

The Sales Management Simulation: Integrate Theory with Practice

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1. Introduction

The purpose of the Sales Management Simulation (SMS) is to help you integrate theory with practice within the field of sales management. You already know a fair amount about managing a salesforce, from case studies, lectures, and reading articles and your textbook. Your participation in SMS allows you to put your learning into practice. Your job will be to manage a salesforce and make the sorts of decisions sales managers actually make — including recruiting, selecting, and hiring salespeople; assigning salespeople to territories; training salespeople; compensating salespeople; setting time-management policies; choosing product prices. Your performance will be evaluated using four metrics: profit, market share, Net Promoter Score (NPS), and Company Reputation (CR).

Your instructor will place you in a *team* (firm); several teams comprise an *industry*. Your instructor will decide how many participants should comprise each team, and how many teams should comprise each industry. Your administrator can create industries with an unlimited number of teams or as few as two teams. Your instructor will also decide the number of periods (quarters) the simulation will run.

In each period, your team will make a series of sales management decisions. In part, the basis for these decisions will be the results from previous period decisions. Additionally, your team will have the ability to purchase market research reports.

In each period, your team's decisions are made by a designated *team leader*; this role may pass from participant to participant as SMS unfolds period by period. For each period, other team members may make *suggestions* for the team leader to consider. The team leader may decide to privately review these suggestions and selectively incorporate all or some of them. Alternatively, the team leader may choose to discuss these suggestions with other team members, and collaboratively arrive at the final decisions.

SMS is a competitive simulation in the sense that your team competes against other teams in your industry. Your team's success depends on the quality of your team's decisions, in the context of market development and competitor teams' decisions.

SMS is offered through Wessex Press — https://sms.wessexlearning.com — Participants register for SMS by paying the \$40.00 registration fee. The prime customer service contact at Wessex is Carelle Bassil — carelle@wessex21c.com.

2. Sales Management Decisions

The core rationale of SMS is to provide an environment in which you learn about sales management by making sales management decisions. These are the decisions you will make.

2.1 Building a Salesforce: Recruiting, Selecting, Hiring Salespeople

You start the simulation in period 1. In period 0, your predecessors successfully hired and trained all five salespeople who were available. These salespeople are now ready to be placed in the field — résumés 1, 2, 3, 4, 5. And they successfully onboarded and trained them. In period 0, these five salespeople earned the salaries listed in the decision form for quarter 1, before you make any changes, and commissions based on projected sales in quarter 1. These calculations are explained in the section relating to start-up costs: *7. Getting Started*. Salaries plus commissions, salesperson payments for each team in period 0 is \$118,735.

Available salesperson recruits are all fresh college graduates. In period 1, you have the opportunity to hire five more salespeople — résumés 6, 7, 8, 9, 10. You may choose to recruit any number from one to five, or not to recruit.

Potential recruits have *expectations for total compensation* — salary plus commissions. They form these expectations based on the average earnings of graduates from their universities and on where they rank themselves relative to other graduates from their university (see résumes).

Potential recruits also develop *total compensation predictions* — their anticipated salary plus commissions. As the employer, you may make independent salary offers to specific recruits, but commission rates are invariant across your salesforce. When making offers to salespeople, you provide estimated commission earnings. Candidates compute their *total compensation prediction* as the sum of salary plus estimated commissions.

Potential recruits make accept/reject decision on job offers based on the relationship between *total compensation expectations* (TCE) and *total compensation predictions* (TCP) In general, candidates react positively to job offers when TCP>TCE; they react negatively when TCP<TCE. If TCP is less than \$5,000 below TCE, they will ask you to reconsider your offer. SMS assumes you readily acquiesce — you decided positively on the recruit — and you want to build your salesforce. If TCP is below TCE by \$5,000 or more than \$5,000, they will reject your offer.

In order to snag a great recruit, you may have to go the extra mile and offer an especially attractive TCP. For less strong candidates, you may consider offering a TCP considerably under the average for his/her university. But you should consider the potential negative effects when the now hired recruit compares his/her TCP with colleagues. Hence, if the university average earnings were \$50,000, you may offer up to \$90,000 for a really great candidate, but not less than \$30,000 for the worst of the worst (assuming you decided you had to have a warm body).

The period in which you hire salespeople is consumed with onboarding and basic training that lasts a quarter; hence, they earn no revenues. Illustratively, salespeople hired in period 1 first earn revenues in period 2.

In period 1, you may fire one or more of the five salespeople that were hired in period 0. In subsequent periods, you may fire any number of salespeople. For each salesperson you fire, it will cost you \$10,000 in severance pay, regardless of how long they have worked for you.

Each period, five potential recruits are available for hire — *Exhibit 1*. Potential recruits that you do not hire are *not* available for hiring in a future period. Furthermore, any salespeople who resign, or whom you fire, are *not* available for rehiring. It is conceivable, if you fire several salespeople and successfully recruit only a few, that you find yourself with way fewer salespeople than many of your competitors.

In SMS, in every period, each firm has access to the same five potential recruits. However, firms DO NOT compete in this human resource market as SMS offers five clones of each potential recruit profile. You can see if the applicant has accepted your offer in the results report under Total Sales. If the applicant has accepted your offer, they will be added to the roster of salespeople.

EXHIBIT 1: Hiring Schedule

Quarter	Applicants
0	1-5 hired by all teams and sent for basic training. Deploy, Re-Train, or Fire in period 1.
1	6-10, train in period 1 and deploy in period 2. (or Fire or Re-Train).
2	11-15, train in period 2 and deploy in period 3.
3	16-20, train in period 3 and deploy in period 4.
4	21-25, train in period 4 and deploy in period 5.
5	26-30, train in period 5 and deploy in period 6.
6	31-35, train in period 6 and deploy in period 7.
7	36-40, train in period 7 and deploy in period 8.
8	41-45, train in period 8 and deploy in period 9.
9	46-50, train in period 9 and deploy in period 10.
10	51-55, train in period 10 and deploy in period 11.

If the simulation goes past quarter 10 there are no more salespeople to be hired.

2.2 Retaining Salespeople

Salespeople may decide to resign. Resignation is driven primarily by a salesperson's belief s/he is not being paid enough. Salespeople may be underpaid for reasons outside of their control. Salespeople could be underpaid because a poor territory assignment has led to low commissions, because the commission rate is low, or because salary is low. Salespeople may also resign for personal reasons.

