Business continuity and Natural disaster recovery plans

Background

IF the Service level/CSAT goes down or Shrinkage goes up –Whether from Natural disaster, infrastructure disaster or People Initiated disaster- must be prepared for a variety of unexpected events that can greatly impact customer service especially When busy tones or long hold times are unacceptable.

Objective

- How to staff for unusual situations such as a flood or earthquake – strikes etc…
- How to re-route call traffic to other locations or choose a recovery site based on geo location.

Customers

- WFM/Vertical Directors
- SD Teams
- Site Leaders
- Resource Planners/Schedulers
- WFM-Leadership Team

In Scope/Out Scope

- BCP Alert sent by WFM team two/one Months before to the respective sites based on the Natural Hazards Risk Level.
- Incorporate Natural Hazards Risk Level into the Long Term/Mid Term Shrinkage Forecast.
- Provide Suggestion to SD Team about route the call traffic to other locations.
- Tracking the Success Rate on BCP for each Month.

Data Collection

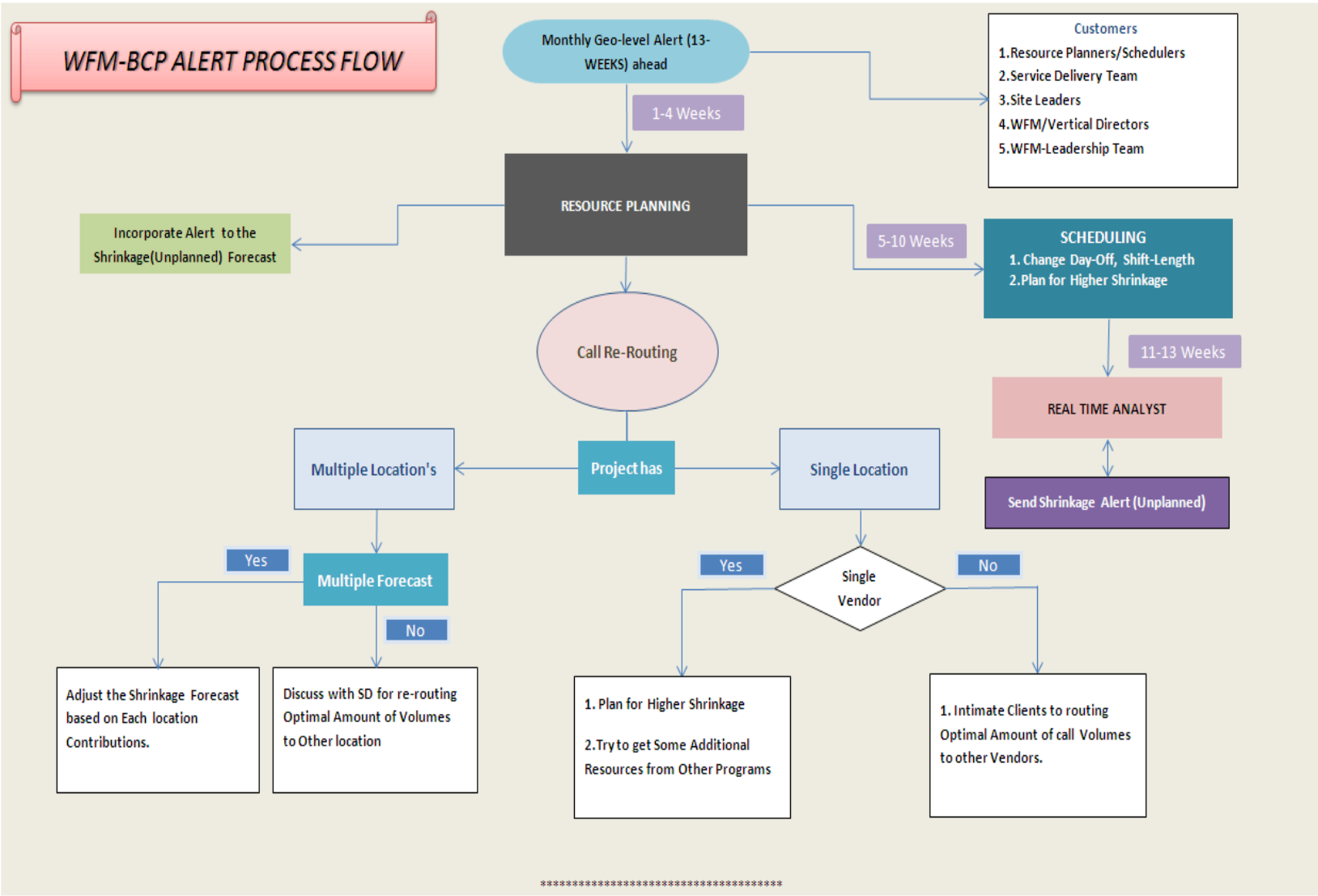
Almost all models data are derived from 15-global circulation models (GCMs) used by the Intergovernmental Panel On Climate Change (IPCC) 4th Assessments Reports. The Models simulate the response of the global climate System to increasing greenhouse gas concentrations.

