The Fransman Innovation Programme (FIP)

Module 1

Increase your Competitiveness by Designing your own Innovation Ecosystem with the Fransman Innovation Programme (FIP)

Terms and Conditions

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Welcome to the
Fransman Innovation Programme (FIP)

FIP was designed to help companies and other kinds of organisations improve their competitiveness and performance. Whilst this is the objective of FIP, the means to achieve it is through innovation. It is innovation that adds value for the customers and users of the products and services that companies and organisations provide.

As a university academic I have for many years been interested in three related areas: competitiveness and innovation; evolution in a socio-economic context; and the generation of new economically-useful knowledge.

It was these interests, together with requests from companies in different parts of the world wishing to improve their competitiveness and innovation, that led me to see whether I could design a single system of players and processes. This FIP Innovation Ecosystem, as I called it, would make competitiveness-increasing innovation happen. Furthermore, I wanted to explain in only 3 modules how it works and can be implemented. This makes it relatively easy for others to use this knowledge. In this way FIP becomes a collective resource.

I would like to invite those who use FIP to let me know, if they wish, about the successes and challenges they have encountered. It is only a collective learning and reflective experience that can lead to deeper understanding and more effective implementation in this important area.

Martin Fransman

FIP Module 1 – increase your competitiveness by designing a FIP Innovation Ecosystem to make value-adding innovation happen

Everyone wants innovation.
But how can you make it happen?

The Goal – Increasing Competitiveness

- **The goal** of FIP is to increase your competitiveness.
- Competitiveness means your ability to add value for your customers relative to the value offered to them by your competitors.
- **The means** for achieving this goal is *innovation* that adds value for your customers.
- But how can you make this innovation happen?
- The answer: by creating a FIP Innovation Ecosystem.

What is a FIP Innovation Ecosystem?

A FIP Innovation Ecosystem consists of all those interrelated *players* and *processes*, in and outside your organisation, who through their interactions make value-adding innovation happen and, by so doing, increase your competitiveness. Through these interactions the players and processes co-evolve over time.

What is Innovation?

- FIP follows Joseph Schumpeter, the OECD, and others in defining innovation as four things:

1. new products and services;
2. new processes and technologies;
3. new ways of organising people and things; and
4. newly created markets, ways of marketing, and business models.

- *It is these four kinds of innovation that add value for external and internal customers and drive competitiveness*.

Agenda

SESSION 1:

- Competitiveness
- Value-Adding Conjectures (VACs)

SESSION 2:

- VAC Creators

SESSION 3:

- Selection Gatekeepers

SESSION 4:

- Continuing VAC Evolution – from VAC Creation to Market

SESSION 5:

- FIP Innovation Culture
- FIP Ecosystem Performance
- FIP Ecosystem Governance
- Floor Innovation

SESSION 6:

- The FIP Internal Innovation Ecosystem

Session 1

- Competitiveness

- Value-Adding Conjectures (VACs)

How competitive are you?

- Think of your most important product/service.
- Answer the following questions:

Question	Answer
1. Who is your most important competitor in this market?	
2. What share of this market do you have?	
3. What share does your most important competitor have?	
4. What proportion of your output of this product/service is exported outside your home market?	

How does your organisation compete?

- How important are the following factors in enabling your organisation to compete? (10 = very important; 1 = unimportant)

Factor	Importance
Lower price	
Higher quality	
Superior design	
Superior after-sales-service	
Superior brand/advertising/reputation	
Other (please specify)	

Does your Organisation have a Competitiveness Strategy?

- yes/no
- The three axes below represent different approaches to competitiveness strategy. On these axes mark ‘X’, your company, and ‘Y’, your strongest competitor.

Benchmarking your current innovation process

- In order to benchmark your current innovation process please complete the table below showing *how* your organisation does the five innovation steps, and *who* does these things.

	Creating innovation ideas	Selecting innovation ideas	Developing them into products or services	Marketing and selling the products or services	Evaluating the innovation process
How is this done in your company?					
Who does it?					

Adding value for your customers through innovation:

The Value-Adding Conjecture (VAC)

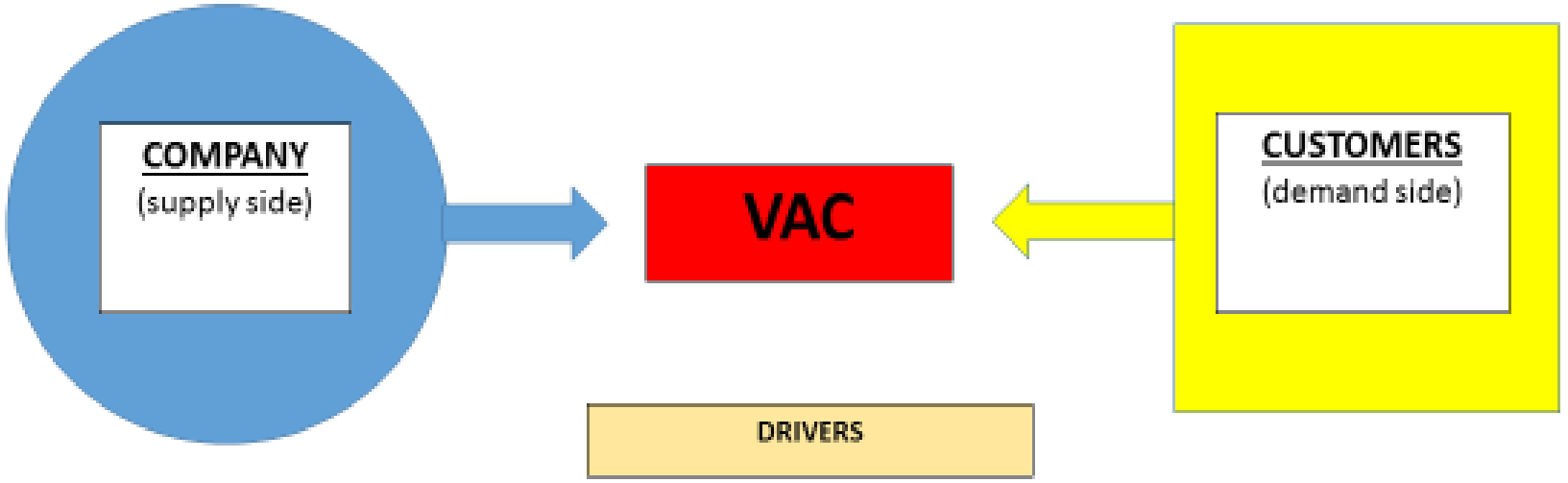
- A VAC is a conjecture about what might add-value for customers relative to competitors. The customer may be outside your company. Or the customer may be internal to your company, e.g. a business unit in the company that needs a new product or process.

- *VACs become embodied in innovations* as defined above. For example, value may be added by creating a new product, a new process, or a new way of organising people.

- The VAC may be right or wrong. It therefore must be *tested*.

Creating a Value-Adding Conjecture (VAC)

'the imagined deemed possible'



Examples of false and true Value-Adding Conjectures: Concorde versus iPhone

False and True VACs – Concorde versus iPhone

Product	VAC	Market Outcome
Concorde	Superfast flight times will add significant value for some customers justifying highly profitable premium market prices.	Conjecture rejected
iPhone	A touch screen user interface will add significant value for customers relative to the old qwerty keyboard.	Conjecture verified

Implications for VACs

- As the Concorde versus iPhone example shows, it is crucial that VACs be thoroughly *tested* as soon as possible.
- The sooner we can discard a false VAC the better. It will save a good deal of money. Concorde cost billions of dollars to develop.
- It is therefore essential that in creating a VAC we collect a good deal of *supporting evidence.* This will allow the company's selectors to decide whether the VAC should be accepted for further development or not.
- The *FIP VAC Checklist Tool* is designed to facilitate this task.

VACs – The *engine* of the evolving FIP Innovation Ecosystem

FIP VAC Checklist Tool to be completed by VAC creators:

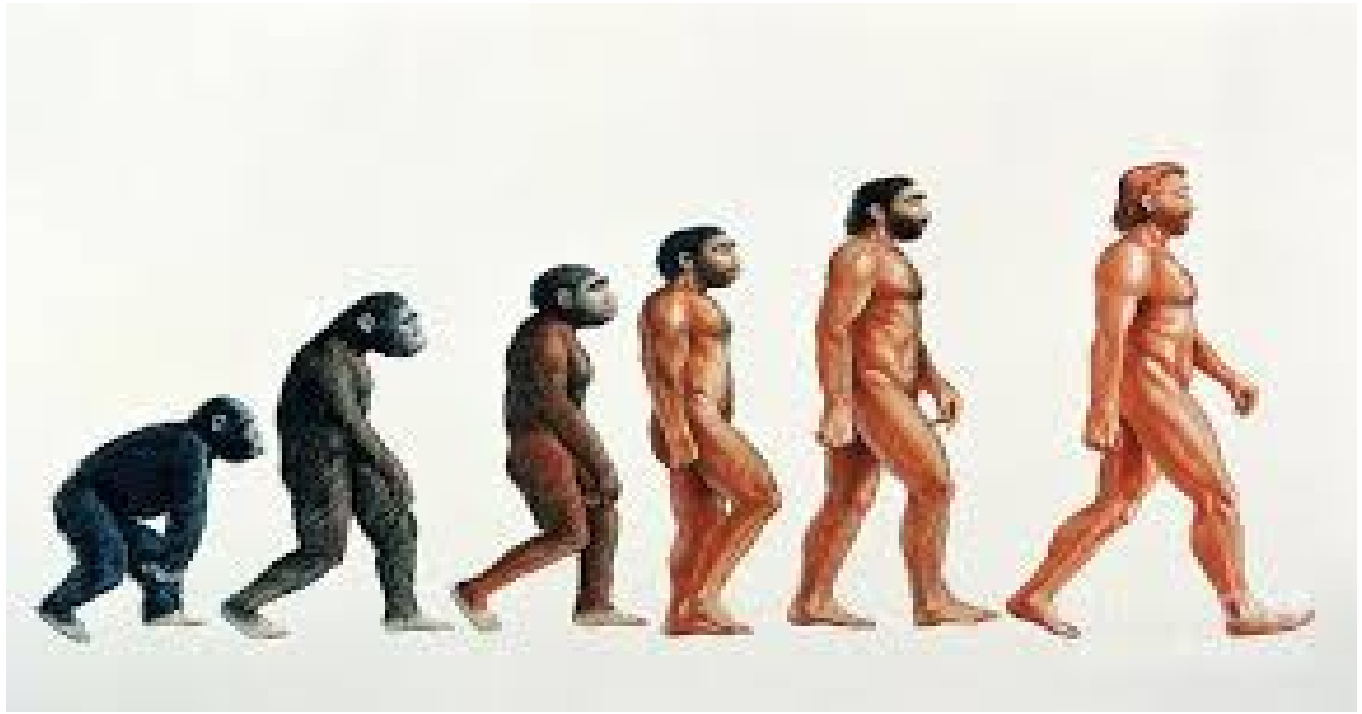
1. Briefly state your VAC proposition
2. Who are your targeted customers? How will you reach them?
3. Who will your two main competitors be?
4. What are the key assumptions you are making in your VAC proposition? (e.g. *how* will this add value?)
5. What evidence do you have to support your VAC?
6. What further tests can be done to provide more evidence?
7. Which partners and suppliers will be needed?
8. What are your preliminary estimates of a) development costs and b) market price per unit of the product/service?
9. How much will customers be willing to pay? What is your evidence for this?
10. [Your organisation can add additional selection criteria.]

The VAC Evolution Process

- It is crucial to understand that developing a VAC involves *a process*. It does not start and stop with the first completing of the FIP VAC Checklist Tool.
- Having completed the Checklist Tool the next step is to find further evidence to support your VAC. For example, go out and speak to a sample of your targeted customers.
- Remember, you are *constantly testing* your VAC against the wants, needs, and problems of your targeted customers.
- What you *will certainly* discover is that your initial ideas of a) who the customer is, and b) what the product/service is, will change as a result of the feedback your tests yield. These ideas, therefore, will have to be revised.
- But the revised VAC will also need further testing.
- In short, in the VAC development process your key ideas and assumptions will *continually evolve*.

How did evolution deal with multiple uncertainties to produce homo sapiens?

Answer: evolution = **variety** + selection + reproduction



One or several VACs? – uncertainty, variety

- The most important problem with innovation ideas and VACs is that they are *uncertain*. In the early days we don't know whether they are true or not.
- But nature has provided us with a way of mitigating uncertainty – evolution.
- Following Charles Darwin: evolution = variety + selection + reproduction.
- Variety is crucial because if there is a change in the environment, although some variants may die, others are likely to survive.
- The FIP Innovation Ecosystem uses evolutionary thinking by creating a *variety* of VACs i.e. several competing VACs.

Advantages of a variety of VACs

- **Uncertainty mitigation**: A variety of VACs means that, at this stage, all your eggs are not in one basket. After testing, some VACs may drop out. Others will remain in play.

- **Benefits of competition**: Competition to be selected takes place both between VACs and VAC-creators.

- **Allowing and encouraging creativity**: Having a variety of VACs means VAC-creators are encouraged to propose even 'crazy', 'out-of-the box' ideas. Remember, not all eggs are in one basket. But these may become tomorrow's successful product/service. Furthermore, permission to be creative encourages a *culture of innovation* in your organisation.

- **But beware of cost!**: Generating VACs costs resources. The expected benefits of a variety of VACs must exceed the cost.

Discussion – Session 1

- In your own words, describe what is meant by a VAC.
- What is the relationship between an organisation's VACs and its innovation?
- How can the creation of VACs lead to an increase in the organisation's competitiveness?
- Why is it important to have a variety of VACs? How does this relate to the idea of evolution?
- What challenges are likely to arise when a VAC-creator attempts to fill out the VAC Checklist Tool?
- Why is VAC-creation a process rather than simply a matter of completing a checklist?
- Do you have any other questions?

Session 2

VAC Creators

Who should create VACs? – functions & teams

- **Seven specialised functions** are performed by a FIP innovation Ecosystem. These functions are allocated to teams which may perform more than one function.

- Four functions are involved in the generation of a variety of VACs:

  1. customer understanding,
  2. conjecture hunting,

  3&4. research/technology.

Customer Understanders

- Customers and customer understanding is so important that FIP allocates a specialised function for them.

- Of course, customers must be 'listened to' and VACs must be continuously tested against them.

- But it is not sufficient to 'listen to the customer' in creating a VAC. REASON: customers only know what they have experienced.

  - *Henry Ford, Ford Motors*: 'If in the age of the stagecoach I had asked coach owners what they wanted they would have replied a faster horse.'

  - *Akio Morita, Sony*: 'I asked Sony's marketers and technologists what they thought of a possible 'Walkman'. They said customers would not want it.'

- The starting point: what are customers trying to achieve, what difficulties do they face, what do they enjoy? Asking these questions can lead to VACs which will add value for customers.

Conjecture Hunters

Conjecture Hunters

- The job of conjecture hunters is, literally, to ‘go out’ and hunt for VACs.
- It is a specialist function, different from other functions and most organisations don’t have them.
- They may search for ‘prey’ (VACs) by visiting lead customers; studying competitors; visiting universities, trade fairs; searching the Internet, etc.
- Their job is to ‘think out of the organisation’s usual boxes’, opening its mind to other possibilities.
- However, as with the other VAC-creating functions, their search path will be constrained by the organisation’s strategy, business models, and priorities.

Researchers and Technologists

- Customer-Understanders and Conjecture Hunters are driven by ‘customer pull’ (i.e. the wants and needs of customers).
- Researchers and Technologists are driven by ‘research and technology push’ (i.e. it is research and new technologies that ‘push’ their VACs).
- The FIP Innovation Ecosystem contains these two very different driving forces.
- Researchers may be located in a distinct organisation (e.g. research labs as in Microsoft); or they may be in a business unit’s engineering department as in Google.
- The job of Technologists is to monitor new technologies (including software) and use relevant ones for VACs.

Functions, Teams, and coordination

- Functions are allocated to Teams. A Team may perform more than one function.
- For example, Customer Understanding and Conjecture Hunting may be done by the same team. But these functions are different and require different specialist skills.
- There are different ways of organising the coordination between Teams. For example: some teams may jointly create VACs; teams may operate individually and compete to have their VACs selected; or there may be a mixture of both ways.
- Teams may be closely networked. Or they may only be loosely networked.
- Each organisation will have to decide what works best for it.

Incentivisation of VAC-creation

- Since VACs are the engine of the FIP Innovation Ecosystem, a key question is how to incentivize their creation.
- Some companies who have done FIP think of the incentivization of VACs in a similar way to the incentivisation of patents. Many companies give ascending material rewards for: applying for a patent, having a patent granted, and share in the commercial benefits that follow from the patent.
- Similarly, VAC-creators could receive ascending material rewards for submitting a completed VAC, having it accepted by the Selectors, when its taken to market in a product, and sharing in the benefit it brings.
- However, there is the danger that this could distort the organisation's other incentives. Furthermore, some research has shown that non-financial incentives (e.g. the assignment of status) work equally well.

Who should join the four VAC-creating teams?

- It is crucial to remember that the functions of the FIP Ecosystem are *innovation* functions. They provide *tomorrow's* products and services, for *tomorrow's* customers, in *tomorrow's* markets.
- Creating tomorrow's products and services requires a fundamentally different mind-set from creating and selling today's.
- Generally, a company's marketing and sales people are 'plugged into' today, not tomorrow. We cannot assume they will become effective Customer Understanders or Conjecture Hunters. They may have to wear 'two hats' if they simultaneously become innovators.
- Researchers and Technologists are different since their jobs are essentially future-oriented.

Discussion – Session 2

- What are the Customer Understanding, Conjecture Hunting, and Research/Technology functions?
- How should these functions be assigned to teams?
- How should these innovation teams relate to the organisation's other existing teams?
- How should VAC-creation be incentivised?
- How should the teams that are involved in VAC-creation interact with one another and what challenges do you think might arise?
- Do you have any other questions?

Session 3

Selection Gatekeepers

Selection Gatekeepers

- The fourth function in the FIP Innovation Ecosystem is Selection Gatekeeping.
- Their role in the FIP innovation process is to *select* from the *variety* of VACs proposed by the VAC creators.
- A key issue is the *selection criteria* that the Gatekeepers should use in making their selection decision. These criteria must be communicated to the other players in the Ecosystem so that they are aware of the 'rules of the selection game' and play accordingly.
- Furthermore, the Gatekeepers must, after they have made their decision, provide feedback to the VAC Creators, giving their reasons for acceptance or rejection of a VAC.
- In the case of rejection this will give the VAC Creator feedback and the opportunity to re-formulate the VAC and re-submit it.

Selection Criteria

- ALIGNMENT WITH ORGANISATION'S STRATEGY AND BUSINESS MODELS: The first criterion is that a VAC must be aligned since it is strategy and business models that must shape the selection process.
- CUSTOMER EVIDENCE: There must be strong evidence that the VAC will indeed add value for customers relative to that provided by competitors.
- VAC CHECKLIST: The VAC Checklist (discussed earlier) provides the basic information that the gatekeepers will use in selecting, including evidence from customers.
- FINANCIAL CRITERIA: e.g. required rate of return.
- OTHER CRITERIA: Each organisation will also have its own selection criteria.

Who should be Selection Gatekeepers?

- Crucially, it is the Selection Gatekeepers who determine *the future of the organisation.* They do this by allocating resources (material and human) today to produce the new products and services for tomorrow. They, in turn, will drive the profits and growth of the company.

- Furthermore, since selection must be shaped by strategy and business models, Gatekeepers should ideally be those who have formulated the organisation's strategy and business models.

- In addition, selection of VACs will have important financial implications.

- It follows that usually the Gatekeepers will include the organisation's leaders and function heads including CEO, chief operating officer, and heads of: finance, R&D, design, production, sales and marketing. If they are unavailable they can designate appropriate substitutes.

- With this membership the Gatekeeping Team will also play a key role in coordinating and informing the top decision-makers about the innovation that is taking place.

- Since Gatekeepers include senior people, VAC creators are likely to be highly motivated to produce VACs that will make an impact.

Continuous selection of VACs

- Like biological organisms, VACs are in a continuous process of evolving

VAC-creation – testing + learning – VAC rebirth – testing + learning – VAC rebirth etc, etc.