Unless they are utterly frustrated, salespeople will warn you when they are considering resignation and ask you to take corrective action. Depending on your response, they may decide to remain or execute their resignation.

A high attrition rate can be an important competitive disadvantage. Your firm can become underrepresented, relative to other firms, in a particular territory, perhaps even in many territories. At times, salesperson who resign or are fired, even when you feel they were underperforming, were generating revenue beyond their costs. Furthermore, at times, the people you recruit to replace those who resign or get fired costs more and generates even less revenue.

2.3 Assigning Salespeople to Sales Regions

Each salesperson is assigned to one of the ten regions. When more than one of your salespeople is in a region, this region is carved up into smaller sales territories.

In period 1, the five salespeople hired in period 0 have been assigned to three different sales regions: one each in two regions and three salespeople in region 2. You can change these territory assignments and reassign one or more salespeople to other sales regions.

The relocation cost to reassign a salesperson from one sales region to another is \$7,000 — transfer charge. There is no such charge for the initial assignment of a newly hired salesperson.

In period 1 and subsequent periods, you are free to place newly hired salespeople in any of the ten sales regions. In any period, you may also relocate existing salespeople. In period 1, you manage the assignments of five salespeople who your predecessors hired and trained in period 0.

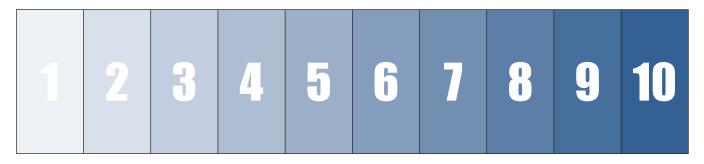
Salespeople start producing revenues in the period after they were hired because they need to be trained for a quarter before they can be deployed. For example, if you successfully hired just one person in quarter 2, this person will be trained in quarter 2 and start bringing in revenue in quarter 3.

Salespeople placed in their *home regions* (identified by permanent address on résumés) perform better than if they had been placed in another region. They are happier to be near home; they are more familiar with the geography, and they find it easier to build customer relationships.

Salespeople you decide to relocate to a different region may resign either for personal reasons or for reasons related to *total compensation predictions* (TCP).

The successful sales leader formulates a sales region strategy upon appointment (start of SMS), then regularly re-evaluates (each period) and makes modifications. Your key assignment decision is whether to concentrate the salespeople you hire in few sales regions, spread them around, or pursue something in between.

Each active salesperson incurs \$4,000 expenses per period.



2.4 Motivating Salespeople

In SMS, salespeople are motivated by the money they earn and by being in their home region.

An important motivating factor is *total compensation* (TC) versus *total compensation expectations* (TCE). Motivation is greater when TC>TCE.

Motivating factors for new hires:

- Average earnings of other salesperson graduates from their universities.
- How the salesperson's self-rating rate compares to these peers.

Additional motivating factors:

- TC versus peers within their firms.
- TC versus peers at rival firms in their industry.

As sales management you have the ability to affect a salesperson's total compensation in several ways:

- Pay different salaries to individual salespeople.
- Impact commission earnings by locating salespeople in sales regions where generating sales revenues is easier or more difficult.
- Increase/decrease commission rate.
- Modify the TC balance between salary and commission more salary or more commission.

Salary decisions. You may modify a salesperson's salary each period.

Sales commissions. The default sales commission rate is one percent. As with salary, you may modify sales commissions each period. However, unlike salary, sales commission rates are invariant across salespeople.

Sales contests are an additional way for motivating salespeople. Each period you have the ability to set up a sales contest with a money prize for the winner. If you decide to initiate a sales contest, you must decide the prize amount. Sales contests are specific to an individual period — no carryover effects.

2.5 Within the Salesperson's Organization

Sales success depends not just on the salesperson's interactions with customers but also within the home organization. These *internal* interactions include:

- Salesperson talking with the boss, learning from peers; creating quality sales reports.
- Secure support from other functions design engineers, customer service, technical service.

In SMS, you create a policy for how much time salespeople should spend on *internal selling*, how much time they should take away from external selling.

2.6 Training Salespeople

When salespeople are hired, initial training for a quarter is mandatory. For the first quarter with the firm, when they generate zero sales revenue.

You can provide additional training to any of your salespeople for up to two more quarters, at any time of their tenure. Training can be separated by time in the field. When making these decisions, please note:

- The cost to train one salesperson during one period is \$504,000; additionally, you must pay \$14,000 expenses for each trainee. You must also pay the salesperson's salary and an estimate of the commission he or she would have earned had she or he not been in training. This estimate is based on commissions earned in the period prior to training for those who are not rookies and an estimate of commissions that will be earned subsequent to training for rookies.
- During the period in which the salesperson is being trained, s/he earns zero sales revenues for the firm. The value of training kicks in the following period.
- After *Initial* (post-hire) training, two additional sequential training programs are available

 Additional training, then *Peak* training. Identical conditions apply to all three training programs.

2.7 Product Management

Your firm offers two products: *base* product — Product A, and a *premium* model — Product B. You must make several product management decisions:

- How much sales effort should salespeople place on each product?
- What price should you set for each product?

Salespeople will implement your decisions.

In your firm, production schedulers rely on your demand estimates in deciding how many items of each product type — *base* and *premium* — to produce, in each period. Hence, your estimates are crucial to firm sales and profits.

If your estimates are less than actual demand, the factory will still produce the required amounts, via extra shifts and overtime payments. The additional products required to make up the demand shortfall cost \$40 more per unit.

If you overestimate demand, your firm will have to store the excess products. Inventory carrying costs are \$25 per unit.

If you have inventory from one period, this will affect production requirements for the following period. Production will need to be the estimated demand less inventory.

2.8 Market Intelligence/Research

To help you make the sales management decisions discussed, SMS makes available for purchase ten market research reports. Data in these reports is updated quarterly.

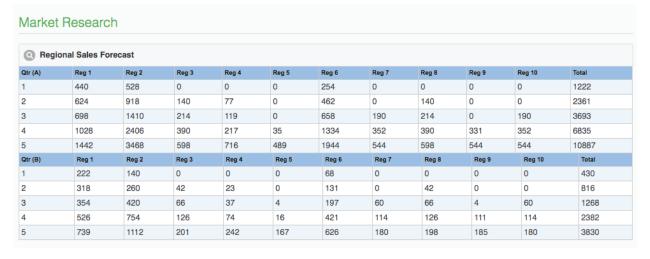
You must decide:

- Which reports have more value for making your sales management decisions.
- How frequently you should buy reports.