Source Link: http://sdwebx.worldbank.org/climateportal/index.cfm

Software's and Techniques

- Tools: R-Studio
- Visualization Technique: heat map

Work-flow


WFM-BCP ALERT PROCESS FLOW
Monthly Geo-level Alert (13-WEEKS) ahead
1-4 Weeks
Customers
1.Resource Planners/Schedulers
2.Service Delivery Team
3.Site Leaders
4.WFM/Vertical Directors
5.WFM-Leadership Team
RESOURCE PLANNING
Incorporate Alert to the Shrinkage(Unplanned) Forecast
5-10 Weeks
SCHEDULING
1. Change Day-Off, Shift-Length
2.Plan for Higher Shrinkage
Call Re-Routing
11-13 Weeks
REAL TIME ANALYST
Send Shrinkage Alert (Unplanned)
Multiple Location's
Project has
Single Location
Yes
Multiple Forecast
No
Yes
Single Vendor
No
Adjust the Shrinkage Forecast based on Each location Contributions.
Discuss with SD for re-routing Optimal Amount of Volumes to Other location
1. Plan for Higher Shrinkage
2.Try to get Some Additional Resources from Other Programs
1. Intimate Clients to routing Optimal Amount of call Volumes to other Vendors.

****

Shrinkage Alert-Execution-RTA Team(Existing)

1. The process begins with BCP notification sent by security team updating everyone about status and the impact to the respective sites. This helps decide which sites should be included in the BCP shrinkage alerts.

2. If the BCP situation affects the One Location (North RTA hub(Clark)) ,then the alerts are sent by the other Location (South RTA hub(Davao)) and vice versa.

3. Accordingly a schedule of alerts is decided by RTA management which clarifies the frequency and POC of the alerts a (below is a sample). The same information is communicated to all the RTA teams which will participate in the alerts.

Data collection time(IST)	Data collection time(MNL)	Report sending time(MNL)	HUB/POC name	POC
17-Nov-15 2:30 PM	17-Nov-15 5:00 PM	17-Nov-15 6:00 PM	Clark- MS RTA	Adrian
17-Nov-15 5:30 PM	17-Nov-15 8:00 PM	17-Nov-15 9:00 PM	Clark- MS RTA	Adrian
17-Nov-15 8:30 PM	17-Nov-15 11:00 PM	18-Nov-15 12:00 AM	Clark- MS RTA	Adrian
17-Nov-15 11:30 PM	18-Nov-15 2:00 AM	18-Nov-15 3:00 AM	Davao	Jayme
18-Nov-15 3:30 AM	18-Nov-15 6:00 AM	18-Nov-15 7:00 AM	Davao	Jayme
18-Nov-15 7:30 AM	18-Nov-15 10:00 AM	18-Nov-15 11:00 AM	Davao	Jayme
18-Nov-15 11:30 AM	18-Nov-15 2:00 PM	18-Nov-15 3:00 PM	Davao	Jayme

4. On the day when the BCP alerts are supposed to begin the assigned RTA Hub/POC would open a common chat room to start collecting shrinkage information 1 hour before the report sending time.