- As the VAC evolves so do the twin ideas of:

1. Who is the customer? And
2. What is the innovation (including product/service)?

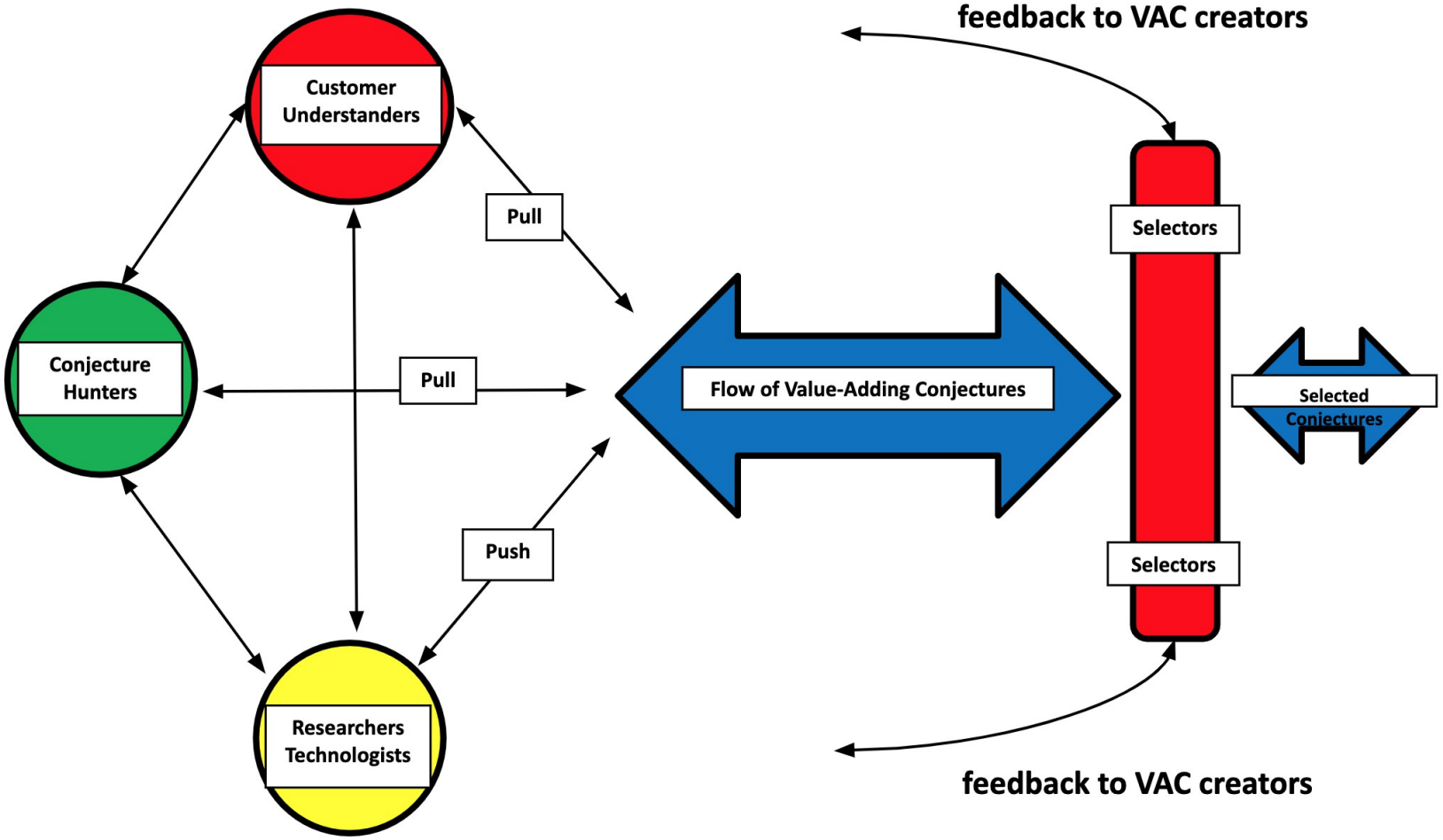
- The following slide shows that even after the VAC passes the first selection process it continues to evolve, unless it is eliminated.

- In this way there is a continuing alignment of VACs with customer wants and needs, ensuring that value is constantly being added for them.

- This must be done at minimum cost and in minimum time.

VAC Creation and Selection

(NOTE: There are multiple feedback loops and continual adaptation)



Appointing and Monitoring the VAC Evolving Team

- Selected VACs must be turned into successful innovations (which include products and services). This job is done by FIP's fifth function: VAC Evolution.
- It is the Selection Gatekeepers who usually should appoint the members of the VAC Evolving Team and monitor their progress.
- The VAC Evolving Team should be multifunctional (i.e. including functions such as design, development, production, sales and marketing).
- It should also have participation from the Customer Understanding and Conjecture Hunting teams to allow continuity and keeping in constant touch with customer wants and needs.
- A key issue is how active participation by key customers in the VAC Evolving Team's work can be organised.

Discussion – Session 3

- What does the function of Selection Gatekeeping involve and why is it so important for the future of the organisation?
- What criteria should be used in selecting a VAC?
- Why is feedback from the Selection Gatekeeping Team to the VAC-Creating Teams so important?
- Who do you think the members of the Selection Gatekeeping Team should be?
- In what way does the FIP Innovation Ecosystem see the selection of VACs as being a continuous process?
- How should VACs be tested?
- Do you have any other questions?

Session 4

Continuing VAC Evolution – from VAC Creation to Market

The Continuing VAC Evolution Process: An Overview

- With the selection of a VAC by the Selection Gatekeeping Team more resources (material and human) are allocated for its further evolution by the VAC Evolving Team. Continuing VAC Evolution is the fifth innovation function in the FIP Innovation Ecosystem.

- The VAC Evolving Team will make use of the current 'development processes' that are widely used by most companies. These processes are assumed to be given and are not analysed by FIP where attention focuses on the evolution of VACs, from creation to market.

- The continuing VAC evolution process includes the development of *testable prototype innovations* (which embody the VAC) – including products and services - that can be tested against customer wants and needs.

- The VAC evolution process *remains a tough selection environment* for innovations and their VACs. It generates strong pressures for *testing* to ensure that they do in fact add value for customers whilst minimising the cost and time needed for this testing.

- The process of testing ensures continuous interaction with the customers for whom value is being added.

The VAC Evolving Team

- The first job of the VAC Evolving Team is to *transform a selected VAC into a prototype innovation* – including product or service - (which embodies that VAC and specifies how value will be added for the targeted customers).

- The team's primary goal is to *test* this prototype as thoroughly and as soon as possible in order to confirm that it does indeed add the conjectured value.

- In order to minimise costs, a *minimalist prototype* must be created. That is, a prototype that has the minimum characteristics needed that will be sufficient to test the value-adding conjecture. For example, a cardboard mock-up of a product may be sufficient.

- The aim is to find out as soon as possible, and at as low a cost as possible, whether the innovation does in reality add the value conjectured. If it does, a more substantial prototype can be developed. If it does not, the VAC must be reformulated, and the development-testing cycle restarted, or thrown out completely.

The Crucial Testing Process

- As the last slides have made clear, the testing process is an absolutely central task of the VAC Evolving Team. Without continual effective testing it will not be possible to ensure that the innovation being developed (including products and services) does in fact add the conjectured value for the customers targeted.

- Testing involves constant interaction with subsets of the targeted customers. A key issue for the VAC Evolving Team to immediately resolve is to determine what kinds of interactions with these customers should take place e.g. can the Internet be used to connect with these customers? Another key issue is what tests and data should be used.

- Each organisation will have to answer these questions in a way that best suits its circumstances.

VAC Evolving Team leaders

- As always, the Team Leader plays a critical role.

- This role includes:

  1. close cooperation with the Selection Gatekeeping Team which will monitor the work and output of the VAC Evolving Team;

  2. an ability to remain ‘in touch’ with customer wants and needs whilst simultaneously focusing on the continuing VAC evolution process and its requirements;

  3. and an ability to provide leadership whilst understanding and motivating team members.

This is a tall order, but essential!

VAC Evolving Team members

- A major challenge facing the VAC Evolving Team is to make use of specialised knowledge, skills, and experience whilst avoiding the fragmentation, lack of communication, and dis-coordination that specialisation can result in.
- In most cases the VAC Evolving Team will want membership from the following corporate functions: design, development, production, marketing and sales.
- Close cooperation between people with these skills will avoid the coordination problems that often arise in the traditional ‘pass-the-baton’ process whereby work is ‘thrown over the wall’ to the next group of specialists.
- Participation in one form or another of Customer Understanders and Conjecture Hunters will provide continuity between the pre-selection and post-selection VAC evolution phases. It should also encourage closer alignment with customer wants and needs.

Continual engagement with customers

- A further possibility that should also be explored is having selected customers participate directly in one way or another in the continuous VAC evolution process.
- This can be tricky. The obvious reason is that customer participation, if the customer is external to the company, may lead to the leakage of the organisation's valuable knowledge. But it may be possible to circumvent this risk.
- Indeed, some customers are often keen to become involved. Reasons may include the opportunity to improve the product/service they depend on; sympathy with the brand and goals of the organisation; and enthusiasm for the product/service.
- Customers should be seen as symbiotic (i.e. 'living together') partners and thought given to how customers can best be incentivised to become engaged.

VAC pivoting

- Tests may be passed but they may also be failed! Where tests against customer wants and needs are failed it will be necessary for some kind of adaptation to be made. The VAC which is embodied in the innovation being evolved may have to be reformulated. This is an inevitable possibility in the continuous learning process that is at the heart of the FIP continuing VAC evolution process.

- In some cases a pivot may be necessary. Pivoting occurs when the tests reveal that a 'change in direction' is needed. This will have important implications for the crucial questions: who is the customer? what is the innovation (including product or service)?

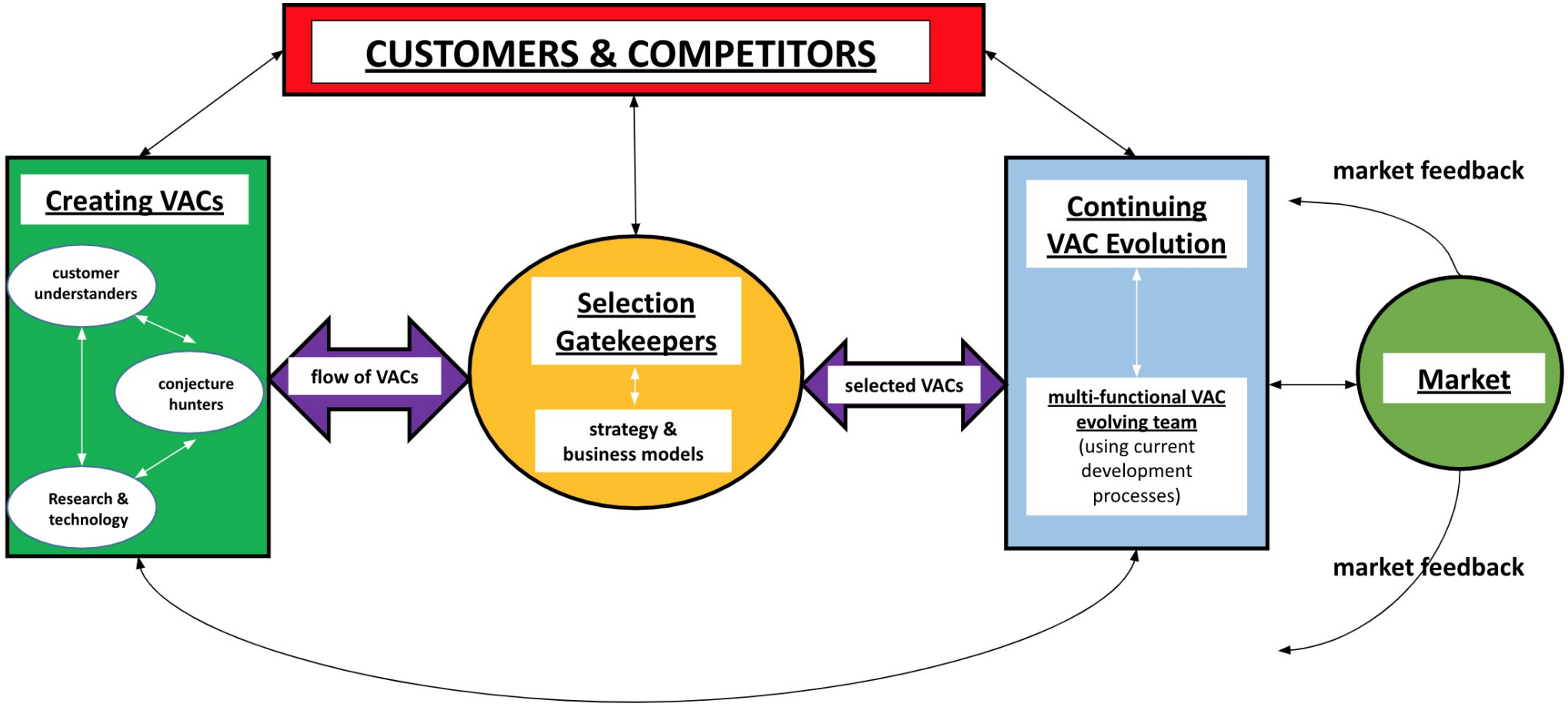
- Failing a test is always disappointing. But it is also part of the evolutionary process of making products/services 'fitter', i.e. better suited, adding more value, for the targeted customers. Testing, failing, and learning are part of the same process and should be encouraged.

- After pivoting, the VAC evolution process begins again: reformulated VAC – minimalist prototype creation – testing – learning – further adaptation etc.

To market

- In the traditional, linear new product development model, ‘going to market’ with the final product comes at the end of the development process.
- However, in the FIP evolutionary innovation process ‘going to market’ begins with the creation of the VAC. By ‘going to market’ we mean ‘going’ to the customer to test the validity of the VAC and its associated product/service.
- To be sure, the earliest ‘going to market’ does not involve full commercialisation of a product/service. This does come at the end of the VAC evolution process. But by the time this begins the VAC Evolving Team should have a pretty good idea of the reception the product/service is likely to receive in the market as a result of all the testing done.
- Having said this, it is true that the market is the Ultimate Selector in the innovation process. It will decide how ‘fit’ the product is, whether it adds value, and what rewards will be received by the successful organisations that produced the innovative product/service.
- The following slide summarises the FIP VAC evolving process – from VAC creation to market.

From VAC Creation to Market



Discussion - Session 4

- Summarise in your own words what is meant by the ‘continuing (i.e. after selecting VACs) VAC evolution process’.
- What role should the VAC Evolving Team play in making the VAC evolution process happen?
- Who should the members of the VAC Evolving Team be?
- What processes should they use?
- How can continual engagement with customers in the VAC evolving process be facilitated?
- Discuss the role of continuous testing of the selected VAC against consumer wants and needs.
- Do you have any other questions?

Session 5

- FIP Innovation Culture
- Ecosystem Performance
- Ecosystem Governance
- Floor Innovation

The FIP Innovation Culture 1

- Also making an important contribution to a successful innovation process is a facilitating, nurturing *innovation culture*. It provides the social 'glue' which holds all the players in the FIP Innovation Ecosystem together and gives them a common purpose and motivation.

- An innovation culture has four components:
  1. shared objectives;
  2. shared values;
  3. shared beliefs; and
  4. a common language.

- The question is: how can we create an innovation culture based on these four components?

- Most readily solved is the common language question since the key concepts of the FIP Innovation Ecosystem provide this language.

The FIP Innovation Culture 2

- The FIP Innovation Culture assumes that in our world of rapid change the only way that an organisation can survive and thrive is by improving its products and services compared to competitors. The only way to do this is through innovation.

- Therefore, it is innovation that creates *tomorrow's* robust organisation through *tomorrow's* improved products/services.

- Uniting all the players in the FIP Innovation Ecosystem is a driving mission:

Create tomorrow's organisation by destroying today's!

- **How is this to be done?**

ANSWER: through innovation creating better products and services for tomorrow that will replace today's. *This is the basis of the FIP Innovation Culture*.

The FIP Innovation Culture– CHANGE!

Creating the new

Destroying the old

Disrupting

Obsoleting

Contrarian thinking

Overturning the status quo

Injecting novelty

How well is the Innovation Ecosystem performing? - 1

- Having designed and implemented an effective innovation ecosystem the question that arises is how well is it performing?

- In FIP a distinction is drawn between:
  1. process performance; and
  2. outcome performance.

- An example of a process performance metric relates to the process of VAC creation, testing, and reformulating, a key process in the FIP Ecosystem. All of the following could be used:
  1. number of VACs submitted to the Selection Team;
  2. number of VACs selected by the Selection Team;
  3. number of VACs taken to full commercialisation.

How well is the Innovation Ecosystem performing? - 2

- Examples of outcome performance metrics are the following:
  1. revenue generated by products and services embodying VACs.
  2. profitability earned by products and services embodying VACs.
  3. market share of these products and services.
  4. exports of these products and services outside home market.

- Each organisation will have its own preferred measures of performance and its own data. These should be adapted in order to give suitable measures of the performance of its FIP Innovation Ecosystem.

Governing the Whole Innovation Ecosystem

Ecosystem Governance Team - 1

- Each player in the FIP Innovation Ecosystem must understand the responsibilities of their team and the role it plays in the ecosystem as a whole.

- But their vision will be bounded by this role. Specifically, they cannot be expected to understand the ecosystem as a whole and its strengths and weaknesses even though they are likely to have ideas about these questions. They will be involved mainly in their 'neck of the woods'.

- It is the Ecosystem Governance Team, that carries out the sixth function in the FIP Innovation Ecosystem, that has the responsibility to assess the strengths and weaknesses of the ecosystem as a whole. It will propose and implement measures designed to reduce the weaknesses and increase the strengths.

Ecosystem Governance Team - 2

- Who should the ecosystem governors be? This is a crucial role since it has extremely important implications for the future of the organisation and since it requires knowledge of the organisation's strategy and business models. The FIP suggestion is that this team should comprise the same members as the Selection Gatekeeping Team. If possible, the Ecosystem Governance Team should also involve key customers.

- It is proposed, further, that the Governance Team meet at least once or twice a year to evaluate in detail:

1. How well is the innovation ecosystem performing?;
2. What are is strengths and weaknesses?; and
3. What should be done to increase the strengths and reduce the weaknesses?

- One suggestion is to do this evaluation at the same time as the organisation publishes its annual results when 'reviews of the year' usually are done.

Floor Innovation

- The seventh and final FIP Innovation Ecosystem function is 'floor innovation', i.e. bottom-up innovation from people who work on the office floor and the factory floor. There is ample evidence to show that their suggestions for usually incremental innovations can have significant cumulative effects. Floor innovation, therefore, should be an important component in an innovation ecosystem. It also extends to all in the organisation a role in 'making innovation happen'.

- Examples are the Japanese *kaizen* (continuous improvements) and quality circle (QC) organisational innovations. In QCs people who work together regularly get together outside working time to discuss how improvements can be made.

- However, floor innovation tends to be incremental and involves people who are not likely to be included in the ecosystem's teams already discussed. Therefore, in most cases floor innovation will be the responsibility of a relatively autonomous sub-system in the FIP Innovation Ecosystem. A particular person or team should be given responsibility for floor innovation. They should report to the Selection Gatekeeping team which will integrate floor innovation into the Innovation Ecosystem as a whole.

- Some of the ecosystem's processes – such as the creation and selection of VACs – may also be useful in making floor innovation happen.

Discussion Session 5

- What is the FIP Innovation Culture and what do you think are the challenges in making it work?
- How should the performance of a FIP Innovation Ecosystem be evaluated?
- How should the FIP Innovation Ecosystem be governed?
- What is floor innovation and how does it fit into the FIP Innovation Ecosystem?
- Do you have any other questions?

Session 6

The FIP Internal Innovation Ecosystem

The 7 FIP Innovation Functions

Function	Description
Customer Understanding (pull)	Interacting closely with customers to understand what they *will* want.
Conjecture Hunting (pull)	'Going out' and searching for potential VACs.
Research/Technology (push)	Creating VACs based on research and new technologies.
Selection Gatekeeping	Selecting from the variety of VACs.
VAC Evolution	Turning VACs into innovations (including new products and services) that will add value for customer-users.
Ecosystem Governance	Governing and improving the FIP Innovation Ecosystem as a whole.
Floor Innovation	Mobilising bottom-up VACs from the office and factory floor.

