

# [Kittyhawk](https://assignbuster.com/kittyhawk/)

### Hewlett-Packard: The Flight of the Kittyhawk

### What would you rate as the strengths and weaknesses of the way Hewlett- Packard structured and supported the Kittyhawk development team?

### Strengths

\* Kittyhawk project team was separated from rest of the R&D division so that resistance from other teams was minimized.

\* The team had freedom to adapt a new development process suitable to their needs.

\* They hired the best talent available with proven track record from other divisions in HP.

\* They did not recruit members who had the existing HP cultural bias. To reinforce the fact that team members have to work differently, they had to sign a creed.

\* Researched team dynamics carefully. As a result the team worked very well.

\* Set up clearly stated 5 simple goals in the beginning which were used to guide the team.

\* They had management buy in. This also helped them obtain necessary funding.

\* Team had autonomous decision making powers. They had the flexibility to move fast and make quick decision like a small startup company.

\* Spenner created a sense of urgency in the team. As a result they completed the project on schedule and within budget.

### Weaknesses

\* The development team carried dual responsibility developing the product as well market for it.

\* Team decided to develop small 1. 3 inch drive, without doing enough market research. After the project had started they were still figuring out a market after the technology, rather than the other way around.

\* They took the approach that if they build it, people will buy it and had set an optimistic estimate of $100 million revenue rate for a market that did not even exist.

\* By laying such emphasis on the 1. 3 inch drive with autonomy to make decisions etc, HP could have made the rest of the DMD team feel as if they were working on less important projects.

\* Took good people from other projects in DMD which was a big risk because other projects may not complete.

### Please refer to exhibit 1 for SWOT analysis.

### What do you think of the way the team set out to find a market for the Kittyhawk? Do you think their methods were appropriate?

The Kittyhawk team employed various ways to do the market analysis for their new product (Exhibit 2 and 3). They contacted a highly reputed market research firm but they were unable to reach any conclusion. They spoke to other companies in the ‘ PDA’ industry to access demand for their product. They attended the Consumer Electronics Show in Chicago but focused only on newest mobile computing products such as PDAs and digital Pens.

Mobile market was not yet established but since the Kittyhawk team narrowed down to these areas, their market analysis was biased. They should have included desktop and notebook computers in their market research and should have accessed immediate and future market needs (features, price and delivery time) for a small storage device (Exhibit 4). Not only they did not do this analysis, they ignored the requirements of Nintendo and some other vendors for a small storage device with minimal features for under $50.

The team decided to not pursue that path for four reasons:

– Lowest cost in the industry for a fully features drive was about $130. It was not going to be possible to build a drive for $50.

– Even if they could build the drive for $50, they feared it would not capture market big enough to achieve break even in the desired time frame.

– They believed that PDA market with application specific niche in the market would succeed in the mobile computing space.

– The demand for mobile market seemed something they could satisfy easily. They were expecting high growth in this area which would eventually help them bring down the price of their drive to $50.

The problem with their analysis was they had no factual data about expected sales volume to support their decision to go after PDA market. Mobile computing was still in infancy. They built a product which had cool features at a high price whereas the market was looking for simple device with a lower cost (Exhibit 5). They knew that mobile industry wanted a product like what they were building but they did not work with them on price or expected sales volume. They had no contingency plans if mobile market failed to take off as they were expecting.

### What do you think are the root causes of the failure of the Kittyhawk program? Is there any way HP could have avoided its fate by addressing those root causes? In other words, could they have been addressed / remedied in some way?

### 5 Major Mistakes that HP made:

1. Decided to go with low storage, which would not meet some customer’s requirements. Some customers were asking for a drive with more than 40MB of storage whereas Kittyhawk was initially designed with 20MB capacity.

2. Incorrect market predictions concerning the PDA market growth.

3. Planned production levels were much higher than actual.

4. Did not plan for the lack of need for the accelerometer from some market segments (e. g. Nintendo), that is, over-predicted the need for ruggedness.

5. Did not make the drive sufficiently low cost for customers ($250 price point was too high).

### The root causes of mistakes:

Improper and hasty market research (pricing, features, design requirements).

