

# A WEB-BASED PRODUCTION MANAGEMENT SYSTEM

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Programmer



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# Production Management

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- Interviewers
- Cases
- Sample



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# Production Management

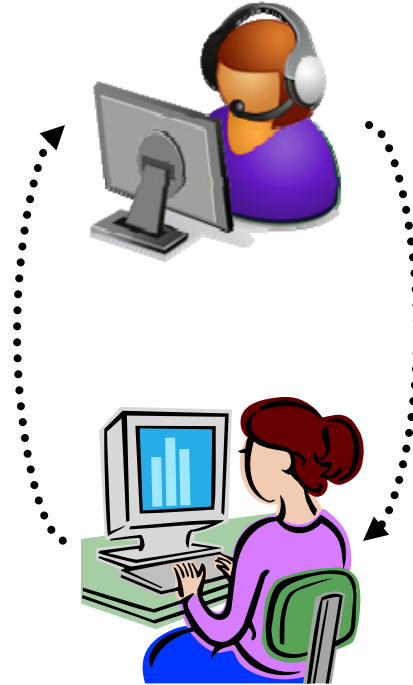
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- **Interviewers**
- Cases
- Sample

# The Feedback Loop

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Interviewer



Supervisor

# Goals

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Interviewer



- Decrease latency
- Increase level of detail



Supervisor

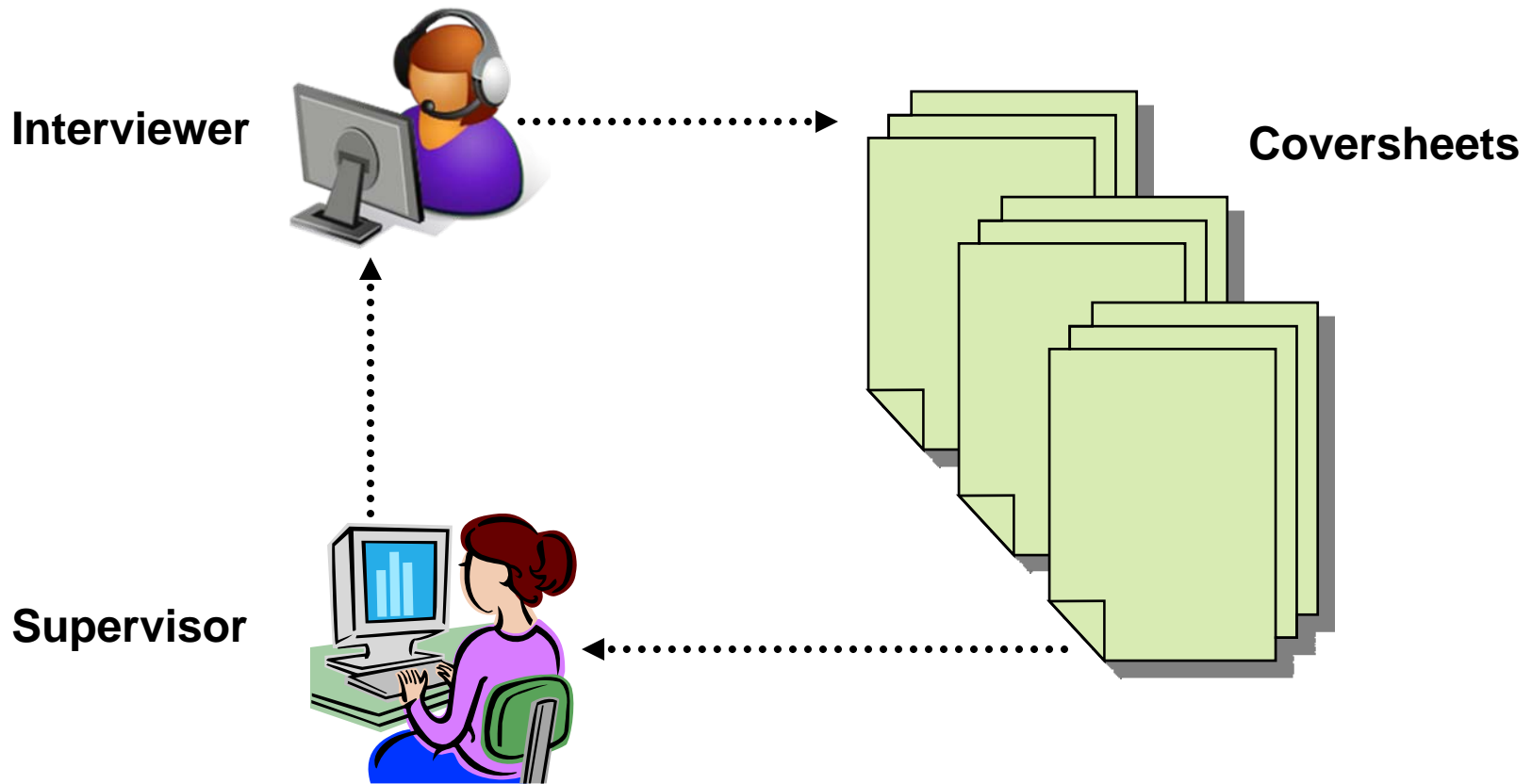


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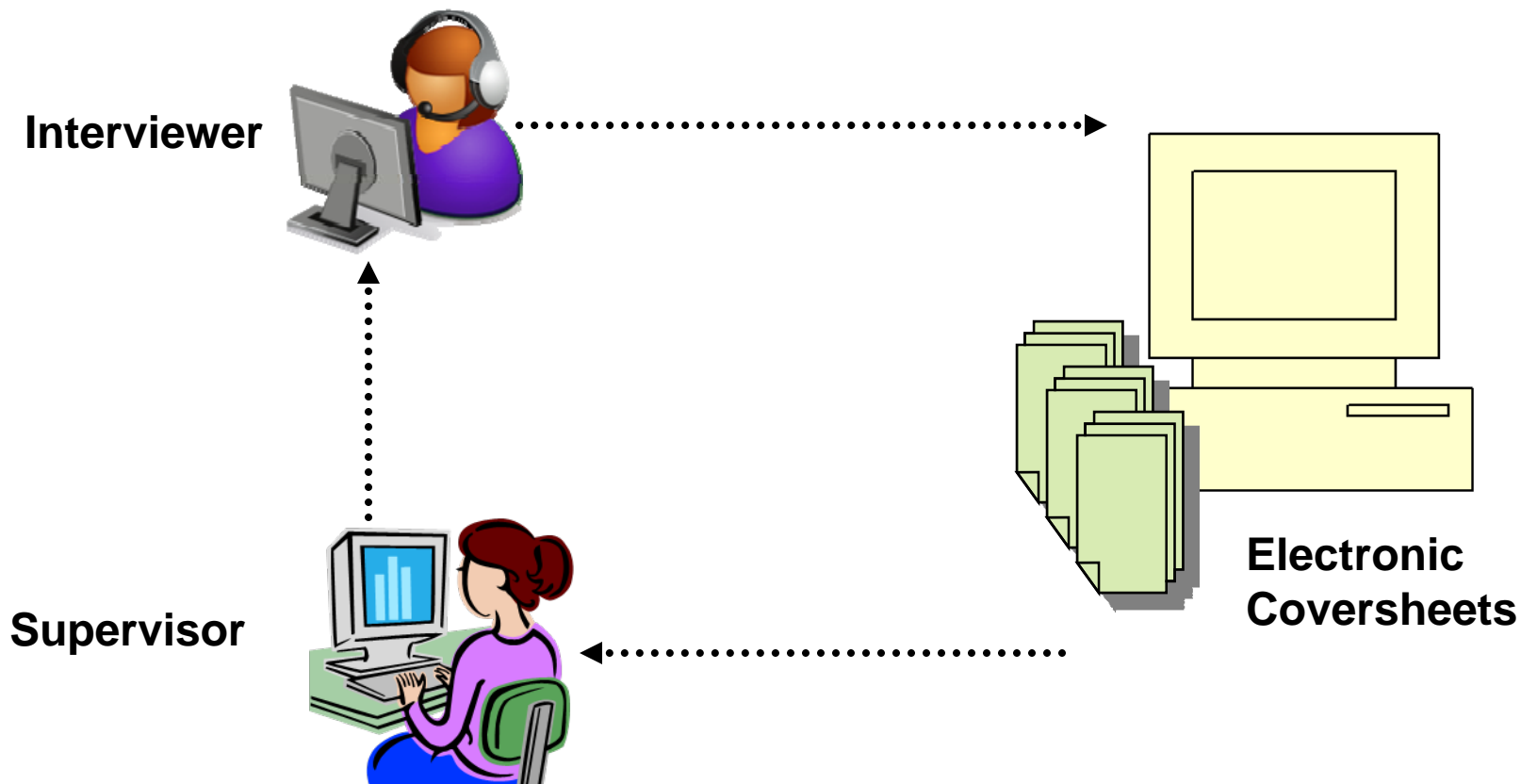