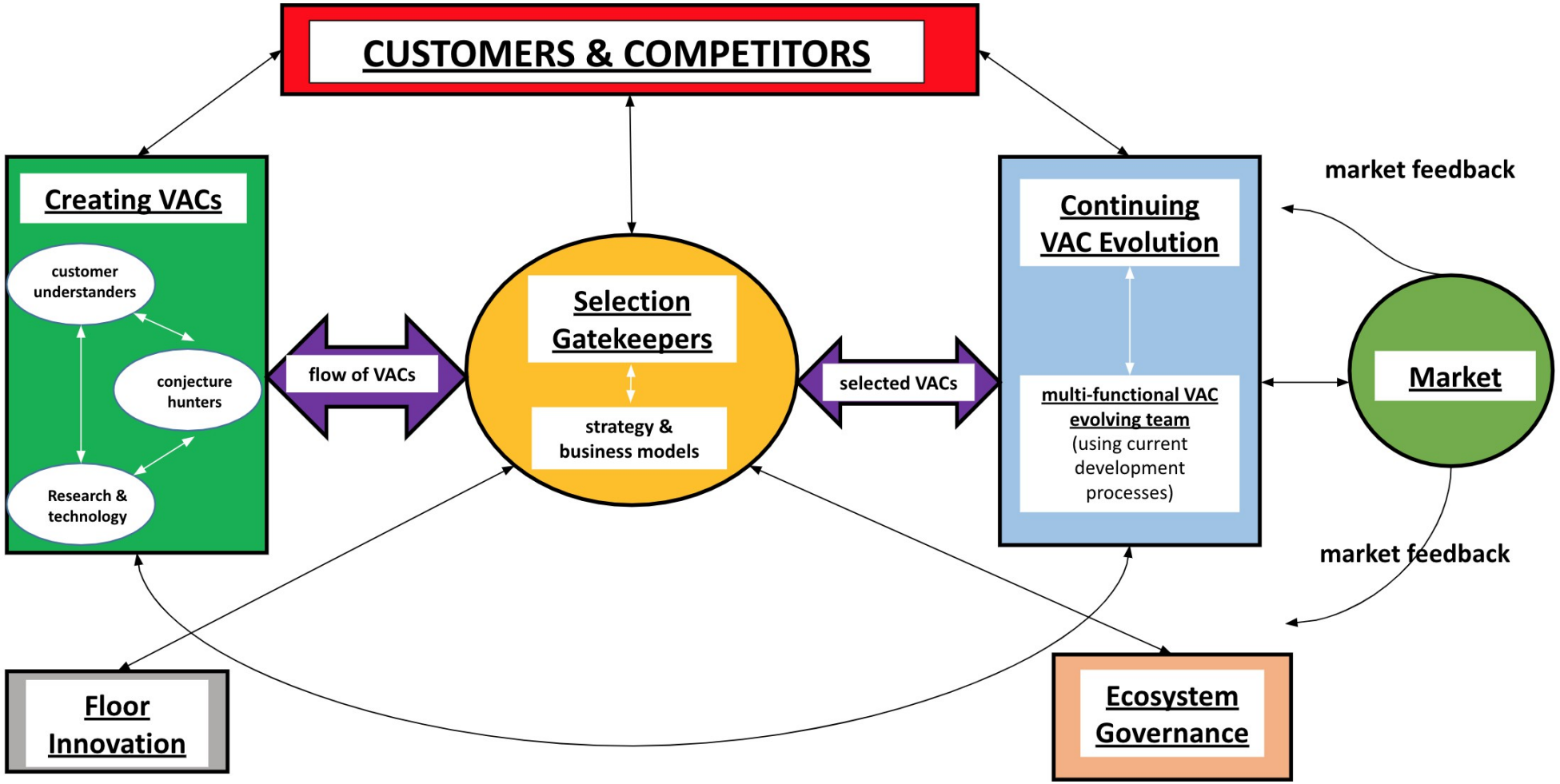
How the FIP Innovation Ecosystem makes innovation happen: a summary

- The *engine* driving the innovation process in the FIP Innovation Ecosystem is a variety of VACs powered by the forces of evolution.

- It contains the following *processes*:
  1. generating a variety of VACs;
  2. selecting the fittest of these VACs;
  3. evolving innovations (including products/services) embodying the VACs;
  4. finally, taking them to market;
  5. learning from this evolutionary process;
  6. improving the innovation (including product/service) for the next round of innovation.

- The next slide illustrates these processes. If these processes are followed, value-adding innovation *must* happen.

FIP Internal Innovation Ecosystem



Discussion – Session 6

- What are the seven functions in the FIP Innovation Ecosystem?
- What is the relationship between these functions and the ecosystem's teams?
- In what way is the FIP Innovation Ecosystem an evolutionary system?
- How does the FIP Innovation Ecosystem make competitiveness-increasing innovation happen?
- Do you have any other questions?

Conclusion

Conclusion and FIP Modules 2 and 3

- In this FIP Module 1 we have explained in some detail how a FIP Innovation Ecosystem may be designed with the purpose of improving value-adding innovation, and therefore competitiveness, in your organisation.

- How can you further strengthen your FIP Innovation Ecosystem by mobilising and incorporating the knowledge and resources of outside players? How can you integrate your customised FIP Innovation Ecosystem into your company's existing organisational structure?

- FIP Module 2 'opens' the FIP Internal Innovation Ecosystem discussed here to incorporate outside players who can also make significant contributions to your innovation process. They include suppliers, partners, competitors, universities, finance providers, importers, and government organisations. Module 2 examines in detail the symbiotic relationships that should be established with them, incorporating them effectively into your Internal Innovation Ecosystem.

- FIP Module 3 is devoted to merging FIP Innovation Ecosystem insights into your company's existing organisational structure. The crucial questions answered are: *who* in your company should do *what* by *when*?

  Option A is to do this in your company with the help of a trained FIP Facilitator.

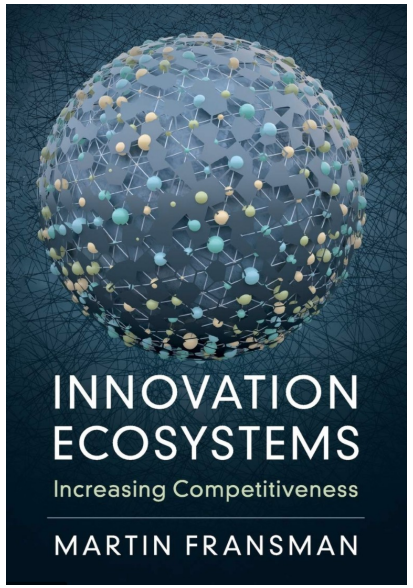
  Option B is to do this in a less company-specific way together with other company representatives.

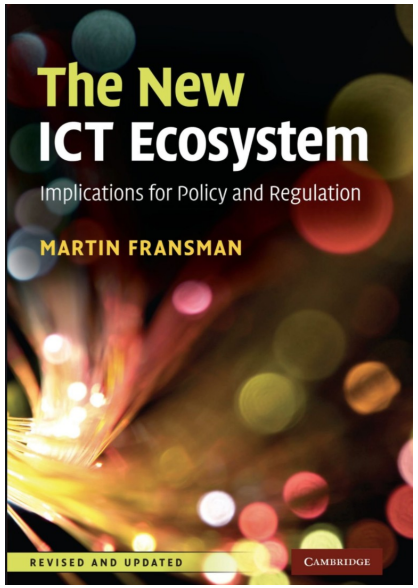
Professor Martin Fransman

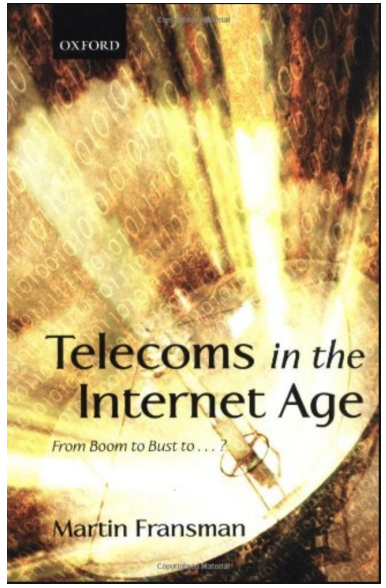
- Martin is Professor Emeritus of Economics at the University of Edinburgh. He now lives in north London.
- Martin is an international expert in innovation and competitiveness. He has advised companies large and small and governments all over the world. Fortune 500 companies he has worked with include AT&T, France Telecom, Fujitsu, Mastercard, Michelin, NEC, Nokia, NTT, Siemens, Skype, Telefonica, Toyota, and Vodafone. He has advised many international organisations including the European Commission, ILO, OECD, UNCTAD, UNECLA, UNESCAP, UNIDO, and the World Bank.
- His books have won three important prizes. The *Joseph Schumpeter Prize* (Cambridge University Press), the most prestigious prize in the economics of innovation. The *Wadsworth Prize* (Oxford University Press) for the best business history book published in the UK, and the Japanese Prime Minister's *Ohira Prize* (Cambridge University Press).
- He has been visiting professor at several universities around the world and was NTT Professor at the Research Centre for Advanced Science and Technology (RCAST) at the University of Tokyo.
- He was the Founder-Director of the Institute for Japanese-European Technology Studies (JETS) at the University of Edinburgh. JETS was supported by the Japanese Ministry of International Trade and Industry (MITI), the UK Department of Trade and Industry (DTI), and the Japanese electronics companies, NEC and Fujitsu. JETS was launched at a reception in the Tokyo residence of the then British Ambassador to Japan, Sir John Whitehead.
- In China he was invited by the incoming government of Xi Jinping to join several Fortune 500 companies in preparing a report for the Chinese government on the role of innovation in China's future development. He was a member of the expert group advising the UK Department for Business, Innovation and Skills (BIS) on the UK's science and technology relationship with China. He regularly gave lectures on innovation to CEOs and other executives from Chinese state-owned enterprises at the China Executive Leadership Programme (CELP) held each year at the University of Cambridge.

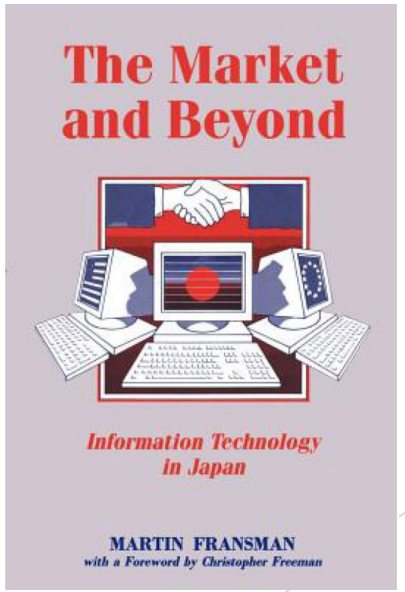
Professor Martin Fransman's Books

- Martin has published thirteen books the most recent of which is *Innovation Ecosystems - Increasing Competitiveness*, Cambridge University Press. Those who endorsed this book on its cover include Arno Penzias, Nobel Laureate in Physics and former Vice President Research at AT&T's Bell Laboratories; Sir Geoffrey Owen, former editor of the *Financial Times*; Martin Wolf, Chief Economics Commentator, *Financial Times*; Lord Alistair Darling, former UK Chancellor of the Exchequer; and Richard Nelson, Professor Emeritus at Columbia University and pioneer of Schumpeterian Evolutionary Economics.









Praise from previous FIP clients

"Innovation in our business has been core for many years but unstructured. This approach by Fransman integrates it into our very DNA throughout the different channels in the business from product offer through to warehouse despatch with an opportunity for everyone in the business to make a difference and to be recognised."

Endura, world-leader in high-class cycling gear

"The course broadened our horizons and helped us encapsulate the depth to which we have to pull together the resources available, both internally and externally, in order to pursue our product development and future business strategy."

Macsween, world-leading food provider

"The Fransman Programme provides both a theoretical model and a programme to put this in place."

William Tracey, leading recycling and resource management group

The Fransman Innovation Programme (FIP)

Module 2

Increase your Competitiveness by Designing your own Innovation Ecosystem with the Fransman Innovation Programme (FIP)

Terms and Conditions

See the TERMS AND CONDITIONS section of the website www.freecovidinnovationhelp.com

Everyone wants innovation.
But how can you make it happen?

FIP Module 2 – getting by with a little help from your friends - incorporating outside players and processes into your Innovation Ecosystem

Agenda

SESSION 1:

- The FIP Innovation Ecosystem – A Review

SESSION 2:

- Bringing outside players into the FIP Internal Innovation Ecosystem

SESSION 3:

- The 7 FIP Innovation Functions and the FIP Internal Innovation Ecosystem

SESSION 4:

- Which Players?

SESSION 5:

- Integrating the 7 Innovation Functions and the external players – The FIP Innovation Ecosystem

SESSION 6:

- Symbiotic Innovation Relationships

SESSION 7:

- What holds the FIP Innovation Ecosystem together, making it a single, coherent, evolving system, and driving it to increase competitiveness?

Session 1

The FIP Innovation Ecosystem – A Review

In this session we will review some of the essentials of the FIP Innovation Ecosystem analysed in Module 1.

The FIP Goal – Increasing Competitiveness

- **The goal** of FIP is to increase your competitiveness.
- Competitiveness means your ability to add value for your customers relative to the value offered to them by your competitors.
- **The means** for achieving this goal is *innovation* that adds value for your customers.
- But how can you make this innovation happen?
- The answer: by creating a FIP Innovation Ecosystem.

What is a FIP Innovation Ecosystem?

A FIP Innovation Ecosystem consists of all those interrelated *players* and *processes*, in and outside your organisation, who through their interactions make value-adding innovation happen and, by so doing, increase your competitiveness. Through these interactions the players and processes co-evolve over time.

What is Innovation?

- FIP follows Joseph Schumpeter, the OECD, and others in defining innovation as four things:

1. new products and services;
2. new processes and technologies;
3. new ways of organising people and things; and
4. newly created markets, ways of marketing, and business models.

- It is these four kinds of innovation that add value for external and internal customers and drive competitiveness.

Adding value for your customers through innovation:
The Value-Adding Conjecture (VAC)

A VAC is a conjecture about what might add-value for customers relative to competitors. The customer may be outside your company. Or the customer may be internal to your company, e.g. a business unit in the company that needs a new product or process.

The VAC may be right or wrong. It therefore must be *tested*.

VACs become embodied in innovations as defined above. For example, a VAC may add value through a new product, a new process, or a new way of organising people.

Discussion – Session 1

- Explain how competitiveness is increased in the FIP Innovation Ecosystem.
- In your own words, what is a VAC (a value-adding conjecture)?
- What is the relationship between a VAC and an innovation?
- What is a FIP Innovation Ecosystem?
- Do you have any other questions?

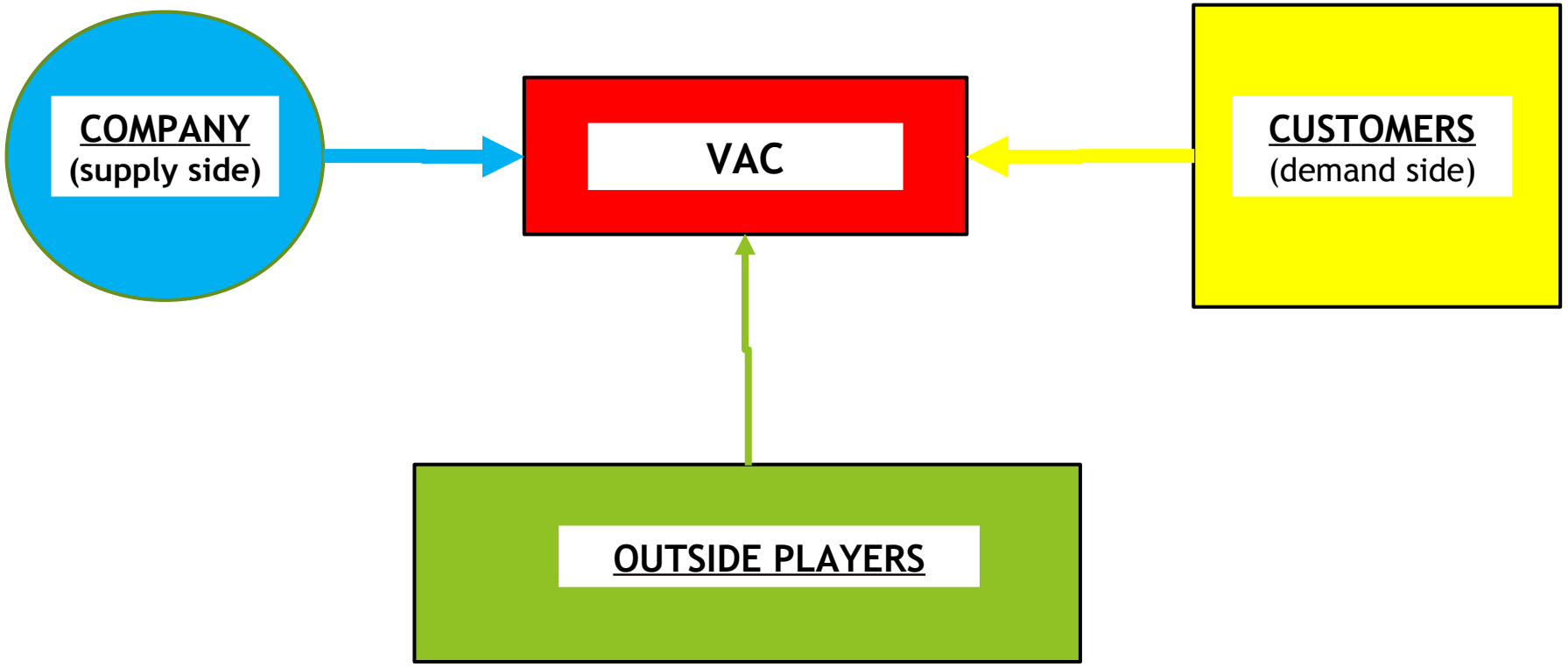
Session 2

Bringing outside players into the FIP Innovation Ecosystem

Mobilising Outside Players to help Create and Evolve VACs

- A major benefit of a FIP Innovation Ecosystem is that it mobilises *outside knowledge and resources* by opening up an organisation's innovation process to include *outside players*.
- In this way, VACs and the innovations in which they are embodied are *enriched by the additional creativity* provided by these outside players.
- This adds a third force shaping VACs and innovations, in addition to company and customer players, thus further increasing competitiveness.

Opening the Evolving VAC up to Inputs from Outside Players



Examples of false and true Value-Adding Conjectures:

Concorde versus iPhone

False and True VACs – Concorde versus iPhone

Product	VAC	Market Outcome
Concorde	Superfast flight times will add significant value for some customers, justifying highly profitable premium market prices.	Conjecture rejected
iPhone	A touch screen user interface will add significant value for customers relative to the old qwerty keyboard.	Conjecture verified

What happened to Concorde?

- 1947 – first supersonic flight.
- 1956 – UK establishes committee for supersonic commercial flights.
- 1962 – France joins the project.
- 1976 – first Concorde commercial flight.
- At the first prototype flight 16 airlines had contracted to purchase 74 Concorde planes.
- Ultimately, only 14 planes were put into commercial service - by only Air France and BA.
- 2003 – Concorde project terminated, deemed a commercial failure.

Why did Concorde fail?

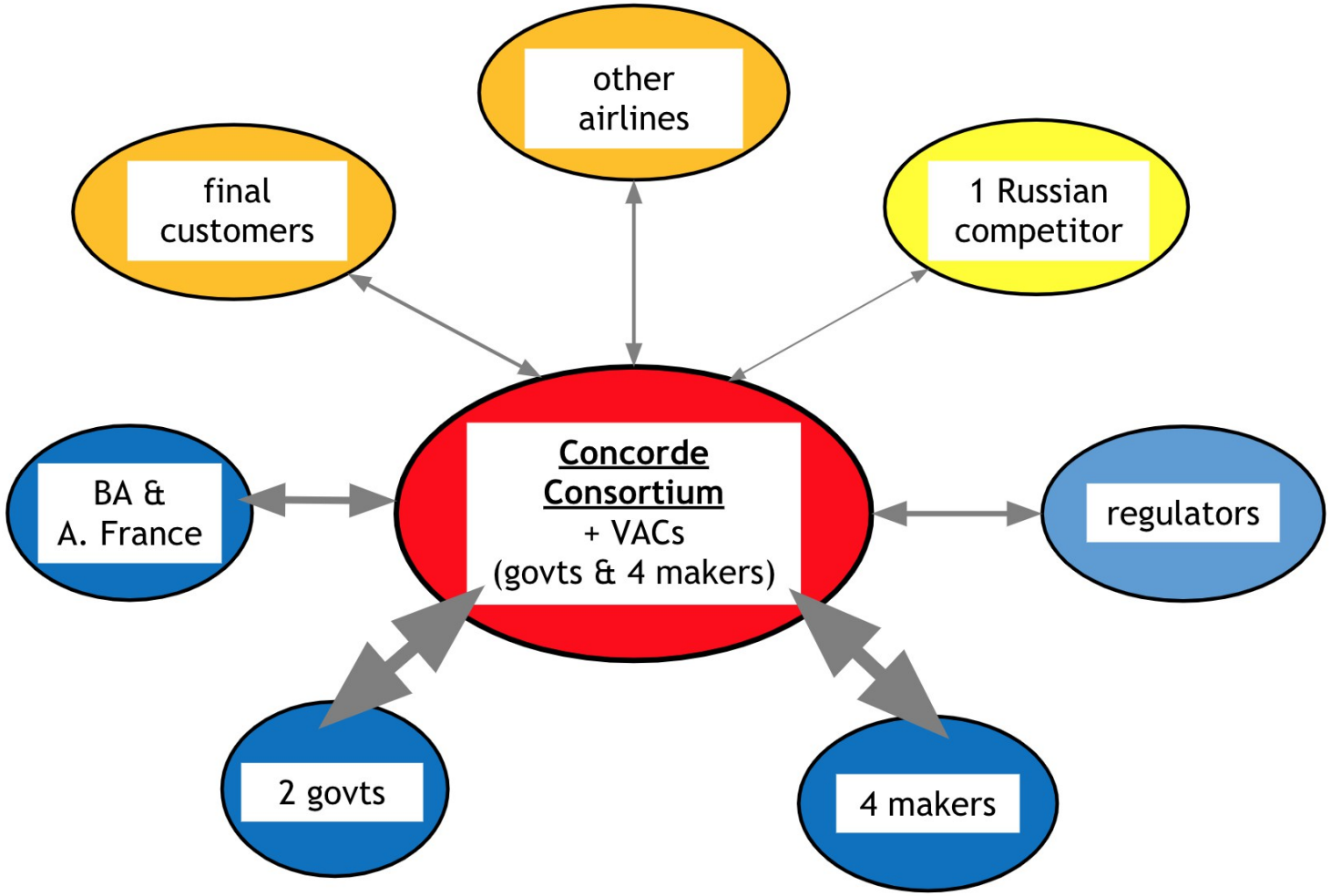
- The reasons included the following:
- *Cost*: In 1962 planned cost was £2 billion (2003 prices). By 1975 (commercial launch) £11 billion had been spent.
- *Regulation*: Because of its sonic boom Concorde was not allowed to fly at supersonic speed over land, limiting markets.
- *Wrong VAC*: The dominant Concorde VAC assumed that a premium price could be charged since *flight time* and *prestige* dominated price in customer valuations.
- In 2003, when Concorde was retired, the average Concorde transatlantic ticket price was $10,000. Ordinary flights business class were $4,000 and economy $1,000.

