Player's Instructions

You work for a company call Birds Ltd. You are a team of advisors who work directly under the CEO. After some market research a feature has been requested on one of your products called BirdSpotter. The feature is called BlackBird and will allow users to automatically identify pictures of blackbirds. You have a team of people who are going to implement the feature. Your job, as a team, is to help the CEO to direct the resources of Birds Ltd and to keep the CEO informed of the finish date. It's currently late in August and work is about to begin. Being agile development, the goals of the product are clear, however the delivery hasn't been broken down into work items yet.

The CEO needs this feature to be ready for Christmas. The financial success of the company for the next 6 months is riding on this feature. At the beginning of each month the CEO comes to you and asks when the feature will be done.

On average (mean) it takes 3 months to deliver a feature at Birds Ltd. Although there is a lot of variance around the mean, lots of features take 1 month and lots take 6 months.

The BlackBird feature looks similar to the robin feature. The robin feature took 2 months to develop, with a team that was familiar with the BirdSpotting application code base. The current team is made up of 7 people, 4 developers, 2 manual QAs and 1 automation QA.

They are:
Betty - Developer
Tim - Developer
Gary - Developer and Team Lead
Robert - Developer
Larry - Automation QA
Shilpa - Manual QA
Daman - Manual QA
Alastair - Product Manager

Only Daman, Betty and Alastair have worked on the BirdSpotting application before. Everyone else is new to the product. Normally it takes 3 months to get someone up to speed if they are working through documentation. It takes a lot less time when they pair with someone.

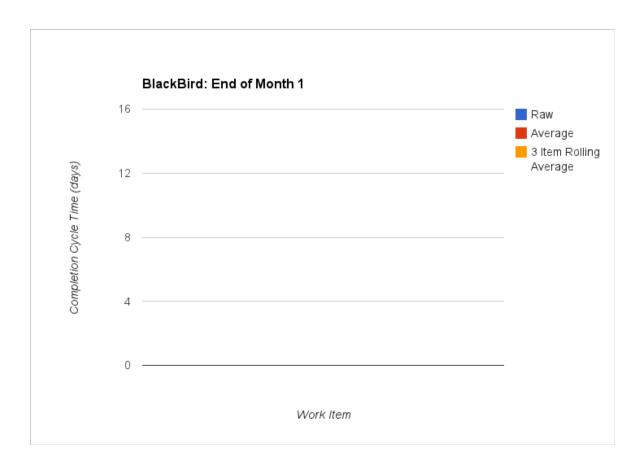
Birds Ltd tend to protect a team once they are working on a feature and they will be dedicated to just that feature.

1st October: End of Month 1

The team has been working hard for just over a month. Take a look at the data on what they have delivered and try to answer the questions.

work-item-completion-cycle-time

Work Item	Start Date	End Date	Raw	Average	3 Item Rolling Avg
44879	8/31/2012	9/7/2012	7	7.00	7.00
45020	9/7/2012				
45017					
45018					
45143					
45134					
45141					
45139					
45137					
45138					
45136					
45135					
45345					
45371					
45372					
45360					
45377					
45357					
45359					
45362					
45373					
45374					
45358					
45380					
45356					
45381					



Discussion questions

Q: How many work items were added this month? How many more do you estimate will be added before the feature is delivered?

Q: Even though you only have a single data point, can you come up with a scheme for how you might estimate the delivery date.

CEO Questions, explain your answers

Q: What date will the feature be ready? (date)

Q: How confident are you (high, medium, low)

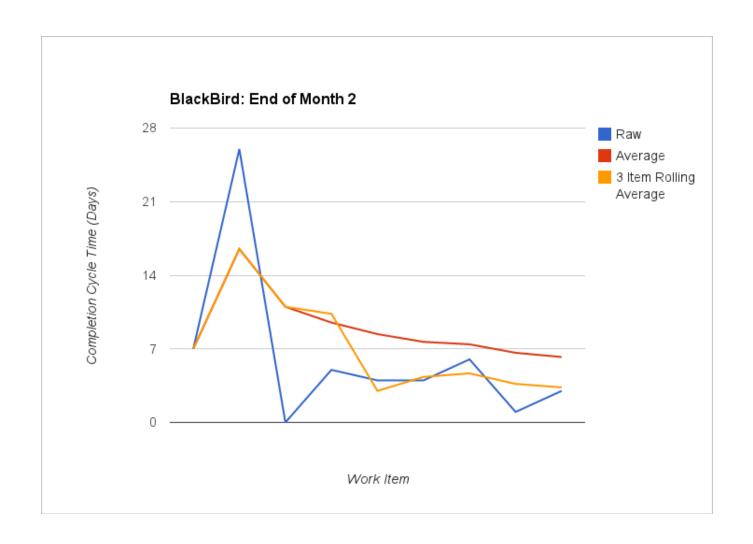
4 Player's sheets

1st November: End of Month 2

The team has been working hard and the pace of work item completion has increased. No new work has been found this month. The team reports that once they completed the second work item a lot of the subsequent items were repeating the same work in different areas. Take a look at the work items completed and the graphs and answer the questions. The team reports that two work items completed on the same day.