The market research reports, and their cost are:

Industry sales forecast	\$2,500
Regional sales forecast	\$5,000
Satisfaction ratings	\$8,000
■ Competitive market share	\$3,000
■ Regional market share	\$4,000
■ Competitive management	\$2,000
Regional sales force size	\$3,500
Competitive unit pricing	\$2,500
Industry compensation	\$5,000
Competitor industry profits	\$4,000

Market research reports are generated based on the decisions inputted by firms in an industry and the results of these decisions. Reports ordered in any quarter will relate to the decisions made in that quarter and the results of that quarter. This is why you need to regularly buy the market research studies that provide information you need to stay current on at the bottom of the results report. The report below is an example of the reports you can buy. Its content relates to the issues discussed in the subsequent section.



3. Market Demand

You have divided the overall market into 10 sales regions. Within all regions, your distribution strategy is for salespeople to make sales to several types of retail outlet: large chain stores, specialty stores, college bookstores, various Internet sites.

Products are manufactured in the factory adjacent to your company's' headquarters in Region 3. You ship directly to retail outlets and Internet warehouses — no intermediaries. You ship CIF; shipping costs are identical for both products; they vary with distance from the factory — *Exhibit 2*.

Overall market demand evolves over time and varies by sales region. In period 0, demand was relatively similar across regions, but this may change based on sales force effort (number of allocated salespeople), salesperson competence (enhanced by training), and product pricing. In SMS there is no transshipment of products from one sales region to another.

Both products A and B are high quality and are considered expensive by consumers. High quality service is important both to consumers and retailers. Salespeople must ensure consumers can access repair and service facilities; understand warranty issues; know about cost and service access outside of the warranty period; and many other issues. Consequently, effective selling goes well beyond order-taking. Salespeople must speak their retail customers' language, understand their issues, and empower them to answer consumers' questions. Securing testimonials from satisfied consumers is important for retailers. The relationships your salespeople build with retail personnel and consumers is important for their success.

 Destination Region
 Cost Per Unit

 Region 1 & 2
 \$20

 Region 3 & 4
 \$10

 Region 5 & 6
 \$10

 Region 7 & 8
 \$20

 Region 9 & 10
 \$30

EXHIBIT 2: Shipping Costs

3.1 Growth in Demand

You have spent significant effort trying to understand market demand over the next two to three years — overall, demand for the *base* and *premium* products separately, and demand in each of the ten sales regions separately.

You commissioned three separate market research studies. In each study, the market research firm made rather precise estimates but, creating confusion, these estimates were quite different across studies.

The demand prediction patterns led you to label the results of the three studies — *developing* market, *saturated* market, *stagnant* market. The results of these studies — they are based on there being 5 firms in an industry — are presented as follows:

3.2 Developing Market

Total Unit Sales by Region by Time — *Exhibit 3*

Product A Sales by Region by Time — Exhibit 4

Product B Sales by Region by Time — *Exhibit 5*

EXHIBIT 3: Developing Market — Total Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	1895	0	0	530	530	530	0	0	0	0	3485
2	2090	640	640	680	680	1190	640	640	0	0	7200
3	3255	935	935	990	1685	2380	935	935	880	880	13810
4	5050	4650	2805	2890	2975	5215	1650	2805	1560	1560	28160
5	7245	4050	4165	4280	4395	7715	4050	4165	3935	3935	47935
6	9150	4780	4905	6685	6805	12050	4780	4905	4650	4650	63360
7	9855	6995	7125	7370	7495	13285	6995	7125	5135	6865	78245
8	11565	7545	7675	9595	9715	15805	7545	7675	7290	7415	91825
9	13290	8045	9855	10230	10350	18325	9735	9855	7785	7910	105380
10	15045	10205	10450	10820	10945	20875	10325	10450	9955	10080	119150

EXHIBIT 4: Developing Market — Product A Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	1265	0	0	420	420	420	0	0	0	0	2525
2	1395	500	500	530	530	930	500	500	0	0	5385
3	2170	725	725	765	1305	1840	725	725	680	680	10340
4	3365	1260	2145	2210	2275	3985	1260	2145	1190	1190	21025
5	4830	3080	3165	3255	3340	5865	3080	3165	2990	2990	35760
6	6100	3630	3725	5075	5165	9150	3630	3725	3530	3530	47260
7	6570	5305	5405	5590	5685	10080	5305	5405	3895	5210	58450
8	7710	5725	5820	7280	7370	11990	5725	5820	5530	5625	68595
9	8860	6100	7475	7760	7850	13900	7385	7475	5905	6000	78710
10	10030	7740	7925	8205	7300	15830	7830	7925	7550	7645	88980

EXHIBIT 5: Developing Market — Product B Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	630	0	0	110	110	110	0	0	0	0	960
2	695	140	140	150	150	260	140	140	0	0	1815
3	1085	210	210	225	380	540	210	210	200	200	3470
4	1685	390	660	680	700	1230	390	660	370	370	7135
5	2415	970	1000	1025	1055	1850	970	1000	945	945	12175
6	3050	1150	1180	1610	1640	2900	1150	1180	1120	1120	16100
7	3285	1690	1720	1780	1810	3205	1690	1720	1240	1655	19795
8	3855	1820	1855	2315	2345	3815	1820	1855	1760	1790	23230
9	4430	1945	2380	2470	2500	4425	2350	2380	1880	1910	26670
10	5015	2465	2525	2615	2645	5045	2795	2525	2405	2435	30170

3.3 Saturating Market

Total Unit Sales by Region by Time — *Exhibit 6*

Product A Sales by Region by Time — *Exhibit 7*

Product B Sales by Region by Time — *Exhibit 8*

EXHIBIT 6: Saturating Market — Total Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	1094	0	1034	0	1564	1494	0	0	0	3060	8246
2	1706	1556	1434	0	1776	1716	1344	0	0	4322	13854
3	3228	2026	2156	1514	2246	2094	1794	0	1764	4682	21504
4	4310	3228	2896	2436	2998	2566	3880	2216	2778	5104	32412
5	4952	3710	3620	2898	3478	2956	4352	2918	3500	5222	37606
6	5172	3888	3880	3086	4040	3198	4500	3348	3840	5494	40446
7	5494	3980	4050	3188	4190	3628	4590	3598	4038	5572	42328
8	5612	4382	4170	3258	4298	3748	5032	3758	4160	5634	44052
9	5702	4450	4260	3580	4380	3848	5092	3878	4602	5702	45494
10	5782	4500	4338	3638	4448	3918	5152	4290	4692	5884	46642