What went wrong with Concorde's Innovation Ecosystem?

- Most important was the *failure to test* adequately the dominant Concorde VAC.
- But why did this failure happen?
- The reason is that the Concorde Consortium did not give sufficient weight to key players in its Innovation Ecosystem.
- Specifically, *Final Customers* and *Other Airlines* (apart from Air France and BA) were not accorded sufficient weight in the decision-making process.
- As a result, the project was *government and technology pushed* with insufficient influence exerted by the market represented by Final Customers and Other Airlines.

Concorde Innovation Ecosystem

(arrow width = influence)

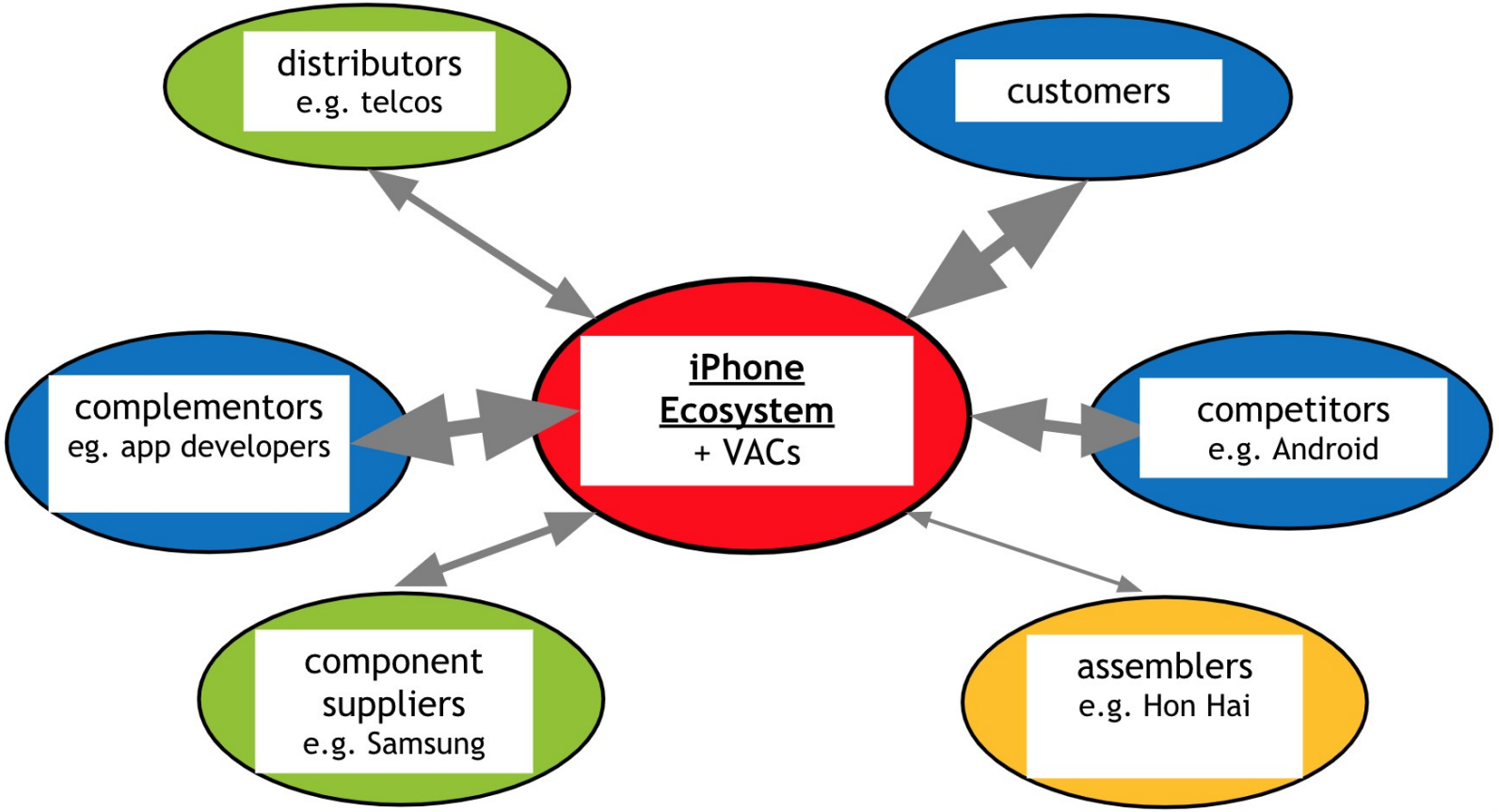


The iPhone Innovation Ecosystem in contrast..

- …was highly *customer pulled*.
- Most importantly, the original *iPhone VAC* – the value added by a touch screen relative to a qwerty keyboard provided by main competitor Nokia – was *tested and shaped by customer wants and needs* and also by the other ecosystem players.
- In particular, Apple honed its *design capabilities* from the time it had to compete with Windows and Intel in computers.
- Also from computers Apple had learned that *app developers* added considerable value to its product. They were accordingly given significant weight.
- Since Apple lacked distribution in mobile phones, telecoms operators became significant partners. Apple's design capabilities gave it strong bargaining.
- Given its market appeal Apple could pick and choose component suppliers and assemblers.

The contrast with the iPhone Innovation Ecosystem is striking!

(arrow width = influence)



Discussion - Session 2

- What role should outside players play in creating, developing, and commercialising VACs?
- Which outsiders do you think can make the most important contribution to the creation, development, and commercialisation of VACs?
- What do you think are the most important lessons to be learned from the Concorde-iPhone comparison?
- Do you have any other questions?

Session 3

The 7 FIP Innovation Functions and the FIP Internal Innovation Ecosystem

The 7 FIP Innovation Functions

- As discussed in FIP Module One, the FIP Innovation Ecosystem embodies 7 innovation functions. These are described in the following slide.

- Each innovation function is allocated to a team. A team may take responsibility for more than one function.

The 7 FIP Innovation Functions

Function	Description
Customer Understanding (pull)	Interacting closely with customers to understand what they *will* want.
Conjecture Hunting (pull)	'Going out' and searching for potential VACs.
Research/Technology (push)	Creating VACs based on research and new technologies.
Selection Gatekeeping	Selecting from the variety of VACs.
VAC Evolution	Turning VACs into innovations (including new products and services) that will add value for customer-users.
Ecosystem Governance	Governing and improving the FIP Innovation Ecosystem as a whole.
Floor Innovation	Mobilising bottom-up VACs from the office and factory floor.

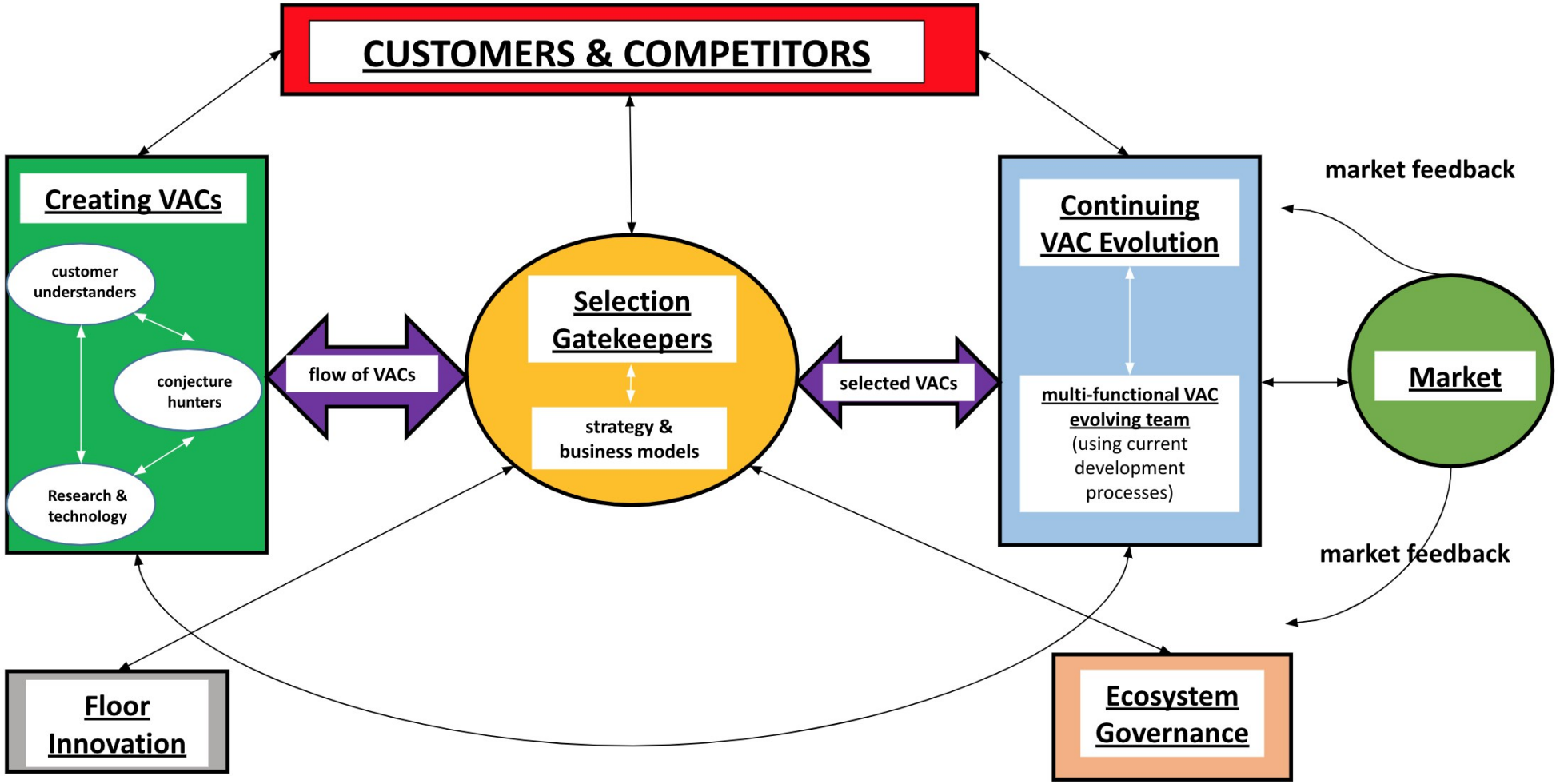
The FIP Internal Innovation Ecosystem

- One of FIP's distinguishing features is that *all innovation functions are integrated into one single coherent system*.

- Another distinguishing feature is that there are *dynamic feedback interactions between the various functions* so that the system as a whole evolves through the generation of a variety of VACs, selection of the fittest VACs, and reproduction of successful VACs.

- The FIP Internal Innovation Ecosystem is shown in the following slide.

FIP Internal Innovation Ecosystem



Discussion – Session 3

- What are the 7 FIP Innovation Functions?
- What is meant by the FIP Internal Innovation Ecosystem? In what way is it 'internal'?
- The traditional innovation process has often been called linear. It involves a 'passing of the baton' between different stages of the development process (i.e. coming up with ideas; 'throwing them over the wall' to the people who choose priority ideas; who throw to the design people; who throw to the development people; who throw to the production people; who throw to the marketing and sales people).
- In strong contrast, the FIP Innovation Ecosystem involves constant dynamic interaction, feedback, and adaptation between all the players of a single system. In your own words, what are the differences between FIP and the traditional innovation process?
- Do you have any other questions?

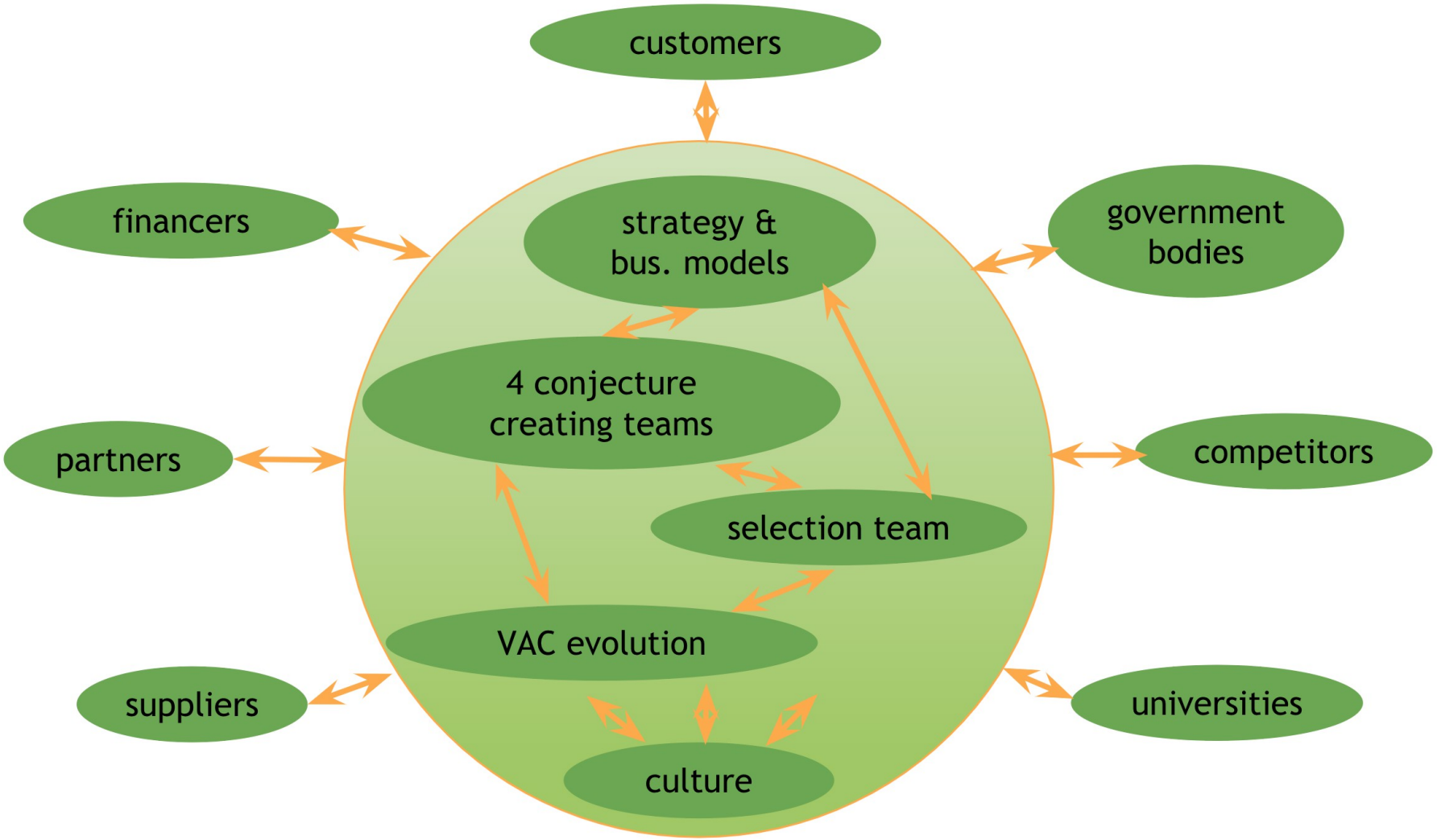
Session 4

Which Players?

Which outside players should be integrated into the FIP Internal Ecosystem?

- Potentially, outside players may make a significant contribution to a company's innovation process.
- Not only may they contribute knowledge and resources. They can also play a key role in formulating and shaping VACs, a key driver of the FIP Innovation Ecosystem.
- This we illustrated through the contrasting case studies of Concorde and the iPhone.
- Two key questions arise:
  - which outside players should be incorporated? and
  - how should they be included in the FIP Internal Innovation Ecosystem?
- The following slide shows the FIP Innovation Ecosystem with some outside players included.

The FIP Innovation Ecosystem

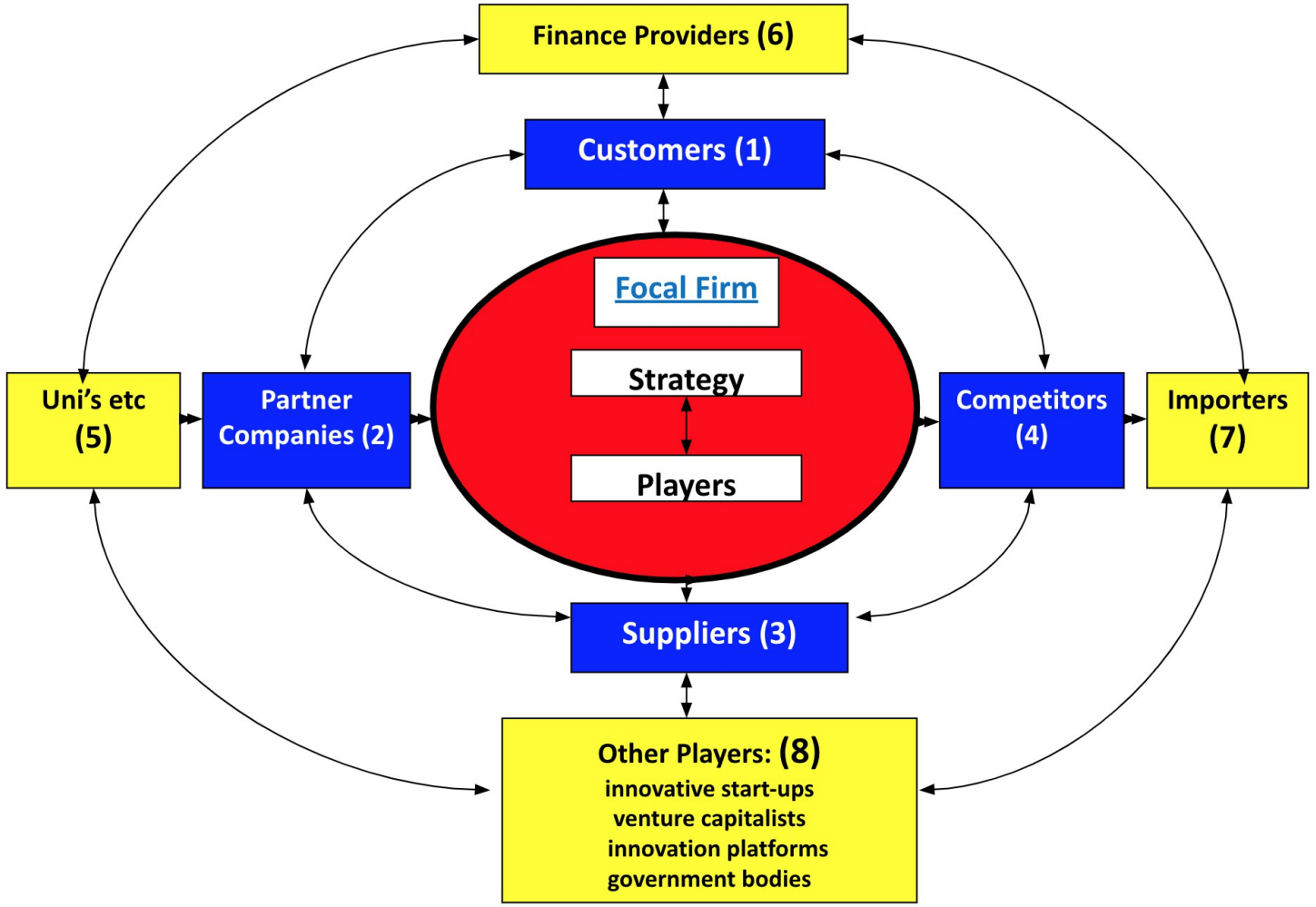


Two groups of outside players

- FIP distinguishes between two groups of outside players as shown in the following slide.
- The first group are the *Primary Outside Players*, shown in blue. They are primary since any company has, and must have, them. They are: *customers, partners, suppliers, and competitors*.
- The *Secondary Outside Players* are shown in yellow. They include: *universities, finance providers, importers, and others*.
- Your company is shown in red. It forms *symbiotic (= living together) innovation relationships* with some or all of these outside players.

