AmerisourceBergen Co. Research Project

FAIR Model Application

RippleRA

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Agenda

- Who We Are
- Our Client
- The Project
- Prototype
- Web Application
- Closing Remarks

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Alex Reichart:~# whoami

- Senior MIS and Finance Double Major
  - Capstone Student
  - AIS Chair of Scholarship
- Competitive, Team Oriented, Solution Driven
- Incoming Media Tech Associate at NBCUniversal
- Why I was interested?
  - Development project brought together both of my interests: MIS and Finance
  - Add value through *developing* aspects of the prototype

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Thomas Norris-About Me

- Born in Silver Spring, MD
- Third year, BBA-MIS/Minor-Computer Science
- Member of the “Lanterns”, MIS’ Hackathon Team
- C, JavaScript, Python, HTML/CSS
- Special Interests: AI, API Development, Game Programming

AmerisourceBergen (NYSE: ABC)

- Leading global healthcare solutions company
  - 29 distribution centers in US, 137 offices in 52 countries
- Founded 1985, headquartered in Chesterbrook, PA
- #391 on Forbes Fortune 500
- Partnered with Temple:
  - Build an application that will analyze the financial risk of IT project

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ABC and Information Technology

- Global firms require global IT
  - Innovative and state of the art → always improving
- Change = Risk
  - Analyzing the financial impact is a decisive factor
- Utilize FAIR methodology for selecting projects
  - Low
  - Moderate
  - High

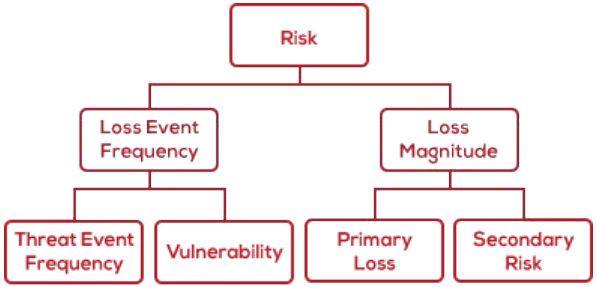
About the Project

Mission: To develop an application to analyze the monetary risk of IT decisions using the FAIR model

What's FAIR?

- FAIR: **F**actor **A**nalysis of **I**nformation **R**isk

- A method of risk calculation focused on the frequency and magnitude of loss, what those factors are comprised of, and how they affect one another



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Covid-19 and its Impact

- The spread of Covid-19 caused Temple campuses to close just one week after spring break
- In order to make the project work our dependency on online resources skyrocketed
- The situation posed new challenges to collaborative documents and version control
- To combat lost efficiency the whole team started committing extra hours to reduce error

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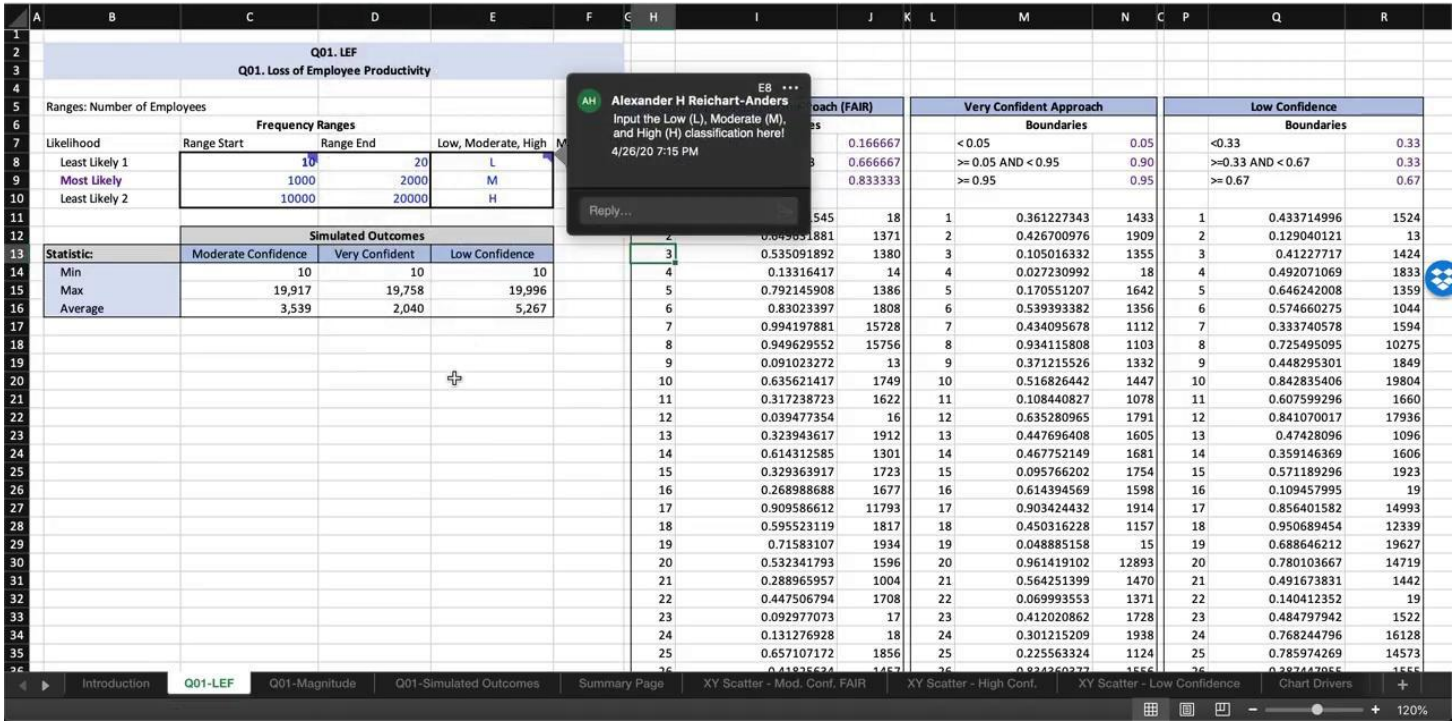
Prototype: Excel Model Logic