EXHIBIT 7: Saturating Market — Product A Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	547	0	517	0	782	747	0	0	0	1530	4123
2	853	778	717	0	888	858	672	0	0	2161	6927
3	1614	1013	1078	757	1123	1047	897	0	882	2341	10752
4	2155	1614	1448	1218	1499	1283	1940	1108	1389	2552	16206
5	2476	1855	1810	1449	1739	1478	2176	1459	1750	2611	18803
6	2586	1944	1940	1543	2020	1599	2250	1674	1920	2747	20223
7	2747	1990	2025	1594	2095	1814	2295	1799	2019	2786	21164
8	2806	2191	2085	1629	2149	1874	2516	1879	2080	2817	22026
9	2851	2225	2130	1790	2190	1924	2546	1939	2301	2851	22747
10	2891	2250	2169	1819	2224	1959	2576	2145	2346	2942	23321

EXHIBIT 8: Saturating Market — Product B Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	547	0517	0	782	747	747	0	0	0	1530	4123
2	853	778	717	0	888	858	672	0	0	2161	6927
3	1614	1013	1078	757	1123	1047	897	0	882	2341	10752
4	2155	1614	1448	1218	1499	1283	1940	1108	1389	2552	16206
5	2476	1855	1810	1449	1739	1478	2176	1459	1750	2611	18803
6	2586	1944	1940	1543	2020	1599	2250	1674	1920	2747	20223
7	2747	1990	2025	1594	2095	1814	2295	1799	2019	2786	21164
8	2806	2191	2085	1629	2149	1874	2516	1879	2080	2817	22026
9	2851	2225	2130	1790	2190	1924	2546	1939	2301	2851	22747
10	2891	2250	2169	1819	2224	1959	2576	2145	2346	2942	23321

3.4 Stagnant Market

Total Unit Sales by Region by Time — *Exhibit 9*

Product A Sales by Region by Time — *Exhibit 10*

Product B Sales by Region by Time — Exhibit 11

EXHIBIT 9: Stagnant Market — Total Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	180	0	0	100	100	100	0	0	0	0	480
2	190	110	110	110	110	120	110	110	0	0	970
3	220	120	120	120	140	150	120	120	120	120	1350
4	280	140	160	160	160	190	140	160	140	140	1670
5	340	260	260	270	270	300	260	260	260	260	2740
6	375	450	450	480	480	550	450	450	440	440	4565
7	390	540	550	550	550	630	540	550	510	540	5350
8	405	570	570	610	610	680	570	570	570	570	5725
9	420	590	620	620	630	720	620	620	590	590	6020
10	435	630	630	640	640	740	630	630	620	630	6225

EXHIBIT 10: Stagnant Market — Product A Sales Units by Region by Time

Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	120	0	0	50	50	50	0	0	0	0	270
2	125	55	55	55	55	60	55	55	0	0	515
3	145	60	60	60	70	75	60	60	60	60	710
4	185	70	80	80	80	95	70	80	70	70	880
5	225	130	130	135	135	150	130	130	130	130	1425
6	250	225	225	240	240	275	225	225	220	220	2345
7	260	270	275	275	275	315	270	275	255	270	2740
8	270	285	285	305	305	340	285	285	285	285	2930
9	280	295	310	310	315	360	310	310	295	295	3080
10	290	315	315	320	320	370	315	315	310	315	3185

EXHIBIT 11: Stagnant Market — Product B Sales Units by Region by Time

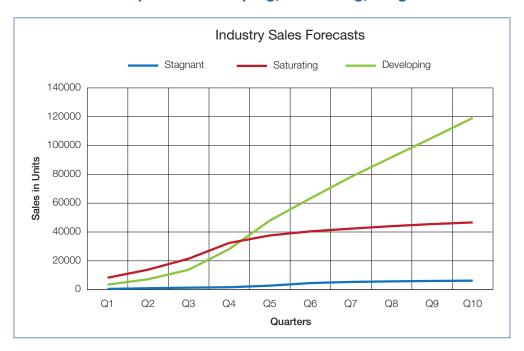
Qtr	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	60	0	0	50	50	50	0	0	0	0	210
2	65	55	55	55	55	60	55	55	0	0	455
3	75	60	60	60	70	75	60	60	60	60	640
4	95	70	80	80	80	95	70	80	70	70	790
5	115	130	130	135	135	150	130	130	130	130	1315
6	125	225	225	240	240	275	225	225	220	220	2220
7	130	270	275	275	275	315	270	275	255	270	2610
8	135	285	285	305	305	340	285	285	285	285	2795
9	140	295	310	310	315	360	310	310	295	295	2940
10	145	315	315	320	320	370	315	315	310	315	3040

Points to note for all exhibits:

- Quarter 1 no sales in six of the ten sales regions. Reason: Each firm has only five salespeople and chooses to cover four, not five, of the 10 sales regions.
- Quarter 2 no sales in two of the ten sales regions. Reason: Each firm has nine salespeople but chooses to place two salespeople in region 6.

Total unit sales for the three sales forecasts are graphed in *Exhibit 12*. As can be seen from the graph, it starts to become evident in Quarter 6 which forecast is more consistent with the market trend.

EXHIBIT 12: Graphs of Developing, Saturating, Stagnant Markets



4. The Sales Force

The General Sales Manager (GSM) for your firm has responsibility for directing the activities of the field sales force. The GSM spends considerable time in the headquarter office, traveling to the field only when necessary. The GSM personally conducts part of the *inside* portion of sales training for each training level. With the aid of an administrative assistant, the GSM develops sales strategies; and *keeps a finger on the pulse* of sales operations. A single front-line sales manager (FLSM) supervises all active salespeople, and conducts a part of the *on-the-job* portion of sales training. The GSM hires a second FLSM when your firm's salesforce crosses 10 salespeople (not including new recruits currently in training).