A Company Global Innovation Ecosystem

and its 8 Symbiotic Relationships



How Important are these Symbiotic Players?

Important Knowledge Source	Proportion of 144 companies reporting
Customers	78%
Suppliers	61%
Competitors	49%
Public and Commercial Research Institutes	21%

Source: *R&D Management*, 'Special Issue: Open R&D and Open Innovation', edited by Ellen Enkel, Oliver Gassman and Henry Chesbrough, 2010, p. 312.

Discussion – Session 4

What is the difference between the Primary External Players and the Secondary External Players? Why is this distinction drawn?

Who are the 8 groups of external players identified in FIP?

Do you have any other questions?

Session 5

Integrating the 7 Innovation Functions and the external players –

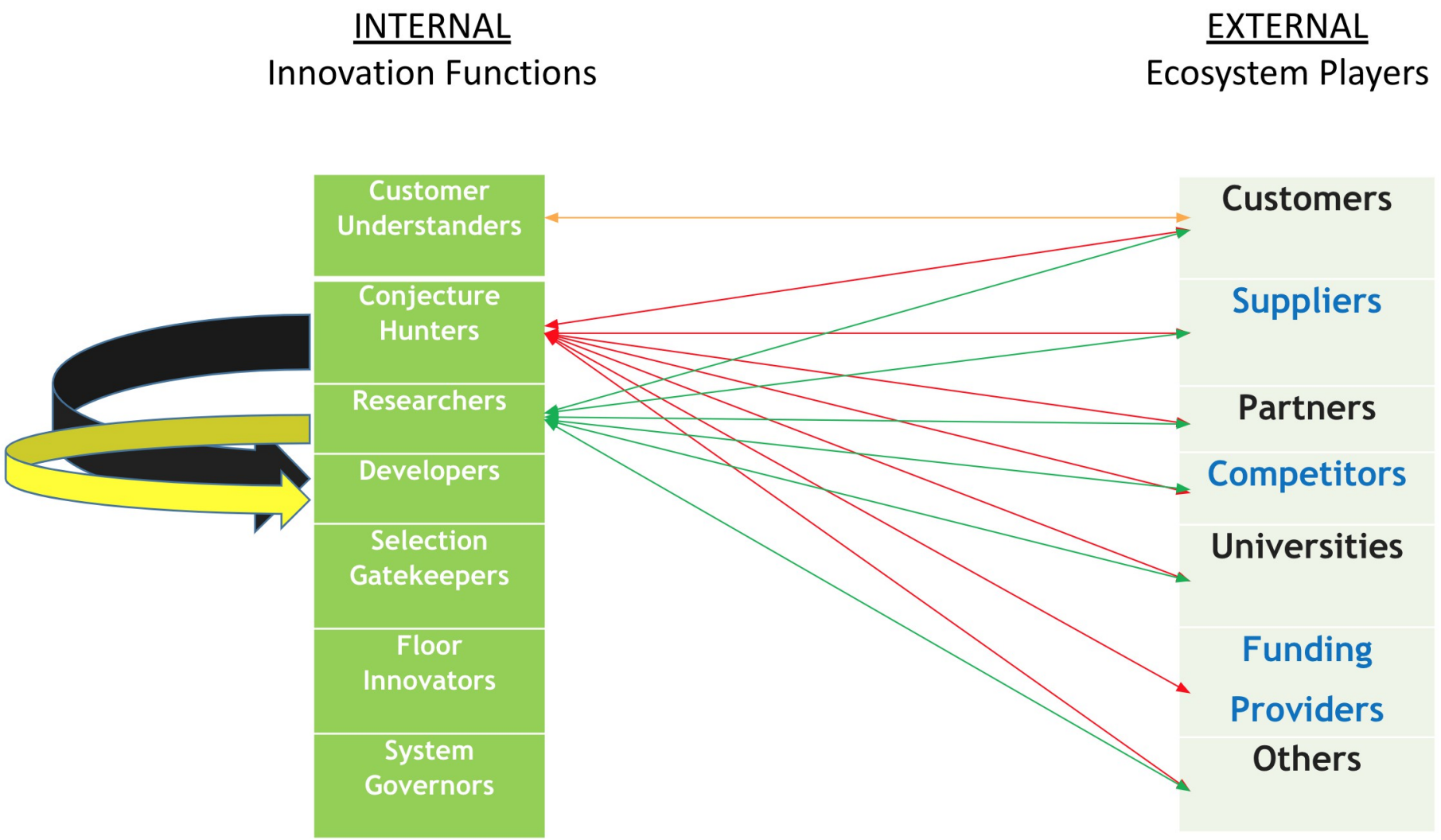
the FIP Innovation Ecosystem

Who in the Internal Innovation Ecosystem should choose, establish, and manage these symbiotic innovation relationships?

- The FIP answer to this key question is to go back to the FIP 7 Innovation Functions and identify which function should include responsibility for choosing, establishing, and managing these symbiotic innovation relationships with the 8 groups of external players.

- The result is shown in the following slide.

Connecting the Internal Innovation Ecosystem with Outside Players



Why these three functions?

- Of the 7 innovation functions the first three i.e. jointly, the VAC-creators, are potentially the most outward-looking. Their function allows them to 'look', not only inside their own company in search of VACs, but also outside it. Logically, therefore, they are best placed to make and manage the connections to the chosen outside players.

- Customer Understanders, again logically, connect with outside customers.

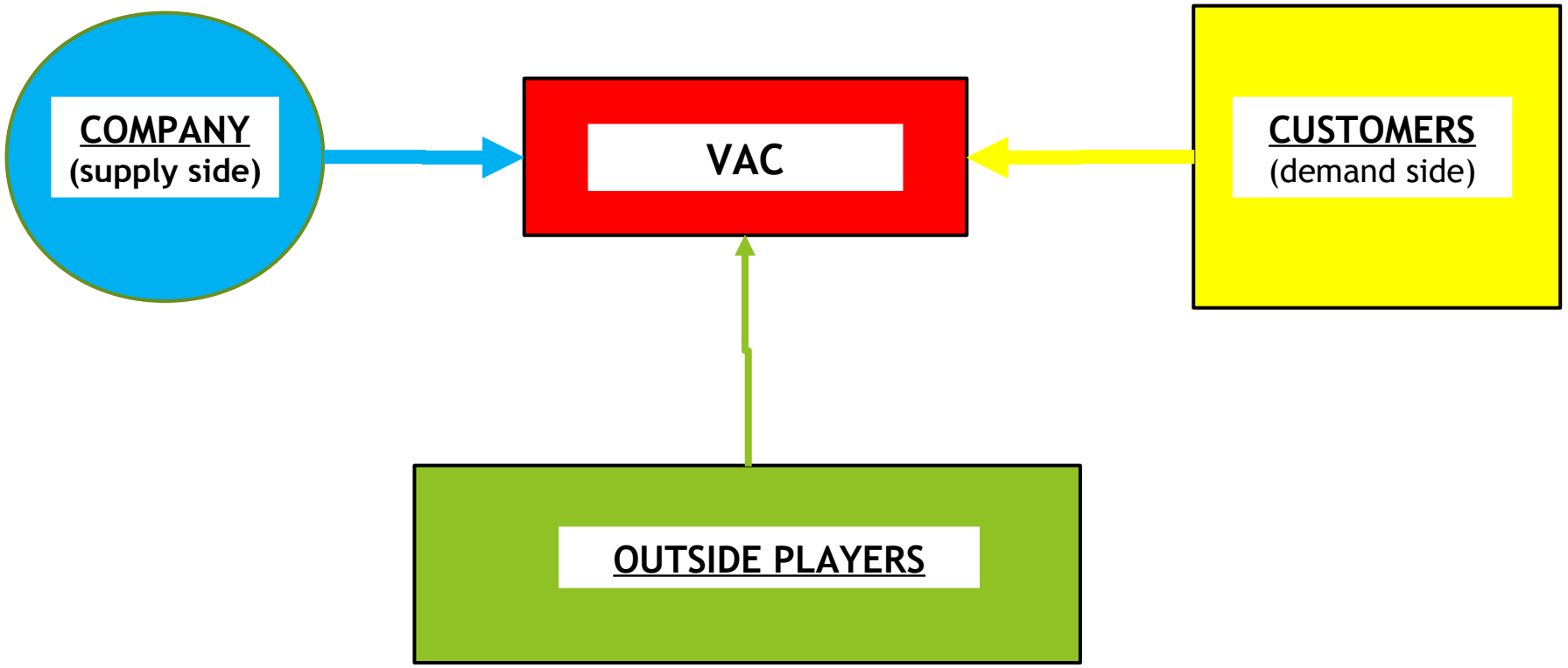
- Whilst Conjecture Hunters and Researchers/Technologists also interact with customers, they in addition, may connect with the other seven external players shown.

- Remember, however, that innovation functions are allocated to teams. Therefore, a team may be in charge of one or more functions.

VACs and the symbiotic relationship with External Players

- Just as in the Internal Innovation Ecosystem, so the VAC plays a coordinating role in the symbiotic relationship between this internal system and the external players.
- In short, in FIP the substance of the relationship between the internal players and the external players is the VAC, its creation, development, and commercialisation.
- In other words, internal players and external players cooperate in creating, developing, and commercialising VACs. It is the VAC that is the engine of the ecosystem that drives innovation and the increase in competitiveness and both internal and external players unite in making the VAC play this central role.
- This is shown in the following slide.

Opening the VAC up to inputs from outside players

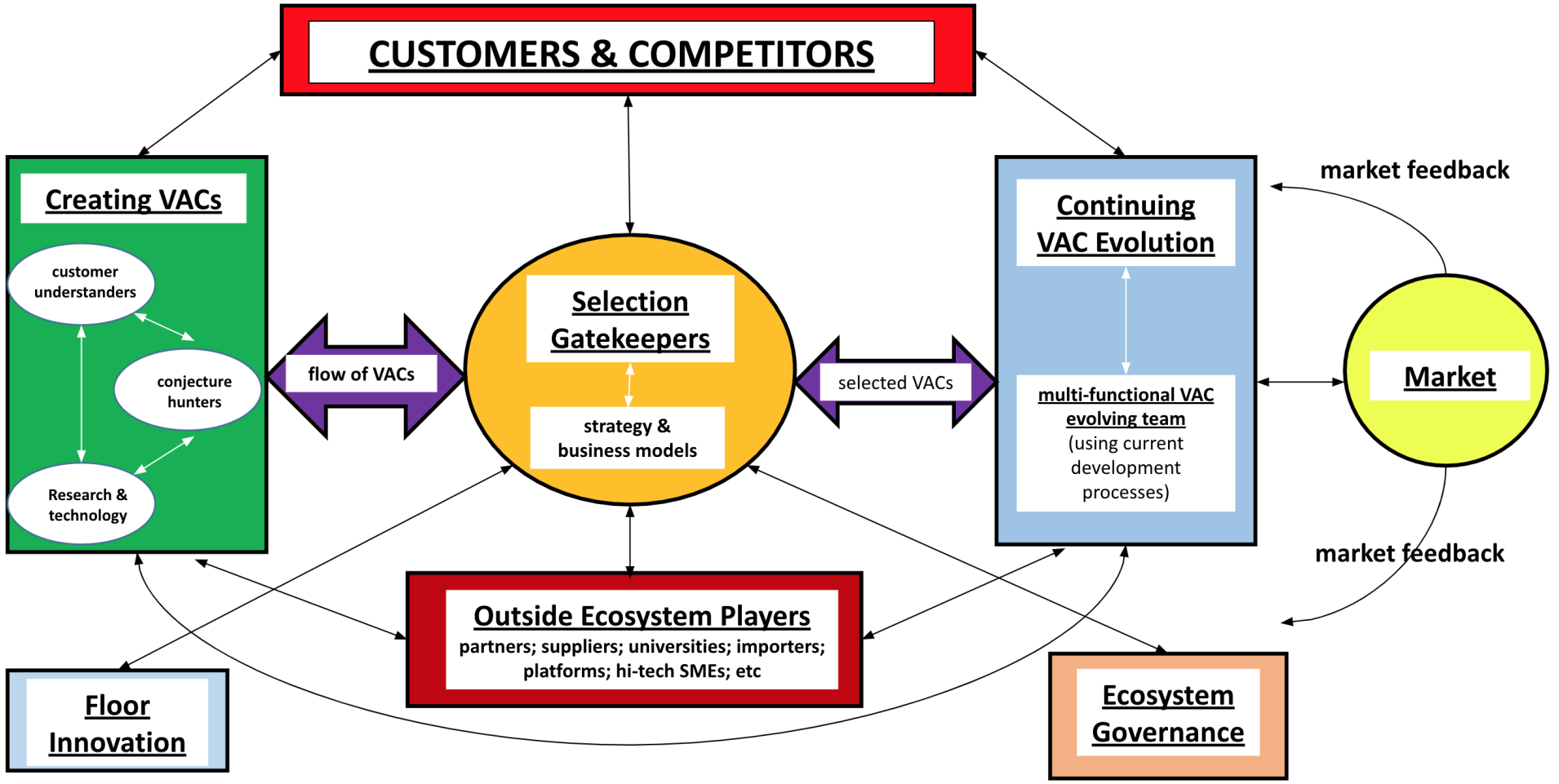


The FIP Innovation Ecosystem

- Having added external players to the FIP Internal Innovation Ecosystem we now are in a position to view the FIP Innovation Ecosystem as a whole.

- This is shown in the following slide.

FIP Innovation Ecosystem



Benefits and Costs of Opening Up

- The main benefit of opening up is the opportunity to incorporate the knowledge and resources of outsiders into your Innovation Ecosystem.
- However, there are also significant costs in opening up.
- The first set of costs arise from the time and resources spent in searching, selecting, designing and managing the symbiotic relationships with outside players. These may be referred to as transactions costs.
- The second set of costs follow from dependence on outside players. Not only must you take account of your company's ability to deliver on time and at the required quality. You also need to assess the ability of the external players who may not be as incentivised as your staff.
- Due diligence involving risk assessment is therefore required.
- Ultimately a benefit-cost analysis is needed to evaluate the expected net return from particular symbiotic relationships.

Discussion – Session 5

- How should internal functions and teams be connected to external players?
- Why is it the three VAC-creating functions and teams who should play the major role in connecting to external players?
- What role do VACs play in the relationship between internal functions and teams and external players?
- How can external players contribute to the creation, development, and commercialisation of VACs?
- What are the main benefits and costs of having relationships with external players?
- Do you have any other questions?

Session 6

Symbiotic Innovation Relationships

Symbiotic Relationships

- ‘Symbiosis’ comes from Greek meaning ‘living together’.

- In FIP we think of the relationships between players inside a company’s Internal Innovation Ecosystem, and players outside, as symbiotic relationships. Players inside see themselves as ‘living with’ players outside, in a mutually beneficial way.

- 2 key questions arise:
  1. *Who* in the internal ecosystem should search for, establish, and manage a symbiotic relationship. This question is answered in Slide 39 above.
  2. *What* needs to be done in order to arrange this symbiotic relationship? This is discussed in the following slide.

Making Symbiotic Relationships Work
– Tool for Developing Symbiotic Relationships

- Who are the individuals at the other end of the relationship?
- What are their goals, activities, challenges, aspirations etc and how can you help them with these?
- How can you engage with them in forming the relationship in the first place and through what channels?
- How can you motivate them to cooperate?
- How can you manage the relationship over time, making sure that it is working effectively and taking corrective action when it is not?
- What criteria should be used to monitor and evaluate the relationship to decide whether it is working and is worth the cost?

Symbiotic Relationship 1: Customers

- Customer is king. The whole aim of FIP is to increase competitiveness by adding value for customers relative to what they are offered by competitors.
- Without customers there is no revenue, profit, growth. The customer, therefore, is the most important of a company's external players.
- It is crucial that companies learn to 'live with' their customers, understanding intimately their problems, concerns, likes, and needs.
- But customers cannot express a demand for what they don't know, such as new technological possibilities.
- In FIP, Customer Understanders play a particularly important role here.
- Searching for, selecting, and managing the symbiotic relationship with chosen customers is a particularly important process in FIP.

Symbiotic Relationships 2 & 3 – Suppliers and Partners

- In late-1990s Alan Lafley, CEO of Procter & Gamble, famously made the decision to increase to 50% the proportion of innovations coming from *outside* the company. His goal was to achieve this by leveraging the R&D capabilities of P&G's suppliers and partners as if they belonged to P&G.

- THE LESSON: Outside knowledge may be used by your company as long as you have the ability to *mobilise* and *absorb* it (i.e. the ***absorptive capability***).

- How may this be done? (NOTE: suppliers may also be partners).

- First, start to think differently about suppliers and partners, seeing them not only as a source of inputs and complementary capabilities but also as a source of knowledge that can be utilised in your innovation process. Second, explore the question: What's in it for them? and think of ways of incentivising their collaboration.

- Third, think of your link with appropriate suppliers and partners, not as a one-off transaction (though in some cases it may be that) but in terms of an ongoing symbiotic ('living together') relationship that needs to be monitored and managed as it delivers mutual benefit.

Symbiotic Relationship 4 - Competitors

- For East Asian companies in Japan, Korea, Taiwan, and China competitors have been a major source of innovation, competitiveness, and growth.
- In Japan many of the leading ICT (information and communications) companies owed a great deal to their technology tie-ups with Western competitors. In the early-1900s, for example, NEC established close ties with AT&T's Western Electric, Fujitsu with Siemens, and Toshiba with General Electric.
- Also in Japan, Konosuke Matsushita, founder of Matsushita/National/Panasonic recalled his great excitement when he first visited Philips, the 'great god' of consumer electronics in the Netherlands, to get ideas. Several decade later Matsushita overtook Philips to become one of the world's largest consumer electronics companies.
- In Hong Kong and Taiwan machinery companies 'learned-by-undoing' the machines of their US, European and Japanese competitors, creating their own far cheaper imitations. These were soon exported back to the markets of their competitors. But these were not strict copies. Incremental innovations were made (e.g. substituting cheaper materials, using lower cost standard components, adding new features) which, together with learning from customer-user feedback, resulted in globally competitive products.

Symbiotic Relationship 5 – Universities - 1

- Universities and Government Research Institutes may also be a significant source of knowledge and resources (human and capital). But the 'transactions costs' of accessing them may be high and therefore this relationship may need careful *designing*.

- Universities are very different from for-profit companies and academics typically have different motivations from company staff. This complicates three key questions: 1. Which entry point? 2. Which university members? 3. How should they be incentivised?

- WHICH ENTRY POINT?: Whilst a university's Tech Transfer Department may be a good starting point, remember that researchers have a good degree of autonomy and may not even respond to requests from this Department.

- WHICH UNIVERSITY MEMBERS?: Establish which researchers have the kind of knowledge that may be useful for your company. Remember, it may be research students, rather than staff, who should be targeted. Locating them may be difficult. Data bases of researchers and their publications may be less helpful that one might suppose.

Symbiotic Relationship 5 – Universities - 2

- MOTIVATION?: Locating the right person is only the first step. Getting him/her to commit may be difficult. Often the main aim of academic researchers is to contribute to knowledge in their area of specialisation, usually judged in terms of publication in respected academic journals. Most universities since the 1980s have 'bolted on' a third mission – namely 'impact' or commercialisation – to their two traditional missions (teaching and research). However, incentives and status in universities, particularly the leading ones, are still heavily skewed towards academic publication.

- Having said this, most universities *have* incentivised 'impact' which is taken into account in assessing staff performance. Academic researchers are usually given some time in which to interact with companies, governments, and other organisations. It is crucial, however, to establish what is important to the academics that you have selected. This should help you to incentivise the symbiotic relationship.

Symbiotic Relationship 5 – Universities - 3

NOVEL WAYS OF INTERACTING WITH UNIVERSITIES: Some companies have created novel ways of interacting with academics and other independent experts. The Chinese white goods global leader, Haier, for example, has created a website called Haier Open Ecosystem. Here technical questions and issues are posted in which the company is particularly interested inviting anyone to respond. Those contributing selected solutions are financially rewarded.

A key advantage of such '*crowd-sourcing*' is that unexpected people from unexpected places with unexpected innovative ideas may respond. In this way Haier has opened its knowledge-generating system, giving entry to anyone from anywhere. This helps to generate the *variety* which, as explained in Module 1, is key to facilitating a healthy evolutionary innovation process.

Symbiotic Relationship 6 – Finance Providers

- The provision by external players of funding for innovation involves far more than simply the providing of funds. Providers of capital are often also the providers of *credibility* and *connections*.

- Obtaining funds in funding markets is another selection hurdle through which companies often have to go, just as within a company getting a Value-Adding Conjecture funded for further development is a selection hurdle. Passing these selection hurdles can provide credibility.

- Raising funds from venture capitalists in Silicon Valley, for example, is only one of the benefits. Equally important may be the connections the VC provides, making linkages for the funded company with other key complementary players.