5. RTA teams can provide the information via the common chat room or by sending email to WFM Global RTA - BCP Alerts DL.

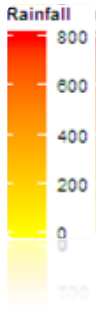
6. Once the data is collected the WFM Global RTA - BCP Alerts mailbox is used to send BCP alert. Below is sample alert.

7. The BCP alert includes the shrinkage details of programs by site and is sent to the site SD teams, site leaders, and WFM leadership team.

Historical Rainfall-Country-(2000-2015)

Average Historical Rainfall Monthly(mm)

Country	Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUS	Sydney	102	118	129	129	120	132	97	80	68	77	84	78
	Melbourne	47	48	50	57	56	50	48	50	58	66	60	59
BRA	Itajai	191	181	149	83	84	83	83	85	106	111	124	149
BGR	Sofia	33	32	38	51	67	75	53	58	46	45	43	42
	Burgas	58	50	49	32	51	50	59	30	63	75	32	61
CAN	Windsor	62	62	70	83	89	86	89	73	94	73	80	74
	Sault Ste.Marie	26	43	56	66	66	74	72	84	102	102	92	47
CHN	Suzhou	45	70	193	103	120	198	152	128	197	65	55	29
	Dalian	9	6	12	25	47	83	140	155	65	29	20	11
COL	Barranquilla	2	3	1	52	115	80	74	110	150	163	80	121
	Bogota	50	68	91	135	120	54	35	45	70	137	127	81
EGY	Alexandria-Egypt	58	41	18	4	1	0	0	0	1	12	32	53
EST	Tallinn	49	32	31	30	36	57	74	73	60	65	61	49
IND	Chennai	23	2	4	8	44	56	100	140	137	279	407	191
	Cochin	32	26	39	103	283	615	594	403	280	422	135	43
	Mumbai	1	1	0	1	13	523	800	530	312	90	17	5
	Hyderabad	13	8	15	20	36	104	170	179	158	97	22	6
	Bangalore	2	8	20	82	121	117	138	148	188	202	62	16
	Pune	4	2	4	18	25	184	207	143	126	78	18	7
JAM	Kingston	18	19	20	39	100	74	42	98	114	177	65	47
MEX	Monterrey	17	17	11	30	52	68	43	119	156	93	23	13
MAR	Casablanca	62	59	51	40	19	6	1	0	5	31	75	78
MYS	Kuala Lumpur	238	182	259	290	186	139	160	156	214	285	333	252
PHL	Camsur	297	196	193	151	181	241	239	178	216	264	485	459
	Clark	14	13	18	33	178	254	422	378	356	193	70	23
	Davao	60	51	53	51	78	105	107	148	124	158	87	66
	Manila	20	21	29	26	173	224	370	431	385	245	130	87
	Tarlac	13	10	18	15	178	227	368	306	310	215	70	31
	Cubao	17	10	22	28	173	340	448	505	382	234	144	54
	Legazpi	297	196	193	151	181	241	239	178	216	264	485	459
	Carmona	25	25	38	25	38	127	254	432	406	356	203	152
SVK	Bratislava	39	37	38	34	55	57	53	59	55	38	54	46
UAE	Dubai	19	14	22	7	15	0	1	5	6	2	3	16
UK	London	55	41	42	44	49	45	45	50	49	69	59	55
USA	Rochester	61	50	64	69	73	85	85	88	86	69	60	67
	Syracuse	64	53	75	81	82	84	96	91	94	87	90	82
	Tulsa-Oklahoma	42	47	84	96	149	120	85	74	108	100	71	63
	Chesapeake	101	96	105	92	106	113	152	140	117	95	87	96
	Clifton-New Jersey	86	61	81	86	74	104	66	91	89	89	66	89
	Torrance	91	82	71	19	7	2	1	3	6	12	31	51
	Coral springs	71	70	76	86	146	186	151	176	178	146	108	63
	Houston	86	81	87	84	129	151	96	96	105	145	110	95
	Reston	79	79	94	84	102	94	109	104	89	85	81	81
	Alexandria-LA	138	132	135	116	120	131	112	104	100	134	157	159



Key Findings (Location)-Monthly:

Here is the Top-10 Location for having High Risk on a monthly basis

JAN: **1.**Legazpi 2.Camsur **3.** Kuala Lumpur **4.** Itajai **5.** Alexandria-LA **6.** Sydney **7.** Chesapeake **8.**Torrance **9.**Houston **10.**Clifton.