- The GSM's salary is \$80,000 per period (\$320,000 annually); travel and entertainment expenses (T&E) are \$8,000 per period (\$32,000 annually).
- Salary for an FLSM is \$50,000 per period (\$200,000 annually); T&E is \$10,000 per period (\$40,000 annually).
- Costs to maintain the sales office salary and benefits for an administrative assistant, a customer service coordinator, secretarial support, rent, telephone, computer, office supplies are currently \$140,000 per period (\$560,000 annually).

5. Making Decisions

Your team makes all decisions for your firm. In each period, one team member acts as GSM. The GSM makes all decisions, but considers *suggestions* provided by other team members, acting as FLSMs. Each period, the GSM must decide, during team discussions, what suggestions to accept and what suggestions to reject. Individual GSMs, team leaders, may choose to be less or more participative (democratic) in their leadership styles. The role of GSM rotates among team members period by period.

Informing the *suggestions* and decisions made are the results, for your team, of your firm's earlier decisions, together with information provided by the market research reports your team purchased. This information supplements the theories you have on cause and effect. From time to time, the SMS administrator may issue news bulletins that report material changes in the market environment, and provide feedback that relates with cause and effect.

5.1 List of Decisions

- Hiring, training, firing, and retaining salespeople
- Allocating salespeople to sales regions
- Motivating salespeople through compensation: salary, commission, and sales contests
- Pricing two products
- Setting policies for time allocation across products, and between selling to customers and selling internally — to supervisors and peers
- Forecasting sales and managing inventory
- Selecting market research reports to track market changes from quarter to quarter

6. Success Indicators

In SMS, there are four distinct performance indicators:

6.1 Cumulative Profit

Each period your team receives a profit and loss (P&L) statement along with a balance sheet. The balance sheet reports, as a part of your firm's equity, cumulative profit: the sum of the profit earned from the start of the simulation.

6.2 Market Share

High market share indicates your firm has capture a greater proportion of the market. An indicator of success is how high your current market share is.

6.3 Net Promoter Score (NPS)

Truly satisfied customers not only continue to purchase products, but also recommend your products to others. Firms have moved from measuring customer satisfaction to measuring their net promotor score (NPS), an indication of how willing customers are to recommend your products.

Firms calculate NPS from their customers' answers to the following question on a 0 to 10 scale:

How likely is it that you would recommend our company/product/service to a friend or colleague?

Responses fall into three categories:

- 9 and 10 Promoters
- 0 to 6 Detractors
- 7 and 8 Passives

NPS = percentage of Promoters minus percentage of Detractors, divided by total number of customers including Passives

SMS does not report NPS as a percentage, but as a scalar number, to make it easier to compare differences across firms.

- NPS = 100 is the average score across the firms in the industry.
- NPS>100 performance is better than average; NPS<100 performance is worse than average.

Factors that drive NPS scores upward in SMS:

- 1. Lower prices for both base and premium products
- 2. Higher skill across the people in the salesforce, that is, the averaged skill across salespeople in the firm
- 3. Greater salesperson acces; the more the number of salespeople in a region and the fewer regions without salespeople, the greater the access
- 4. Greater firm reputation (below)

6.4 Company Reputation

The firm's reputation for being a good employer. Factors that drive Company Reputation are:

- Average Total Compensation (TC) earned by salespeople salary plus commission relative to other firms in the industry. (Sales contests are not included.)
- Proportion of salesperson earnings from salary; higher salary portion implies better reputation.
- Proportion of salesperson's time spent on internal selling.

SMS reports Company Reputation (CR) as a scalar number.

- Industry average = 100
- CR>100 performance is better than average
- CR<100 performance is worse than average.

7. Getting Started

Salespeople cannot be deployed till they receive basic training; this takes a quarter.

At the start of the simulation, quarter 1, each of the 5 companies has hired five salespeople, the same people, in quarter 0: resumes 1, 2, 3, 4 and 5. They have been trained in quarter 0. Although by default the simulation places these salespeople in three territories, you can alter this. You can concentrate the salesforce even more, placing them in two or even one territory, or distribute the salesforce by placing them in four or five territories. If you feel five salespeople are too many to deploy, you can cut back by firing, or re-training, one or more of these salespeople.

Each of the five companies had a start-up cost. This cost comprised off: (a) salesperson compensation, (b) sales office expenses, (c) trainees' expenses and the cost of training and (d) the cost of the market research studies. Before they could deploy salespeople to the field and start generating revenue, each of the 5 firms, in quarter 0, incurred a cost that totaled \$811,735.

Expenses Incurred in Quarter 0

a) Salesperson compensation = \$118,735.

Salespeople were paid both the salary they would make on completion of training and and estimate of the commission they would make on completion of training. The salary portion, across the five salespeople, totaled \$90,500. The commission portion totaled \$28,235.

The sales projections for quarter 1 assuming a developing market—for a saturating or stagnant market the commission portion would be different—is 2525 units of A and 960 units of B. Converted into dollars, at the default prices of \$3,500 for A and \$5,500 for B, this is \$14,117,500. Distributed evenly across the five salesforces, the anticipated sales is \$2,823,500, and at 1% the commission is \$28,235.

b) Sales office expenses: \$288,000.

c) Trainee expenses and the cost of training: \$255,000.

Each trainee gets \$1,000 over the quarter for expenses and the cost of training is \$50,000 per salesperson.

d) Cost of market research studies: \$150,000.

Three elaborate studies, each to determine the likely demand in the next 10 quarters.

You start your firm with an investment of \$1.5 million, of common stock. After the start-up cost of \$811,735 common stock drops to \$688,265. You hope the profit your firm makes in the first two or three quarters is enough to recover your start-up cost.

In quarter 1 you have the opportunity to recruit five more salespeople. You need to decide who you want to try to hire from resumes 6 to 10. You additionally need to decide, for each individual applicant, what salary you will offer them. To estimate the commissions they would earn, you need to look at the sales

projections for quarter 2, when they will be deployed in the field. An estimation of the commission that would be paid to each applicant can be found in their individual profiles.

For a developing market the projections convert to \$28,830,000: about double of quarter 1 projections. At a 1% commission rate, quarter 1 projections mean than on average a salesperson would earn annually \$22,588 from commissions. At a 1% commission rate, quarter 2 projections mean that on average a salesperson would earn annually \$23,064 from commissions: keep in mind that a firm in quarter 2 would have 10 not 5 salespeople.