They setup revenue targets, price point, break even goal, and revenue growth for a disruptive technology in a new product targeted for a new market. Once they set those targets, they constrained themselves to achieve those targets even though market required them to drastically reduce the drive price.

The market was too broad for their product and they decided a focus on an undeveloped segment of the market.

HP could have addressed these issues by either developing more than one product within the group to satisfy different customer needs or choose one market segment. The management team could have chosen to develop one product at a cheaper price ($50, as requested by Nintendo) in order to meet current needs of large volume customers. They could have increased the memory capacity as well. This would have aligned characteristics of the product(s), including features and pricing, with customer needs to allow for explosive growth. They could have screened the product for success or done some model (Exhibit 6 and 7)

### Exhibit 1 – SWOT analysis

### Strength

Started operation in new building to enable development of new processes

Had management buy in

Hired experienced team members with proven track record

Had financial support

Autonomous decision making

### Weakness

Not sure what to build – cheap drive or feature rich expensive drive

Did not do enough market research

Pulled away resources from other projects

### Opportunities

Breakthrough product with great potential

No competing product in mobile industry

Willing customers at lower price point

New technology with potential for usage in new products

### Threats

Other companies are developing smaller drives

Flash memory is smaller, lighter and could be price competitive

Unproven target market

No risk assessment

### Exhibit 2

Ansoff H Igor (1957), “ Market Strategy Given Newness of Markets and Products” HBR Sep-Oct.

HP was seeking to diversify with their new disk drive. They were looking to explore new markets with a new product.

### Exhibit 3

Steven C. Wheelwright and Kim B. Clark (1992) “ Creating Project Plans to Focus Product Development,” HBR March – April.

They had a breakthrough product using new core processes.

– Smallest in size

– Rugged (3 feet drop)

– Low power consumption

– Light weight

### Exhibit 4 – Porter’s Five Forces

Exhibit 5 – The Risk Matrix

Intended Market

…be the same as in our present market

…partially overlap with our present market

…be entirely different from our present market or unknown

Customer’s behavior and decision making process will…

1

2

3

4

5

5

Our distribution and sales activities will…

1

2

3

4

5

5

The competitive set (incumbents or potential entrants) will…

1

2

3

4

5

3

…highly relevant

…somewhat relevant

…not at all relevant

Our brand promise is…

1

2

3

4

5

1

Our current customer relationships are…

1

2

3

4

5

4

Our knowledge of competitor’s behavior and intentions is…

1

2

3

4

5

3

TOTAL

21

Product/Technology

…is fully applicable

…will require significant adaptation

…is not applicable

Our current development capability…

1

2

3

4

5

4

Our technology competency…

1

2

3

4

5

4

Our intellectual property protection…

1

2

3

4

5

3

Our manufacturing and service delivery system…

1

2

3

4

5

4

… are

identical

to those of

our current

offerings

… overlap

somewhat

with those

of our current

offerings

… completely

differ from

those of

our current

offerings

The required knowledge and science

bases…

1

2

3

4

5

5

The necessary product and service

functions…

1

2

3

4

5

5

The expected quality standards…

1

2

3

4

5

4

TOTAL

29

### Exhibit 6 – Screening for Success

Is it real?

Is the market real?

Is there a need or desire for the product?

Yes

Can the customer buy it?

Unknown

Is the size of the potential market adequate?

Unknown

Will the customer buy the product?

Unknown

Is the product real?

Is there a clear concept?

Yes

Can the product be made?

Yes

Will the final product satisfy the market?

Unknown

Can we win?

Can the product be competitive?

Does it have a competitive advantage?

Yes

Can the advantage be sustained?

Maybe

How will competitors respond?

Similar features products at lower price

Can our company be competitive?

Do we have superior resources?

Maybe

Do we have appropriate management?

Yes

Can we understand and respond to the market?

Yes

Exhibit 7 – A-T-A-R

Item

Market Research

Concept Test

Product Use Test

Component Testing

Market Test

Market Units

XX

X

X

XX

Awareness

X

X

X

X

Trial

X

X

X

Availability

X

XX

XX

Repeat

XX

X

Consumption

XX

X

X

XX

Price/Unit

XX

XX

X

X

XX

Cost/Unit

X

XX

xx: Best source for Kittyhawk

x: Some knowledge gained