FEB: 1. Legazpi 2.Camsur **3.** Kuala Lumpur **4.** Itajai **5.** Alexandria-LA **6.** Sydney **7.** Chesapeake **8.**Torrance **9.**Houston **10.**Reston.

MAR: **1.**Kuala Lumpur **2.**Sczhou 3.Legazpi **4.**Camsur **5.**Itajai **6.** Alexandria-LA **7.**Sydney **8.** Chesapeake **9.**Reston **10.**Bogota.

APR: 1. Kuala Lumpur **2.**Legazpi **3.**Camsur **4.**Bogota **5.**Sydney **6.** Alexandria-LA **7.**Suzhou **8.**Cochin **9.**Tulsa-Oklahoma **10.** Chesapeake.

MAY: **1.**Cochin **2.**Kuala Lumpur **3.**Camsur **4.**Legazpi 5.Clark **6.**Tarlac **7.**Cubao **8.**Manila **9.**Tulsa-Oklahoma **10.**Coral Springs.

JUN: 1. Cochin **2.**Mumbai **3.**Cubao **4.**Clark **5.**Legazpi **6.**Camsur **7.**Tarlac **8.**Manila **9.**Suzhou **10.** Coral Springs.

JUL: **1.**Mumbai **2.**Cochin **3.**Cubao **4.**Clark **5.**Manila **6.**Tarlac **7.**Carmona **8.**Camsur **9.**Legazpi **10.**Pune.

AUG: 1. Mumbai **2.**Cubao **3.**Carmona **4.**Manila **5.**Cochin **6.**Clark **7.**Tarlac **8.**Hyderabad **9.**Camsur **10.**Legazpi.

SEP: 1. Carmona **2.**Manila **3.**Cubao **4.**Clark **5.**Mumbai **6.**Tarlac **7.**Cochin **8.**Camsur **9.**Legazpi **10.**Kuala Lumpur.

OCT: 1. Cochin **2.**Carmona **3.**Kuala Lumpur **4.**Chennai **5.**Legazpi **6.**Camsur **7.**Manila **8.**Cubao **9.**Tarlac **10.**Bangalore.