- But there is also a potentially more problematical side to the provision of funds. By becoming powerful stakeholders with demands of their own, funding providers may be in a position to drive innovation in directions that suit themselves. For example, they may opt for quicker pay-back periods at the expense of further innovation, conflicting with the goals of other stakeholders.

- For these reasons it is important to include funding providers as a key player in the Innovation Ecosystem.

FIP

Symbiotic Relationship 7:
Importers: The Importance of Learning-by-Exporting - 1

- In Korea from the mid-1960s the government made the decision to incentivise exports. (At the same time it heavily protected sectors such as machinery, cars, electronics, and steel – areas where Korean companies later became globally competitive).

- Some significant incentives – such as heavily subsidised loans from state-owned development banks – were given. The condition was that Korean companies demonstrated a *prior* rapid rate of growth of exports. In other words, the 'carrot' was given *after* the company proved it could rapidly increase exports. The Blue House (Korea's equivalent of the US's White House) tracked export performance of the major Korean companies with charts on its walls.

- Two major advantages flowed from exports. First, company revenues increased as companies expanded beyond the limited domestic market, achieving economies of scale and scope. Second, by exporting to some of the world's most sophisticated markets with the most sophisticated customer-users, Korean companies initiated a key process of learning-by-exporting.

Symbiotic Relationship 7:
Importers: The Importance of Learning-by-Exporting - 2

- Initially their products were found wanting. But, incentivised to export, they began to learn from both overseas customers (such as the US retail chain, Walmart) and competitors regarding how to improve their products. Out of the process of learning-by-exporting emerged some of Korea's most famous companies such as Samsung, LG, Hyundai, Daewoo, and Posco.

- The lessons are simple but important: First, it is often worth using exports (particularly to the most sophisticated markets, customers and competitors) as a platform for learning and increasing competitiveness. This is so even if, to begin with, these exports make a loss. Second, the same principle may apply to exporting to large lower-income country markets with different customer requirements. For example, China's most successful global company, the ICT company Huawei, began by exporting to other emerging countries. It used the capabilities and revenues generated in this way to then move into the most sophisticated global markets.

- The opportunity to learn is a key advantage provided by exporting. Many empirical studies have shown a positive correlation between export performance and company performance.

Symbiotic Relationships 8 – Other Players - 1

- Several other players may also be important in influencing the focal firm's innovation process.

- GOVERNMENT: Government policy-makers and regulators may be important. Government programmes and agencies often attempt to facilitate innovation and provide resources and incentives. Scottish Enterprise, for example, has many initiatives to help Scotland-based businesses to innovate and grow.

- INNOVATION PLATFORMS: Your focal firm may simultaneously be a player in another company's innovation platform. Such platforms provide a foundation for bringing together the complementary activities of multiple companies intended to benefit the 'keystone' company that has set up and runs the platform. Apple's app ecosystem based on the iPhone; Google's ecosystem base on the Android mobile operating system; and Microsoft's ecosystem based on Windows are examples. Membership of broader innovation platforms such as these may create both innovation-related opportunities and constraints for the focal firms with which we are concerned. These other platforms accordingly need to be included in the Innovation Ecosystems of these focal firms.

Symbiotic Relationships 8 – Other Players - 2

INNOVATIVE SMEs: Innovative SMEs, too small to be suppliers or longer-term partners, may nevertheless be important collaborators. For example, British Telecom has a programme called “showcasing” where, e.g. the bank of the future or the supermarket of the future is shown, highlighting the contribution of new innovations. Independent SMEs (e.g. Israeli start-ups) have been invited to join these showcases, contributing their own creativity to the joint output. There are many ways in which such innovative SMEs may be incorporated into the focal firm’s FIP Innovation Ecosystem.

Discussion – Session 6

- Why is the relationship in FIP between internal players and external players described as ‘symbiotic’? What is meant by this term?
- What needs to be done to ensure that the symbiotic relationship with an external player works effectively?
- Discuss the pros and cons of the eight symbiotic relationships with the eight groups of external players.
- Do you have any other questions?

Session 7

What holds the FIP Innovation Ecosystem together, making it a single, coherent, evolving system, and drives the focal firm to increase competitiveness?

VACs as FIP Innovation Ecosystem Integrators

- What holds all the players and processes in the FIP Innovation Ecosystem together, giving them coherence and coordination as a single, integrated, innovation ecosystem?
- ANSWER: the VACs, created, developed, and commercialised by the players in the Innovation Ecosystem.
- VACs are the engine of the FIP Innovation Ecosystem for the simple reason that this ecosystem is designed to increase competitiveness by adding value for customers relative to that provided to them by competitors.
- In pursuit of this overriding objective, all the players and processes in the ecosystem are focused on the creation, development, and commercialisation of these VACs. It is the VACs that give the ecosystem its coherence and driving force.

Summary: How does FIP make competitiveness-increasing innovation happen?

1. Four teams of VAC Creators create a variety of conjectures about how value for customers may be increased through an innovation, e.g., a new product or service.

1. These conjectures are passed to the Selection Gatekeepers who examine the evidence regarding whether the innovation is indeed likely to increase value in this way or not. Their decision is guided by the company's Strategy and Business Models.

1. If yes, the conjecture is passed to the Continuing VAC Evolution Team.

1. Feedback from ecosystem players (including suppliers, partners, and university researchers) is constantly provided which leads to continuous improvements in the VACs.

1. VACs are also continuously tested against Customer Responses to ensure that they do indeed add value in this way.

1. Through this process, feedback is also provided regarding Strategy and Business Models. They, accordingly, continually co-evolve too.

Discussion - Session 7

- In your own words discuss how the FIP Internal Innovation Ecosystem should be ‘opened up’ to include outside players.
- What role do VACs play in facilitating the coordination and cooperation between internal and external players in making value adding innovation happen and thus increasing competitiveness?
- Do you have any further questions relating to the themes discussed in Module 2?

Conclusion

Summary of Module 2

- The main aim of Module 2 has been to discuss how the designed FIP Internal Innovation Ecosystem, the subject of Module 1, can be ‘opened up’ to external players.

- The reasoning for opening up is to add the knowledge and resources of external players to those of the Internal Innovation Ecosystem, thus increasing the ability of the focal company to make value-adding innovation happen and in this way increase competitiveness.

- But this does not happen either automatically or costlessly. It must be made to happen by designated players who take responsibility for doing what needs to be done. The players and processes needed to make this opening-up happen have been the substance of this module.

FIP Module 3
– making it happen –
How to merge FIP Insights into your Existing Innovation Process

- FIP Module 3 is devoted to merging FIP Innovation Ecosystem insights into your current innovation process. Modules 1 and 2 explained the 7 FIP functions necessary to make competitiveness-increasing innovation happen. They showed how these functions can be incorporated into a custom-designed FIP Innovation Ecosystem which includes outside players.

- However, any company or other organisation already has players and processes involved in innovation.

- **The objective of Module 3 is to discuss how insights from the FIP Innovation Ecosystem can be effectively merged into your company's existing innovation process.**

- By the end of Module 3 participants will be able to answer the three key implementation questions: *who* should do *what* by *when*?

- Module 3 may be done either inside your organisation with the help of a trained FIP Facilitator. Or it can be done in a larger group with other organisations.

Professor Martin Fransman

Martin is Professor Emeritus of Economics at the University of Edinburgh. He now lives in north London.

Martin is an international expert in innovation and competitiveness. He has advised companies large and small and governments all over the world. Fortune 500 companies he has worked with include AT&T, France Telecom, Fujitsu, Mastercard, Michelin, NEC, Nokia, NTT, Siemens, Skype, Telefonica, Toyota, and Vodafone. He has advised many international organisations including the European Commission, ILO, OECD, UNCTAD, UNECLA, UNESCAP, UNIDO, and the World Bank.

His books have won three important prizes. The *Joseph Schumpeter Prize* (Cambridge University Press), the most prestigious prize in the economics of innovation. The *Wadsworth Prize* (Oxford University Press) for the best business history book published in the UK, and the Japanese Prime Minister's *Ohira Prize* (Cambridge University Press).

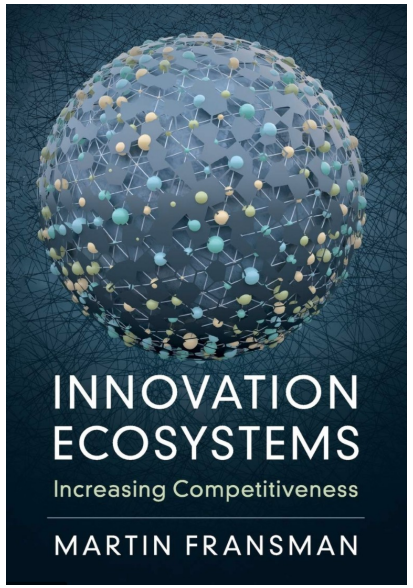
He has been visiting professor at several universities around the world and was NTT Professor at the Research Centre for Advanced Science and Technology (RCAST) at the University of Tokyo.

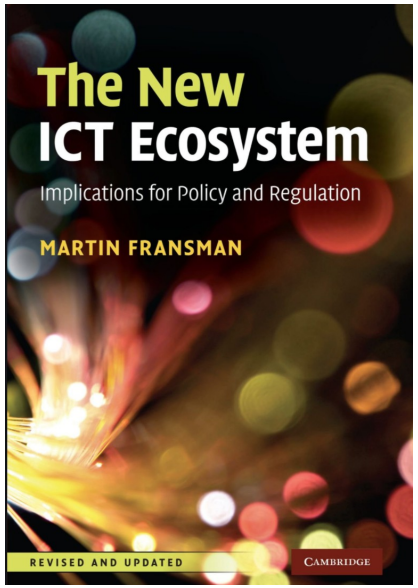
He was the Founder-Director of the Institute for Japanese-European Technology Studies (JETS) at the University of Edinburgh. JETS was supported by the Japanese Ministry of International Trade and Industry (MITI), the UK Department of Trade and Industry (DTI), and the Japanese electronics companies, NEC and Fujitsu. JETS was launched at a reception in the Tokyo residence of the then British Ambassador to Japan, Sir John Whitehead.

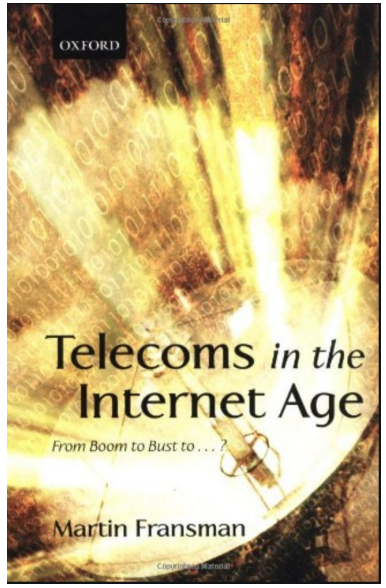
In China he was invited by the incoming government of Xi Jinping to join several Fortune 500 companies in preparing a report for the Chinese government on the role of innovation in China's future development. He was a member of the expert group advising the UK Department for Business, Innovation and Skills (BIS) on the UK's science and technology relationship with China. He regularly gave lectures on innovation to CEOs and other executives from Chinese state-owned enterprises at the China Executive Leadership Programme (CELP) held each year at the University of Cambridge.

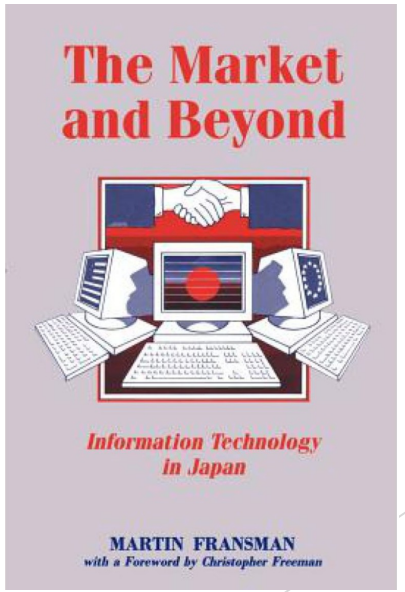
Professor Martin Fransman's Books

Martin has published thirteen books the most recent of which is *Innovation Ecosystems - Increasing Competitiveness*, Cambridge University Press. Those who endorsed this book on its cover include Arno Penzias, Nobel Laureate in Physics and former Vice President Research at AT&T's Bell Laboratories; Sir Geoffrey Owen, former editor of the *Financial Times*; Martin Wolf, Chief Economics Commentator, *Financial Times*; Lord Alistair Darling, former UK Chancellor of the Exchequer; and Richard Nelson, Professor Emeritus at Columbia University and pioneer of Schumpeterian Evolutionary Economics.









Praise from previous FIP clients

"Innovation in our business has been core for many years but unstructured. This approach by Fransman integrates it into our very DNA throughout the different channels in the business from product offer through to warehouse despatch with an opportunity for everyone in the business to make a difference and to be recognised."

Endura, world-leader in high-class cycling gear

"The course broadened our horizons and helped us encapsulate the depth to which we have to pull together the resources available, both internally and externally, in order to pursue our product development and future business strategy."

Macsween, world-leading food provider

"The Fransman Programme provides both a theoretical model and a programme to put this in place."

William Tracey, leading recycling and resource management group

The Fransman Innovation Programme (FIP)

Module 3

Increase your Competitiveness by Designing your own Innovation Ecosystem with the Fransman Innovation Programme (FIP)

Terms and Conditions

See the TERMS AND CONDITIONS section of the website www.freecovidinnovationhelp.com

FIP Module 3

– making it happen –

How to merge FIP insights into your existing innovation process

Agenda

SESSION 1:

- Introduction

SESSION 2:

- The FIP Innovation Ecosystem – A Review

SESSION 3:

- How does innovation happen in most companies?

SESSION 4:

- Integrating insights from the FIP Innovation Ecosystem into your current innovation process

SESSION 5:

- Integrating FIP insights in seven innovation activity areas

SESSION 6:

- Implementing FIP insights with your colleagues in your company with the help of a FIP Facilitator

SESSION 7:

- Any other questions?

Session1

Introduction

Introduction

- There is strong evidence that most companies are well behind the state-of-the-art frontier. This means they could significantly improve their performance by making optimal use of *existing* knowledge. In addition, the FIP Innovation Ecosystem gives them a way of creating *new* knowledge, embodied in innovation, that will increase their competitiveness.

- But if they could improve their performance by making better use of existing and new knowledge, why do many of them fail to change to take advantage of this opportunity?

- There is both a good reason, as well as a bad reason, for such inertia.

- The good reason is that organisational change can be disruptive, costly, and can take time.

- The bad reason, where the benefit of change outweighs the cost, is that companies may fail to take advantage of important opportunities by being too afraid to rise to the challenge.

- In this module, FIP Module 3, we will examine how to merge key FIP Innovation Ecosystem insights into your company's existing innovation process, minimising the cost of change.

The FIP Swedish Smorgasbord

Merging Insights from the FIP Innovation Ecosystem into your Existing Innovation Process

- In FIP Modules 1 and 2 we answered two questions:
  1. How to make competitiveness-increasing innovation happen using a FIP Innovation Ecosystem? and
  2. How to incorporate outside players into your FIP Innovation Ecosystem?

- Most companies will already have some kind of innovation process in place before joining FIP. The key aim of Module 3 is to understand how to merge insights from the FIP Innovation Ecosystem into your existing innovation process.

- You have two broad options.
  1. First, to implement your customised FIP Innovation Ecosystem as a whole.
  2. Second, treat your FIP Innovation Ecosystem as you would a Swedish Smorgasbord, namely as a collection of delightful components, each of which you can choose to consume if it feels right.

Discussion – Session 1

- Why are many companies well behind the state-of-the-art frontier?
- What should be done to bring them ‘up to speed’?

Session 2

The FIP Innovation Ecosystem – A Review

In this session we will review some of the essentials of the FIP Innovation Ecosystem analysed in Modules 1 and 2.

Adding value for your customers through innovation: **The Value-Adding Conjecture (VAC)**

A VAC is a conjecture about what might add-value for customers relative to competitors. The customer may be outside your company. Or the customer may be internal to your company, e.g. a business unit in the company that needs a new product or process.

*VACs become embodied in innovations (*defined in the following slide). For example, value may be added by creating a new product, a new process, or a new way of organising people.

The VAC may be right or wrong. It therefore must be *tested*.

What is Innovation?

- FIP follows Joseph Schumpeter, the OECD, and others in defining innovation as four things:

1. new products and services;
2. new processes and technologies;
3. new ways of organising people and things; and
4. newly created markets, ways of marketing, and business models.

- *It is these four kinds of innovation that add value for external and internal customers and drive competitiveness*.

The 7 FIP Innovation Functions

- The FIP Innovation Ecosystem contains seven innovation functions. These functions, in combination, are necessary to make competitiveness-increasing innovation happen.

- These seven functions are allocated to teams. One team may be responsible for more than one function. For example, Customer Understanding and Conjecture Hunting may be done by the same team.

- The seven functions are shown in the following slide.

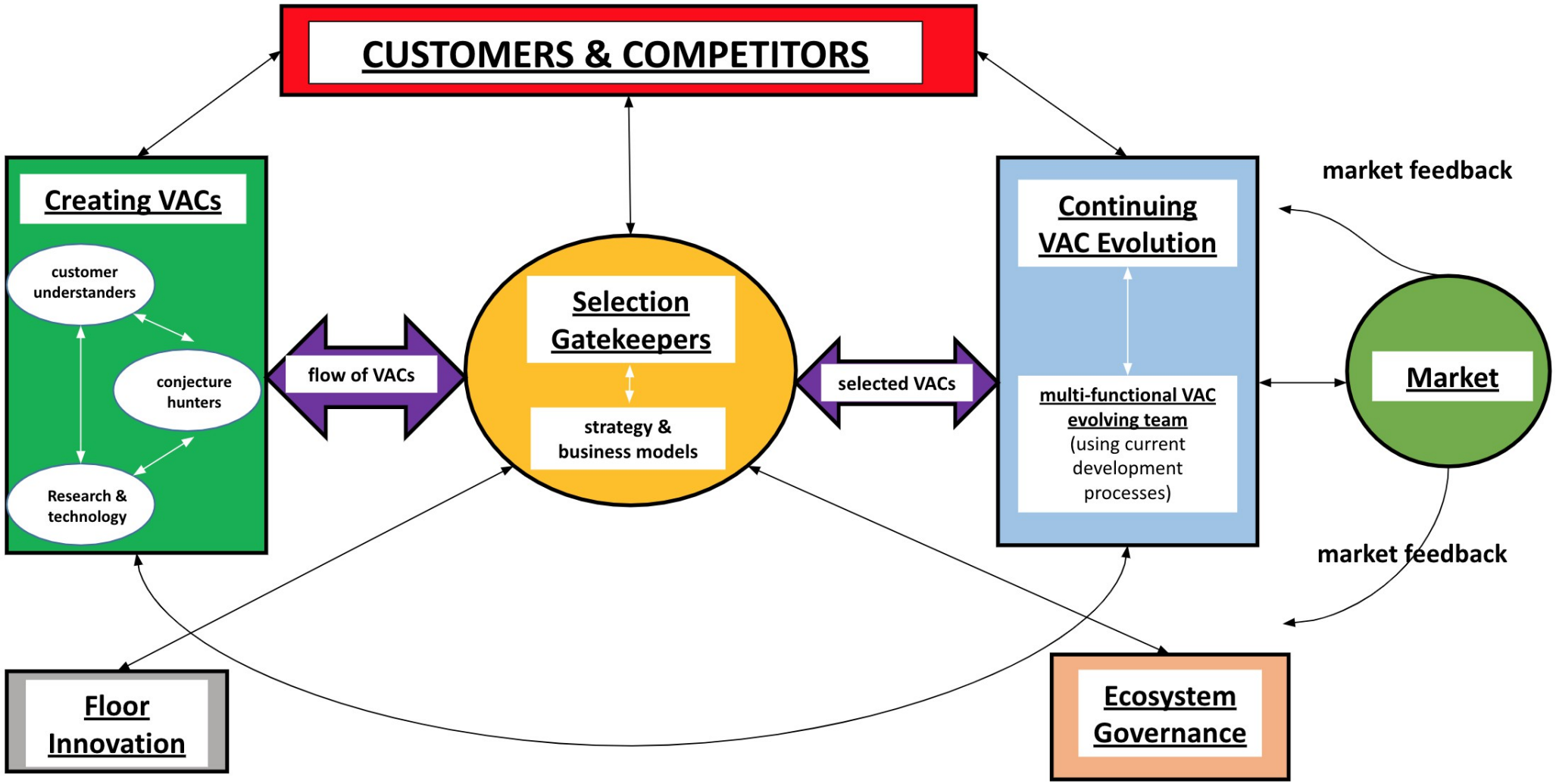
The 7 FIP Innovation Functions

Function	Description
Customer Understanding (pull)	Interacting closely with customers to understand what they *will* want.
Conjecture Hunting (pull)	'Going out' and searching for potential VACs.
Research/Technology (push)	Creating VACs based on research and new technologies.
Selection Gatekeeping	Selecting from the variety of VACs.
VAC Evolution	Turning VACs into innovations (including new products and services) that will add value for customer-users.
Ecosystem Governance	Governing and improving the FIP Innovation Ecosystem as a whole.
Floor Innovation	Mobilising bottom-up VACs from the office and factory floor.

