nov: 2017 = 31, 2018 = 59
- Dec: 2017 = 39, 2018 = 108

Status Trx Distribution

Contribution per Status Transaction

- 0.06%
- 1.15%
- 98.79%

Legend: Success · SnR · Error

TOP 3 Keyword Contribution POV SMS Log

No	Keyword	Contribution	Current vs Last Week	Current vs Last Month
1	INJECT	71.10%	-19.12%	+3.92%
2	HUT	12.63%	+12.57%	-13.10%
3	POIN	4.69%	-49.65%	-76.45%
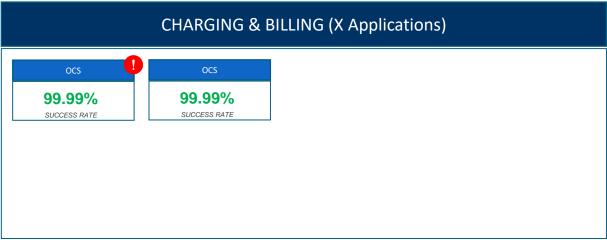
TOP 3 Service Contribution POV Inject POIN

No	Service	Contribution	Current vs Last Week	Current vs Last Month
1	uxp_getpoin	66.43%	-0.20%	-16.37%
2	uxp_rdm	31.66%	+5.80%	-37.83%
3	Flash Deal	1.91%	-26.16%	+4.20%

→ **Each box is clickable for more detail information**
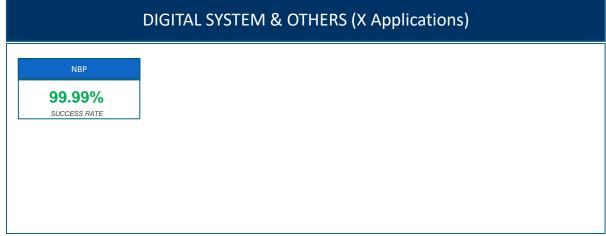
Application Performance

There were **XX** applications that was breach its threshold out of YY applications.

CHANNEL (X Applications)

MY Telkomsel	MY Telkomsel	MY Telkomsel (!)
99.99%	**99.99%**	**99.99%**
SUCCESS RATE	*SUCCESS RATE*	*SUCCESS RATE*

ORDERING & PROVISIONING (X Applications)

REFLEX PREMIUM	REFLEX PREMIUM (!)
99.99%	**99.99%**
SUCCESS RATE	*SUCCESS RATE*

CHARGING & BILLING (X Applications)

OCS (!)	OCS
99.99%	**99.99%**
SUCCESS RATE	SUCCESS RATE

DIGITAL SYSTEM & OTHERS (X Applications)
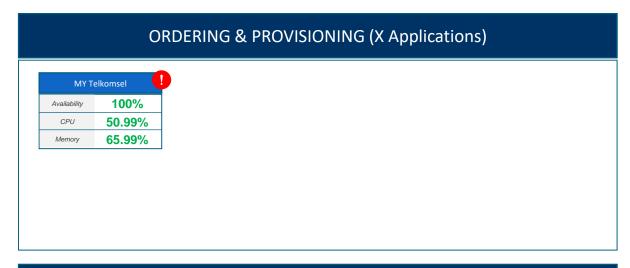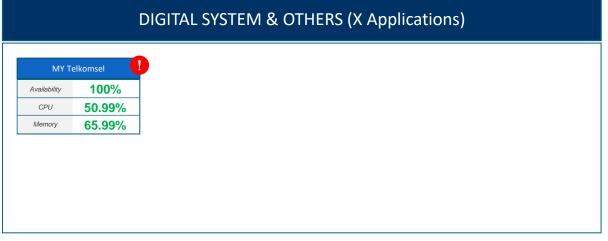
NBP
99.99%
SUCCESS RATE

(!) Success Rate degradation were caused by various factors which are explained in more details in the appendices.

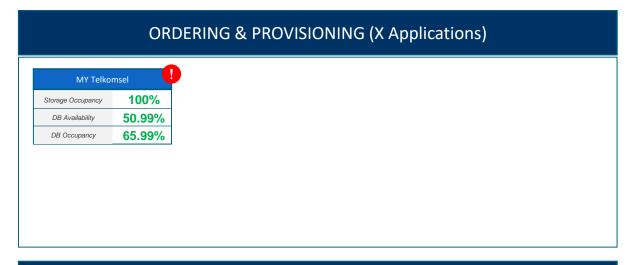**Note:** *Each application may have different target for Monthly average of Success Rate*

Infrastructure Performance (1)

Server Performance

CHANNEL (X Applications)

MY Telkomsel	!
Availability	**100%**
CPU	**50.99%**
Memory	**65.99%**

ORDERING & PROVISIONING (X Applications)

MY Telkomsel	!
Availability	**100%**
CPU	**50.99%**
Memory	**65.99%**

CHARGING & BILLING (X Applications)

MY Telkomsel	!
Availability	**100%**
CPU	**50.99%**
Memory	**65.99%**

DIGITAL SYSTEM & OTHERS (X Applications)