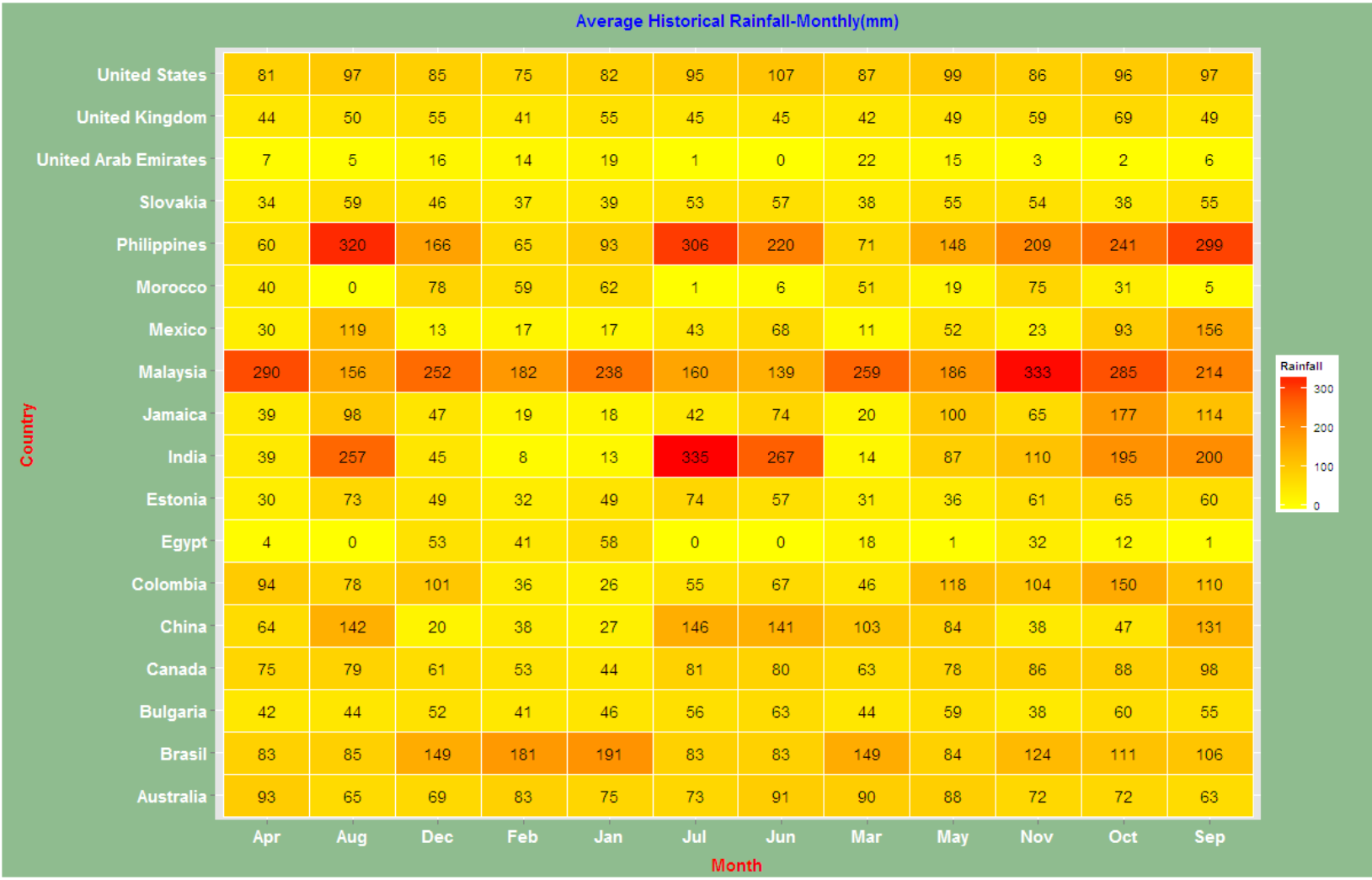
NOV: 1. Camsur **2.**Chennai **3.**Legazpi **4.**Kuala Lumpur **5.**Carmona **6.**Alexandria-LA **7.**Cubao **8.**Cochin **9.**Manila **10.**Bogota

DEC: 1. Camsur **2.**Kuala Lumpur **3.**Legapi **4.**Chennai **5.**Alexandria **6.**Carmona **7.**Manila **8.**Barranquila **9.** Chesapeake **10.**Housten.

Overall-High Risk

1) Camsur-PHL
2) Legazpi-PHL
3) Cochin-IND
4) Kuala Lumpur-MYS
5) Cubao-PHL
6) Mumbai-IND
7) Manila-PHL
8) Carmona-PHL
9) Clark-PHL
10) Tarlac-PHL
11) Alexandria-LA-USA
12) Coral springs-USA
13) Itajai-BRA
14) Chennai-IND
15) Suzhou-CHN
16) Chesapeake Virginia-USA
17) Houston-USA
18) Bangalore-IND
19) Davao-PHL
20) Reston-USA

Historical Rainfall-Country-(2000-2015)



Country	Apr	Aug	Dec	Feb	Jan	Jul	Jun	Mar	May	Nov	Oct	Sep
United States	81	97	85	75	82	95	107	87	99	86	96	97
United Kingdom	44	50	55	41	55	45	45	42	49	59	69	49
United Arab Emirates	7	5	16	14	19	1	0	22	15	3	2	6
Slovakia	34	59	46	37	39	53	57	38	55	54	38	55
Philippines	60	320	166	65	93	306	220	71	148	209	241	299
Morocco	40	0	78	59	62	1	6	51	19	75	31	5
Mexico	30	119	13	17	17	43	68	11	52	23	93	156
Malaysia	290	156	252	182	238	160	139	259	186	333	285	214
Jamaica	39	98	47	19	18	42	74	20	100	65	177	114
India	39	257	45	8	13	335	267	14	87	110	195	200
Estonia	30	73	49	32	49	74	57	31	36	61	65	60
Egypt	4	0	53	41	58	0	0	18	1	32	12	1
Colombia	94	78	101	36	26	55	67	46	118	104	150	110
China	64	142	20	38	27	146	141	103	84	38	47	131
Canada	75	79	61	53	44	81	80	63	78	86	88	98
Bulgaria	42	44	52	41	46	56	63	44	59	38	60	55
Brasil	83	85	149	181	191	83	83	149	84	124	111	106
Australia	93	65	69	83	75	73	91	90	88	72	72	63