While hiring salespeople you do not need to place them in their home territory, but you need to tell them which of the ten territories you plan to place them in. You can change your mind after they are trained and place them elsewhere; they may or may not be happy with the change.

8. SMS Mechanics: Inputting Decisions

You enter all team decisions on the Decision Form.

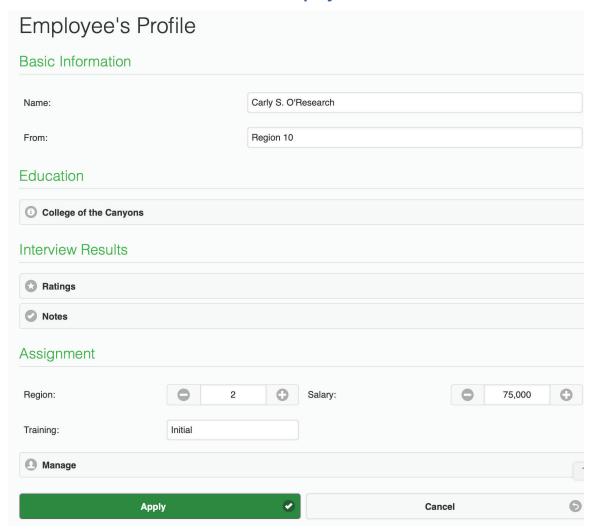
The Salesforce — salespeople that comprise your salesforce. At the start of Period 1, you see Team **Decision** — *Exhibit 13*:

- Go to far-right heading *info*
- Click on the icon for a salesperson. *Exhibit 14* **Employee Profile** is the screen you will see.

EXHIBIT 13: The Salesforce



EXHIBIT 14: Employee Profile



8.1 Change Salary and Territory Assignment

- The **Employee Profile** screen (*Exhibit 14*) allows you to change the salary and territory assignment for a salesperson.
- Example: if you choose to move salespeople #2 and #4 to their home territories and change their salaries, just make the appropriate changes.
- *Exhibit 15* is what you will see.

EXHIBIT 15: Modified Territory Assignment and Salary



8.2 Fire or Retrain Salespeople

- Go to the appropriate **Employee Profile** page (*Exhibit 14*); click on the *Manage* tab. *Exhibit 16* shows what you will see.
- Make the changes you require. *Exhibit 17* shows what you will see. Remember, neither fired salespeople nor those being trained are actively selling.

EXHIBIT 16: Fire or Retrain Salespeople — Action



EXHIBIT 17: Fire or Retrain Salespeople — Illustrative Results



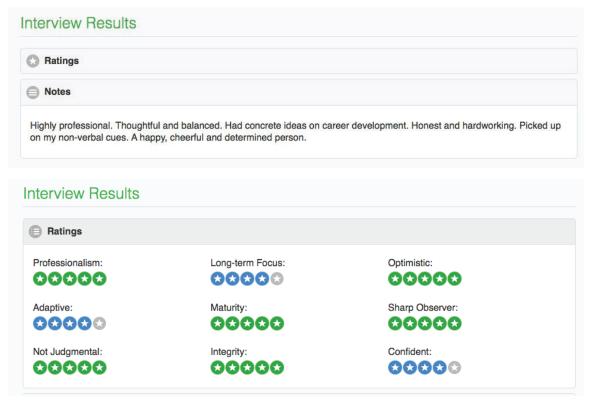
8.3 More Salesperson Information

- **Education.** Go to the appropriate **Employee Profile** page (*Exhibit 14*); click on Education. *Exhibit 18* displays what you will see.
- Go to the appropriate **Employee Profile** page (*Exhibit 14*). Under *Interview Results*, click on *Ratings and Notes. Exhibit 19* displays what you will see ratings and descriptive comments.

EXHIBIT 18: Salesperson Education



EXHIBIT 19: Salesperson Interview Results



8.4 Compensation and Recruitment

- The **Team Decision** screen (*Exhibit 13*) allows you to change the commission rate and recruit new salespeople.
- **Commission Rate**. Change the *commission rate* for your salesforce the same across salespeople and products. Enter a dollar amount for a sales contest.
- Enter your decision by overtyping the current entry or pressing the "+" or "-" keys repeatedly (*Exhibit 20*).
- **Recruitment.** In the **Team Decision** screen (*Exhibit 13*), under *Candidates* (available for recruitment) you will see information on five potential salesperson recruits *Exhibit 21*.
- Click the *Info* tab; you to secure the candidate's profile *Exhibit 22* James Wright example. You may change the candidate's assigned region, and the proposed salary. The commission number is the anticipated commission earnings in the first year. This figure changes if you change the commission rate, and if you change the assigned sales region.
- Using the James Wright example, clicking on Dartmouth College. You learn *Exhibit 23* average compensation paid to students from Dartmouth \$50,000.
- Click on *Offer*; the candidate changes categories, from *Candidates* to *Offers Exhibit 23*.
- Note. James H. Wright's evaluations are high. The decision is to try to hire Wright salary \$XXXXX (\$YYYYYYY more than average for Dartmouth graduate) and place hum in a sales region that is not his home region.

EXHIBIT 20: Compensation — Modify Commission Rate

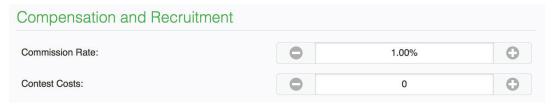


EXHIBIT 21: Recruitment — Available Candidates



EXHIBIT 22: Recruitment — Information and Decisions

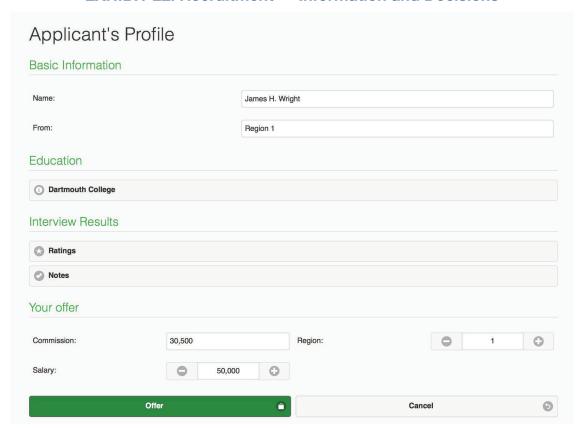
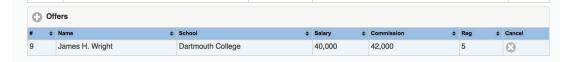


EXHIBIT 23: Recruitment — Offers



8.5 Production and Sales

- *Exhibit 24* shows the screen for entering several decisions. Use the "+" and "–" buttons to increase/decrease the figures:
 - Production requests for Product A *base* and Product B *premium*.
 - Product emphasis the proportion of sales effort placed on Product A. (The product emphasis you place on product A is written as a percentage of total product emphasis. 100% minus product A emphasis is equal to product B emphasis.)
 - Internal selling proportion of selling effort placed within your organization to secure service and other resources.
 - Product prices. Note: production costs are: Product A \$3,000, Product B \$4,000.