The Seven Innovation Functions and the FIP Internal Innovation Ecosystem

- The FIP Internal Innovation Ecosystem organises the seven innovation functions, and the players who perform these functions inside your company, into a coordinated, competitiveness-increasing, innovation process.
- A detailed explanation was provided in Module 1.
- This is shown in the following slide.

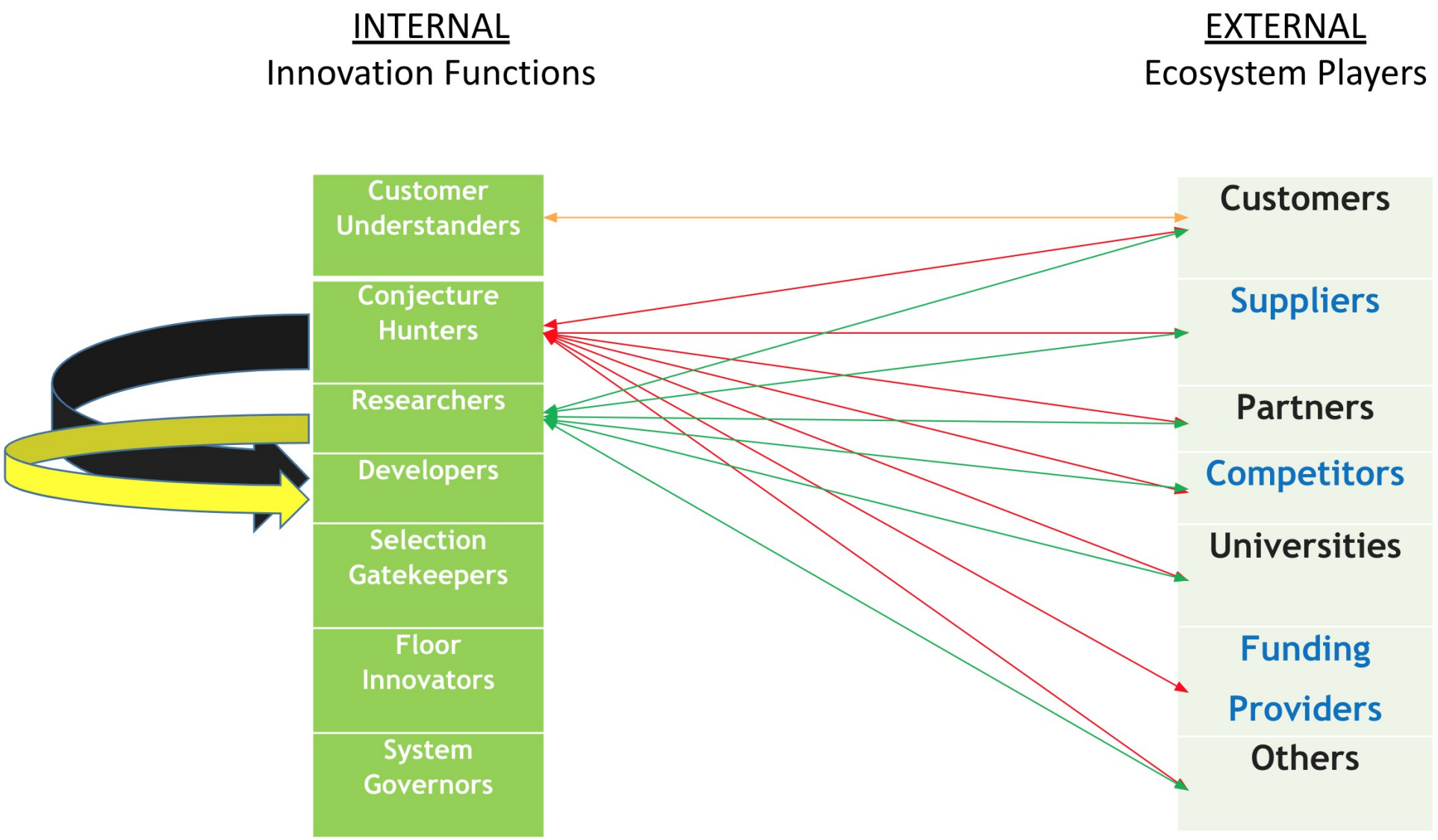
FIP Internal Innovation Ecosystem



Connecting the Internal Innovation Ecosystem with Outside Players

- Module 2 explained how a company's innovation process can be significantly enhanced by the inclusion of selected outside players. Their knowledge and resources can be incorporated into the Internal Innovation Ecosystem.
- How should external players be sought, chosen, incorporated into the Internal Innovation Ecosystem, managed, and evaluated?
- Who inside your company should take responsibility for these activities?
- These two questions were examined in detail in Module 2.
- A summary is provided in the following slide

Connecting the Internal Innovation Ecosystem with Outside Players



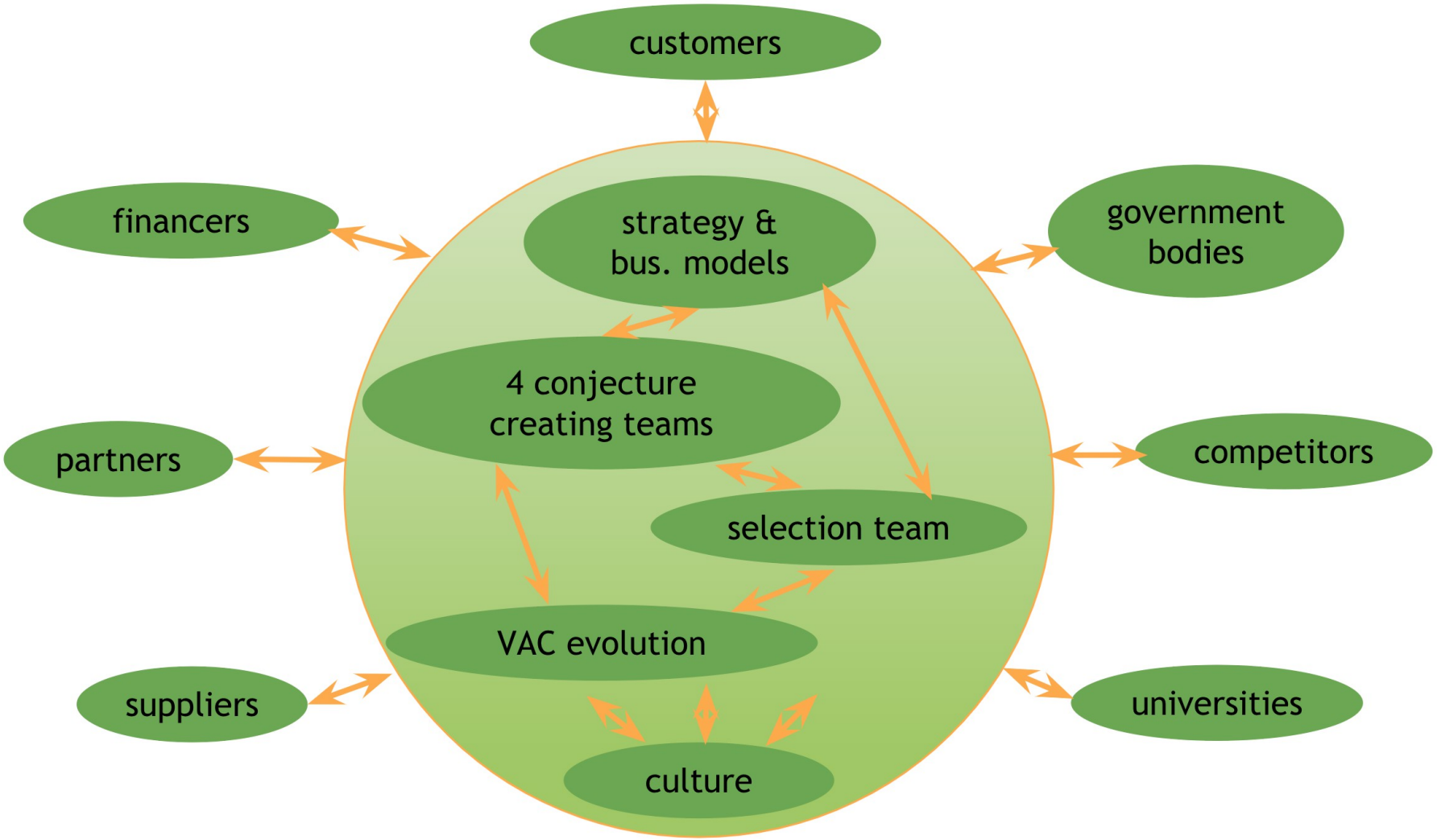
The FIP Innovation Ecosystem

- What is a FIP Innovation Ecosystem?

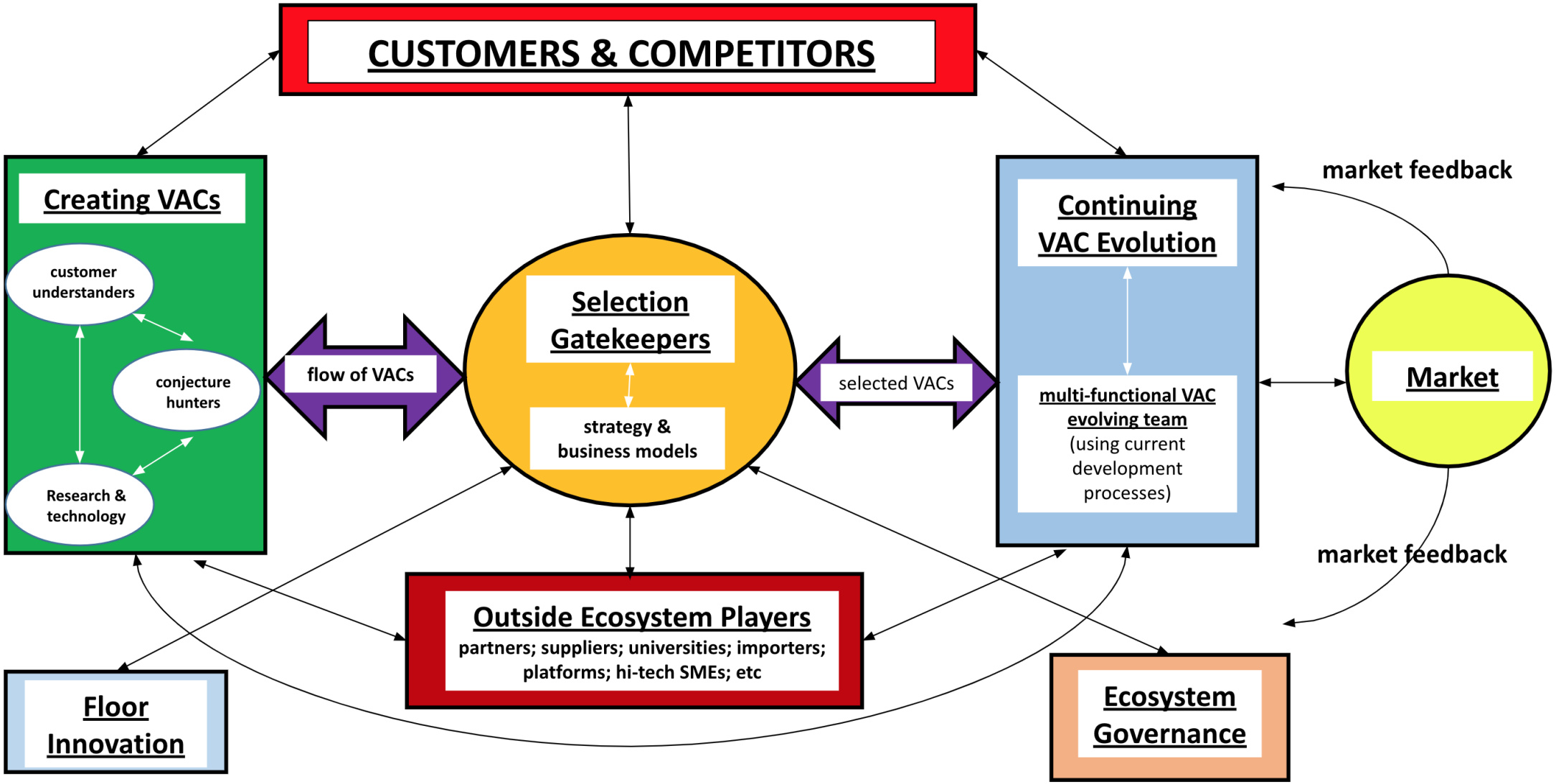
- A FIP Innovation Ecosystem consists of all those interrelated *players* and *processes*, in and outside your organisation, who through their interactions make value-adding innovation happen and, by so doing, increase your competitiveness. Through these interactions the players and processes co-evolve over time.

- The following two slides show the FIP Innovation Ecosystem. The first of these slides is a simplified version. The second goes into more detail regarding the FIP Innovation Functions and the FIP innovation process.

The FIP Innovation Ecosystem



FIP Innovation Ecosystem



Discussion – Session 2

- What are the seven FIP Innovation Functions?
- Why are all of them necessary to make competitiveness-increasing innovation happen?
- Explain the role of VACs (value-adding conjectures) in making competitiveness-increasing innovation happen in the FIP Innovation Ecosystem.
- Explain in your own words how the FIP Innovation Ecosystem makes competitiveness-increasing innovation happen?
- Do you have any other questions?

Session 3

How does innovation happen in most large and medium companies?

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How does innovation happen in most large and medium companies?

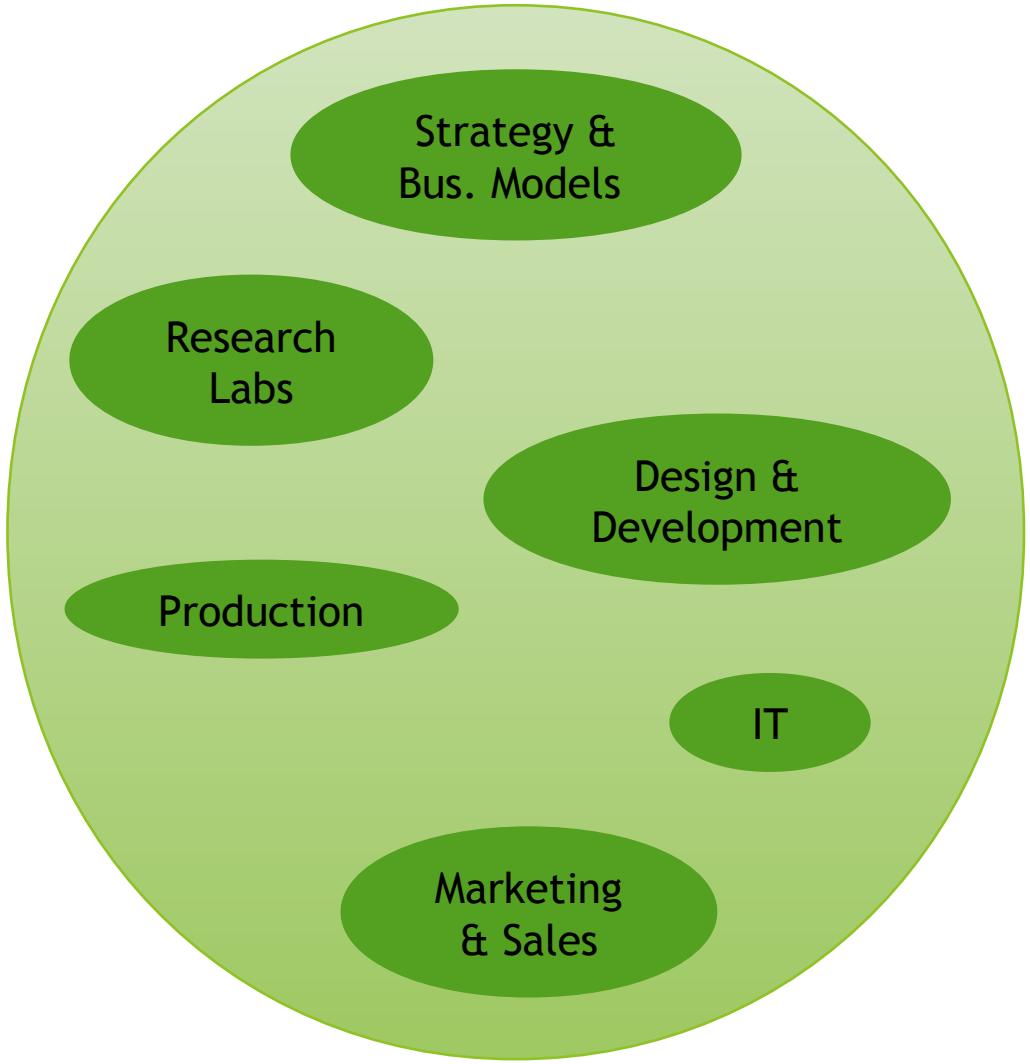
- "Innovation in our business has been core for many years but unstructured. This approach by Fransman integrates it into our very DNA throughout the different channels in the business from product offer through to warehouse despatch with an opportunity for everyone in the business to make a difference and to be recognised."

  Endura, world-leader in high-class cycling gear

- Comments by one of the companies that has done FIP captures very well the situation in most companies regarding their current innovation process: Whilst they do have many innovation activities, these activities are largely "unstructured". In the FIP terminology, they are not part of one coherent and coordinated system.

- The following slide depicts the situation in most large and medium companies.

Innovation Functions in most larger companies



The typical Innovation Process in most larger companies

- Typical characteristics of the Innovation Process:
- Each innovation function is performed by a different group of people.
- They are linked by a linear, baton-passing, process:
  - first, Strategy and Business Models are created;
  - second, these inform the work of the Research Labs;
  - third, they also inform the work of Design & Development;
  - fourth, the output from Research and D&D is passed to Production;
  - fifth, the developed product/service is passed to Marketing & Sales.
- Multi-Product companies often have Business Units to whom the third, fourth and fifth innovation processes are delegated.
- Although there is coordination and interaction between these different groups, there remains a separation between their activities.
- Typically, these processes are done in-house by internal players.

The FIP Innovation Process

- FIP is an innovation ecosystem that is created within medium-sized companies or the Business Units of larger companies.

- A Business Unit is defined as an organisation that has control of the main innovation functions, namely, business models, design and development, production, marketing and sales. Some of these functions may be outsourced.

- The FIP Ecosystem brings together *in one holistic system* all the players and processes, both inside and outside the company, that together make innovation happen. This adds value for customers relative to what is offered to them by competitors. In this way it increases the company's competitiveness.

- Multiple interactions between the ecosystem's players and processes *generate dynamic evolutionary progress* involving: the creation of a variety of innovation conjectures, selection from these conjectures, and rapid, low-cost transformation of the selected conjectures into commercialised, value-adding, products and services.

How does FIP make competitiveness-increasing innovation happen?

1. Four teams of VAC Creators create a variety of conjectures about how value for customers may be increased through an innovation, e.g., a new product or service.
2. These conjectures are passed to the Selection Gatekeepers who examine the evidence regarding whether the innovation is indeed likely to increase value in this way or not. Their decision is guided by the company's Strategy and Business Models.
3. If yes, the conjecture is passed to the Continuing VAC Evolution Team.
4. Feedback from ecosystem players (including suppliers, partners, and university researchers) is constantly provided which leads to continuous improvements in the VACs.
5. VACs are also continuously tested against Customer Responses to ensure that they do indeed add value in this way.
6. Through this process, feedback is also provided regarding Strategy and Business Models. They, accordingly, continually co-evolve too.

How does the force of evolution drive competitiveness in the FIP Innovation Ecosystem?

- Competitiveness-enhancing innovation in FIP is driven by *four evolutionary processes*:

- Creating a variety of Value-Adding Conjectures (VACs, a FIP trade name), i.e.conjectures about what kinds of innovation will add value for customers.

- Selecting the 'fittest' of these VACs.

- *Continually evolving* the selected VACs, making sure that they actually do add value for customers, by constantly testing the VACs against customer wants and needs and adapting the VACs accordingly.

- *Implementing and evaluating* the VACs.

Discussion – Session 3

- How does innovation take place in most large and medium companies?
- What are the disadvantages of organising the innovation process in this way?
- How does the innovation process in the FIP Innovation Ecosystem differ?
- What are the advantages of the FIP innovation process?
- Do you have any other questions?

Session 4

Merging characteristics of the FIP Innovation Ecosystem into your current innovation process

The FIP Integration Steps

- First, we start by identifying *the main innovation activities* that need to be done if competitiveness-increasing innovation is to happen.
- Second, we need to understand *how these innovation activities are currently done* in your company.
- Third, *who does these innovation activities?* For example, is there a team that has responsibility for the activity? If so, what is the name of the team and who are its members?
- Fourth, we need to know *whether the activity is being done as well as it can be*. Are there problems with the way in which it is done? If so, what are the problems? Are there improvements that should be made and what are they? It is appropriate people in your company who must answer these questions since it is they who will decide whether change is needed or not.
- The tool in the following two slides helps to deal with these four steps.