work-item-completion-cycle-time

				•
				3 Item Rolling
Start Date	End Date	Raw	Average	Average
8/31/2012	9/7/2012	7	7.00	7.00
9/7/2012	10/3/2012	26	16.50	16.50
9/27/2012	10/3/2012	0	11.00	11.00
10/3/2012	10/8/2012	5	9.50	10.33
10/4/2012	10/12/2012		8.40	3.00
10/10/2012	10/16/2012	4	7.67	4.33
10/15/2012	10/22/2012	6	7.43	4.67
10/17/2012	10/23/2012	1	6.63	3.67
10/19/2012	10/26/2012	3	6.22	3.33
	8/31/2012 9/7/2012 9/27/2012 10/3/2012 10/4/2012 10/10/2012 10/15/2012	8/31/2012 9/7/2012 9/7/2012 10/3/2012 9/27/2012 10/3/2012 10/3/2012 10/8/2012 10/4/2012 10/12/2012 10/10/2012 10/16/2012 10/15/2012 10/22/2012 10/17/2012 10/23/2012	8/31/2012 9/7/2012 7 9/7/2012 10/3/2012 26 9/27/2012 10/3/2012 0 10/3/2012 5 10/4/2012 10/12/2012 4 10/10/2012 10/16/2012 4 10/15/2012 10/22/2012 6 10/17/2012 10/23/2012 1	8/31/2012 9/7/2012 7 7.00 9/7/2012 10/3/2012 26 16.50 9/27/2012 10/3/2012 0 11.00 10/3/2012 10/8/2012 5 9.50 10/4/2012 10/12/2012 4 8.40 10/10/2012 10/16/2012 4 7.67 10/15/2012 10/22/2012 6 7.43 10/17/2012 10/23/2012 1 6.63



Discussion Questions:

- Q: How can there be a cycle time of 0 days?
- Q: What trend can you see on the graph?
- Q: Why are the averages different?
- Q: Does your prediction have to be a specific date?

CEO Questions, explain your answers

- Q: What date will the feature be ready? (date)
- Q: How confident are you (high, medium, low)
- 6 Player's sheets

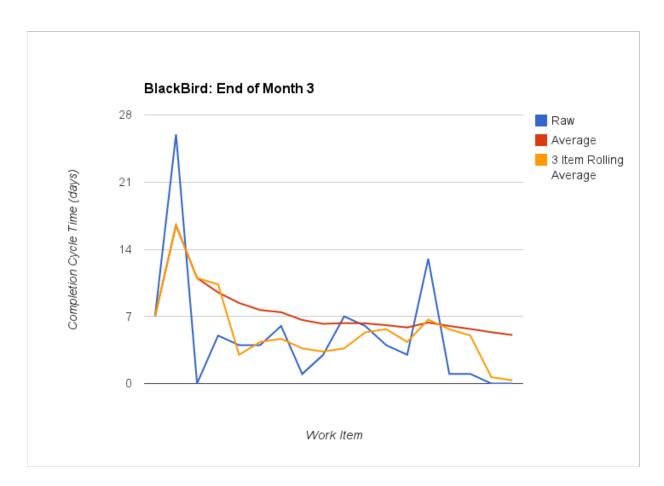
1st December: End of Month 3

The team reports that this month they hit a work item that was hard to complete and took longer than they expected. It required them to work in a new area of the code and product. Once they completed this work item they found that work items started to complete quickly again. The team have looked at the work left and some of the work items will only a very small amount of testing effort. They expect the pace of work item completion to increase.

work-item-completion-cycle-time

					3 Item Rolling
ID	Start Date	End Date	Raw	Average	Average
44879	8/31/2012	9/7/2012	7	7.00	7.00
45143	9/7/2012	10/3/2012	26	16.50	16.50
45371	9/27/2012	10/3/2012	0	11.00	11.00
45372	10/3/2012	10/8/2012	5	9.50	10.33
45134	10/4/2012	10/12/2012	4	8.40	3.00
45345	10/10/2012	10/16/2012	4	7.67	4.33
45984	10/15/2012	10/22/2012	6	7.43	4.67
46008	10/17/2012	10/23/2012	1	6.63	3.67
46009	10/19/2012	10/26/2012	3	6.22	3.33
45141	10/25/2012	11/2/2012	7	6.30	3.67
45139	10/31/2012	11/8/2012	6	6.27	5.33
45137	11/6/2012	11/12/2012	4	6.08	5.67
45138	11/8/2012	11/15/2012	3	5.85	4.33
46930	11/23/2012	11/28/2012	13	6.36	6.67
45020	11/23/2012	11/29/2012	1	6.00	5.67
46497	11/14/2012	11/30/2012	1	5.69	5.00
46768	11/28/2012	11/30/2012	0	5.35	0.67
45136	11/30/2012	11/30/2012	0	5.06	0.33
45017					
45018					
45135					
45360					
45377					
45357					
45359					
45362					
45358					
45373					
45380					

45356			
45374			
45381			
46771			



Discussion questions:

Q: What do you think will happen to the cycle time between now and the end of feature delivery?