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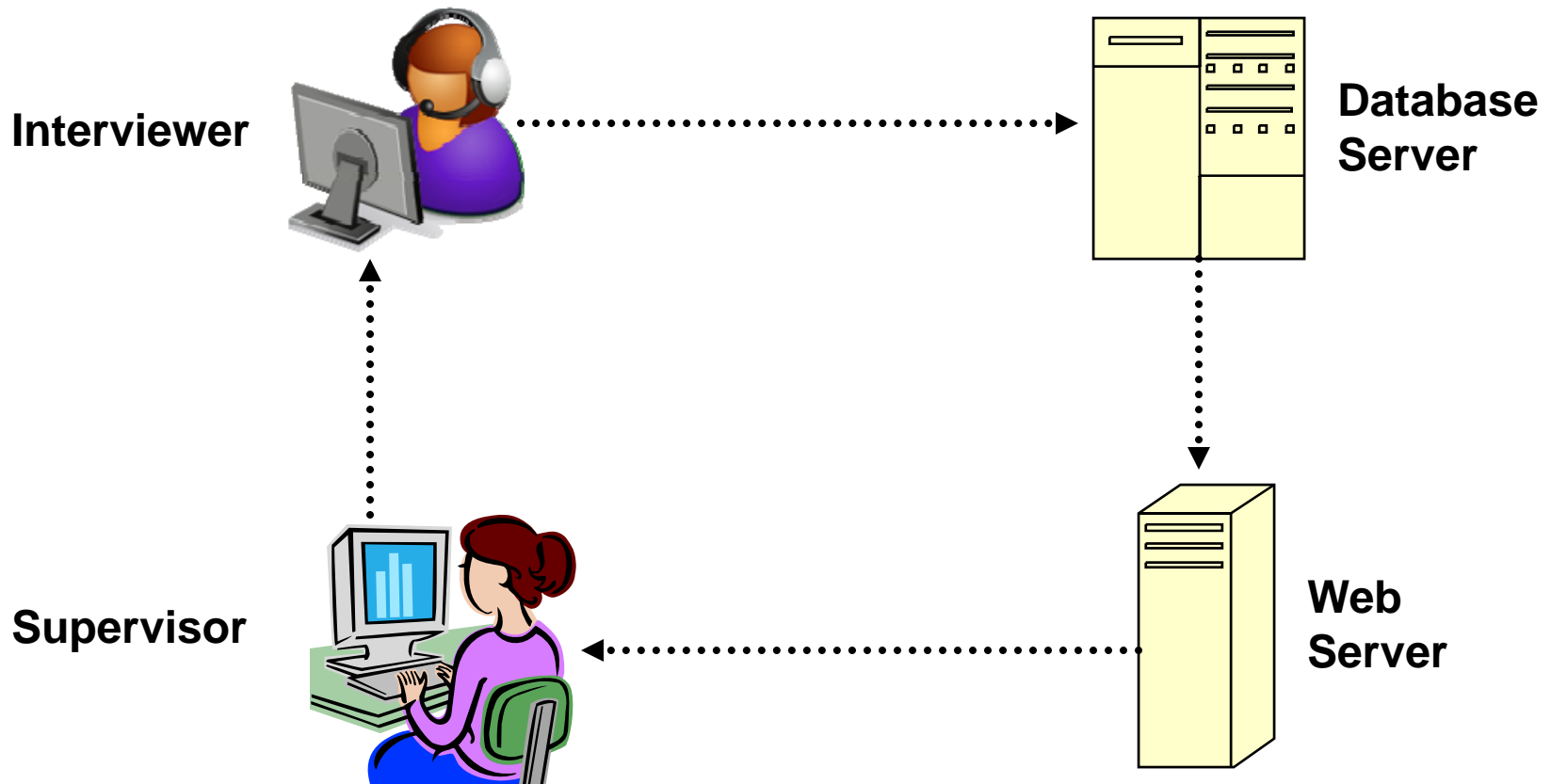
# The Old Path of Paradata



# The Recent Path of Paradata



# The New Path of Paradata



# Transition to Web Applications

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- Our paradata was all in a central database now.
- Web scripting languages have great database support.
- We wanted to merge our field applications to share code. The web application model lends itself to this.