Innovation Activities 1

	1. Incorporating outside players	2. Creating innovation ideas	3. Selecting innovation ideas	4. Evolving and selling
How is this done in your company?				
Who does it?				
How well is it done? (10=excellent; 1=poorly)				

Innovation Activities 2

	5. Incorporating floor innovation	6. Nurturing an innovation culture	7. Governing the whole innovation process
How is this done in your company?			
Who does it?			
How well is it done? (10=excellent; 1=poorly)			

Discussion – Session 4

- Take 10 – 15 minutes for each participant to complete the diagrams in the last two slides, using additional paper to permit elaboration. It is particularly important that the last row is completed containing the participant's evaluation of how well these innovation activities are done currently in their company.

- GROUP DISCUSSION: In which activities are companies weakest with most to learn from FIP?

- GROUP DISCUSSION: In which activities are companies strongest with least to learn from FIP?

- GROUP DISCUSSION: In the weakest activities how do you think you and your colleagues in your company might merge FIP characteristics into your existing teams and innovation processes?

- Do you have any other questions?

Session 5

Integrating FIP insights in the seven innovation activity areas

The Integration Rules

- **RULE 1:** 'If it ain't broke don't fix it!' Remember that change is costly. Therefore, if an innovation activity is currently well done there is no need to change it. Be guided by your company's objective evaluation of how well an activity is being done as reflected by your answers in the last row in the two tables.

- **RULE 2:** The FIP Swedish smorgasbord rule: you can pick and choose insights from the FIP Innovation Ecosystem *as long as they can be effectively integrated, in an incentive-inducing way, into your innovation process as a whole*.

- In the following slides we will discuss some of the considerations you may want to take into account in deciding whether or not to integrate FIP Innovation Ecosystem insights into your innovation process. We will do this for each of the innovation activities.

1. Integrating Outside Players

- Integrating outside players was examined in detail in Module 2. It was stressed that outside players can make a significant contribution, in terms of knowledge and resources, to the success of your innovation process. These players include: customers, importers, suppliers, partners, competitors, university researchers, funding providers, innovative small companies, etc.

- If you feel that your 'how well score' (shown in the last row of the previous two tables) is sufficiently low, or you feel beneficial improvements can be made, then you should consider the possibility of integrating FIP characteristics.

- The FIP approach analyses: 1) which outside players should be considered? 2) how can an effective symbiotic (= living together) relationship be designed to make win-win cooperation happen? and 3) who in your company should search for, select, design, manage, and evaluate a symbiotic relationship? Question 3 is answered by connecting the 7 FIP Innovation Functions, and the teams that undertake them, to the possible outside players.

2. Creating Innovation Ideas

- FIP Module 1 contained a detailed analysis of how innovation ideas are best created drawing on evolutionary thinking.

- Companies differ greatly in terms of how they go about creating new innovation ideas. There is no agreed consensus regarding how this should be done.

- The differentiating FIP approach is based on the concept of the VAC i.e. the value-adding conjecture regarding what type of innovation will add value for customers compared to what is offered to them by competitors. The generation of a *variety* of VACs is the starting point for the FIP innovation process.

- Since generating VACs is so important, FIP allocates four out of the seven FIP Innovation Functions to this task. Two functions deal with 'innovation pull', i.e. pulled by customer wants and needs: Customers Understanding and Conjecture Hunting. The remaining two functions deal with 'innovation push', i.e. innovation pushed by Research and by New Technology respectively (including software).

- Some or all of these four functions could be added to the responsibilities of the team/teams which currently in your company come up with innovation ideas.

3. Selecting Innovation Ideas

- The selection of innovation ideas was discussed in detail in FIP Module 1.

- The FIP Selection Gatekeepers determine not only which VACs should be selected. They also determine the future of the company. The reason is that it is they who allocate the resources (financial and human) that will go into creating *tomorrow's* products and services which will drive the competitiveness and health of *tomorrow's* company.

- *Who* should be the Selection Gatekeepers and *how* they should carry out this critical function?. The answers to these questions were examined in Module 1.

- Significantly, in the FIP Innovation Ecosystem, Selection Gatekeepers are an integral part of the single innovation ecosystem as a whole. They interact in many ways, analysed in Module 1, with the other players in the ecosystem. They also contribute to the evolution of the company's strategy and business models.

- Some of these insights could be incorporated into your company's innovation process.

4. Evolving and Selling

- Some of the activities discussed here as 'evolving and selling' are usually referred to by the word 'development'. Conventionally, 'development' refers to 'new product development' (NPD).

- Of all the innovation activities examined here, 'development' is best recognised and catered for. A huge range of courses, ideas, and tools exist to assist in the process of NPD. Most companies doing FIP will want to retain much, if not all, of these.

- From a FIP perspective, however, it is important to also recognise the limitations of NPD. These limitations emerge when considering what NPD usually excludes. For example: the relationship with competitiveness and strategy; the role that variety should play; how external players should be incorporated; how NPD should interact with the other innovation functions, teams and players; how NPD should be fitted into a single, coordinated, innovation ecosystem.

- FIP sees the process of 'evolving and selling' as a broader evolutionary process that includes what is usually referred to as NPD but which goes beyond it. The essence of this process involves continuously creating variety + selecting the fittest from that variety. In FIP this evolutionary process continues from the moment that VAC creation begins to the moment that evaluation of market success is completed.

- Many, perhaps most, companies will want to retain much of their current NPD activities and processes. But many of them may also want to integrate insights from the FIP Innovation Ecosystem which they feel will add value to what they are already doing.

5. Incorporating Floor Innovation

- From a FIP perspective, floor innovation, discussed in Module 1, refers to innovation that originates on the factory floor and the office floor.

- There is much evidence, from Japan and other places, that floor innovation, that is largely incremental, can have important cumulative benefits. Another benefit is that it allows a company to greatly widen the net to include most, if not all, employees in the innovation process. This helps to make competitiveness-increasing innovation an important shared goal.

- How should floor innovation be incorporated into a company's whole innovation process? The FIP answer is two-fold. First, although floor innovation players are unlikely to be included amongst the FIP Innovation Ecosystem's players (since their innovation is usually incremental), they can also make use of many FIP ideas such as VACs and evolutionary processes. Second, floor innovation teams should report directly to the Selection Gatekeeping team thus facilitating a degree of coordination.

- Many companies will want to explore in their own company the usefulness of the FIP ways of including floor innovation in the Innovation Ecosystem.

6. Nurturing an Innovation Culture

- Innovation does not happen either automatically or costlessly. It must be made to happen. This raises the complex issues of incentivisation and motivation as discussed in Module 1.
- Culture is crucial. A company that has a strong innovation culture has won half of the battle. But how can such a culture be created?
- An innovation culture requires that those involved in innovation activities share: goals, values, beliefs, and language. But how can a viable innovation culture be nurtured?
- The FIP answer draws on the ideas of the Harvard economist, Joseph Schumpeter, who talked of capitalism as a 'creative destructive' system which drives its continual restlessness.
- In the FIP Innovation Ecosystem all players involved in the innovation process are given both the responsibility and opportunity to 'destroy today's company by making tomorrow's company'. Their main weapon is creating tomorrow's new competitiveness-increasing products and services which will destroy today's. By creating tomorrow's fitter company they themselves will be increasing their own ability to both survive and thrive.
- In this way the FIP Innovation Ecosystem and its players are both incentivised and motivated to help make competitiveness-increasing innovation happen.

7. Governing the Whole Innovation Process

- Individual players in a company's innovation process, understandably, only 'see' their own 'neck of the woods' with which they have experience. They cannot be expected to have an in-depth understanding of the innovation system as a whole. The task of governing and evaluating the innovation process as a whole, therefore, must become the responsibility of a specialist function and team.

- In FIP it is proposed that the Ecosystem Governance function, which includes evaluation of the performance of the ecosystem, should be allocated to the Selection Gatekeeping team. The reason is that the latter consists of senior company decision-makers who are familiar with the company's strategy and business models and have an intimate understanding of its innovation process.

- Companies that lack a governance function, or feel that theirs should be strengthened, will want to consider the way this issue is dealt with in FIP.

Merging FIP Insights into your Company's Innovation Process

- In Session 4 we have considered the main innovation activities that must be undertaken to make competitiveness-increasing innovation happen.

- A key question arising is which parts of the 'FIP Swedish Smorgasbord' do you feel could profitably be included in your existing innovation process?

- In order to answer this question to your own satisfaction you are invited to go through each of the seven innovation activities discussed in the previous seven slides. Make use of the two tool diagrams that you completed showing: 1) how these activities are currently done in your company; 2) who does them; and 3) how well they are done.

- For each of the seven activities ask yourself two key questions:
  1. What can my company learn from FIP?
  2. How might these FIP insights be integrated in my company?

Challenges Facing the Integration of FIP Insights - 1

Possible Tensions arising from Task Allocation

In many cases companies will want to allocate FIP activities to one or more of their existing teams. We should be aware, however, that this can be a sensitive matter.

Existing teams often feel that they are already required to do more than they can easily cope with. Adding FIP activities may sometimes seem to be the straw that breaks the camel's back.

The best way forward is to be completely open about any conflicts, encouraging the people involved to freely express their reservations. Usually it will help if they have a good knowledge of the FIP Innovation Ecosystem and the benefits that it can bring. This will help them understand the rationale behind the allocation of additional innovation responsibilities. Some of the slides in the FIP Modules may help to explain the working of the FIP ecosystem and its benefits.

Challenges Facing the Integration of FIP Insights - 2

Bringing all Innovation Ecosystem Players together to make One Single Coherent and Coordinated System: the Centrality of Communication and Information Flows

To get full benefit from the FIP Innovation Ecosystem it is necessary that it works as one co-ordinated system. But this requires information flows and communication between at least the innovation players within the company, and sometimes between inside players and outside players.

Each company will have its own way of sharing information and communicating internally and will be best placed to decide what works well for it.

To facilitate communications it will be helpful to have a common framework and language used by all internal innovation players. Some of the FIP Module slides may be helpful here such as the slides showing the FIP Innovation Ecosystem and how it works.

Innovative thinking may also be helpful. For example, the players in the innovation ecosystem may find it helpful to use social media options such as *WhatsApp* or *Workplace* by Facebook. This will allow players to keep up with what different teams are doing and with other news of general interest.

Challenges Facing the Integration of FIP Insights - 3

Nurturing the FIP Innovation Culture

Recall that the rallying cry of the FIP Innovation Culture is: **Make Tomorrow's Company by Destroying Today's!**. Replacing today's products and services with tomorrow's superior ones will add value for customers relative to competitors and increase competitiveness. Thus everyone in the company will increase their ability, not only to survive, but also to thrive in our changing, often turbulent, world.

But slogans are often perceived by those at whom they are directed to be boring, self-interested, and not particularly motivating. To make the FIP Innovation Culture work it is necessary that the culture slogan is supported by *appropriate incentives that motivate*.

In Module 1 we discussed how VAC creation, selection, and evolution can be incentivised, thus motivating the evolutionary process underlying the dynamics of the FIP Innovation Ecosystem. Remember, the incentives do not always have to be material. Non-material incentives, such as the allocation of status to those who have performed successfully, may be just as effective.

Challenges Facing the Integration of FIP Insights - 4

The Bottom Line: deciding WHO should do WHAT by WHEN?:

Change is often costly, threatening, and subject to inertia. It is therefore necessary, having decided which FIP insights should be merged into your company's existing innovation process, to be firm and explicit about how implementation will be made to happen.

A good way to address this is to ask the three key implementation questions: **WHO should do WHAT by WHEN?** It is only when individuals and teams are very clear about what is expected of them, and by when, that they are likely to respond constructively.

Answering these questions may be a sensitive exercise and negotiations may be necessary. But if competitiveness-increasing innovation is to happen it is essential to go down this road.

To assist this process it will be helpful to appoint a Coordinator as discussed in the following slide.

Challenges Facing the Integration of FIP Insights - 5

Appointing an Innovation Ecosystem Coordinator to Start The Innovation Change Ball Rolling and Monitor Progress: report to the Ecosystem Governance Team

It will be very helpful to have an **Innovation Ecosystem Coordinator**. The role of this person is to start the change ball rolling, to monitor progress, and to deal with hitches and bottlenecks that arise in the ecosystem.

It is not essential that this person be senior. It is more important that they are trusted and liked, find it easy to communicate, and are well organised.

It is also important that the Coordinator liaises closely with the Selection Gatekeeping Team and the Ecosystem Governance Team since they have overall responsibility for the Innovation Ecosystem as a whole. It will probably make sense that either or both of these teams appoint the Coordinator.

The first crucial job of the Coordinator is to set, after consulting with all the ecosystem's teams, a **start date** for getting the Innovation Ecosystem going.

Challenges Facing the Integration of FIP Insights - 6

The First Job of the Innovation Ecosystem's Teams

The first job of the ecosystems teams, immediately after the start date, is to meet and clarify the following:

Who are the team's members?

How does the team fit into the Innovation Ecosystem and what, precisely, are its responsibilities? (The diagrams showing the whole FIP Innovation Ecosystem may be helpful here.)

What are the team's objectives?

How will these objectives be achieved?

With which other teams and players will the team cooperate?

How will the team's important decisions be communicated to other players in the Innovation Ecosystem?

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Once these key questions are clarified the teams can get to work, starting to make competitiveness-increasing innovation happen.

Discussion – Session 5

- What are the two integration rules for incorporating FIP insights into your company's existing innovation process?

- In this module we have broken down the innovation process into 7 innovation activities. Then we discussed some of the FIP insights relevant for each of these activities. Of these 7 activities in your company:
  1. which do you feel can benefit most from the inclusion of FIP insights?
  2. which do you feel are likely to benefit least from FIP insights?

- Of the challenges identified confronting the merging of FIP insights into your innovation process which do you feel are the most difficult? Which are least difficult?

- Do you think it would be helpful to have a qualified FIP Facilitator come to your company to help you and your colleagues integrate insights from the FIP Innovation Ecosystem? Discuss.

- Do you have any other questions?

Summary of Module 3

- Module 3 completes the Fransman Innovation Programme (FIP).
- Module 1 dealt with how to make competitiveness-increasing innovation happen by designing a FIP Innovation Ecosystem. Module 2 was concerned with incorporating outside player's into the company's Ecosystem.
- The aim of Module 3 has been to discuss how FIP Innovation Ecosystem insights can be effectively merged into your company's existing innovation processes.
- Many of the challenges that might arise in effecting such a merging were examined and solutions proposed.
- Change can be tricky. But increasing competitiveness and the innovation which can enhance it are absolutely crucial in enabling a company to survive and thrive. It is therefore necessary that these and other challenges be confronted and solved. Module 3 assists in meeting these challenges.

Professor Martin Fransman

Martin is Professor Emeritus of Economics at the University of Edinburgh. He now lives in north London.

Martin is an international expert in innovation and competitiveness. He has advised companies large and small and governments all over the world. Fortune 500 companies he has worked with include AT&T, France Telecom, Fujitsu, Mastercard, Michelin, NEC, Nokia, NTT, Siemens, Skype, Telefonica, Toyota, and Vodafone. He has advised many international organisations including the European Commission, ILO, OECD, UNCTAD, UNECLA, UNESCAP, UNIDO, and the World Bank.

His books have won three important prizes. The *Joseph Schumpeter Prize* (Cambridge University Press), the most prestigious prize in the economics of innovation. The *Wadsworth Prize* (Oxford University Press) for the best business history book published in the UK, and the Japanese Prime Minister's *Ohira Prize* (Cambridge University Press).

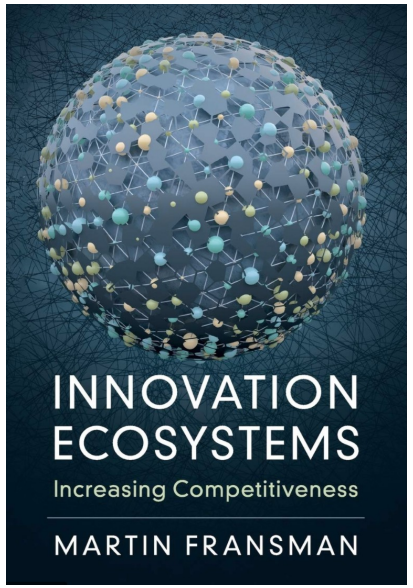
He has been visiting professor at several universities around the world and was NTT Professor at the Research Centre for Advanced Science and Technology (RCAST) at the University of Tokyo.

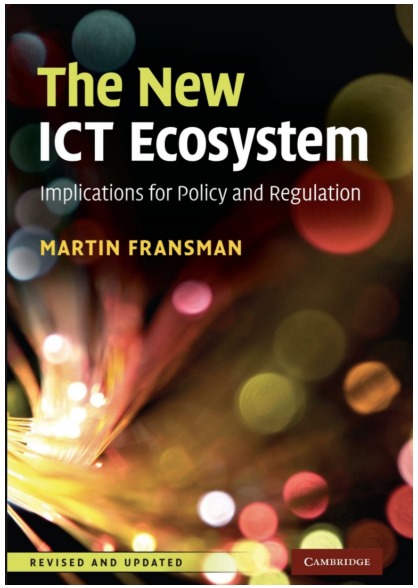
He was the Founder-Director of the Institute for Japanese-European Technology Studies (JETS) at the University of Edinburgh. JETS was supported by the Japanese Ministry of International Trade and Industry (MITI), the UK Department of Trade and Industry (DTI), and the Japanese electronics companies, NEC and Fujitsu. JETS was launched at a reception in the Tokyo residence of the then British Ambassador to Japan, Sir John Whitehead.

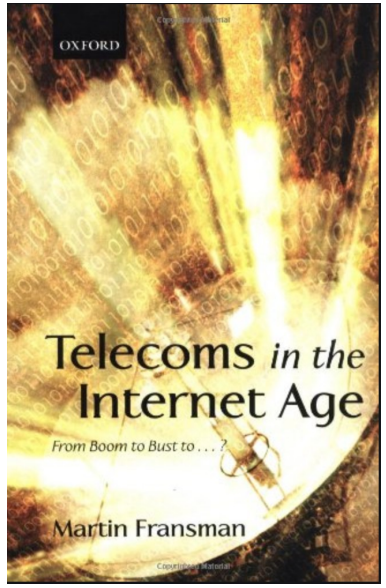
In China he was invited by the incoming government of Xi Jinping to join several Fortune 500 companies in preparing a report for the Chinese government on the role of innovation in China's future development. He was a member of the expert group advising the UK Department for Business, Innovation and Skills (BIS) on the UK's science and technology relationship with China. He regularly gave lectures on innovation to CEOs and other executives from Chinese state-owned enterprises at the China Executive Leadership Programme (CELP) held each year at the University of Cambridge.

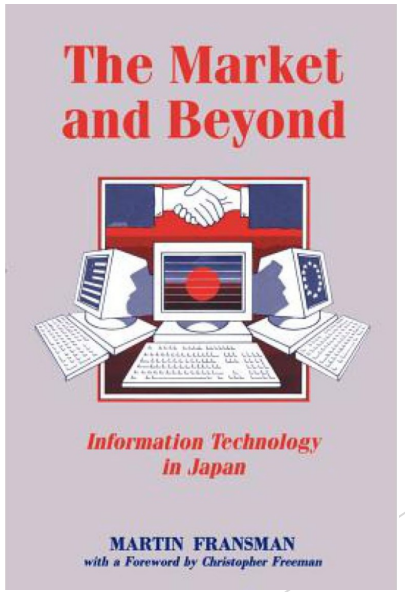
Professor Martin Fransman's Books

Martin has published thirteen books the most recent of which is *Innovation Ecosystems - Increasing Competitiveness*, Cambridge University Press. Those who endorsed this book on its cover include Arno Penzias, Nobel Laureate in Physics and former Vice President Research at AT&T's Bell Laboratories; Sir Geoffrey Owen, former editor of the *Financial Times*; Martin Wolf, Chief Economics Commentator, *Financial Times*; Lord Alistair Darling, former UK Chancellor of the Exchequer; and Richard Nelson, Professor Emeritus at Columbia University and pioneer of Schumpeterian Evolutionary Economics.









Praise from previous FIP clients

"Innovation in our business has been core for many years but unstructured. This approach by Fransman integrates it into our very DNA throughout the different channels in the business from product offer through to warehouse despatch with an opportunity for everyone in the business to make a difference and to be recognised."

Endura, world-leader in high-class cycling gear

"The course broadened our horizons and helped us encapsulate the depth to which we have to pull together the resources available, both internally and externally, in order to pursue our product development and future business strategy."

Macsween, world-leading food provider

"The Fransman Programme provides both a theoretical model and a programme to put this in place."

William Tracey, leading recycling and resource management group