Q: What happened to the cycle time in the last couple of work items?

CEO Questions, explain your answers

Q: What date will the feature be ready? (date)

Q: How confident are you (high, medium, low)

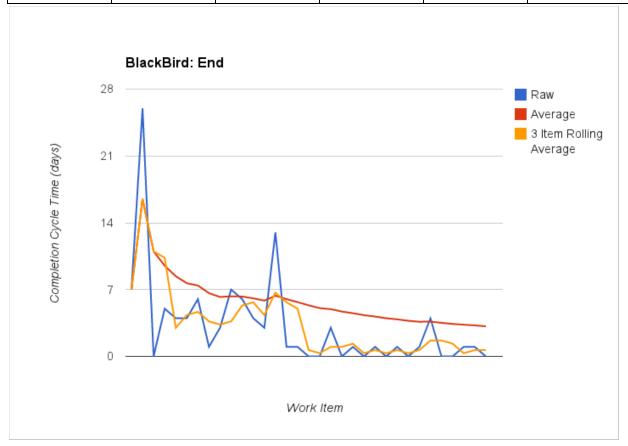
13th December: End

The team has finished their work in good time for christmas. The CEO is very pleased with your efforts. The team noticed that lots of the stories at the end could be completed very quickly. Now, reflect on your ability to predict and how your predictions changed over the course of delivery. Please answer the questions on your sheet.

work-item-completion-cycle-time

					3 Item Rolling
ID	Start Date	End Date	Raw	Average	Average
44879	8/31/2012	9/7/2012	7	7.00	7.00
45143	9/7/2012	10/3/2012	26	16.50	16.50
45371	9/27/2012	10/3/2012	0	11.00	11.00
45372	10/3/2012	10/8/2012	5	9.50	10.33
45134	10/4/2012	10/12/2012	4	8.40	3.00
45345	10/10/2012	10/16/2012	4	7.67	4.33
45984	10/15/2012	10/22/2012	6	7.43	4.67
46008	10/17/2012	10/23/2012	1	6.63	3.67
46009	10/19/2012	10/26/2012	3	6.22	3.33
45141	10/25/2012	11/2/2012	7	6.30	3.67
45139	10/31/2012	11/8/2012	6	6.27	5.33
45137	11/6/2012	11/12/2012	4	6.08	5.67
45138	11/8/2012	11/15/2012	3	5.85	4.33
46930	11/23/2012	11/28/2012	13	6.36	6.67
45020	11/23/2012	11/29/2012	1	6.00	5.67
46497	11/14/2012	11/30/2012	1	5.69	5.00
46768	11/28/2012	11/30/2012	0	5.35	0.67
45136	11/30/2012	11/30/2012	0	5.06	0.33
45360	11/30/2012	12/3/2012	3	4.95	1.00
45377	11/30/2012	12/3/2012	0	4.70	1.00
45017	12/3/2012	12/4/2012	1	4.52	1.33
45357	12/3/2012	12/4/2012	0	4.32	0.33
45359	12/4/2012	12/5/2012	1	4.17	0.67
45362	12/4/2012	12/5/2012	0	4.00	0.33
45373	12/5/2012	12/6/2012	1	3.88	0.67
45374	12/6/2012	12/6/2012	0	3.73	0.33
45018	12/5/2012	12/7/2012	1	3.63	0.67
45358	12/4/2012	12/11/2012	4	3.64	1.67
45380	12/5/2012	12/11/2012	0	3.52	1.67

45356	12/5/2012	12/11/2012	0	3.40	1.33
45135	12/6/2012	12/12/2012	1	3.32	0.33
46771	11/30/2012	12/13/2012	1	3.25	0.67
45381	12/12/2012	12/13/2012	0	3.15	0.67



Discussion Questions:

- Q: When was there enough of a trend to make an accurate prediction?
- Q: There are two distinct phases of the graph, can you spot them. Given what you know about the team, what might be happening?
- Q: What percentage of work items were completed in the last round?
- Q: What features of the graph catch your eye?
- Q: Are there any interesting patterns?
- Q: During which month were the most work items discovered? Which month after that?
- Q: Does this development effort look ordered or chaotic to you?

- Q: Can you draw a graph that shows a highly ordered feature delivery?
- Q: Can you draw a graph that shows a chaotic feature delivery
- Q: Which is better, a chaotic or a structured delivery?