Key Findings (Countries)-Monthly:

Here is the Top-10 Countries for having High Risk on a monthly basis

JAN: **1**.Malaysia **2**. Philippines **3**. United States **4**.Brazil **5**. Australia. **6**. Morocco **7**. Egypt **8**. United Kingdom **9**.Estonia **10**.Bulgaria.

FEB: 1. Malaysia **2.** China **3.** United States **4.** Philippines **5.** Brazil. **6**. Morocco **7**. Canada **8**. Egypt **9**.Bulgaria **10**. United Kingdom.

MAR: **1.** Malaysia **2.** China **3.** United States **4.** Brazil **5.** Philippines. **6**. Canada **7**. Australia **8**. Colombia **9**.Bulgaria **10**. United Kingdom.

APR: 1.Malaysia **2.** Australia **3.** Colombia **4.** United States **5.** Canada. **6**. China **7**. Brazil **8**. Philippines **9**.Bulgaria **10**. United Kingdom.

MAY: **1**.Malaysia **2.** Philippines **3.** China **4.** Colombia **5.** United States. **6**. Jamaica **7**. India **8**. Brazil **9**.Canada **10**. Bulgaria.

JUN: 1. India **2.** Philippines **3**. China **4**. Malaysia **5.** United States. **6**. Australia **7**.Brazil **8**. Canada **9**.Jamaica **10**.Mexico.

JUL: **1.** India **2.** Philippines **3**. Malaysia **4**. China **5.** United States. **6**. Brazil **7**.Canada **8**. Estonia **9**.Australia **10**.Bulgaria.

AUG: 1. Philippines **2.** India **3**. Malaysia **4**. China **5**.Mexico. **6**. Jamaica **7**.United States **8**. Brazil **9**.Canada **10**.Colombia.