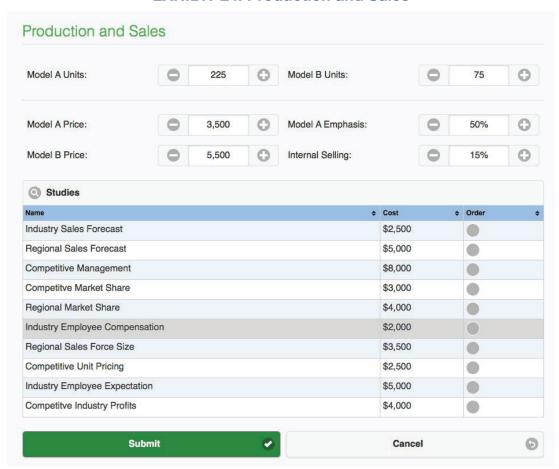


EXHIBIT 24: Production and Sales

8.6 Market Research Studies

- Where applicable, team 1 is your team; team 2 is the competitor. The studies are (*Exhibit 25*):
 - Industry Sales Forecast 5 period sales forecasts product A, product B
 - Regional Sales Forecasts 5 period sales forecasts product A, product B
 - Competitive Management competitive activities and reputational results.
 - Competitive Market Share competitive unit market share by product and overall
 - Regional Market Share competitive market share by product and sales region
 - Industry Employee Compensation Competitive data 0m salaries/commissions
 - Regional Sales Force Size salesperson allocations to sales regions
 - Competitive Unit Pricing product prices
 - Industry Employee Expectation compensation: actual, expectations, and satisfaction
 - Competitive Industry Profits by competitor

EXHIBIT 25: Market Research Studies — Examples

Market F	Research	
O Industr	y Sales Forecast	
Qtr	Units A	Units B
1	1279	447
2	2686	944
3	4277	1510
4	7909	2807
5	12714	4491

Q F	egional	Sales For	ecast								
Qtr A	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	461	555	0	0	0	263	0	0	0	0	1279
2	769	940	134	79	71	425	134	134	0	0	2686
3	1011	1330	207	120	110	719	207	207	183	183	4277
4	1407	2275	381	489	474	1439	381	381	341	341	7909
5	1700	3526	931	783	765	2112	931	906	530	530	12714
Qtr B	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
1	229	148	0	0	0	70	0	0	0	0	447
2	394	266	40	23	21	120	40	40	0	0	944
3	517	396	64	39	36	216	64	64	57	57	1510
4	720	714	126	162	158	456	126	123	111	111	2807
5	868	1130	314	263	257	683	314	302	180	180	4491

Competitive	ve	Management				
Team	‡	Training \$	Internal Sales \$	Contest \$	NPS \$	Reputation \$
Team 1		0	15%	\$0	100	100
Team 2		0	15%	\$0	100	99

Competitve Market Share							
Team	¢	Units A	\$	Units B	\$	Market Share	\$
Team 1		685		240		53.59%	
Team 2		594		207		46.41%	

Region	onal Marl	cet Share	e								
Model A	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
Team 1	53%	54%	0%	0%	0%	54%	0%	0%	0%	0%	54%
Team 2	47%	46%	0%	0%	0%	46%	0%	0%	0%	0%	46%
Model B	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total
Team 1	53%	55%	0%	0%	0%	53%	0%	0%	0%	0%	54%
Team 2	47%	45%	0%	0%	0%	47%	0%	0%	0%	0%	46%

Industr	y Empl	oyee Compens	ation	i							
Team	*	Commission %	\$	Commission \$		Salary	*	Compensation	\$	Comm/Comp	
Team 1		1.50%		\$46,021		\$92,400		\$138,421		33%	
Team 2		1.00%		\$25,456		\$72,400		\$97,856		26%	

Region	Regional Sales Force Size											
Team	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7	Reg 8	Reg 9	Reg 10	Total	
Team 1	1	3	0	0	0	1	0	0	0	0	5	
Team 2	1	3	0	0	0	1	0	0	0	0	5	
Industry	2	6	0	0	0	2	0	0	0	0	10	

Competitive U	nit Pricing				
Team	\$	Unit Price A	\$	Unit Price B	\$
Team 1		\$3,500		\$5,500	
Team 2		\$3,500		\$5,500	

Industry Employee Expectation										
Team	\$	Compensation	\$	On Graduation	\$	Now	+	Satisfaction		
Team 1		\$119,010		\$71,700		\$108,917		109%		
Team 2		\$98,140		\$71,700		\$108,917		90%		



8.7 Results

- Exhibit 26 Sales units by salesperson and product
- *Exhibit 27* Income statement
 - Gross margin on sales Sales revenues and gross margin by product
 - Operating expenses itemized expenses
 - Total balance profit and loss
- *Exhibit 28* Balance sheet
 - Assets
 - Equity and Liabilities
- *Exhibit 29* Salespeople hired and fired
- *Exhibit 30* Salespeople dissatisfaction/reasons

EXHIBIT 26: Results — Sales Units by Salesperson



EXHIBIT 27: Results — Sales Revenues and Gross Margin by Product,
Operating Expenses, Profit and Loss



EXHIBIT 28: Results - Balance Sheet

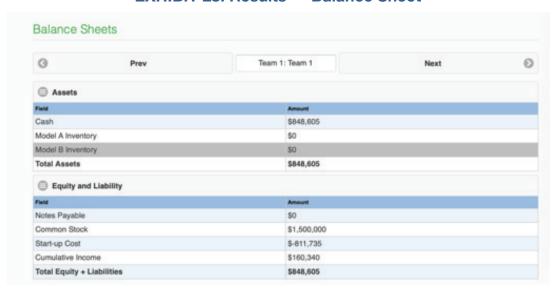


EXHIBIT 29: Results — Salespeople Hired and Fired



EXHIBIT 30: Results — Salespeople Dissatisfaction/Reasons



9. Frequently Asked Questions (FAQs)

1. Do I have to purchase a license to play SMS?

a. Yes. All players must purchase an individual license.