MY Telkomsel	!
Availability	**100%**
CPU	**50.99%**
Memory	**65.99%**

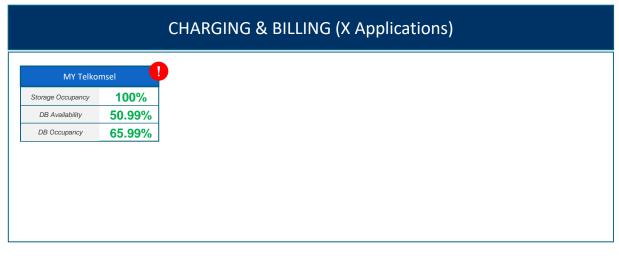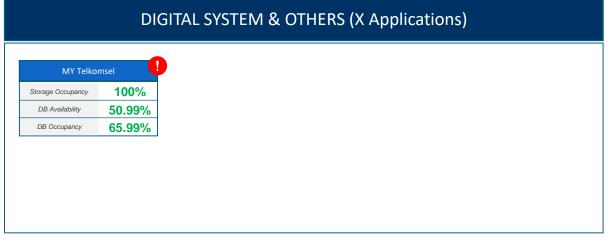! Metric degradation were caused by various factors which are explained in more details in the appendices.

Note: *Each application may have different target for Monthly average of Metric*

Infrastructure Performance (2)

💻 **Storage and Database Performance**

CHANNEL (X Applications)

MY Telkomsel	❗
Storage Occupancy	**100%**
DB Availability	**50.99%**
DB Occupancy	**65.99%**

ORDERING & PROVISIONING (X Applications)

MY Telkomsel	❗
Storage Occupancy	**100%**
DB Availability	**50.99%**
DB Occupancy	**65.99%**

CHARGING & BILLING (X Applications)

MY Telkomsel	❗
Storage Occupancy	**100%**
DB Availability	**50.99%**
DB Occupancy	**65.99%**

DIGITAL SYSTEM & OTHERS (X Applications)

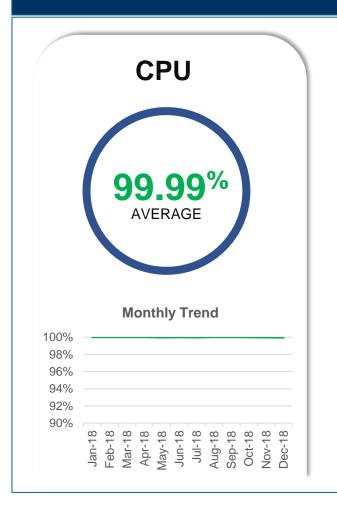| MY Telkomsel	❗
Storage Occupancy	**100%**
DB Availability	**50.99%**
DB Occupancy	**65.99%**

❗ Metric degradation were caused by various factors which are explained in more details in the appendices.
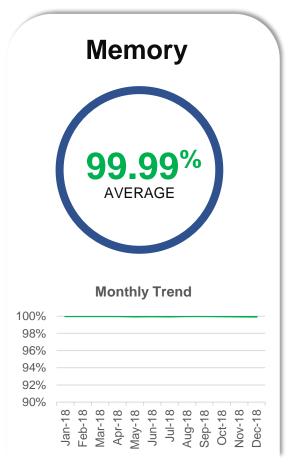
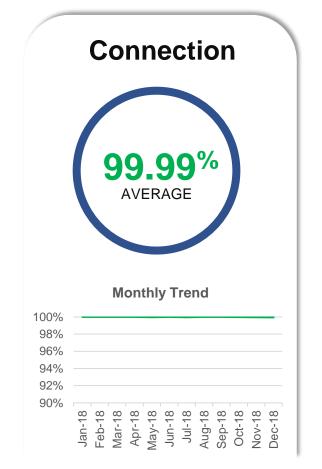**Note:** *Each application may have different target for Monthly average of Metric*

Infrastructure Performance (3)

💻 **Firewall, Load Balancer, Proxy, Router & Switch Performance**

FIREWALL

CPU

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Memory

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Connection

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Throughput

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

❗ Metric degradation were caused by various factors which are explained in more details in the appendices.

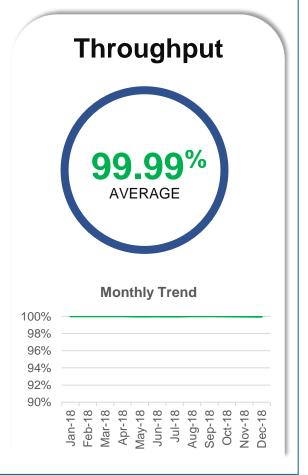**Note:** *Each application may have different target for Monthly average of Metric*

Infrastructure Performance (3)

Firewall, Load Balancer, Proxy, Router & Switch Performance

LOAD BALANCER

CPU

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Memory

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Throughput

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Metric degradation were caused by various factors which are explained in more details in the appendices.

Note: *Each application may have different target for Monthly average of Metric*

Infrastructure Performance (3)

Firewall, Load Balancer, Proxy, Router & Switch Performance

PROXY

CPU

99.99%
AVERAGE

Monthly Trend

Memory

99.99%
AVERAGE

Monthly Trend

Throughput

99.99%
AVERAGE

Monthly Trend

! Metric degradation were caused by various factors which are explained in more details in the appendices.

Note: *Each application may have different target for Monthly average of Metric*

Infrastructure Performance (3)

💻 **Firewall, Load Balancer, Proxy, Router & Switch Performance**

ROUTER & SWITCH

CPU

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Memory

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

Throughput

99.99%
AVERAGE

Monthly Trend

100%
98%
96%
94%
92%
90%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18

❗ Metric degradation were caused by various factors which are explained in more details in the appendices.

Note: *Each application may have different target for Monthly average of Metric*