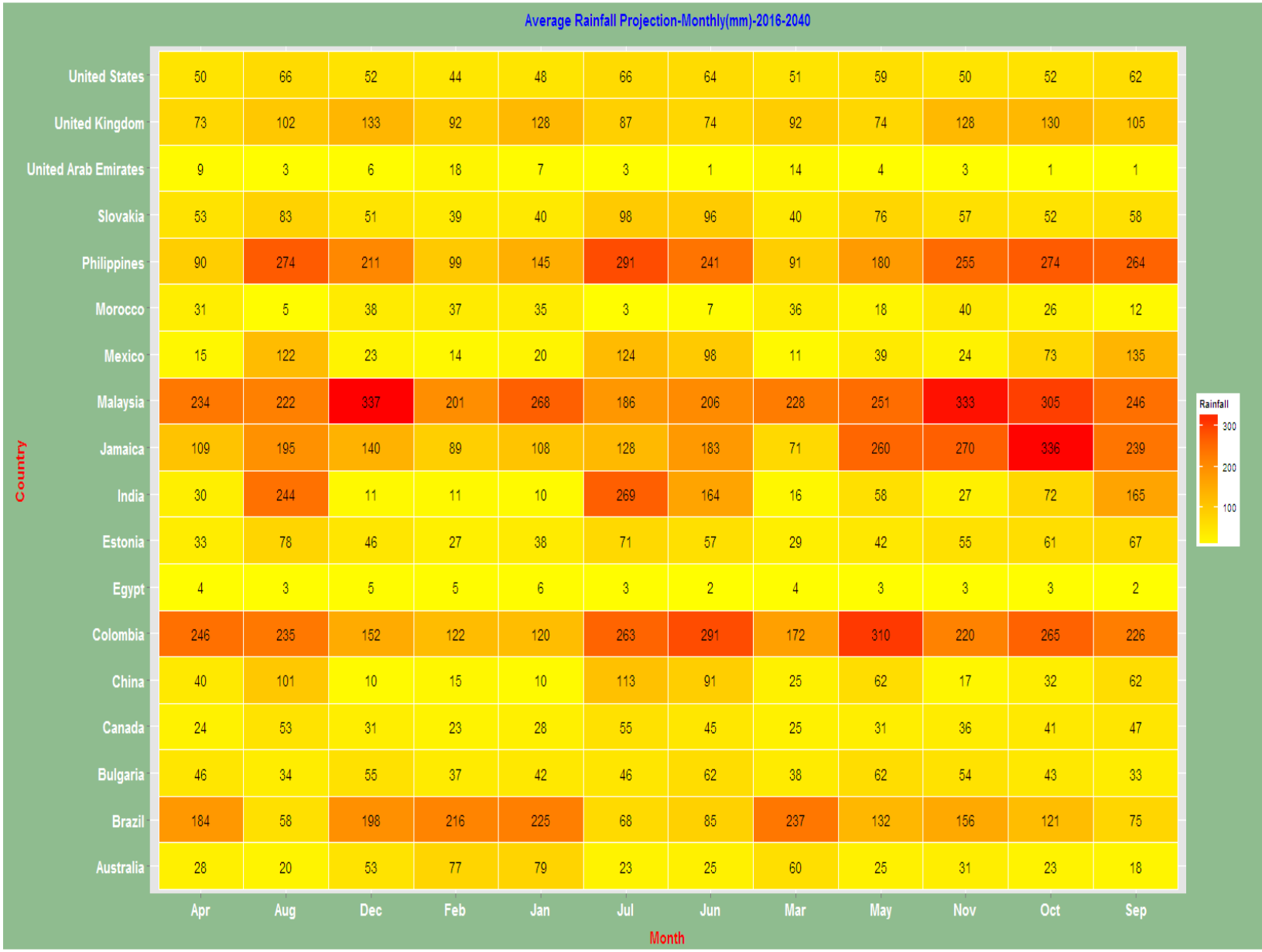
SEP: 1. Philippines **2.** Malaysia **3**. India **4.** China **5**.Mexico. **6**. Jamaica **7**.Colombia **8**. Brazil **9**.Canada **10**.United States.

OCT: 1. Malaysia **2.** Philippines **3**. India **4.** Colombia **5**.Mexico. **6**. Brazil **7**.United States **8**. Mexico **9**.Canada **10**.Australia.

NOV: 1. Malaysia **2.** Philippines **3**. India **4.** Colombia **5**.Canada. **6**. Brazil **7**.Morocco **8**. Australia **9**.Jamaica **10**.Estonia.

DEC: 1. Malaysia **2.** Philippines **3**. Colombia **4.** United States **5**.Canada. **6**. Brazil **7**.Morocco **8**. Australia **9**.Canada **10**.United Kingdom.

Average Rainfall Projection-(2016-2040)