SUCCESS!



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# Increased Level of Detail

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- Call time resolution went from minutes to seconds.
- Outcome codes can be more plentiful because interviewers don't have to remember complicated differences.

# Decreased Latency

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- Feedback latency was roughly halved.
- Interviewers can now receive high quality mid-shift feedback.
- Shiftleaders are able to provide feedback to more people on each shift.

# EXAMPLE REPORTS



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# Example Report #1: Calling Summary

<b>INum</b>	<b>Minutes</b>	<b>Calls</b>	<b>Contacts (I)</b>	<b>Contacts (R)</b>	<b>Completes</b>	<b>Refusals (I)</b>	<b>Refusals (R)</b>	<b>Refused</b>	<b>CR Rate</b>
	6271	3049	316	75	99	74	25	99	50.0000
	4247	1076	0	0	1049	0	0	0	100.0000
	3795	1633	212	48	25	17	4	21	54.3478
	5050	1818	69	12	925	15	2	17	98.1953
	1771	283	0	0	266	0	0	0	100.0000
	3535	1428	129	18	44	42	3	45	49.4382
	279	65	0	0	65	0	0	0	100.0000
	3601	1450	137	21	144	25	2	27	84.2105
	622	90	0	0	87	0	0	0	100.0000
	4516	2821	162	44	92	22	5	27	77.3109
	469	114	0	0	107	0	0	0	100.0000
	629	149	0	0	141	0	0	0	100.0000
	2744	1425	88	7	24	26	4	30	44.4444
	2724	1329	97	26	29	32	8	40	42.0290
	3010	1670	133	53	48	23	5	28	63.1579
	4834	2886	242	39	54	49	9	58	48.2143

# Example Report #1: Calling Summary

**Completes / (Completes + Refusals)**

I Num	Minutes	Calls	Contacts (I)	Contacts (R)	Completes	Refusals (I)	Refusals (R)	Refused	CR Rate
	6271	3049	316	75	99	74	25	99	50.0000
	4247	1076	0	0	1049	0	0	0	100.0000
	3795	1633	212	48	25	17	4	21	54.3478
	5050	1818	69	12	925	15	2	17	98.1953
	1771	283	0	0	266	0	0	0	100.0000
	3535	1428	129	18	44	42	3	45	49.4382
	279	65	0	0	65	0	0	0	100.0000
	3601	1450	137	21	144	25	2	27	84.2105
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	4834	2886	242	39	54	49	9	58	48.2143

# Example Report #2: Prod. & Eff. Tracker

## P9610\_04: BRFSS 2008 April

ID	Calls	Non-Contacts	2-10m	1h+	2-10m a/ NC	Busy	Wasteful	Suspicious
Avg	52	31	7.82	0	0.45	71%	17%	2%
[Redacted]	94	51	6	0	1	73%	6%	2%
[Redacted]	92	54	11	0	0	62%	12%	0%
[Redacted]	46	31	5	0	0	70%	11%	0%
[Redacted]	36	22	5	0	1	71%	14%	5%
[Redacted]	42	24	6	0	1	83%	14%	4%
[Redacted]	55	41	7	0	0	69%	13%	0%
[Redacted]	53	34	11	0	0	58%	21%	0%
[Redacted]	43	24	6	0	0	79%	14%	0%
[Redacted]	44	21	7	0	0	79%	16%	0%
[Redacted]	32	15	14	0	2	70%	44%	13%
[Redacted]	39	21	8	0	0	61%	21%	0%

## P9636\_01: FHS Q1 2008

ID	Calls	Non-Contacts	2-10m	1h+	2-10m a/ NC	Busy	Wasteful	Suspicious
Avg	61	48	6.17	0	1	70%	10%	2%
[Redacted]	59	29	3	0	0	77%	5%	0%
[Redacted]	54	39	7	0	0	64%	13%	0%
[Redacted]	42	33	3	0	0	79%	7%	0%
[Redacted]	70	60	8	0	0	71%	11%	0%
[Redacted]	83	73	7	0	1	68%	8%	1%
[Redacted]	59	52	9	0	5	68%	15%	10%



# Example Report #2: Prod. & Eff. Tracker

## Time in calls / Total time paid

ID	Calls	Non-Contacts	2-10m	1h+	2-10m a/ NC	Busy	Wasteful	Suspicious
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	55	41	7	0	0	69%	13%	0%
	53	34	11	0	0	58%	21%	0%
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	83	73	7	0	1	68%	8%	1%
	59	52	9	0	5	68%	15%	10%



# Example Report #

% of calls followed by a 2-10m break

# Tracker

Time in calls / Total time paid

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	59	52	9	0	5	68%	15%	10%



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# Example Report #

% of calls followed by a 2-10m break

% of non-contact calls followed by a 2-10m break

## Time in calls / Total time paid

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**GOOD**

**BAD**

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# HOW IS THIS ALL CONSTRUCTED?