- Dr. Kumar

- Started with an Excel Model
  - Multiple Spreadsheets for the different components
  - Link to Workbook

- Can be used as a local version of the app
  - Requires manual input
  - Can be done outside of the ABC network

Prototype Visualization



Q01. LEF

Q01. Loss of Employee Productivity

Ranges: Number of Employees

	Frequency Ranges		
Likelihood	Range Start	Range End	Low, Moderate, High
Least Likely 1	10	20	L
Most Likely	1000	2000	M
Least Likely 2	10000	20000	H

	Simulated Outcomes		
Statistic:	Moderate Confidence	Very Confident	Low Confidence
Min	10	10	10
Max	19,917	19,758	19,996
Average	3,539	2,040	5,267

Alexander H Reichart-Anders
Input the Low (L), Moderate (M), and High (H) classification here!
4/26/20 7:15 PM
Reply...

	oach (FAIR)		Very Confident Approach		Low Confidence	
	es		Boundaries		Boundaries	
	0.166667		< 0.05	0.05	<0.33	0.33
	0.666667		>= 0.05 AND < 0.95	0.90	>=0.33 AND < 0.67	0.33
	0.833333		>= 0.95	0.95	>= 0.67	0.67

		545	18	1	0.361227343	1433	1	0.433714996	1524
		0.645851881	1371	2	0.426700976	1909	2	0.129040121	13
3	0.535091892		1380	3	0.105016332	1355	3	0.41227717	1424
4	0.13316417		14	4	0.027230992	18	4	0.492071069	1833
5	0.792145908		1386	5	0.170551207	1642	5	0.646242008	1359
6	0.83023397		1808	6	0.539393382	1356	6	0.574660275	1044
7	0.994197881		15728	7	0.434095678	1112	7	0.333740578	1594
8	0.949629552		15756	8	0.934115808	1103	8	0.725495095	10275
9	0.091023272		13	9	0.371215526	1332	9	0.448295301	1849
10	0.635621417		1749	10	0.516826442	1447	10	0.842835406	19804
11	0.317238723		1622	11	0.108440827	1078	11	0.607599296	1660
12	0.039477354		16	12	0.635280965	1791	12	0.841070017	17936
13	0.323943617		1912	13	0.447696408	1605	13	0.47428096	1096
14	0.614312585		1301	14	0.467752149	1681	14	0.359146369	1606
15	0.329363917		1723	15	0.095766202	1754	15	0.571189296	1923
16	0.268988688		1677	16	0.614394569	1598	16	0.109457995	19
17	0.909586612		11793	17	0.903424432	1914	17	0.856401582	14993
18	0.595523119		1817	18	0.450316228	1157	18	0.950689454	12339
19	0.71583107		1934	19	0.048885158	15	19	0.688646212	19627
20	0.532341793		1596	20	0.961419102	12893	20	0.780103667	14719
21	0.288965957		1004	21	0.564251399	1470	21	0.491673831	1442
22	0.447506794		1708	22	0.069993553	1371	22	0.140412352	19
23	0.092977073		17	23	0.412020862	1728	23	0.484797942	1522
24	0.131276928		18	24	0.301215209	1938	24	0.768244796	16128
25	0.657107172		1856	25	0.225563324	1124	25	0.785974269	14573

Introduction | Q01-LEF | Q01-Magnitude | Q01-Simulated Outcomes | Summary Page | XY Scatter - Mod. Conf, FAIR | XY Scatter - High Conf. | XY Scatter - Low Confidence | Chart Drivers

120%

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Ripple Risk Analysis: The User Interface

Importance: Great

- Analysts at ABC were already using a different FAIR software
- Conveyed to us by ABC that unless UI was easy to use and appealing from early on, our stakeholders wouldn't transition products

Goals:

- Create an application with the functionality personal ABC touch
- Heavy error-checking to reduce adoption duration/ensure standardized data
- Optimize edge processes to ensure fastest data processing b/w client and server

Ripple Demonstration

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Current Progress and Next Steps

- Finalize implementation of excel model logic on application server
- Initialize QA testing with ABC analysts to improve UI and error checking
- Continue protecting server side from SQL injections & other nefarious activity
- Build and stylize the Excel Templates to ABC standards
- Conduct trainings of the Prototype and Application

Thank You!

- This experience was
  - Challenging
  - Rewarding
  - Invaluable

- Any Questions?

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E-Portfolio Screenshot

[Insert e-portfolio screenshot]

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