Key Findings (Country wise)-Monthly-Projections

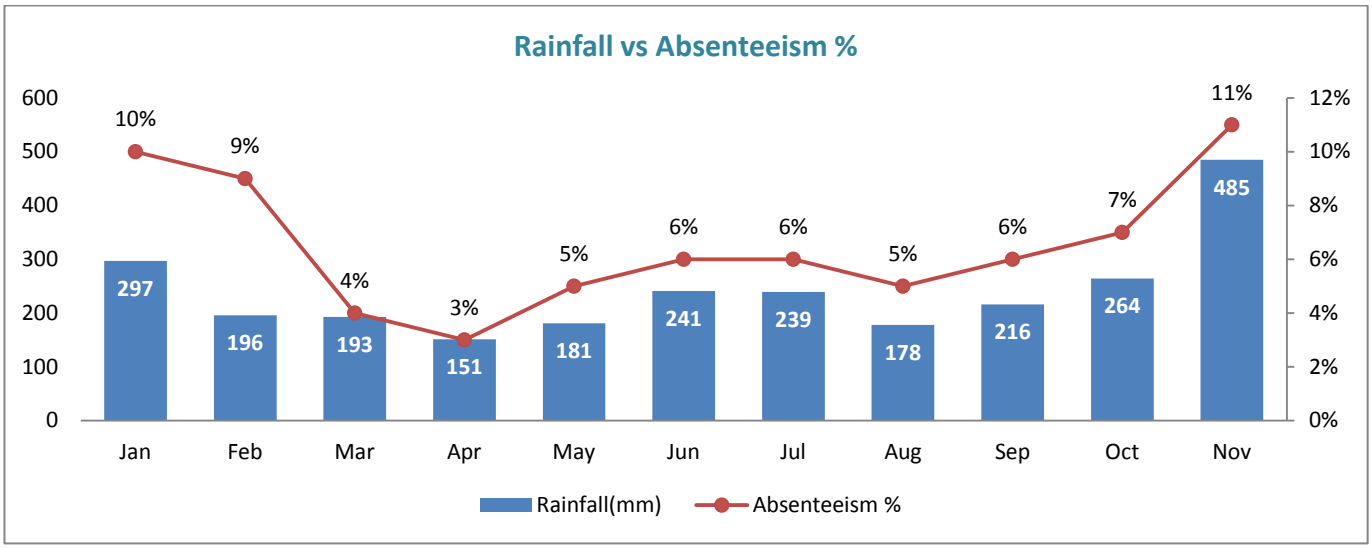
Here is the Top-10 Countries for having High Risk on a monthly basis

JAN: **1.**Malaysia **2.** Philippines **3.** Brazil **4.** United Kingdom **5.** Colombia **6.** Jamaica **7.** Australia **8.** United States **9.** Bulgaria **10.**Slovakia.
FEB: 1. Malaysia **2.** Philippines **3.** Brazil **4.** Colombia **5.** United Kingdom **6.** Jamaica **7.** Australia **8.** United States **9.**Slovakia **10.**Bulgaria.
MAR: **1.**Brazil **2.** Malaysia **3.** United Kingdom **4.** Colombia **5.** Philippines **6.** Jamaica **7.** Australia **8.** United States **9.**Slovakia **10.**Bulgaria.
APR: 1. Colombia **2.** Malaysia **3.** Philippines **4.** Brazil **5.** Jamaica. **6.**United Kingdom **7.** Slovakia **8.** United States **9.** Bulgaria **10.**China.
MAY: **1.** Colombia **2.** Malaysia **3.** Jamaica **4.** Philippines **5.**Brazil. **6.** Slovakia **7.** United Kingdom **8.** Bulgaria **9.**China **10.**United States.
JUN: 1. Colombia **2.** Malaysia **3.** Philippines **4.** Jamaica **5.** India. **6.** Mexico **7.** Slovakia **8.** China **9.** Brazil **10.**United Kingdom.
JUL: **1.** Philippines **2.** India **3.** Malaysia **4.** Colombia **5.** Jamaica. **6.** Mexico **7.** China **8.** Slovakia **9.** United Kingdom **10.** Estonia.
AUG: 1. Philippines **2.** India **3.** Malaysia **4.** Colombia **5.** Jamaica. **6.** Mexico **7.** United Kingdom **8.** China **9.** Slovakia **10.** Estonia.
SEP: 1. Philippines **2.** Malaysia **3.** Colombia **4.** Jamaica **5.** India. **6.** Mexico **7.** United Kingdom **8.** Brazil **9.** Estonia **10.**China.
OCT: 1. Jamaica **2.** Malaysia **3.** Philippines **4.** Colombia **5.** United Kingdom. **6.** Brazil **7.** Mexico **8.** India **9.** Estonia **10.**Slovakia.
NOV: 1. Malaysia **2.** Jamaica **3.** Philippines **4.** Colombia **5.** Brazil. **6.** United Kingdom **7.** Slovakia **8.** Estonia **9.**Bulgaria **10.** United States.
DEC: 1. Malaysia **2.** Philippines **3.** Colombia **4.** Brazil **5.** Jamaica 6. Bulgaria **7.** United Kingdom **8.** Australia **9.** United States **10.** Slovakia.

Analysis

Project Name: Activision Tech Support – Chat (25201)

Location : Camsur II



Project Name: PHH (10451)

Location : Cochin