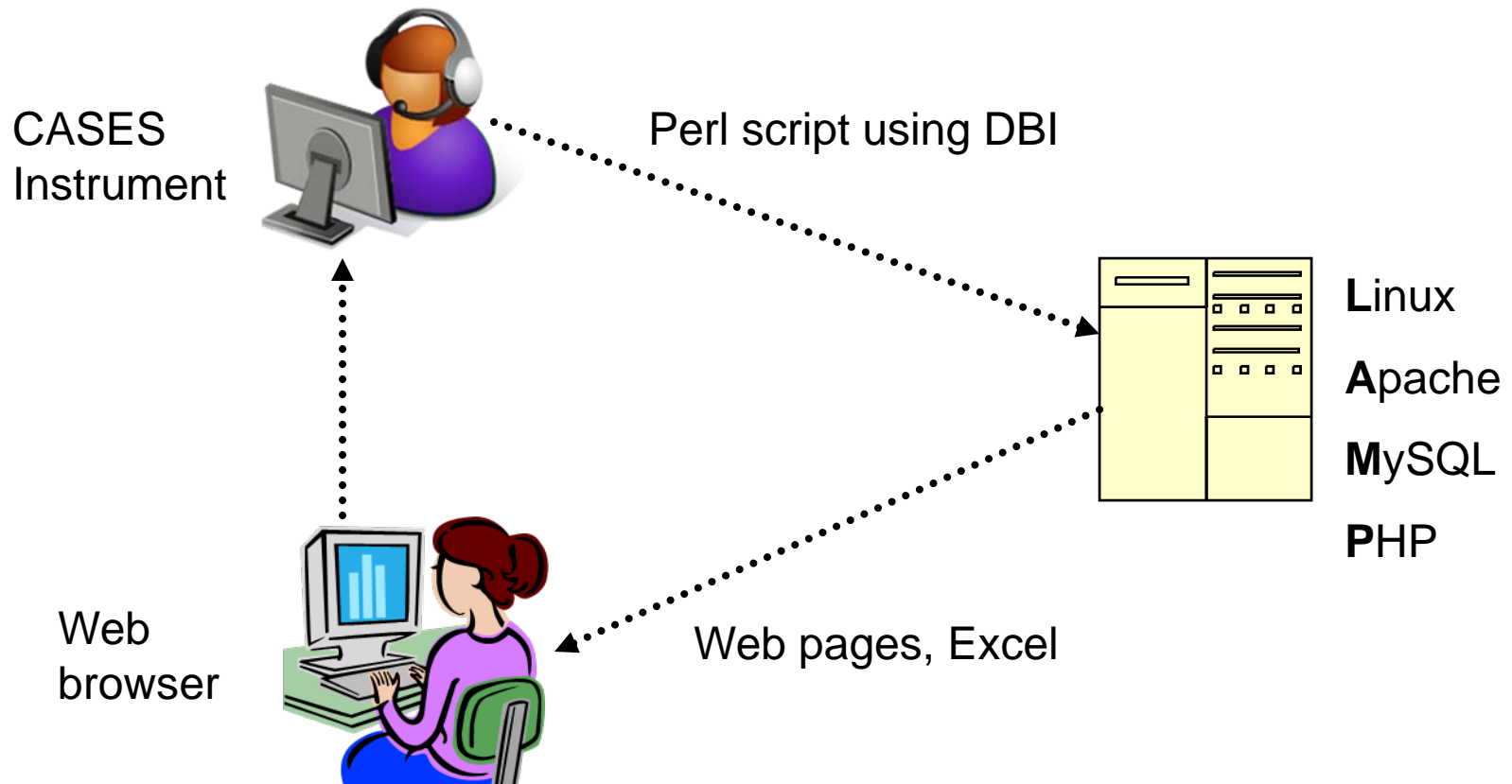
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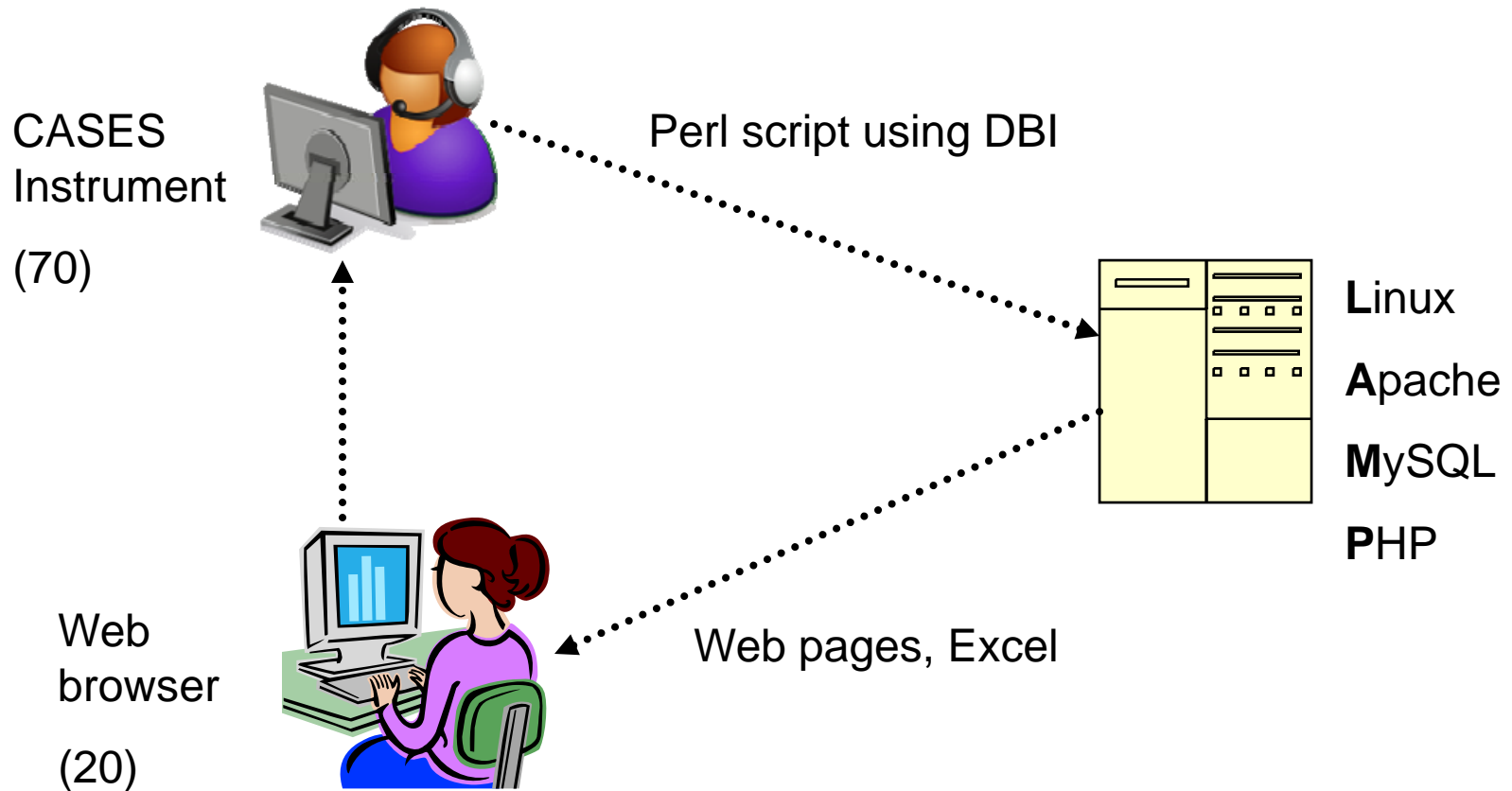
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# The Technology



# The Technology



# COST-BENEFIT ANALYSIS



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# Centralized Processing

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- Processing takes place on the server, extending the lifespan of supervisor computers.
- Not everyone can generate a report at the exact same time.

# Centralized Updates

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- Software updates take far less time and effort.
- Botched software updates can prevent everyone from working.

# \$\$\$ Money

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- A sub-\$2k server will support >30 supervisors.
  - Benefits not fully realized without in-house expertise.
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- The single largest cost is still licenses and staff. The real impediment is whether you have staff to manage the infrastructure.



# A WEB-BASED PRODUCTION MANAGEMENT SYSTEM

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May 20, 2008



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