2. Shall I make all decisions in SMS by myself?

a. No. You will be part of a team.

3. Can I select my own team members?

a. Your instructor will decide how to assign participants to teams.

4. What preparation should I do before the start of SMS?

a. Study the participant manual. You will be able to read the manual online when you purchase a license for the simulation.

5. What sales management decisions are included in SMS?

- a. Recruiting and selecting salespeople
- b. How much and when to train salespeople
- c. Territory management assigning the salespeople you have successfully hired to the territories and making adjustments in these assignments. Deciding, strategically, whether to focus sales efforts on a few territories or to cover as many territories as possible.
- d. Salesperson compensation through salary, commissions, and contests
- e. Pricing separately, for premium and base products
- f. Leadership, manifest in two time-allocation policies time spent selling the base product versus the premium product; time spent selling to customers versus *internal* selling.
- g. Market Monitoring illustratively, competitive pricing, demand growth, and comparative compensation. Also for success outcomes: Comparative Profit, Market Share, Net Promotor Scores (NPS), and Company Reputations

6. Is the industry a high growth market?

- a. Research suggests the market could have high continuous growth; high growth but mature early; market that does not take off. You do not know this at the start of the simulation.
- b. You will need to track changes in market projections to identify the answer.

7. How many salespeople can a firm hire every period?

- a. Maximum 5. Successful recruiting requires offering total compensation that matches expectations, or just falls below it.
- b. SMS assumes no competition among firms in hiring salespeople.

8. Can different salespeople within a firm be paid different salaries?

- a. Yes, not only while recruiting, but also during SMS. Individual salespeople salaries can be altered every period.
- b. Salespeople are paid the same commission rate but commissions earned vary, determined by the territory potential and how crowded with salespeople the territory is, and by the salesperson's skill as well as motivation.

9. Can my firm fire salespeople?

a. Yes — at any time. Salespeople may also resign. Factors: Whether compensation falls short of initial and updated expectations; distance from sales territory to home territory; personal factors.

10. How much training should a salesperson receive?

a. One period training is mandatory. Additional training is optional. You may add two more periods of training — early or late. You may space training between periods or concentrate training to immediately follow previous training.

11. Does a home territory assignment affect performance?

a. Yes, positively. Salespeople more easily build client relationships and tend to be personally happier.

12. What happens if my firm under-produces?

- a. SMS allows your firm to fill all orders by permitting overtime, without limit. Additional production allows your firm to meet demand exactly no additional inventory.
- b. Overtime production cost per unit is greater than inventory cost per unit.
- c. Extraordinary high inventory level automatically triggers a bank loan to finance the inventory.

13. In period 1, must the firm place salespeople in different territories?

a. No. Concentrating salespeople by territory will give you a competitive advantage in those territories, but you will forgo sales opportunities in territories with no salespeople.

14. How can the firm motivate salespeople?

a. Compensation is the principle means — salary and commissions have different effects.

15. What time-allocation policy decisions can the firm make?

- a. Effort on the base (less expensive) product versus the premium product.
- b. Time spent selling internally— service support, technical support, administration versus externally, with customers.

16. What indicates success?

- a. Cumulative Profit summed over periods
- b. Current Market Share
- c. Current Net Promoter Score
- d. Current Company Reputation

Achieving on criterion may adversely affect achieving another criterion. Your instructor may choose to focus on only one, or two, of the criteria or evaluate success based on an average of all 4 criteria.

9.1 FAQs While Making the First Decision

1. Can I change the salary and the territory assignments of the 5 salespeople that are already trained and ready to be deployed in period 1?

a. Yes. See page 26 of your manual.

2. How can I learn how qualified these salespeople are?

a. Click the icon under Info, next to their name, then Ratings and Notes. You should also have a file that has resumes and interview notes of all 55 salespeople.

3. Can I fire one or more of these 5 salespeople?

a. Yes. Click the Manage button after you press the icon under the Info column. Page 27, 28 and 29.

4. Can I further train one or more of these 5 salespeople?

a. Yes. Click the Manage button after you press the icon under the Info column.

5. Can I change the commission rate from 1%?

a. Yes.

6. Can I make offers to all 5 candidates who apply?

a. Yes.

7. While making an offer can I alter the salary and the commission from the is on the screen?

a. Salary, yes. The commission number is computed from the percentage commission you choose for your entire salesforce. To alter this number, you have to raise or lower your commission rate.

8. Why would a candidate reject my offer?

a. If it falls \$5000 or more below her of his expectations, which are based on the average earnings of graduates from their school and the evaluations they have from the interviewer—that they are at, above or below average for their school.

9. What will happen if I produce too much?

a. You will carry inventory and have to pay for it. If the inventory is so high that you run out of cash a bank will give you a loan (and charge you interest) to pay for your inventory.

10. What is internal selling?

a. Developing relationships with the people in your organization who can enable your relationship with your customers: e.g., service personnel.

11. What is in each of the market research reports?

a. Described on page 32 and 33.

12. Would it be okay if I bought market research every other period?

a. Conditions in your industry may change very rapidly, e.g., the average compensation being paid to salespeople may become much higher, and not knowing this may make it impossible for you to make a good decision.

13. How do I know if an applicant accepted my offer?

a. In the Results Report under Sales Force Management, you will see a subheading Hired for Training. All candidates successfully hired will be listed. If a candidate you made an offer to is not listed, then this candidate rejected your offer.

14. Where can I find the market intelligence report I purchased?

a. You can find the market intelligence report in the bottom of the results report in the subsequent quarter in which you had purchased the report.

15. Where can I find cumulative profit/income?

a. Profit made in each quarter is located at the top of the results page. Cumulative income is found in the results page in the Balance Sheet under Equity + Liabilities.

16. How is market share calculated?

a. In units, aggregated across the base and the premium product, and not in terms of dollars. So, the base and premium products are weighted equally, despite the dollar value of each premium product sold being, generally, higher.

The answers to these FAQs are described in greater detail earlier in this document.